Glossary

ad hoc hypotheses. An hypothesis created to account for a specific case or situation, especially a case which seems to refute one=s theory, e.g., claiming that an esp experiment failed because it was observed by someone who does not believe in esp and their Ahostile vibes≅ interfered with the subject=s powers.

ad hominem. A critical remark about a person rather than about the person=s argument.

ad populum. Irrelevant appeal to the popularity of a belief to justify it. Also known as the bandwagon fallacy, the appeal to the mob, the democratic fallacy and the appeal to popularity.

ambiguity. Lack of clarity due to a word or expression being reasonably open to more than one interpretation.

analogy. Similarity in some respects between things otherwise dissimilar. A comparison based on similarities.

analytic statement. A statement whose predicate is in-cluded in its subject. Statement which is true by definition. For example, AA bachelor is an unmarried male.≅

analysis. A separation of material or an abstract entity into its constituent parts. To analyze an argument is to separate the premises and conclusions from background material, fluff, examples, illustrations, etc., in order to evaluate the argument.

a priori claims. Non-empirical claims which are taken to be necessarily true but which are not matters of definition.

arguing in a circle. To use a statement to prove itself.

argument. Any set of statements where at least one statement (a premise) is put forth to support the truth or reasonableness of another statement (a conclusion) or the reasonableness of an action.

argument from ignorance. Arguing that something is true on the ground that it hasn=t been proved false, or that something is false on the ground that it hasn=t been proved true.

assumption. Something taken for granted; believed or asserted without providing any proof or support. Every argument is based on assumptions, premises put forth or presupposed without proof.

begging the question. Assuming what ought to be proved in an argument.

class. A group of items which share something in common.

classify. To group items according to shared characteristics.

clustering illusion. The clustering illusion is the intuition that random events which occur in clusters are not really random events.

cognitive content. The descriptive or literal sense or reference of a word or expression.

communal reinforcement. The process by which a claim becomes a strong belief through repeated assertion by members of a community.

composition, fallacy of. Reasoning that what is true of the parts must be true of the whole.

conclusion. A statement asserted to follow (either with necessity or with some degree of probability) from another statement or set of statements.

conditional statement. A complex statement asserting that a statement--B-is true, on condition that another statement--A--is true. The form of the conditional statement is *If A, then B*.] The >A= statement is called the *antecedent*]; the >B= statement is called the *consequent*.

confirmation bias. A type of selective thinking whereby one tends to notice and to look for what confirms one's beliefs, and to ignore, not look for, or undervalue the relevance of what contradicts one's beliefs.

consistent statements. Statements are said to be consistent with each other if they can be true simul-taneously.

contradictory statements. Statements are said to

contradict one another if both cannot be true and both cannot be false. If S_1 is the contradictory of S_2, then if S_1 is true, S_2 must be false, and vice-versa. E.g., >The sun is round= is the contradictory of >The sun is not round=.

contrary statements. Statements are said to be contrary to one another if both cannot be true. Contraries may both be false. E.g. >The sun is square= is contrary to >The sun is triangular.=

correlation. Mutual or reciprocal relation between two things.

counter-argument. A refutation; an argument offered against another argument.

counter-example. A refuting example; an example which shows that a claim is false.

deductive argument. An argument which asserts that its conclusion follows necessarily from its premises.

descriptive generalization. A generalization which ascribes a characteristic or quality only to those members of a class which have actually been observed.

division, fallacy of. Reasoning that what is true of the whole must be true of the parts.

dogmatic. Characterized by an authoritative, arrogant assertion of unproved or unprovable principles.

emotive meaning. The attitude or feeling expressed by a word or expression.

empirical. Originating in or tested by sense experience and observation.

empirical generalization. A generalization based on sense experience and observation..

enthymeme. A syllogism in which one of the premises is unstated. (The term is sometimes extended to refer to any argument in which a premise is unstated).

enumerative or simple inductive generalization. A generalization which ascribes a characteristic or quality to all or some of the members of a class which have not been observed, on the basis of observations made of some of the class members.

epistemology. The study of the origins, nature and extent of knowledge.

equivocation. Ambiguous use of a key term in an argument whereby a term is used in different senses in different places in the argument.

euphemism. An inoffensive or mild expression used in place of one that might offend or suggest something unpleasant.

evaluation of an argument. To determine the warrantedness of premises and the warrantedness of the inference made in the argument that a conclusion follows from the premises with necessity or some degree of probability.

explain. To render intelligible; to make clear the cause or reason for something; to account for.

fallacy. Incorrect or invalid reasoning; also, deceitful arguing.

false analogy. A fallacious argument in which one tries to prove a point about an item or group of items by comparing it to something very dissimilar. Also known as **irrelevant comparison**.

false cause. A fallacy in which one reasons that simply because two things are correlated they are causally related.

false dilemma. An argument which considers fewer than all of the relevant alternatives to a decision.

falsifiability. Term used by Karl Popper to describe the defining characteristic of scientific theories, viz., they are capable of being tested in ways which might prove them false. He opposed falsifiable theories to metaphysical ones, which cannot be tested in any empirical way to prove them false.

false implication. A statement which is true, but which implies that something is true when it is not, makes a false implication.

generalization. A statement which ascribes some quality or condition to members of a class.

hasty conclusion. A conclusion based on relevant but insufficient evidence.

hasty generalization. A generalization based on a sample which is too small.

hypothesis. A proposed explanation of some phenomena.

implication. Something that is implied; an inference.

imply. To assert or suggest that something logically follows from something else and may therefore be inferred from it.

inconsistent statements. Statements are said to be inconsistent with each other if both cannot be true. See contrary statements.

inductive argument. An argument which asserts that its conclusion follows with some degree of probability, rather than necessity, from its premises.

inductive generalization. Empirical generalization which ascribes a characteristic or quality not only to class members which have been observed but also to class members which have not been observed.

infer. To conclude or judge from premises or evidence.

inference. The act of inferring; or, that which is inferred.

loaded question. A question which, if answered directly, commits one to implying the truth of a claim which ought to be proved.

motive. A psychological reason which explains an action or belief.

necessary condition. AC≅ is a necessary condition for AE≅ if it is necessary that AC≅ occur for AE≅ to occur. Put another way, it means that *if* AC≅ had not occurred, AE≅ would not have occurred.

non sequitur. A conclusion or inference which does not follow from its premises.

placebo. An inert substance used as a control in an experiment or given to a patient for its psychological effects.

placebo effect. The measurable or observable effect on a person or group that has been given a placebo rather than an active substance.

population or **target population**. A class from which a sample is taken and about which generalizations are to be made based upon the sample..

post hoc fallacy. A type of false cause reasoning in which one reasons that simply because one event preceded another even, the first event is the cause of the second.

preconception. A conception or opinion formed beforehand; a bias.

premise. A statement put forth as a reason for accepting the truth or reasonableness of another statement.

presumption. An assumption that something is true.

presupposition. Something assumed to be true, but left unstated.

questionable analogy. An analogical argument in which the analogue is too dissimilar to the subject to warrant any inference about the subject based only on what is known to be true about the analogue. Also known as **false analogy** and **irrelevant comparison**.

questionable assumption. A premise which is unwarranted.

random sample. A sample selected in such a way that every member of the target population has an equal chance of being selected for the sample.

refutation. An argument put forth to disprove a statement, argument, theory, etc.

regressive fallacy. The failure to take into account natural and inevitable fluctuations of things when ascribing causes to them.

repressed memory. A memory of something unpleasant which has been forgotten until years later when an experience triggers the memory.

sample. The members of a target population which have been observed and studied.

selective thinking. The process whereby one selects out favorable evidence for remembrance and focus, while ignoring unfavorable evidence for a hypothesis.

self-deception. The process or fact of misleading ourselves to accept as true or valid what is false, invalid, or inadequately supported.

slippery slope. A fallacious form of reasoning which asserts, without providing any proof, that taking (or not taking) a particular action will lead to a series of disastrous consequences.

sound argument. An argument whose premises are

warranted and whose conclusion follows from its premises with the degree of certainty asserted for it.

statistical generalization. One which asserts that a quality either does or does not belong to *some* members of a class.

stereotype. An oversimplified classification, invested with special meaning, by a group.

straw man. A distorted or weak version of an argument set forth so as to be easily refuted or defeated.

sub-argument. An argument whose conclusion serves as a premise is another argument.

sufficient condition. AC≅ is a sufficient condition for AE≅ if the presence of AC≅ is sufficient to bring about AE≅. Put another way, it is to say that IF AC≅ occurs, AE≅ will occur-- everything else being equal.

target population. All of the members of a class being studied and from which a sample is taken.

tautology. A statement which is necessarily true.

statement is >true= and the truth-value of a false statement is >false=.

universal generalization. One which asserts that a quality or characteristic does or does not belong to *all* the members of a class.

vagueness. Lack of clarity due to imprecision or indefiniteness.

validity. The quality of an argument whose conclusion follows from its premises with the degree of certainty asserted for it. A deductively valid argument is one whose conclusion follows necessarily from its premises.

verbal disagreement. An apparent disagreement due to different people using the same term differently.

wishful thinking. Believing something is true because one wants it to be true rather than on the basis of solid evidence.

worldview. A person=s set of basic beliefs and attitudes about the world, knowledge and experience

traditional wisdom, appeal to. A fallacy in reasoning which assumes that because something is well-established and customarily assumed to be true, it therefore is true. The age and traditional acceptance of a belief are irrelevant to the establishment of either its wisdom or its truth.

truth-value. A statement is said to have either the value of >true= or the value of >false=; the truth-value of a true