

## Lecture 5: Aristotle vs. the Stoics

In the past couple of weeks we have learned about:

1. The *‘pre-Socratics’* (the *Sophists*: Protagoras, Prodicus, Gorgias, Hippias, etc.), who were mainly concerned with language origins and change, orthography, rhetoric and logic. At that time (5<sup>th</sup> century BC), the Ancient Greeks had already devised their alphabet, in which every ‘letter’ had a name, a graph, and a pronunciation. The study of **orthography** included learning all three aspects of each letter; the focus on pronunciation thus led to the development of early phonetics.
2. The *nomos-physis* debate: Speculation about language origins led to the controversy about whether language was arbitrary, the creation of the human mind (convention), or determined by Nature (physis):

The two terms *nomos* ... and *physis* are key-words – in the fifth and fourth centuries one might rather say catch-words – of Greek thought. In earlier writers they do not necessarily appear incompatible or antithetical, but in the intellectual climate of the fifth century they came to be commonly regarded as opposed and mutually exclusive: what existed 'by *nomos*' was not 'by *physis*' and *vice versa*. *Physis* ... can safely be translated 'nature' ... *Nomos*, for the men of classical times, is something that ... presupposes an acting subject – believer, practitioner or apportioner – a mind from which the *nomos* emanates (Guthrie, p. 55).

Greeks saw everything through the prism of the *physis/nomos* contrast: “do the gods exist in reality or only as inventions of human groups? did states arise by divine ordinance, by natural necessity, or by *nomos*? are the differences between groups of people natural or only a matter of *nomos*? is rule of man over man or nation over nation natural and inevitable or only by *nomos*?”<sup>1</sup> Debate over concrete moral and political issues led to more abstract speculation about the general nature of perception (remember, Protagorean ‘relativism,’ “Man Is the Measure of All Things”?).

3. *Socrates*: Socrates, we remember, had opposed the relativism of the sophists, and claimed not to know the answer to Hermogenes’ dispute with Cratylus about whether ‘names’ are ‘natural’ or ‘conventional.’
4. *Plato*, however, was clearly opposed to the idea of relativism and *nomos* (convention) – his Theory of Forms asserts the existence of immutable Ideas that we, ‘prisoners’ of the Cave, can only hope to catch a glimpse of through education.

Today we will learn about other ‘stars’ of Classical Greek philosophy, **Aristotle** and the **Stoics**.

### Aristotle (384-322 BC)

Most people think that **Aristotle** is too difficult for them to understand, so many are surprised, when they try to read his thoughts (check out an excerpt from his work On Interpretation – *De Interpretatione* – at the end of these lecture notes).

“Aristotle is actually quite an easy read, for the man thought with an incredible clarity and wrote with a superhuman precision. It really is not possible to talk about Western culture (or modern, global culture) without coming to terms with this often difficult and often inspiring philosopher who didn't get along with his famous teacher, Plato ... We can say without exaggeration that we live in an Aristotelean world;

<sup>1</sup> <http://www.cavehill.uwi.edu/bnccde/PH19C/ph19cnatureconvention20045.html>

wherever you see modern, Western science dominating a culture in any meaningful way (which is just about everywhere), Aristotle is there in some form.”

<http://www.wsu.edu/~dee/GREECE/PLATO.HTM>

Aristotle's father was a physician to the king of Macedon, so science had 'rubbed off' on him. At the age of seventeen, he went to Athens and joined Plato's school, where he stayed until Plato's death in 347.

Plato (left) & Aristotle (right), a detail of The School of Athens, a fresco by Raphael. Aristotle gestures to the earth, representing his belief in knowledge through empirical observation and experience, while holding a copy of his Nicomachean Ethics in his hand, whilst Plato gestures to the heavens, representing his belief in the Forms. →



A few years later, he became the tutor to the young prince of Macedon, Alexander the Great (356-323 BC). Although Alexander was a brilliant pupil, Aristotle returned to Athens three years later, founded his own school, the **Lyceum**, and taught and studied there for twelve years. Because Alexander began conquering all of the then known world, Macedonians became somewhat unwelcome in Athens and Aristotle was accordingly shown the door in 323. He died soon after.

Although he studied under Plato, Aristotle fundamentally disagreed with his teacher on just about everything. He could not bring himself to think of the world in abstract terms the way Plato did; above all else, Aristotle believed that the world could be understood at a fundamental level through detailed observation and cataloguing of phenomena - i.e., that **knowledge** (which is what the word **science** means) is fundamentally **empirical** (knowable through the senses). As a result of this belief, Aristotle literally wrote about everything: poetics, rhetoric, ethics, politics, meteorology, embryology, physics, mathematics, metaphysics, anatomy, physiology, logic, dreams, and so forth. We aren't certain if he wrote these works directly or if they represent his or somebody else's notes on his classes; what we can say for certain is that the words, "I don't know," never came out of his mouth. In addition to studying everything, Aristotle was the first person to really think out the problem of evidence. When he approached a problem, he would examine

1. what people had previously written or said on the subject,
2. the general consensus of opinion on the subject, and
3. make a systematic study of everything else that is part of or related to the subject.

In his treatise on animals, he studied over five hundred species; in studying government, he collected and read 158 individual constitutions of Greek states as his fundamental data. This is called inductive reasoning: observing as many examples as possible and then working out the underlying principles.

**Inductive reasoning is the foundation of the Western scientific method.**

Outside of the empirical method, three characteristics stand out in Aristotle's thought:

1. The schematization of knowledge
2. The four causes, and
3. The ethical doctrine of the mean.

## 1. The Classification of Knowledge

Perhaps the most fundamental aspect of Aristotle's philosophy is the classification of knowledge according to the objects of that knowledge. The Greeks for some time had been concerned about the nature of human knowledge; this concern is called *epistemology*, or the "study of knowledge." For a long time, Greek philosophy dealt with questions of certainty; how could one be certain of knowledge? Suppose everything was an illusion? Aristotle resolved the question by categorizing knowledge based on the objects of study and the relative certainty with which you could know those objects.

For instance, certain objects (such as in mathematics or logic) permit you to have a knowledge that is true all the time (two plus two always equals four). These types of knowledge are characterized by certainty and precise explanations.

Other objects (such as human behavior) don't permit certain knowledge (if you insult somebody you may not make them angry or you may make them angry). These types of knowledge are characterized by *probability* and imprecise explanations. Knowledge that would fall into this category would include ethics, psychology, or politics.

Unlike Plato and Socrates, Aristotle did not demand certainty in everything. One cannot expect the same level of certainty in politics or ethics that one can demand in geometry or logic. In *Ethics* I.3, Aristotle defines the difference in the following way,

"we must be satisfied to indicate the truth with a rough and general sketch: when the subject and the basis of a discussion consist of matters which hold good only as a general rule, but not always, the conclusions reached must be of the same order. . . . For a well-schooled man is one who searches for that degree of precision in each kind of study which the nature of the subject at hand admits: it is obviously just as foolish to accept arguments of probability from a mathematician as to demand strict demonstrations from an orator."

## 2. The Four Causes.

If you walk out of this class knowing anything really well, it should be this, for Aristotle's "four causes" stand at the heart of Western rationality and Western science. In order to know a thing, anything at all, Aristotle says that one must be able to answer four questions (*Physics*).

**Plato** looked at the world and saw nothing but change; he wondered how we can know anything at all when everything is in motion and change. Plato solved the problem by postulating an unchanging world of intelligible Forms or Ideas of which our world is but an imperfect copy. But **Aristotle** accepted the visible world of change and motion, and **attempted to describe the principles, which bring about change and motion**. Therefore, the question that dominated his thought at all points was: **what is the cause** of this particular change or motion that I'm observing? What causes this thing to come into existence? What causes it to pass out of existence? Aristotle was the first major thinker to base his thought and science entirely on the idea that everything that moves or changes is caused to move or change by some other thing.

**The four causes** of all motion and change in the universe, according to Aristotle, are:

:

1. **The material cause:** the matter out of which a thing is made (clay is the material cause of a bowl);
2. **The formal cause:** the pattern, model, or structure upon which a thing is made (the formal cause of a bowl is "bowl-shaped"; the formal cause of a human is "human-shaped");

3. **The efficient cause:** the means or agency by which a thing comes into existence (a potter is the efficient cause of a bowl);
4. **The final (in Greek, *telos*) cause:** the goal or purpose of a thing, its function or potential (holding cereal and milk is the final cause of a bowl). The final cause is the most unscientific, but is far and away the most important "cause" of a thing as far as Aristotle was concerned. Aristotle's analysis of phenomenon and change, then, is fundamentally *teleological*.

Aristotle's thought is consistently teleological: everything is always changing and moving, and has some aim, goal, or purpose (*telos*). For example, we may say that everything has potential which may be actualized (a baby is potentially an adult; the process of change and motion through which the child goes is directed at realizing this potential).

### 3. The Doctrine of the Mean.

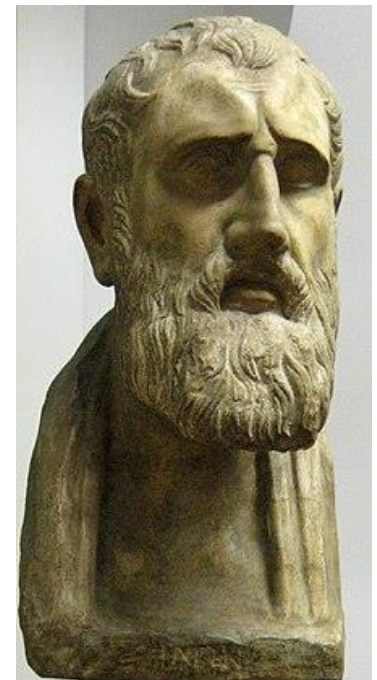
The Four Causes are universally applicable. However, ethics is not a precise science – it allows for uncertainty, because human actions and motivations are so varied. Traditionally, ethics required absolute and unchanging principles (“Thou shalt not kill,” etc.), which individuals depart from at their peril. The idea that ethics are “man-made” was a very controversial idea in those days (we saw what happened to Socrates for daring to ask difficult questions!). But Aristotle managed to avoid controversy – he came up with a system of ethics based on the “mean” to serve as a guideline to human behavior, which fits in with his general *empirical* approach. According to Aristotle, there is no proper definition of any moral virtue, but rather every moral virtue stands in relationship to two opposing vices. Take, for example, *courage*. Courage is the opposite of cowardice – but it is also the opposite of foolish bravado. So where is courage, then? Somewhere between foolishness and cowardice, that's where! What constitutes this “mean” between the two terms varies from situation to situation: what is courageous in one situation may be cowardly in another; what is foolhardy in one situation may be courageous in another. Therefore, every action must be judged in the context of all relevant circumstances. Aristotle called judging actions in this manner “**equity**”; equity, as we know, is the foundation of modern law and justice.

“As with the works of Plato, we must assemble Aristotle's linguistic doctrine from statements scattered among several works on rhetoric and logic, where they appear incidentally and in other contexts. Nevertheless, the outlines of Aristotle's linguistics are fairly clear, and it may be seen that his work marks a development from the positions reached by Plato” (Robins: 1995).

### The Stoics

**Stoicism** (greek *Στοά*) was a school of Hellenistic philosophy founded in Athens by **Zeno of Citium** in the early **3rd century BC**. The Stoics considered destructive emotions to be the result of errors in judgment, and that a ... person of "moral and intellectual perfection," would not undergo such emotions. Stoics were concerned with the active relationship between cosmic determinism and human freedom, and the belief that it is virtuous to maintain a will that is in accord with nature. Because of this, the Stoics presented their philosophy as a way of life, and they thought that the best indication of an individual's philosophy was not what a person said, but how he behaved.<sup>2</sup> (“Actions speak louder than words”)

**Zeno of Citium (334 BC - 262 BC), founder of Stoicism** →



<sup>2</sup> <http://en.wikipedia.org/wiki/Stoicism>

Stoics made linguistics an important part of their understanding about the world and the human society. They, for the first time, gave linguistic enquiry a “defined place within the overall context of philosophy, and linguistic questions were expressly treated in separate works devoted to aspects of language, and treated in an orderly manner” (Robins: 1995, p. 18). The Stoics believed that:

1. “First comes the impression; then the mind, making use of speech, expresses in words the experience produced by the impression” (Diogenes 7.49)
2. “All things are discerned through dialectic studies” (Ibid. 7.83)
3. “Most people are agreed that it is proper to begin the study of dialectic from that part of it dealing with speech” (Ibid. 7.55).

The Stoics were the first within the European tradition to reflect on the duality of language (form and meaning), distinguishing ‘the signifier’ and ‘the signified’ (almost like de Saussure, over 2000 years later!). The Stoics studied *phonetics* (the sounds of language), *grammar* (structures), and *etymology* (history of words) separately, treating them as separate levels of analysis.

Some scholars claim that grammar in the modern sense only began with the Stoics, although they built on the work that had been done before them: ‘The Stoics, whose philosophical attitude led them to pay great attention to language, contributed significantly to the development of the descriptive analysis of Greek’ (Robins: 1995). They further refined the Aristotelian system of word classification and grammatical categories in two directions: the number of word classes was increased, and more precise definitions and additional grammatical categories were introduced to cover the morphology and part of the syntax of these classes.

Other verbal categories and distinctions appeared in the Stoic system, but their most important contribution to the analysis of the Greek verb was the abstraction of the **tense** and **aspect** meanings inherent in verbs. The indication of time, recognized by Aristotle, is only part of the semantic function of the Greek verbal tenses. As in many languages, two dimensions are involved, time reference, and completion as against incompleteness or continuity. Four tenses can be arranged in relation to these two categorial distinctions like this:

Aspect	Time	present	past
incomplete		Present tense grápheí (γράφει) is writing	Imperfect tense égraphe) (ἔγραφε) was writing
complete		Perfect tense gégrapha (γέγραφα) has written	Pluperfect tense egegrápheí (ἔγεγραφέει) had written

In phonetics and phonology, the Stoics described speech sounds and defined their articulators. They singled out the syllable as an important structure in speech organization. The terms and theories that the Stoics first developed still reverberate in modern linguistics.

## Alexandrian Grammarians

Alexandrian grammarians also studied speech sounds and prosody, defined parts of speech with notions such as noun, verb, etc. There was also a discussion about the role of analogy in language, in these discussions the grammatici in Alexandria supported that language and especially morphology is based on analogy or paradigm, whereas the grammatici in schools Asia Minor consider that language is not based on analogical bases but rather on exceptions.

Alexandrians, like their predecessors, were very interested in the meter and its relation with poetry. The metrical "feet" in the Greek was based on the length of time taken to pronounce each syllable, which were categorized according to their weight as either "long" syllables or "short" syllables (also known as "heavy" and "light" syllables, respectively, to distinguish from long and short vowels). The foot is often compared to a musical measure and the long and short syllables to whole notes and half notes. The basic unit in Greek and Latin prosody is a mora, which is defined as a single short syllable. A long syllable is equivalent to two moras. A long syllable contains either a long vowel, a diphthong, or a short vowel followed by two or more consonants. Various rules of elision sometimes prevent a grammatical syllable from making a full syllable, and certain other lengthening and shortening rules (such as correption) can create long or short syllables in contexts where one would expect the opposite. The most important Classical meter as defined by the Alexandrian grammarians was the dactylic hexameter, the meter of Homeric poetry. This form uses verses of six feet. The first four feet are dactyls, but can be spondees. The fifth foot is almost always a dactyl. The sixth foot is either a spondee or a trochee. The initial syllable of either foot is called the ictus, the basic "beat" of the verse. There is usually a caesura after the ictus of the third foot.

Subsequently, the text *Tékhnē grammatiké* (c. 100 BCE, Gk. *gramma* meant letter, and this title means "Art of letters"), possibly written by Dionysius Thrax, lists eight parts of speech, and lays out the broad details of Greek morphology including the case structures. This text was intended as a pedagogic guide (as was Panini), and also covers punctuation and some aspects of prosody. Other grammars by Charisius (mainly a compilation of Thrax, as well as lost texts by Remmius Palaemon and others) and Diomedes (focusing more on prosody) were popular in Rome as pedagogic material for teaching Greek to native Latin speakers.

One of the most prominent scholars of Alexandria and of the antiquity was Apollonius Dyscolus. Apollonius wrote more than thirty treatises on questions of syntax, semantics, morphology, prosody, orthography, dialectology, and more. Happily, four of these are preserved—we still have a Syntax in four books, and three one-book monographs on pronouns, adverbs, and connectives, respectively. Lexicography became an important study domain as dictionaries, thesauri and lists of special words "λέξεις" that were old, or dialectical or special such as medical words, botanic words were made at that period by many grammarians. In the early medieval times we find more categories of dictionaries like the dictionary of Suida that is considered the first encyclopedic dictionary, etymological dictionaries etc. At that period, the Greek language was considered a lingua franca, i.e. the language spoken in the known world (for the Greeks and Romans) of that time and, as a result, modern linguistics struggles to overcome this. With the Greeks a tradition commenced in the study of language. The Romans and the medieval world followed and their laborious work is considered today as a part of our everyday language. Think, for example, of notions such as the word, the syllable, the verb, the subject etc.

## Greek Grammar was a *word* based grammar

The framework of grammatical description in western antiquity was the word and paradigm model. Despite the richness of classical morphology, a theory of the morpheme was not achieved, and classical grammatical statements exhibit the strengths and the weaknesses of a **word based morphology**. It

involved three main procedures: the identification of the word as an isolable linguistic entity, the establishment of a set of word classes to distinguish and classify the words in the language, and the working out of adequate grammatical categories to describe and analyse the morphology of word paradigms based on the syntactic relations between words in sentences .

Though there are general grammatical arguments in favor of treating syntactic relations as the central component of grammar, in the history of Western grammatical theory, morphology was formalized first (the first extant description of Greek morphology pre-dates the first extant description of Greek syntax by two centuries).

### **Aristotle vs. the Stoics on Nomos/Physis & Analogy/Anomaly Debates**

Aristotle firmly upheld the *nomos* view: “**Language is by convention, since no names arise naturally**” (De Interpretatione 16a 27). Onomatopoeia does not really contradict this position, for ‘mimic words’ vary from language to language. “**Speech is the representation of the experiences of the mind, and writing is the representation of speech**” (Ibid. 16a 4-5).

**The Stoics had a contrary view:** they believed that “names are naturally formed, the first sounds imitating the things which they name.’ This attitude fitted well with their more general emphasis on nature as the guide to man's proper life; and in their etymology much weight was placed on the 'original forms' of words, *protai phonai*, which were said to have been onomatopoeic but later to have suffered changes of various kinds” (Ibid.).

#### **Analogy vs. Anomaly**

These opposing views of Aristotle and the Stoics are particularly important since they lead to the second linguistic controversy of antiquity, *analogy* versus *anomaly*. This controversy was about the extent to which order and regularity prevail in language, as opposed to irregularities (*anomalies*).

**Aristotle** favoured *analogy*, while the **Stoics** favoured *anomaly* as the dominant theme in language. Later **analogs** focused on linguistic questions for the purposes of literary criticism and the maintenance of standards of ‘*correctness*.’ **Stoic** interests were more broadly based, for they believed that the study of speech was central to the whole study of dialectics. **Chrysippus**, the Stoic, wrote a **treatise on linguistic anomaly** (Diogenes 7.192).

This controversy prompted the early attempts at semantic labelling of grammatical categories such as singular and plural and the nominal cases. To this extent, as the analogist **Dionysius Thrax**<sup>3</sup> later pointed out, the morphological component of grammar largely consists of ‘the working out of analogy.’ However, while analogists managed to describe Greek morphology through drawing formal analogies, the anomalists also had a case, because, as we know, most rules in grammar have exceptions (i.e., irregular verbs, nouns, etc.).

The Stoics regarded language as a natural human capability to be accepted as it was, with all its irregularity. They were interested in language as the tool for expressing thoughts and feelings; for them, literature held deeper meanings, veiled in myth and allegory. Thus, the anomalists and the analogists

---

<sup>3</sup> **Dionysius Thrax (170-90 BC)** is, by some accounts, the author of the first extant grammar of Greek, the “*Art of Grammar*” (*Tékhnē grammatiké*), although there is some doubt that the work really belongs solely to him. It is primarily a *morphological* description of Greek, lacking any treatment of *syntax*. Thrax defines grammar at the beginning of the *Tékhnē* as “the practical knowledge of the general usages of poets and prose writers.”

differed in their approach to language: the Stoics approached it *philosophically*, while the Alexandrian literary critics were more concerned with *literary* considerations. This debate has been a recurrent feature of the history of linguistic thought.

### Some important points to remember:

**1. Protagoras** distinguished **different types of sentence** in which a general semantic function was associated with a certain grammatical structure, e.g., wish, question, statement, and command.

**2. Plato** and **Aristotle** make scattered references to grammar, but do not deal with it consecutively or as a specific topic. **Plato**, however, is said to have been the first to take the subject seriously; in his dialogues he divided the Greek sentence into the noun and a verb components, *onoma* and *rhema*, which remained the primary grammatical distinction underlying syntactic analysis and word classification in all future linguistic description.

**Aristotle** maintained this distinction, but added a third class of syntactic component, the *syndesmoi*, a class covering what were later to be distinguished as conjunctions, prepositions, the article, and pronouns. Aristotle also gave a formal definition of the word as a linguistic unit: a component of the sentence, *meros logou*, having a meaning of its own but not further divisible into meaningful units.

**3. The Stoics** were the first to try to describe the Greek grammar as a separate field of enquiry.

**4.** Unlike the Stoics, whose concern for language was primarily from a philosophical viewpoint, linguists working in or connected with Alexandria were predominantly interested in language as a part of literary studies, and were adherents of the analogist position. They used analogy to determine standards of ‘correctness.’ **Dionysius Thrax** (c. 100 B.C.) is credited with the authorship of the first surviving explicit description of the Greek language. Although he was an analogist, Thrax was also influenced by Stoic linguistic studies.



## Appendix: On Interpretation by Aristotle ~ Written 350 B.C.E

Translated by E. M. Edghill

### Section 1 ~ Part 1

First we must define the terms *'noun'* and *'verb'*, then the terms *'denial'* and *'affirmation'*, then *'proposition'* and *'sentence.'*

Spoken words are the symbols of mental experience and written words are the symbols of spoken words. Just as all men have not the same writing, so all men have not the same speech sounds, but the mental experiences, which these directly symbolize, are the same for all, as also are those things of which our experiences are the images. This matter has, however, been discussed in my treatise about the soul, for it belongs to an investigation distinct from that which lies before us.

As there are in the mind thoughts which do not involve truth or falsity, and also those which must be either true or false, so it is in speech. For truth and falsity imply combination and separation. Nouns and verbs, provided nothing is added, are like thoughts without combination or separation; 'man' and 'white', as isolated terms, are not yet either true or false. In proof of this, consider the word 'goat-stag.' It has significance, but there is no truth or falsity about it, unless 'is' or 'is not' is added, either in the present or in some other tense.

### Part 2

By a noun we mean a sound significant by convention, which has no reference to time, and of which no part is significant apart from the rest. In the noun 'Fairstead,' the part 'stead' has no significance in and by itself, as in the phrase 'fair stead.' Yet there is a difference between simple and composite nouns; for in the former the part is in no way significant, in the latter it contributes to the meaning of the whole, although it has not an independent meaning. Thus in the word 'pirate-boat' the word 'boat' has no meaning except as part of the whole word.

The limitation 'by convention' was introduced because nothing is by nature a noun or name-it is only so when it becomes a symbol; inarticulate sounds, such as those which brutes produce, are significant, yet none of these constitutes a noun.

The expression 'not-man' is not a noun. There is indeed no recognized term by which we may denote such an expression, for it is not a sentence or a denial. Let it then be called an indefinite noun.

The expressions 'of Philo', 'to Philo', and so on, constitute not nouns, but cases of a noun. The definition of these cases of a noun is in other respects the same as that of the noun proper, but, when coupled with 'is', 'was', or 'will be', they do not, as they are, form a proposition either true or false, and this the noun proper always does, under these conditions. Take the words 'of Philo is' or 'of or 'of Philo is not'; these words do not, as they stand, form either a true or a false proposition.

### Part 3

A **verb** is that which, in addition to its proper meaning, carries with it the notion of time. No part of it has any independent meaning, and it is a sign of something said of something else.

I will explain what I mean by saying that it carries with it the notion of time. 'Health' is a noun, but 'is healthy' is a verb; for besides its proper meaning it indicates the present existence of the state in question.

Moreover, a verb is always a sign of something said of something else, i.e. of something either predicable of or present in some other thing.

Such expressions as ‘is not-healthy’, ‘is not, ill’, I do not describe as verbs; for though they carry the additional note of time, and always form a predicate, there is no specified name for this variety; but let them be called indefinite verbs, since they apply equally well to that which exists and to that which does not.

Similarly ‘he was healthy’, ‘he will be healthy’, are not verbs, but tenses of a verb; the difference lies in the fact that the verb indicates present time, while the tenses of the verb indicate those times which lie outside the present.

Verbs in and by themselves are substantival and have significance, for he who uses such expressions arrests the hearer’s mind, and fixes his attention; but they do not, as they stand, express any judgment, either positive or negative. For neither are ‘to be’ and ‘not to be’ the participle ‘being’ significant of any fact, unless something is added; for they do not themselves indicate anything, but imply a copulation, of which we cannot form a conception apart from the things coupled.

#### **Part 4**

A sentence is a significant portion of speech, some parts of which have an independent meaning, that is to say, as an utterance, though not as the expression of any positive judgment. Let me explain. The word ‘human’ has meaning, but does not constitute a proposition, either positive or negative. It is only when other words are added that the whole will form an affirmation or denial. But if we separate one syllable of the word ‘human’ from the other, it has no meaning; similarly in the word ‘mouse’, the part ‘ouse’ has no meaning in itself, but is merely a sound. In composite words, indeed, the parts contribute to the meaning of the whole; yet, as has been pointed out, they have not an independent meaning.

Every sentence has meaning, not as being the natural means by which a physical faculty is realized, but, as we have said, by convention. Yet every sentence is not a proposition; only such are propositions as have in them either truth or falsity. Thus a prayer is a sentence, but is neither true nor false.

Let us therefore dismiss all other types of sentence but the proposition, for this last concerns our present inquiry, whereas the investigation of the others belongs rather to the study of rhetoric or of poetry.

#### **Part 5**

The first class of simple propositions is the simple affirmation, the next, the simple denial; all others are only one by conjunction.

Every proposition must contain a verb or the tense of a verb. The phrase which defines the species ‘man’, if no verb in present, past, or future time be added, is not a proposition. It may be asked how the expression ‘a footed animal with two feet’ can be called single; for it is not the circumstance that the words follow in unbroken succession that effects the unity. This inquiry, however, finds its place in an investigation foreign to that before us.

We call those propositions single which indicate a single fact, or the conjunction of the parts of which results in unity: those propositions, on the other hand, are separate and many in number, which indicate many facts, or whose parts have no conjunction.

Let us, moreover, consent to call a noun or a verb an expression only, and not a proposition, since it is not possible for a man to speak in this way when he is expressing something, in such a way as to make a statement, whether his utterance is an answer to a question or an act of his own initiation.

To return: of propositions one kind is simple, i.e. that which asserts or denies something of something, the other composite, i.e. that which is compounded of simple propositions. A simple proposition is a statement, with meaning, as to the presence of something in a subject or its absence, in the present, past, or future, according to the divisions of time.

## References

<http://www.wsu.edu/~dee/GREECE/PLATO.HTM>

<http://faculty.washington.edu/smcohen/320/cats320.htm>

<http://faculty.washington.edu/smcohen/320/archange.htm>