

CHAPTER 6

The Necessary Linkage Between Critical Thinking and Critical Writing

Strictly put, one cannot succeed and prosper if one cannot write well or write dialectically, critically. Critical writing and critical reasoning go hand-in-hand. Both intrinsically matter to your academic and professional life, family, and world community. In the 21st-century, more than any time in the past, basic knowledge of philosophy and liberal arts will make you stand out, in addition to whatever specialized field you pursue. In fact, according to the Department of Labor statistics, the average American may change occupations 4 to 6 times in their lifetime. And, when for whatever reason one changes careers, essential critical thinking and writing skills are one's most valuable credentials. The heart and logic of words and ideas will make you aware of what is exactly right and what is simply enough to go by. The happy way to live, serve, and create wealth is through critical thinking. You want to live better than just mere subsistence.

Supreme Court Justice, John Paul Stevens, puts it this way:

The best preparation for law school is to study poetry.

Professors X. J. Kennedy and Dana Gioia comment thus:

Why? George D. Gopen, an English professor with a law degree, says it may be because "No other discipline so closely replicates the central question in the study of legal thinking: here is a text; in how many ways can it have meanings?"

Kennedy and Gioia, then, conclude:

Many careers today, besides law, call for close reading and clear writing, for careful listening and thoughtful speech. Lately, college placement directors have reported more demand for graduates who are good readers and writers. Employers need people who can handle words. In a survey conducted by Cornell University, business executives were asked to rank in importance the traits they look for when hiring. Leadership was first, but, still, writing and speaking came in at fourth, ahead of managerial skills and analytical skills.

Definitely, therefore, to think persuasively and to write clearly are fundamental abilities required for one's success, world peace and development, your wealth creation and happiness, and a universal democratic life.

Some Principles of Critical, Dialectical Writing

First, critical thinking presupposes the clarity of thinking (appearance and immediacy of general ideas: ‘good,’ ‘true,’ ‘beautiful,’ ‘just,’ ‘free,’ ‘valid,’ ‘cogent,’ ‘real,’ ‘justified,’ ‘proven,’ ‘right,’ ‘wrong,’ ‘fallacious,’ ‘moral,’ and so on); the familiarity, recognition or acknowledgement, distinctness and relevance of words. This first principle or tenet of philosophy shows that it is the most precise study and the mother of all sciences and arts, in contrast to the general misconceived view that philosophy is general and abstract. CT rests upon logic, precondition for mathematical and scientific exactitude and substantiation (evidence, proof, meaning, purpose, examples, counterexamples, contrasts, arguments, etc.). Namely, from Socrates onward, we are inspired to think critically, dialectically (advocate and devils advocate; thesis and antithesis; meaning of justification), or in the wisdom of Socrates, “An unexamined life is not worth living.” However, logical thinking and empirical cooperation are necessary but not both necessary and sufficient, hence, the inherent linkage between our careful thought and its translation into careful and clear writing (reading, listening, speaking).

Second, critical and clear writing is equivalent to multi sensory memory. It is tactile memory. It is visual memory. It is auditory memory. It is kinesthetic memory. Namely, when I think critically and write critically, my reasoning is coherent; my point (thesis, position, view, perspective) is lucid and methodic; my analysis is relevant and adequately detailed; my arguments and counter arguments are well constructed; my assessment is justified; and my problem-solving is documented and cogent. I remember what I mean and I mean (justified) what I remember, think, argue, counter-argue, explain, and such.

Third, clear and compelling writing presupposes simplicity. Namely, clutter hampers cogent writing. As a prominent modern writer, William’s Zinsser,¹ maintains:

Clutter is the disease of American writing. We are a society strangling in unnecessary words, circular constructions, pompous frills and meaningless jargon.

Precisely, clear and compelling writing is limited by such ills as unthinking language and terminology, ambiguities and vagueness, tautologies or circularities, redundancies repetitive, ill-drafted sentences, noisy words, weak composition, muddled style, non-referred pronouns, inaccurate meaning and purpose, lengthy verbiage, and such. The college essay, the business letter, the legal or medical report, the financial, or investment opinions, all carry imprecision, equivocation, rhetoric, and complexity.

The secret, therefore, to powerful and elegant writing is to simplify (not oversimplify) every proposition to its clearest ingredients. That is, every word or concept that is without purpose; every long sentence that could be a short sentence; and every adverb, adjective, verb, noun, noun phrase, complement, etc., must be thoughtful, unambiguous, and as exact as possible to carry the intended meaning with elegance, logical and empirical force, and beauty. Reader’s Digest² puts the matter of simplicity this way:

... to reduce confusion [in writing]:

1 *On Writing Well*, 3rd edition, Harper & Row Publishing.

2 *Reader’s Digest*, August 2002, p. 204.

1. *Do not rely on cues. Listeners often not, make eye contact or say “un-huh” to be polite or move the conversation along. But it’s easy to misinterpret these as signs of understanding.*
2. *Train the editor in your head. If you say, “Beth discusses the problems with her husband.” It’s not clear if she’s talking to her husband or about him. “Beth talks to her husband about her problems.” Or, “Beth talks to others about her marital problems.”*
3. *Ask listeners to restate your message. Preface the request with “I want to be sure I said that right.” Questions like, “How does that sound?” Or “Does that make sense?” may also work.*
4. *Listen well. When on the receiving end, ask questions to be sure you’re on the same page. After all, speakers are not responsible for the whole exchange.*

The fourth principle of critical writing is substance, analytic reasoning, coherent thinking, and consistency. Critical and clear writing is indubitably premised upon logic. Logic is concerned with how to link the dots, words, sentences, assertions, assumptions, and facts correctly, clearly, consistently, and cogently. Logic is traditionally one of the four main areas of philosophy. Invented single-handedly by Aristotle, logic is the art and science of correct reasoning and thought. Logic is concerned with the standards for valid inference in the most rigorous, exact, and optimum manner. Logic is, also, concerned with the nature, scope, and extent of the erroneous thinking, speaking, listening, reading, and writing. Logic guides and involves all sciences, arts, and humanities. It deals, moreover, with dilemmas, paradoxes, proofs, evidence, counter-evidence, justification, fallacies, syllogisms, mathematics, the sciences, and the arts.

Logic is divided into: (i) formal deductive logic or symbolic logic; (ii) inductive logic or statistics, probability, hypothesis testing, estimation, sampling and generalization, sociometrics (econometrics, psychometrics, politico-metrics, etc.) and nature-metrics (chemico-metrics, biometrics, astrometrics, etc.); and, (iii) informal logic, applied logic, or critical thinking, viz., good reasoning independent from mathematical systems, formal proofs, and statistical methodologies.³ As a result, without some logical training, at least critical thinking training, one may prove to argue and write ambiguously, fallaciously, or downright absurdly. Listen to some of our celebrities and leaders.

1. Mariah Carey: “Whenever I watch TV and see those poor starving kids all over the world, I can’t help but cry. I mean I’d love to be skinny like that, but not with all those flies and death and stuff.”
2. Brooke Shields: “Smoking kills. If you’re killed, you’ve lost a very important part of your life.”
3. Jason Kidd: “We’re going to turn this team [Dallas Mavericks] around 360°.”
4. Dan Quayle: “The loss of life is irreplaceable. ... I was recently on a tour of Latin America, and the only regret I have is that I didn’t study my Latin harder in school so I could converse with those people. ... I love California. I practically grew up in Phoenix.”

3 There are other philosophic systems of logic, including meta-logic, semantic or model logic, emotive logic, mathematical logic, intuitive logic, fuzzy logic, etc.

5. Al Gore: “We are ready for an unforeseen event that may or may not occur.”
6. Bill Clinton: “If we don’t succeed, we run the risk of failure.”
7. George W. Bush: “I am a patient man, because I am a patient man.”

Fifth, the other principles, including style, the audience, word usage, consistency and unity, beginning and ending, grammar and syntax, semantics, axiomatics, listening and reading, outlining, abstractions, summarizing, and interviewing. Further, predicating (time, space, quantity, quality, relations, active, passive, utility, form, position, and substance) bits and pieces, criticism, humor, fiction and drama, and poetry are all equally significant. Dialectical writing will become clearer in the next few sections.

Common Fallacies

Broadly speaking, a fallacy is an incorrect way of thinking. Moreover, a fallacy is any attempt to persuade, not on logical, but emotional or sentimental grounds. It is, hence, highly advisable to pay close attention to their occurrence: (i) in your own argumentation and positions; (ii) in your critics counter positions and counter arguments; (iii) in readings and cases; and, (iv) in your general formal (other courses) and informal (newspapers, magazines, television, the Internet, etc.) education as well as throughout your successful living.

In what follows, we should highlight the most common thinking errors. For memorization purposes I shall proceed alphabetically (Many of these popular and historically remote fallacies will be expanded on infra.) Hence:

Ad Hominem: This happens whenever the attack aims at the person rather than his/her argument or theory. For example, “X’s position on equal opportunity is wrong because he is an African-American, a Jew, or Chinese.” This may be based on personal tax, circumstances, poisoning the well, and/or pseudo-refutation.

Ad Ignorantiam: This stems from an appeal to ignorance, or that an argument for a claim is true just because it has not been shown to be false. For example, “until you prove that God exists, he does not.” Or, “She is a communist because there is nothing on file to disprove it.” Or, “Since the doctrine that we have a moral obligation to honor our promises cannot be proven; therefore, we ought to reject it.”

Ad Misericordiam: Appealing to pity as an argument for special treatment, opportunity, or favor. For example, “I know that I didn’t always come to your lectures and that I flunked my exams. But if I don’t pass this course, I’ll have to retake it, so, you ought to let me pass.”

Ad Populum: Appealing to the emotions or feelings of the populace, a crowd, a group of people, an organization, or an individual authority (religious, political, academic). It is related to, though somewhat different from, an argument from authority. For example, “Abortion is wrong because VP Cheney says it is.” “Euthanasia is immoral because the US Bar Association says it is.” Notice that **The Provincialist of Fallacy** is another designation of **ad populum**.

Affirming the Consequent: As in if P, then Q; Q, then P (see MP). Thus, in lieu of affirming the antecedent (P), one affirms the consequent (Q). For example, “If civil disobedience

violates the law (P), then it is wrong (Q). Civil disobedience is wrong (Q), then it violates law (P).”

Ambiguity or Equivocation: Occurs when a word or phrase is used in such a way that its meaning is not clear. For example, “Euthanasia is wrong because it is the willful taking of an innocent human life.” Thus, it is clear that without precisely defining what (i) a human life stands for; and, (ii) innocent denotes, the predicate wrong is simply equivocal, ambiguous, or, at the minimum, vague.

Begging the Question: The fallacy of implicitly using your conclusions as a premise. For example, “The Bible is true, because God wrote it.” This argument assumes just what it is trying to prove; it is circular, tautologous.

Clever Question: be logically careful by asking for clarification of a complex question (i.e., politicians, lawyers, physicians, televangelists, advertisers). For example, “Will you follow your conscience, instead of your wallet, and donate to our cause?” Either way, you are pushed unjustifiably (without grounds) to respond to a canny question, a machiavellistic device, a slanter, a rhetorical trick, or a spin.

Composition: “Since the members of the company are honest people, therefore the company must be an honest one.” The opposite of this is the **fallacy of division**.

Denying the Antecedent: A deductive fallacy of the form: if P then Q, $\neg P/\Delta\neg Q$ (see MT). For example, “If the roads are icy, the mail is late. The roads are not icy; therefore, the mail is not late.

False Dilemma: Occurs when logical alternatives are falsely reduced to just two choices, A or B, but nothing in between or outside these two choices.

Hasty Conclusion: Occurs when we make a judgment based on insufficient rational support and/or evidence. “Since four students in this class are already against vivisection; therefore, all member of the class must be against vivisection.”

Non-Sequitur: Occurs, simply, when Q does not follow from P or Y does not logically follow from X.

Post Hoc, Ergo Propter Hoc (after this, therefore because of this): Assuming causation too heavily on the basis of mere successions in time. This is a fundamental issue not only vis-à-vis correct logical reasoning but also with respect to the true value of a causal relationship or argument. Good arguments, then, do not just appeal to the correlation of A and B; they also explain why it is true/false that A causes B. Two events or moral premises may (not) be correlated but not necessarily causal. They might both be related to a single/complex cause(s); what is supposed to be the cause might turn out to be the effect and vice versa.

Questionable Claim: Happens because of the breath of its assertion or non-empirical verification. The “only way” or “most” or “best” are usually words that designate such a fallacy. For example, “Anti-abortion solutions are the only way to maintain our civilization.” “Nuclear race is the best deterrent.” “Radical equality is the utmost cause of our economic problems.”

Slippery Slope: Occurs when you object to something (X), because you wrongly assume that it will inevitably lead to an undesirable consequence (Y). For example, “I am going to vote against the federal famine relief program, because, if that passes, then it won’t be long before Ethiopians start to pour into the U.S.”

Two-Wrongs-Make-A-Right: The fallacy of defending what is considered wrongdoing by pointing to an instance of similar conduct. For example, “My spouse voted for proposition X, therefore, I am going to vote just like my spouse.”

Above all, please endeavor to avoid the following quasi-reasoning traps in cogent reasoning and substantiated problem-solving.

1. **Do not rely on emotionalism.** Emotions are not easy to get rid of because most of us inherit our positions from parents, religion, society, peer groups, and other influential social and political forces. However, the failure to argue logically and factually convincingly is simply unacceptable, albeit emotions, personal opinions, and feelings may be cherished.
2. **Do not rely on authority to determine personal or collective solutions.** All forms of authorities: religious, political, legal, provincial, and so forth do not determine sound (valid and true) judgments and policies. Only vigorous rational and articulate thinking, and accurate facts determine sound judgments and policies.
3. **Do not do wrong.** That is, no matter what others say or propose, if their judgments are unsound (invalid and false) they should be rejected. Thus, we must never do what is wrong or immoral. Our only criteria of judgment and decision-making, again, are: (i) logical thinking; and, (ii) accurate, pertinent empirical justification (testability, reliability, credibility).
4. **Do not rely on impulsive, non-reflective, and/or uncreative thinking.** Use the power of your right brain and its productive exchanges with the left-brain. Find the compromise, the golden mean: between the linear and the intuitive, the analytic and the holistic.

Successful, Generic Writing Tips

1. Make your words work as hard as you do.
2. Your writing should be as clear as the numbers on your checks.
3. Say exactly what you mean.
4. Avoid breeziness slang.
5. Keep the subject clear throughout.
6. Avoid long sentences. The rule is 10 words or less per sentence.
7. Be original. Original goods and services do sell.
8. Avoid opinions and seek out knowledge, truth, the whole truth, and nothing but the truth.
9. Avoid buzzwords. Explain your technical terms.
10. Stop when you are finished. If you’re writing makes sense without the final sentence of paragraph and you’re done.

11. Put it aside and rewrite it at least four times.
12. Be in a positive frame of mind when you write.
13. Still in doubt, read your manuscript out loud.
14. Try taking out the first paragraph.
15. Watch your punctuation, sentence structure, and grammar. Always have someone else proofread what you have written or processed.
16. Anyone can re-write anyone. Writing is never over, however, attempt to stick to 1 through 15.

Last, please transcend powerless speech and writing:

1. Avoid hesitating: “um,” “aah,” “hum,” “well,” “like,” or such.
2. Avoid weaslers or hedging, “I think,” “I believe,” “in my opinion,” “perhaps,” etc.
3. Avoid excessive adverbs, “very, very accurate,” “really tremendously true,” “definitely,” “surely,” etc.
4. Avoid over-politeness, e.g., “yes, sir,” “please sir,” etc.

Logical Philosophic Rules Checklist

The following are rules (Rs) that you ought to master in order to critically comprehend and successfully write logico-ethical, or, for that matter, intellectually cogent, scientific, and professional papers. Furthermore, these rules will be the guiding line for grading your exams and cases. For example, say, your paper includes R1, R7, and R35. These will respectively reflect an English problem, a logical fallacy such as a clarification or ambiguity, and a biographical failure such as missing a source. Notice, finally, that the numbers between parentheses indicate the points lost from committing one or the other of these errors. Evidently, the lost points increase with the seriousness of the mistake. English would be one or two points, depending on whether the error is a grammatical or a punctual one. A logical mistake would be two or three points, depending on whether the mistake is a general fallacy or an invalid argument altogether. And the lack of an argument, a counterargument, or an objection (a counterevidence), soundness, replies to objections, not answering the question (such as a comparing but not contrasting, or a downright irrelevant answer) will cost you anywhere between 4 to 40 points.

Remember that the purpose of this list is not to hurt your grades, rather to assist you, materially, in sharpening your intellectual skills, rationalizing and justifying your position and arguments, and increasing your level of CT awareness and self-esteem. Hence, please pay close attention to these rules by practicing them. Posterior demonstrations on how to write a CT essay will follow. Do not hesitate to come see me, or ask questions if you are genuinely unsatisfied.

Rules (Rs)

1. ENGLISH. This denotes a grammatical mistake, a muddled syntax or style, or an incorrect punctuation. (1)

2. **PREMISE.** Premise or assumption is missing or in need of an explanation or argumentative defense. (2)
3. **ARGUMENT.** You do not have an argument here and you should have one. (4)
4. **EXPLAIN ARGUMENT.** The argument is unclear, or vague and requires clarification. (2)
5. **COMPLETE ARGUMENT.** Either one or more premises are missing or your conclusion (position, claim, judgment, view, thesis) is nonexistent.
6. **NON-SEQUITUR.** States or implies that something follows (Y) from something else (X) but it does not follow. (2)
7. **EQUIVOCAL or AMBIGUOUS.** Here a term, phrase, or a sentence can be read with various meanings. You should use unequivocal words or sentences. That is, reformulate the sentence until it is unambiguous. (2)
8. **RHETORICAL QUESTION.** This is related to begging the question but somewhat different. Rhetorical questions occur when you are avoiding arguing the issue. For example, you may say that abortion or terrorism is wrong and then you speculate about these or other cases. That will not do unless you specifically define and soundly defend your position, and possibly reply to counter positions. (6)
9. **BEGGING THE QUESTION.** This occurs in many ways. One common way is when a writer cleverly repeats the same claim and thinks that he/she has logically justified the position. (4)
10. **AUTHORITY.** An argument or a proposition is not necessarily true just by someone saying it is true. This is not philosophically, scientifically, socially, or artistically sound. (3)
11. **EMOTIONAL APPEAL.** To feel strongly about an issue is not bad. What is bad is the lack of a valid argument and true facts. Pleasure, disgust, and so forth are simply rejected of philosophy and CT. (4)
12. **INCONSISTENCY.** This occurs when a word, proposition, or argument contradicts itself or the outside facts, present or future. Same as self-contradiction or self-defeats. (2)
13. **UNDEVELOPED.** You mentioned an important objection or argument without fully developing it. (2)
14. **OBJECTION.** Arguing is necessary but not sufficient. You must always anticipate objections to your position (e.g., abortion, hunger, homelessness, unemployment) and attempt to defend it against them. (3)
15. **CAREFUL.** Be careful on how you express a judgment. It should be clear, complete, sound, and fully defended against reasonable criticisms. (3)
16. **TRANSITION.** This means that your transition is incorrect. Be careful whenever you jot down such transitional indicators as: but, however, nevertheless, yet, although, thus, therefore, so, hence, in addition, because, since, for, in summary, and so on. You must do it logically. (2)
17. **CONNECTIVES.** Be careful about your connectives (if, and, or, if and only if) as well as quantificational ones (all, some, no) and modal ones (necessarily, possibly, not necessarily). (2)

18. **NOT ANSWERING THE QUESTION.** This occurs when you partially or entirely failed to answer the question. Your answer might be delightful but it's not relevant it will just not do. (10)
19. **WHAT EXACTLY DO YOU MEAN.** This happens when you're using technical words (e.g., duty, goodness, bad, right, wrong, ought, responsibility) without defining them in the context of your writing. It happens also when your reader does not follow what you're saying – not because what you're saying is deep and thoughtful, but because it is obscure and vague. (3)
20. **THIS NEEDS SUPPORT.** Your argument might be logically valid. However, if your facts are not straight or your background and crucial data are lacking, then it is unacceptable, no matter how impeccable it is. (4)
21. **WEAK INTRODUCTION.** At its worst, this means that you do not have an introduction at all. Most likely, denotes that the introduction is irrelevant or at best weak. For example, stating that: "Philosophers for centuries have debated about the nature of freedom (abortion or whatever)" this is padding. It is no news to your philosophy professor. So be relevant and get to the point. For example, "In this essay I will explain the basic arguments of psychological egoism and, then, I shall critically assess its: (i) validity; (ii) plausibility: and, (iii) explore some challenging views..." is, of course, much better. (3)
22. **WEAK CONCLUSION.** This indicates either lack of a concluding paragraph or statements are an "out of the blue" conclusion (something that has nothing to do with your project). So, provide at the end of your project a brief summary of what you have done. (2)
23. **REDUNDANT OR REPETITIVE.** Avoid repeating yourself unnecessarily. (2)
24. **IRRELEVANT.** You are drifting from your topic or line of reasoning (argument) by inserting extraneous material. (2)
25. **WRONG WORD.** Use a more precise word. (1)
26. **DEFINITION.** Your topic is not clearly defined. (2)
27. **SIGNIFICANCE.** What is the significance of what you are saying here? (2)
28. **EXAMPLE/DISTINCTION.** Provide examples or distinctions, please. (2)
29. **PARAPHRASE.** In philosophy, you are required to clearly interpret and not just to paraphrase. (2)
30. **COMPARE/CONTRAST.** When you are assigned just to compare then just compare. Obviously when you're told to compare and contrast, then do so. Sometimes you need to compare and contrast theories one, two, and three. So, you must do so for one and two, two and three, and one and three. (20)
31. **CATEGORY MISTAKE.** This happens when a term is used out of context. For example, 'bad' or 'lazy' or 'good' for 'smart.' Remember, that the words good, bad, right, wrong, etc., are technical concepts. They are equally functions of your subject: physics, finance, law, etc.
32. **EXPLAIN QUOTATION.** If the quotation is relevant to what you are saying, then interpret its basic line of reasoning. (2)

33. OVER QUOTE/UNDER QUOTE. Use only the adequate quotes to your topic and do not use quotation marks or italics. Also, when you quote, you must comment on the quote! (2)
34. MISQUOTE. Always copy correctly your quotations. (1)
35. SOURCE. When quoting the source from which the material is quoted, you must like explicitly and specifically. Namely, a complete bibliography is required: authors name, book or article title, publisher/editor, year and page, or any other equivalent format. With cyberspace research, include complete full data (web addresses). (1)

Following and practicing the flexibility of these rules will enhance your grades. They will increase your intellectual, rational, and empirical skills as well as improve your theoretical and practical reasoning and wisdom, whatever your career pursuits.

Possible Approaches to Your Exams, Projects, R&D

In fact, there is a whole branch of philosophy related to epistemology (theory of knowledge), known as methodology (theory or science of methods) that deals particularly with various alternative approaches to philosophic, scientific, literary, medical, legal, or social problem solving. Our simple concern in this class, however, is to present three guiding techniques that ought to be sufficient in doing your exams, projects, internships, or externships.

The Developed Method (DM)

Three steps are usually required to compose your CT essay (keep in mind the problems may be as varied as the nature of reality, truth, goodness, justice, beauty, health, markets, etc.). First, you ought to explore your topic looking for the key concepts and issues. Secondly, you want to consider all the pros and cons vis-à-vis each concept, thesis, and issue. Finally, try to carefully and coherently assemble all your philosophic/scientific/literary baggage into methodic, concise, short sentences, and separate paragraphs. In so doing, your writing style may resemble a symphony!

1. Exploring the topic: as you are presenting and analyzing your topic, you will find arguments for and against various positions. You will also begin to identify and formulate your own position and arguments. Thus, you may consider developing arguments for each side of the issue, and then criticize them using that subject and its critics. Precisely, try to evaluate each argument premise (assumption) by showing its strength (defense) and weaknesses (objections) through appraising each argument/claim and by showing its validity and invalidity, truth and falsehood, and optimality and ineffectiveness. You may want to use counter-examples, counter-views, and so on. Finally, please do revise and rethink your arguments as they emerge. Illustrate.
2. Maintain themes of the topic: first, please, begin by exploring your topic. Why is it relevant? What is (are) the major problem(s)? How are you going to approach (solve) it (them)? Secondly, clearly evaluate the proposed philosophic solutions (recommendations) showing the logical and scientific (if any) strengths. Then,

you must proceed by showing the logical and/or empirical (scientific) objections to it. You may continue by thinking out counter objections and rebuttals. Finally, try to synthesize through sorting out your own solutions (recommendations, alternatives) if any. Be clear and specific, and without detailed elaboration (unless you want to). Justify why your position, or somebody else's, is better, or more efficacious. For example, suppose the problematic (ESSAY) is: What is the ultimate, basic, and primary nature of reality according to our first, official Western philosopher, Thales? (Your key concepts embedded in this problem are "ultimate," "basic," and, in particular, "reality," "Thales," and "first Western philosopher.") Next, put everything on a separate sheet of paper (everything means anything that comes to your mind about "the structure of reality" in light of Thales). Write down everything in disorder (*pêle-mêle*). After exposing the subject's main pieces, then anticipate his antagonists' objections (maybe only one, say, Anixamenes) and what is his specific antithesis, alternative (why and how)? Then you may conclude by providing your own synthesis, corroborated alternatives. "In this CT paper I will argue that the argument(s) for X (water as the ultimate "stuff") is not necessarily conclusive. For, first" This would be a more forceful and specific introduction than say "Thales was born in 624 B.C., he was a lunatic, and"

3. Actual Writing: By now you have the problem fully worked out (incidentally, if it is a project, I would give it some "psychic distance," i.e., a couple of days and then go back to it fresh). Therefore, you should follow your outline by introducing your topic, incorporating your arguments (pro and con), one at a time, and suggesting your final synthesis. Do not go beyond what you planned to perform. That is, conclude your paper (project) with a summary interpretation looking back (summarizing the major points) and looking ahead, (what should further discussions/research be like on this problem). For example, you may write, "In concluding my review of philosophic analysis of Thales' doctrines, I attempted to demonstrate that the basic, alternate structure of reality is water. This was attributable to both empirical and deductive assumptions of his prescientific physical system. Furthermore, it marks the birth of a natural philosophy. It contains the distant seeds to contemporary theories of physics and biochemistry." You may desire to find out, later, within a research thesis or a PhD dissertation, if Thales' axioms are true!

The Summarized Method (SM)

A good response to an exam or to a project should be both: (i) expository; and, (ii) evaluative (analytic, critical). Expository denotes your ability to clearly present the main thesis or arguments of the philosopher at hand. If one is asked to discuss the concept of "NOUS" (mind, logos, a universal reason, etc.) Anaxagoras then ought to be interpreted, re-constructed, or clarified. A summarized, but thoroughly, understandable, reconstruction of the NOUS-based argument suffices. Illustrations, that are pertinent, are useful.

Evaluative, on the other hand, means that the writer (you) ought to appeal to his/her rational skills (which you all possess) to analyze the theses and/or argument(s) through breaking it (them) down into methodic assumptions and logical conclusion(s). Each claim (assumption, premise, ground) should be looked at and examined, first, by exploring its

philosophic strengths. Then, the weaknesses of the system should be equally explored. These weaknesses might be logical, factual, or both. You may want to consider your own (someone else's, you, or another philosopher) reply(ies) to these objections to draw up a balanced synthesis.

It is, moreover, practical to directly attack the issue, or problem, at hand by stating what you are about to accomplish. For instance, "In this essay (project), I shall: (i) expose the main conclusion(s) of Adam Smith regarding the Invisible Hand by identifying the grounds supporting it (them); (ii) assess (critique, evaluate) its (their): (a) logical validity (fallaciousness); and, (b) factual truth (falsity). Criticisms and replies to such criticisms will be explored as well. Finally, (iii) I shall try to furnish my own argument and/or position for or against the theory under examination. Please stick to your outline.

Comparative/Contrastive/Interpretive Research Project

Please remember that you need to do three methodic things herein. First, explore the main differences in kind and/or scope between X and Y. Provide pertinent examples. Second, identify the main similarities between X and Y, again, in kind and/or scope via providing relevant instances. Finally, present or discuss your own position. Do you agree with X, with Y, with X and Y, with neither X nor Y? If so, why? If not, why?

Basic Anatomy/Style for Your Scientific-Normative Research Paper in CT

- A. Front Matter or Front Organizational Framework (15 points)
 1. Title Page (4 points)
 2. Dedication (3 points)
 3. Disclaimer (4 points)
 4. Outline (4 points)
- B. Substance or Research Development (70 points)
 1. Introduction (10 points)
 2. Body (50 points)
 - a. Thesis or Exposé or Presentation or Description of Topic (10 points)
 - b. Antithesis or Analysis or Assessment or Pros and Cons (30 points)
 - c. Synthesis or Findings and Remedies (10 points)
 3. Conclusion (10 points)
 - a. Summary (5 points)
 - b. Outlook (5 points)
- C. Back Matter or Back Organizational Framework (15 points)
 1. End Notes: name, title, and page number (3 points)
 2. Bibliography: name, title, publisher, publishing company, year, website, etc.
 - a. traditional serious references (books, scientific work, etc.) (3 points)
 - b. websites (use critical thinking) (3 points)
 3. Exhibits: computer-generated graphs, diagrams, tables, etc. (3 points)
 4. School-to-Career Statement: State the professional applications of paper your CT class and your career (entrepreneurial) pursuits.

Recap

This chapter introduced the reader to the power of critical writing. Specifically, it supplied the principles, structure, dynamics, and goals of critical writing, in conjunction with critical thinking. The chapter, also, lists some main informal errors of reasoning, or fallacies, albeit we shall explore these mistakes, in more detail later in the book. Last, effective rules for effective writing were introduced. Succinct, sound approaches to good writing were also delineated and included.

Key Words and Phrases

Developed methods to writing
Elements of style
Powerful and powerless speech
Elements of substance
Informal fallacies (ad homina, fallacies of language)
Effective writing
Principles of dialectic writing
Succinct methods to writing
Logical rules of effective writing, R1 through R35

More Suggested Essays, Research Projects

1. Write a thoughtful paper on “how to write well.”
2. Why are effective CT-based writing and speaking the most sought-after skills for 21st Century businesses and economics? More than a business background, itself.
3. Write an essay on language fallacies. Illustrate.
4. Write an essay on fallacies of relevance. Illustrate.
5. Write an essay on statistical fallacies.
6. Consider interviewing a business leader, a political leader, a religious leader, a scientist, an economist, a judge, or such and assess their views on the power of CT and critical writing.
7. Intern with a gaming or a media company in town and explore/evaluate their written products or literature.
8. Why does sound thinking and sound writing create wealth?
9. How would you utilize CT and critical writing to resolve some major crises in our global village: crime, wars, violence, poverty, pollution, diseases, homelessness, hatred, etc.?
10. Why is critical writing necessary for your career development? Discuss.