SIRIUS: The Strategic Issues Research Institute Benjamin C. Works, Executive Director 1515 Jeff Davis Hwy #408 * Arlington, VA 22202 703 415-1191; <u>www.siri-us.com</u>; E-mail: Benworks@AOL.Com --Speak the Truth and Shame the Devil--

MAJOR ELEMENTS OF LOGIC:

In philosophy and rhetoric words have double the power in meaning; they are like soldiers in a battle line, each supporting and guarding its comrades. Change or take out a word or two and the idea's integrity may be betrayed. By the end of The Golden Age of Greek Philosophy, the war of words and ideas between the disciplinary philosopher and the manipulative sophist-rhetorician was raging and the war continues unabated in our own time: the logician wants to give us keys to wisdom, the sophist wants to take our support by stealthful seduction, often to and beyond the point of fraud.

As the reader looks into the Wisdom and Folly of the successor ages, it will be helpful to have at the student's fingertips an outline guide to the traps of false logic which one encounters routinely in politics and advocacy. The following (derived and condensed from William S & Mabel Lewis Sahakian; *Ideas of the Great Philosophers*, Barnes & Noble, 1966 & 1993; pp 11-23) are the major logic and semantics traps in evidence and facts: errors in structure are not included herein, but reinforcing observations will be found in following chapters, where appropriate.

* **Material Fallacies**: where the error lies in the factual content of the argument, rather than in structure. These include Linguistic Fallacies, Fallacies of Irrelevant Evidence and some miscellaneous fallacies listed below:

* Eight Linguistic Fallacies:

Fallacy of Emotive Language: using words that color emotional reactions, particularly to cast an aspersion against an opponent; "Commie!" "Tree hugger." "Fascist."

Fallacy of Ambiguity: hiding behind words which lack precise meaning, are vague, imprecise, ill-defined, etc.

Fallacy of Equivocation: using a word or term in more than one of its senses in various parts of an argument.

Fallacy of Amphibology: use of an entire statement which permits two interpretations. This is often nothing more than bad writing where a modifier is misplaced, such as "a chair for a baby with a broken leg." Which has the broken leg, the chair or the baby?

Figure of Speech Fallacy: e.g., audible and visible are comparable because they mean

`can be heard' and `can be seen.' However, desirable means `ought to be desired' and would be falsely compared to the prior examples. - This was defined by Aristotle for a problem that was greater in the Greek language of his day.

Fallacy of Composition: an organic whole may not be as good as its constituent parts. The whole may be better, or worse. A group of stars can perform in a dreadful play or movie; conversely a group of stars and journeymen may combine to play as a championship team.

Fallacy of Division: the converse of the fallacy of Composition; an organic whole, such as a flower, a man, a ball team cannot be divided as a mathematical whole. What is true of the whole is not necessarily true of each constituent part. The championship team's players may not all be the best in the league at their respective positions.

Fallacy of Vicious Abstraction: taking a statement out of context to change the meaning. For example: "Love of Money is the root of all evil." In a Fallacy of Vicious Abstraction, a form of deliberate or careless misrepresentation, this quote is often recalled as: "Money is the root of all evil." Other examples of this fallacy, with the omitted words in italics, include:

** "Foolish* consistency is the hobgoblin of little minds." - Emerson ** "A little* learning is a dangerous thing..." - Alexander Pope ** "A little* philosophy inclineth a man's mind to atheism; *but depth in philosophy bringeth men's minds about to religion."* - Francis Bacon

* Seven Fallacies of Irrelevant Evidence in Logic:

Fallacy of Irrelevance, or *ignoratio elenchi*; - Deflecting the argument by proving B instead of A, which was the real issue.

Argumentum ad Ignorantiam, or, appeal to ignorance. - Assume a given thesis is correct because no one can prove it incorrect: "No one can prove Alien life forms do not exist, therefore they exist."

Argumentum ad Misericordiam, or, appeal to pity. A purely emotional appeal ignoring all pertinent facts. Tragic, little "victim" girls are the best example.

Argumentum ad Verecundiam, or, appeal to Prestige:

- "Respect your elders..."
- "A professor from Harvard says it's so..."

Argumentum ad Baculum (baculum: a club), or, the appeal to force; "or else..."

Argumentum ad Hominem. "To the man"

- In Rhetoric, an appeal to prejudice, rather than to reason by attacking the opponent's personality rather than his facts. The original meaning, though, also was an invitation to

the listener's selfish interests, greed and envy. In political and legal practice, if you cannot attack the evidence, attack the personality and besmirch the integrity of your opponent or hostile witness

Argumentum ad Populum, or, appeal to the masses.

- a positive appeal to blind patriotism, or, conversely, a negative appeal to tribal, national, religious or racial prejudice, or selfish interest; a favorite of Fascist propaganda.

* Other Miscellaneous Material Fallacies:

Fallacy of Accident, or, Dicto Simpliciter:

Converse Fallacy of Accident, or, hasty generalizations: "All geniuses are odd people, because the first five geniuses I met were all eccentrics."

Post Hoc, or, False Cause: "*Post hoc, ergo propter hoc*;" (After this, therefore because of this). A may happen before B, but it may not necessarily cause B, as in correlation does not necessarily prove causation. A simple example is "the rooster taking credit for the dawn. Activist groups are particularly keen on claiming credit not due them or beyond what is due them. The underlying principle in statistics is that correlation does not necessarily prove causation.

Non Sequitur, or, does not follow: a lack of a logical connection.

Compound questions: multiple questions or "poisoning the well." Used as a means of tricking self-incrimination. "Have you stopped cheating on your wife?"

Petitio Principii, or, Begging the Question by circular reasoning: "Gentlemen prefer blondes." "How do you know?" "A gentleman told me so." How do you know he is a gentleman?" "I know for the simple reason that he prefers blondes."

Tu Quoque, or, you yourself do it: "If you can stay up, dad, I should be able to stay up too."

Fallacy of Misplaced Authority, citing an authority in one subject on matters pertaining to subjects outside of the authority's area of expertise; one does not cite Einstein's political, religious or artistic opinions as authoritative. Carl Sagan, an astronomer asserted himself as an "authority" on "Global Warming." despite having no training in meteorology, climatology, history, geology or archaeology.

Genetic Error, or, dismissing validity on basis of obscure origin or cause. If a madman says 2+2=4, or that smoking is bad for your health; these statements cannot be disqualified because he is otherwise mad; they must be judged on their own merits.

False Analogy, "women make better nurses than men for nursing is merely good housekeeping."

Insufficient Evidence, or, accepting inadequate data as a basis for a conclusion. Proof that a murder weapon legally belongs to a person does not by itself prove that person committed the murder.

Pathetic Fallacy, or, altering historical facts to draw conclusions about an alternate future. "If the South had won the Civil War, then slavery would abound in the North today."

Contradictory Premises, or, the self-contradiction. "Can God make a round square?" - from Sahakian & Sahakian; Ideas of the Great Philosophers

In addition, there is the argument to absurdity, the Reductio ad Absurdum; Proof of the falsity of a principle by demonstrating that its logical consequence involves an absurdity. It is used loosely of taking an argument or principle to impractical lengths. "The more sleep one has the longer one lives. To sleep all the time ensures the longest possible life." - Wordsworth Dictionary of Phrase and Fable, 1994; p. 902

George F Will speaks of a Fallacy of the False Alternative which is a combination of elements of the above fallacies. - ABC-This Week, May 3, 1998

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