A sign "is" a "thing" "having" "one" "or" "more" "meanings." A word is "type" "of" sign expressed as a sound(s) or a collection of marks on a material which are collected into a "meaningful" "unit." The "thing" a sign refers to may be named a *referent*; and the sign's *reference* is the predicate of words describing the referent (see Ogden, C.K. and Richards, I.A., The Meaning of Meaning, Harcourt, Brace & World, Inc., N.Y.C., 1946). In a dictionary, the word representing the referent is "named" the subject and is described by the reference. "Types" "of" signs are gestures, words, diagrams (e.g., a road sign that shows two lanes that change to one), or natural events (e.g., smoke suggesting or inferring that a fire is near or "gurgling" suggesting or inferring moving liquid). A special kind of word is "name;" it can be "particular" such as "Jim" or used as a "universal" or "set" such as dogs or cats. Names are words which may or may not relate to the nature of the referent or the thing being named. For example, the name cat gives no suggestion of the meaning of the word cat; couldn't the word representing cats be *meows* which would give a hint of the meaning of the named referent by its sound? Kinds of words are orthographic, phonological, morphological, lexical, grammatical, name, and root. Orthographic words are letters or syllables grouped into a meaningful unit. Phonological words are sound or sounds grouped into a meaningful unit. Lexical words (also called lexeme) relate to things, acts, or states.

A phrase is a collection of words not set off by a period and not having a subject and a verb. A clause is a collection of words having a subject and a verb. Sentences are collections of words having at a minimum both a subject and a verb which are demarcated by periods or speech pauses. Sentences often convey one complete thought. A proposition is a true or false sentence such as I am hungry.

Sentences have words arranged in a certain order; the arrangement of the words in a sentence is named the syntax of a sentence. Syntax conveys meaning by the order of word classes in a clause: For example, nouns are persons, places, or things and are arranged in sentences by the words representing a certain order: *subjects* or *objects*. In a sentence the subject is before the verb and the object after the verb. Syntax

conveys meaning by the order of word classes in a clause: For example, nouns are subjects or objects; and verbs have a subjects plus objects of said verbs. Another example is "The cats were sitting unhappily in the rain." The syntax analysis is +CAT + s + (BE + past/plural) + SIT(T) + ing + un + HAPPY + ly + in + the + RAIN (lower-case items are morphemes, the upper-case lexemes). Thus this eight word sentence contains eight morphemes and five lexemes.

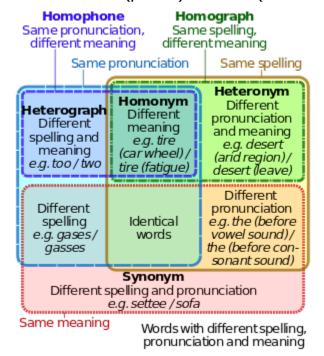
Language is the conveyance or communication of meaning with signs. This conveyance is accomplished by the components of language which are the fields of phonology, syntax, and semantics. Semiotics is the study of signs and symbols as part of communication or language. Categories of these signs and symbols can be gestures, clothing, behavior, words, hair style, types of houses, or signs given meaning by implication such as smoke means a fire is close (Medical diagnosis depends on signs implying underlying pathologies). Semantics is from the Greek word *sema* meaning "sign." The field of semantics is concerned with the meaning of words. Semantics makes the meaning of words clearer by grouping them into sets (tautological words: classes, types, kinds, groups, universals, ).

Semantic categories of words follows: A hyponym puts the "subject" into class membership such as geraniums and a daffodils are flowers. A synonym refers to a word whose meaning is close to the subject word but varies by some quality. Emotive refers to how words may have the same denotation but differ in connotation, e.g. a politician versus a statesman. Collocation is a meaning derived from habitual association of placing words together, e.g. to and fro or draw up; both made into one word—to and fro or drawup.

Antonym means a subject word's opposite, which can help give understanding of the subject word. Subcategories of antonym types follows: 1. Opposites in degree: spacial differences such as wide or narrow; time differences such as old and young; degree differences such as A is older than B. 2. Opposites of non-gradable classes such as gender (male or female), existence (exist or dead). 3. Opposites in relation such as in commerce—buy or sell or in marriage husband or wife (Only a husband can have a wife.).

In linguistics, a **homonym** is, in the strict sense, one of a group of words that share spelling and pronunciation but may have different meanings. Thus homonyms are simultaneously homographs (words that share the same spelling, regardless of their pronunciation) and homophones (words that share the same pronunciation, regardless of their spelling). The state of being a homonym is called *homonymy*. Examples of homonyms are the pair *stalk* (part of a plant) and *stalk* (follow/harass a person) and the pair *left* (past tense of leave) and *left* (opposite of right). A distinction is sometimes made between "true" homonyms, which are unrelated in origin, such as *skate* (glide on ice) and *skate* (the fish), and polysemous homonyms, or **polysemes**, which have a *shared origin*, such as *mouth* (of a river) and *mouth* (of an animal).

In non-technical contexts, the term "homonym" may be used (somewhat confusingly) to refer to words that are either homographs *or* homophones. In this looser sense, the word *row* (propel with oars) and *row* (argument) are considered homonyms, as are the words *read* (peruse) and *reed* (waterside plant).



Using etymology to choose 2<sup>nd</sup> predicates: Homonyms may have the same etymology, e.g. shared origin of mouth (of a river) and mouth (of an animal) which are **polysemes** or **polysemous homonyms** versus **homonyms with different etymology (origins)** such as skate (glide on ice) and skate (the fish). Thus related or unrelated by origin to the first predicate words may be a way to find predicates consistent with and related to the first predicate words for second, third, etc. subject words. That is choose subsequent predicates that have words with the same origin as the first predicate's words; and/or exclude second, third, etc. predicates with words that are not related to the first predicate words' origins.

Some words do not refer anything such as the words of or up; their meanings become clear when in proximity to other words or phrases.

Meanings of words are often conveyed by metaphors, similies, or analogies. The Greek word *analogia* means double relation, that is two words having in their definitions a common shared element. Analogies depend on the concept of **as-if**: If two things agree at least in one respect, they may agree in other respects. (A form of logic is reasoning by analogies, e.g. in law) Analogies are often used to explain, e.g. I produced that jacket and he made the buttons; or, e.g., Producing a jacket is like making buttons in that both are creating something—a simile. The two Jacket and buttons differ as to types of materials used but both produce and made mean the same. And both produce or make something by transforming a raw material.

The Greek word *metaphora* means carrying over or transferring. Metaphorical and figurative are often adjectives used as antonyms to literal. Figures of speech are sub-categories of metaphors such as antithesis, hyperbole, metonymy (A word or phrase substituted for another, such as Washington substituted for the U.S. government.), idioms, sayings (A stitch in time saves nine.), proverbs, similes, and extended metaphors are allegories. An example of a metaphor would be "One's life is to old age as a day is to evening"—life and day have the **shared element** of time; the meaning of life's change in time is conveyed by how a day changes from morning to

evening. The kind of metaphor shown is a simile as "as" is used. If we don't understand something, often we look for an analogy or metaphor, e.g. God is referred to as a heavenly father. Creativity can be inspired by metaphorical thinking: If I can see with my eyes, can I see with an electronic imitation of my eyes?

A *definition* is the "meaning" of a word or phrase. In a dictionary, the syntax of a definition takes the form of subject, verb, and a word or collection of words following the verb. The combination of the verb and word or collection of words following the verb is named the *predicate*. Definitions may give meaning to a subject by a predicate of words or by other defining methods such as giving examples of the word being defined as when the word being defined is used in stories. Also a word can be defined by use of an illustration(s) and/ or percept(s) and/ or explanation(s). For example, the meaning of the percept, that tree we are standing next to, can be conveyed by one of us pointing to the tree we are standing next to.

How does one understand or know the meaning of a subject word? The predicate words for the subject word usually convey the essential, necessary, and sometimes accidental properties of the subject; these are the Aristotelian categories of predicate words that define a subject; for example, the essential trait of being human is the ability to think—that is to be able to remember, compare and contrast, be consistent, and imagine. If a subject did not have the ability to think, the subject would not be a human but some other living thing, i.e. thinking is the **essential trait** in the predicate of human. Examples of **necessary traits** of a human are the organs and functioning of those organs such as lungs and breathing, a mouth and eating, etc. Other living things have a human's **necessary traits**. An **accidental trait** of a human is for example eating dinner at 6:30PM in a friend's house. Often accidental traits are space-time conditions. In addition if one understands or knows the meaning of a subject word's predicate, one is able to explain subtle synonym differences and why some words are antonyms by giving examples and explanations of these of the differences.

Classes, Categories or Types of the word or term being defined may be introduced by attaching modifier to the word or term or by attaching an intervening

variable. For example a human is a type of mammal, formed by attaching the essential modifier to the word mammal, i.e. a thinking mammal. These modifiers can often be thought of by asking the question words What, How, When, Why? As an example, the word, <a href="knowledge">knowledge</a> is a class and can be divided subclasses by **asking how** does one differentiate the fields of knowledge, subclasses or categories of knowledge? One answer is by the class of objects one tries to <a href="know">know</a> and by the method one uses to <a href="know">know</a> that class of objects.

The subclass or field of knowledge known as Philosophy is distinguished from other fields of knowledge by the objects it studies; those objects are first principles such as the concept of existence and its subclasses such as potential versus actual being, existing in our minds or outside our minds. Other objects Philosophy studies are the concept of mind and its subclasses such as percepts (sensed from inside our body and outside our bodies), memories, imaginations, and concepts, consciousness, reasoning, emotions, will or intentionality; desire versus needs, etc.

The method or "how" of philosophy is to analyze the clarity, precision, logical consistency, and coherence in its subject matter. Philosophy applies these processes to understanding the meaning of words. Truth may be defined as correspondence to reality (In the case of perception, a word defined by abstracting traits of an object perceived from outside our minds.). The degree of truth of a predicate definition corresponds to the clarity and precision of the agreed to abstracted qualities of the subject's particulars or elements observed. The agreed to qualities may vary with the persons viewing an object. Which qualities the observers note may not be all the qualities of the object viewed by rather narrowed by the "lens" of the observer. For example if the observer is hungry, he/she may only note qualities of a tree which relate to satisfying the observer's hunger. More generally, our unconscious and conscious needs, desires, ways of looking at the world (cultural habitus) may modify the qualities abstracted from an object. "We can regard a scientific formula, sometimes, as merely an indication of our will to arrange our observations in one way rather than another. Thus the puzzling problem whether we find order in, or impose order upon, nature is prepared for us and kept in a privileged position by the very terms we use in discussing it." (Mincius) What is meant by analytic versus experiential understanding of words? How can empathy and metaphor be used to understand emotions? An example of a concept could be Liberty. "Liberty is a common object of our thought, even though it is signified by two concepts: mine privately in my mind, and yours privately in your mind." What type of existence is such an object in our minds as liberty, it is not totally independent of the mind nor is it subjective existence i.e. an aspect of my own existence in reality. "It exists as a result of being intended or meant by the formal signs that exist as cognitive contents in your mind and mine, let us call it intentional existence." (Adler)

In the field of Science, the object of study is a measurable observation and the method is the use of special investigative techniques to measure said observable phenomena. A subcategory of Science is History—the objects of study being past phenomena and one of its methods being a comparison of records from past as to concurrence in descriptive phrases regarding the recorded phenomena. The truth being achieved by how well what is found corresponds to what actually was.