

**Language Logic and Reality: A Stoic
Perspective**

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Language, Logic, and Reality: A Stoic perspective

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Note: In text citations of the form (Abbreviation Number) refer the reader to an appendix of ancient testimonials. In the case of citations at the head of a section or subsection, discussions in the pages cited were considered along with the relevant fragments in constructing this exposition of Stoic thought.

1. Introduction: The tripartite division of Stoic philosophy

The general concern of this paper is the philosophy of the Stoic school of classical Athens, founded by Zeno of Citium (350-260 BC) whose teachings were synthesized and systematized by Chryssipus (280-205 BC), the third scholarch of the Stoic school. By the time of Chrysippus, Stoic philosophy was divided into three inter-related disciplines: physics, ethics, and dialectic (DL 1, PP 1). Stoic physics contained a description of what is in the world, which includes material things which are the subject of modern physics, and any other non-material things which might be beyond those posited in a purely physical description of the world, i.e. , non-material objects such as souls, events, and universals (a property or relation such as "redness" or "runs toward"). Stoic ethics explained the purpose of the things described in Stoic physics, and offered a theory of proper human goals and conduct. The division of Stoic philosophy called dialectic covered a range of topics including grammar, rhetoric, logic, and epistemology (DL 12).

Considering the subjects under the purview of dialectic and that dialectic was considered a basic unit of the complete Stoic system, it stands to reason that the Stoics had an established view of the relationship between language, logic, and reality. Although the collection of extant expositions of the details of this relationship from ancient sources is far from unequivocal (DL 12), this paper hopes to offer a plausible explanation of what this relationship may have been, given the evidence we have of Stoic ideas in these fields. To this end, I first explain the ideas of Stoic physics in order to give the ideas of Stoic dialectic in their proper context. I then explain the important ideas of Stoic dialectic (Stoic theory of mind, the concept of lekta, Stoic logic, and Stoic theory of knowledge), in order to reconstruct what the Stoics held as the relationship between language, logic

and reality. In conclusion I then exemplify the Stoic picture of how reasoned discussion, through the proxy of logic, can lead to knowledge about the world, by analyzing a portion of discourse using the ideas that are thus developed.

2. Stoic Physics

In order to understand Stoic dialectic it is necessary to have a basic understanding of their conception of physics. The Stoics proposed that all the somethings (τινα) of the world are either bodies (σώματα) which have being or incorporeals (ἄσώματα) which do not have being (S 1). What did it mean for the Stoics to be or not to be? The things which have being, bodies, are extended in three dimensions and have the capacity to act or be acted on, whereas the things which do not have being, incorporeals, possess neither of these attributes (SE 1-2, DL 3). A body has two distinct but inseparable parts. One part is the unqualified matter of the body, and the other part is the active principle, logos (λογος); a physical substance, characterized as an invisible fiery breath, which permeates every portion of unqualified matter in a body, and endows a body with its individual and particular properties (DL 2). It is an important point to observe that the Stoics considered bodies as the type of natural kinds of objects people normally conceive of, e.g., persons, rocks, trees, dogs, and grains of sand. The physical universe was considered finite, its boundary the sphere of stars, and beyond this the incorporeal, and infinite void (DL 4). Other entities the Stoics considered incorporeal were time, place, and the somethings called lekta (λεκτα) which roughly correspond to what Gottlob Frege called the "sense" of a word or phrase (SE 2).

3. Stoic Dialectic

3.1 A Stoic Theory of Mind: Logos and presentations

Since for the Stoics, people are bodies in the sense defined above, they are composed of unqualified matter and logos. The logos of a human being is that collection of fiery breath matter, which permeates the body of a human, and constitutes something beyond what ancient philosophers called the soul. (DL 5) Logos is the seat of all passions, reason, and motivations, yet it is also the substance which lends the matter of flesh the feature of being soft, and the matter of bones the feature of hardness. If this sounds like a strange combination of functions for a human logos to have, think of it this way: Rocks and trees and grains of sand have logos, just like persons and all the other bodies in the cosmos, but a person's logos has something extra that lends them passions, reason, and motivation.

The Stoics theorized that all human experience comes in the form of presentations (*φαντασια*). Presentations are such things as sense impressions, thoughts, memories, and feelings; basically anything a person is conscious of. Presentations are explained as impressions on, or arrangements of a person's logos, which may be made upon the logos by a person's physical environment or else by the active principle of the logos itself (DL 6). When a person is born, their logos is a blank slate. That is, a person's logos does not come pre-equipped with presentations. The most basic form of presentations, the initial ones people encounter after birth, are the result of contact with material objects which make the arrangements of the logos we recognize as sense impressions (PP 2, DL 10). As a person accumulates experience, logos being an active principle, can form new presentations from a growing collection of experiential presentations. For instance, by the similarity of many presentations of small things, one might form a presentation of the concept of smallness. One could also gain a concept of a human in this way, and by

combining the two concepts, a person may form a presentation of a pygmy, when they have in fact never actually seen a pygmy. A person's logos may also form presentations from other presentations by the processes of human reasoning which are the subject of discussion of Stoic logic. The reasoning and conceptual apparatus naturally common to all people is supposed to be achieved by the age of 7 (PP 3), whereas more specialized presentations are gained through instruction and variety of individual experience (DL 6-9).

3.2 Stoic Philosophy of Language: Lekta versus linguistic forms

(Mates 11-16, Reale 226-229, Bobzein 85-88, Kneale 138-146)

The forms of language, in the case of the spoken word, for the Stoics were composed of meaningful phones (φωναί), described as beatings upon the air of a person's vocal apparatus. The air waves then reached the listener's auditory sense organ, leaving a corresponding presentation on the logos of the listener. There is no indication in the extant testimony that the Stoics made a distinction between tokens of linguistic forms, their particular realization in the course of a discourse, and types of linguistic forms, the general form of a word, phrase, or statement (Kneale, 143). However, the Stoics made clear distinctions between three things: (i) the forms of language, linguistic sounds, (ii) the messages of those forms, what they called lekta (the singular is lekton), translated "sayables", and (iii) the referent of a linguistic sign, some actual object in the world.

A lekton is whatever it is that is said *about* something; the component of meaning of a linguistic sign which is left over if you disregard reference. For instance, the phrases "The first man on the moon" and "Neil Armstrong" refer to the same person but they don't mean the same thing. To illustrate this, consider the sentences "Neil Armstrong was

Neil Armstrong", and "Neil Armstrong was the first man on the moon". The second sentence is informative whereas the first is not. Since all that differs between the two sentences is the substitution of "Neil Armstrong" for "the first man on the moon" we must conclude the two noun phrases differ in some aspect of meaning but not in reference. This aspect of meaning roughly corresponds to the Stoic concept of a lekton.

It is easiest to understand lekta if one takes into account the other entities that are grouped with them in the class of incorporeals. As the void is a something by virtue of defining the boundary of the cosmos, and places are somethings only by virtue of their occupations by physical objects, lekta are somethings only by virtue of the presentations of which they are associated. Just as one may refer to an object in different ways, a person may also have different sorts of presentations of an object. Since a presentation is an arrangement of logos it seems plausible to think of a lekton as the pattern of that presentation. Just as the void is not altered by the particular state or size of the cosmos, and a place is not altered by the particular object which happens to occupy it, so too a lekton is not altered by the particular logos which happens to be arranged in its pattern. In fact, it is recognized by modern scholars that at least some Stoic philosophers most likely conceived there were no presentations without lekta, and no lekta without presentations (Long, Mates, Kneale). Also, lekta were always associated with some form of linguistic sound, although the Stoics were aware of the fact that such associations were rarely in the form of a one to one correspondence. So it appears that for the Stoics, language and thought were inextricably linked. Thus, reality has direct relationships with presentations, presentations have direct relationships with lekta, and lekta have direct relationships with

the physical manifestations of language, e.g., words, phrases, sentences, or arguments (SE 4).

Assuming that the Stoics did not make a clear distinction between a linguistic form which is a type opposed to a linguistic form which is a token, it makes sense that the Stoics developed grammatical ideas, such as the analysis of Greek noun cases and verb forms, in respect to lekta rather than linguistic forms. To this end they developed a specific terminology to describe the taxonomy and interrelationships of lekta. Particular lekta were classified as either complete or incomplete. Incomplete lekta were associated with linguistic units smaller than a clause whereas complete lekta corresponded to complete statements. There were types of complete lekta associated with declarative, interrogative, imperative, and exclamatory statements. The only analyses of complete lekta of which significant evidence remains to posterity are analyses of the lekta associated with declarative statements called axiomata (αχιωματα) . Concerned with these statements, incomplete lekta were classified as either subjects or predicates. A subject was associated with a corresponding common or mass noun and a predicate was associated with a verb phrase which might consist of either a simple intransitive verb like "runs" or a verb and its complement or object as in "runs to the acropolis", or "hits the bird".

3.3 Stoic Logic

3.3.1 Simple and Complex Axiomata (Kneale 144)

Axiomata, as opposed to declarative sentences, were considered along with their corresponding presentations, as the proper subject of the adjectives "true" and "false". As such, the inter-relationships between axiomata are a proper subject of Stoic logic.

To avoid confusion, mention of axiomata will be in quoted italics. Axiomata came in two classifications, simple or compound. Simple axiomata consist of a subject lekton and a predicate lekton. Compound axiomata consist of axiomata which are conjoined by sentence connectives. Any axioma prefaced by a negative particle, "*not*" has the opposite truth value. That is, if the axioma "*It is light out*" is true, the corresponding axioma prefaced by the negative particle "*Not: it is light out*" is false.

3.3.2 Truth Conditions and Sentence Connectives (Kneale 145-149)

The Stoics recognized several sentence connectives which were defined strictly in terms of their truth functionality. The sentence connectives which all Stoic authors viewed as truth functional are "*both...and*", "*either...or*", and "*if...then*". To describe the truth functionality of these sentence connectives we consider the following axiomata, allowing that the axiomata corresponding to any other two simple declarative statements could take their place in the following discussion:

(1) *It is light out.*

(2) *It is day.*

The Stoics considered the complex axioma, "*Both it is light out and it is day.*" to be true if and only if both (1) and (2) are true. The Stoics considered the sentence connective "or" in the sense of what modern logicians call the "exclusive or", which is rendered in English unambiguously by a usage along the lines of "Either this or that (but not both)." So, for the Stoics the complex axioma "*Either it is light out or it is day.*" is true if and only if exactly one of either (1) or (2) is false. There are conflicting Stoic views on the truth conditions of complex axiomata containing the connective "*if...then*". However, the minimum requirement, which all the Stoics agreed on, for the truth of a conditional

axioma of the form "*If it is light out then it is day*", is that it cannot have a true antecedent and a false consequent. That is (1) cannot be true while (2) is false.

3.3.3 Inference Schemata and Truths of Logic (Kneale 158-176)

The Stoics also recognized five valid basic argument forms, or inference schemata, which they expressed using ordinal numbers for propositional variables as follows:

- (1) If the first then the second; but the first; therefore the second.
- (2) If the first then the second; but not the second; therefore not the first.
- (3) Not both the first and the second; but the first; therefore not the second.
- (4) Either the first or the second; but the first; therefore not the second.
- (5) Either the first or the second; but not the second; therefore the first.

According to the Stoics all valid arguments could be reduced to these five basic forms by applying some combination of the four rules of inference. Of these, reports of rule one and three survive.

- (6) Rule 1: If two axiomata entail a third, then either of these two together with the negation of the third entails the negation of the remaining one.
- (7) Rule 3: When two propositions entail a third and one of those two is itself established by further premises, then the other axiomata and the further premises together entail the original conclusion.

The Stoics also ascribed to the law of non-contradiction, and the law of the excluded middle. The law of non-contradiction may be stated in modern terms as "*not (p and not p)*" is always true. For instance "*It is light out and it is not light out.*" is an apparent falsehood. The law of the excluded middle states that the axiomata "*p or not p*" is always true. One can imagine the absurdity in most circumstances of disagreeing with the statement, "*It is light out or else it is not.*" However the Stoics could express these two

principles in a simpler formulation with their exclusive conception of the connective "or" as:

(8) *"Either the k-th or not the k-th."* is always true, where k-th is any ordinal number used as a variable for axiomata.

The last basic component of Stoic Logic I will mention is what modern scholars have termed a principle of conditionalization. That is:

(9) An argument is valid if and only if the conditional formed by an antecedent of the conjunction of its premises and a consequent as the conclusion is reducible to a truth of logic.

3.4 Stoic Theory of Knowledge

3.4.1 Truth

So far we have discussed five different facets of reality which are subjects of discussion in the dialectic branch of Stoic philosophy: logos, bodies, presentations, lekta, and linguistic forms (DL 12). Now it is left to explain how these different facets of reality interact to produce knowledge. The Stoics acknowledged that some presentations may be in some sense faulty, i.e., some presentations may not properly resemble some existent thing or state of affairs. For instance, the presentation of a straight stick submerged in water which appears crooked, or else the presentations people experience in dreams and episodes of madness (DL 6). The Stoics considered presentations, which are properly formed from the bodies with which a person is in contact with, to be the basic building blocks of human knowledge. True presentations are the complex presentations derived by the logos from simple well formed presentations, whose corresponding axiomata are also said to be true. So, for instance, a person may have a presentation of a man, or a dog, or a stick, and such a presentation is not something which can be considered true or false. On

the other hand, the presentation corresponding to the recognition of something like the idea that this man has five fingers, or else the idea that this man is Socrates is the sort of presentation which is either true or false, as it is the sort of presentation which corresponds to an axioma (DL 11).

3.4.2 Knowledge (Long, 76-106)

Now we shall see how the Stoic conception of truth functions in their theory of knowledge. Knowledge of the world depends on a function of the human logos, assent. Knowledge comes in the form of assent to a true presentation which corresponds to a true axioma. Zeno is said to have described the relationship between assent and a well formed presentation metaphorically, as a well formed presentation being the grasping of the hand upon reality, and the assent to such a presentation as the closing of a fist around it. Granted this metaphor does not seem to be particularly illuminating. Perhaps the distinction that is being made here is, in the case of simple sense presentations, that of between actually seeing something and being aware that you have in fact seen it. There are countless sense impressions that a person experiences in their day to day life to which they pay no conscious recognition. In the case of assenting to a presentation corresponding to an axioma, the distinction would perhaps be that of having a presentation corresponding to an axioma like "*The dog is dead.*" and actually believing it, or perhaps justifiably believing it. People after all entertain many thoughts which they may not in fact believe. As axiomata are somethings only by virtue of some corresponding presentation, it is reasonable to assume that the system of logic developed by the Stoics describing the relations of truth and falsehood between axiomata has a corresponding formulation as a function of the logos for the correct inference from true

presentations to true presentations. That is, Stoic logic explains the synthetic capacity for the human logos to arrive at knowledge (SE 5).

4 Conclusion: Analysis of an eristic argument

Eristic was an activity popular in classical Athens both as a method of discovering philosophical insights, and as a game people engaged in for entertainment and the development of skills in argument. Traditionally there are two participants in an eristic debate. One participant, the answerer, defends a premise while another, the questioner, is free to ask questions and develop arguments in an attempt to refute the premise at issue. An eristic unfolds in more or less the form of the Platonic dialogues which were modeled from this common practice. For Socrates, a major influence on Stoic thought, eristic argument was the principal method of philosophical investigation. We are now in a position to see how the Stoics might have justified the use of eristic as a proper methodology for the teaching of philosophy and for philosophical investigation. To this end, I demonstrate the Stoic theory of knowledge in respect to language by presenting a narrative of an eristic argument adapted from Plato's *Cratylus*, using the conceptual tools the Stoics developed in their dialectic branch of philosophy. Inference schemata and truth tables are contained in Appendix I for easy reference.

4.1 Hermogenes as the measure of "Man is the measure".

One day Hermogenes, considering the doctrine of Protagoras, that man is the measure of all things, has the presentation corresponding to (1) *"Things are for each person as they believe them to be."* He decides to consult Socrates on whether (1) is true, and therefore worthy of assent and a proper object of knowledge, or else false.

A stream of phones associated with (1) issues forth as waves of beaten air, as Hermogenes says to Socrates, "Let's suppose that the being or essence of each thing is something private for each person, that things have no fixed being or essence of their own, that is that things are for each person as they believe them to be." (See Appendix II)

The phones impact on Socrates' auditory organ making an impression on his logos which is associated with a lekton, which in turn is associated with a presentation. Socrates' logos makes the appropriate presentation associated with the lekton, and further his logos recalls a presentation which corresponds to an argument lekton against (1). To make sure Hermogenes can grasp the argument presentation, and therefore grasp the falsehood of (1), he parses out the presentations, of which the argument presentation is composed, piecemeal, so that Hermogenes may assent to each in turn, and then be in a position to grasp the truth of the entire argument. (See Appendix II)

Socrates says, "Okay, but consider this. Is there no such thing as a bad person?"

Hermogenes considers and then assents to the presentation associated with the lekton, (2) "*Bad people exist.*"

He then says, "No, by god. Indeed there are very bad ones and plenty of them."

Socrates says, "Are there any who are very good?"

Hermogenes says, "Not many."

Socrates then says, "But there are some good ones, correct?"

Hermogenes assents to the presentation associated with (3) "*Good people exist.*" and says, "I do know of some."

Socrates says, "And do you hold that if a person is good then she is wise, and that if a person is bad then she is foolish?"

Hermogenes assents to the presentation associated with (4) *"If a person is good then a person is wise."* and (5) *"If a person is bad then a person is foolish."*

"Yes, that's what I believe."

"Then you must also agree that since there are good people and bad people there are wise people and foolish people."

Here is how the argument is considered by Hermogenes' logos.

(3) Good people exist.	Assented
(5) If a person is good then a person is wise.	Assented

(6) A person is wise.	(3), (5), Ax.1

Seeing that (6) is true Hermogenes assents to (6), and by a similar argument he assents to (7) *"A person is foolish."* Since (6) and (7) are both true, from the truth table for *"both...and"* he gets that (8) *"There are wise people and there are foolish people."* is true and assents to this as well.

Hermogenes then says, "Yes, this is true."

Socrates says, "But if things are for each person as he believes them to be, then is it is not possible for one person to be wise and another to be foolish?"

Hermogenes assents to (9) *"If things are for each person as they believe them to be, then it is not possible for one person to be wise and another to be foolish."*

Hermogenes says, "It isn't possible."

Socrates concludes, "Yet we have already agreed that there are both wise people and foolish people. So can it be the case that things are for each person just as he believes them to be?"

Hermogenes' considers as follows:

(9) If things are for each person as they believe them to be, then it is not the case that some person is wise and another is foolish.

Assented

(10) Not (things are for each person as they believe them to be). (8), Ax.2

Therefore, Hermogenes agrees, "Certainly not."

And so we see how, according to the Stoic theory outlined above, Hermogenes came to know that men are not the measure of all things (for this particular interpretation of the phrase).

Appendix I: Truth tables and Inference Schemata
Truth tables

p q if p then q	p q both p and q	p q either p or q
t t t	t t t	t t f
t f f	t f f	t f t
f t t	f t f	f t t
f f t	f f f	f f f

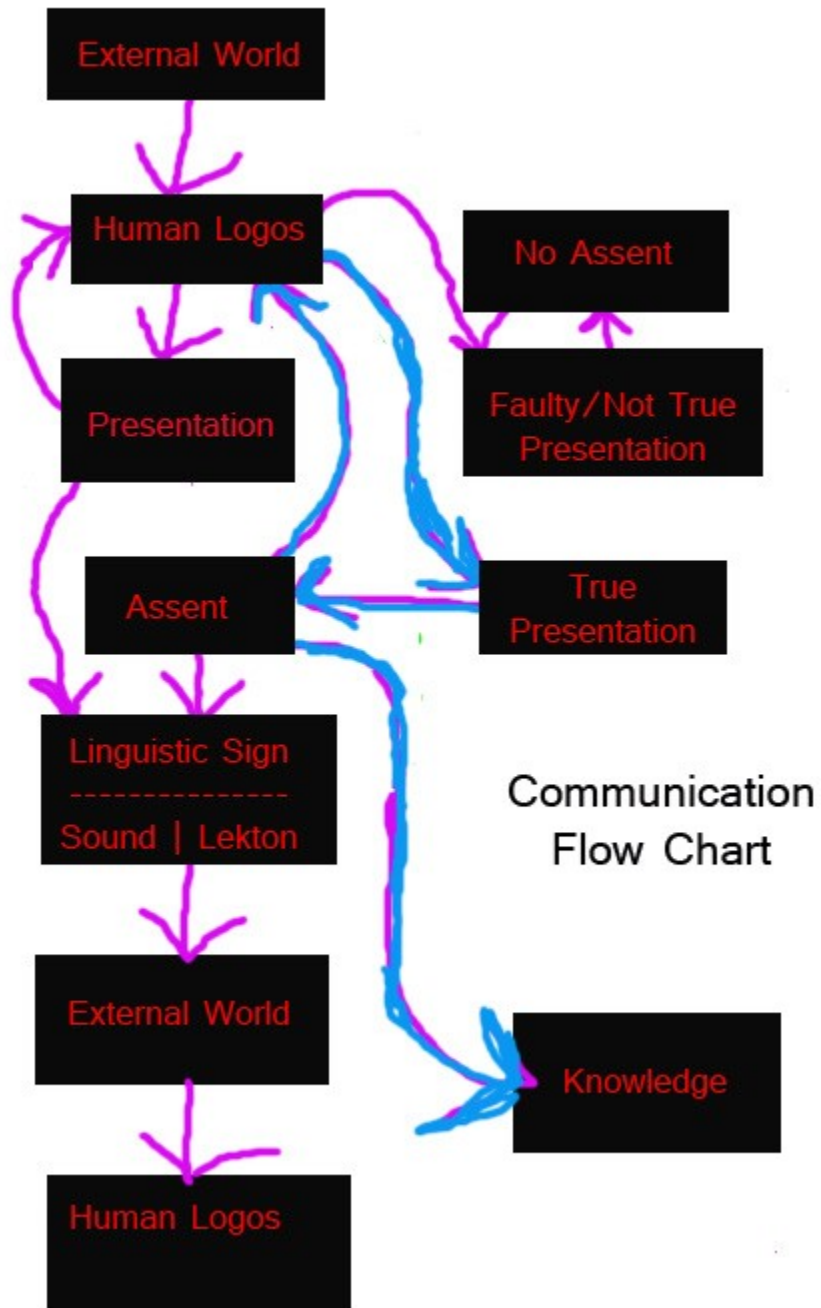
Inference Schemata and Metalogical Principles

- (1) If p then q; but p; therefore q.
- (2) If p then q; but not q; therefore not p.
- (3) Not both p and q; but p; therefore q.
- (4) Either p or q; but p; therefore q.
- (5) Either p or q; but not q; therefore p.
- (6) ((p and q) then z) implies ((p and not z) then not q)
 ((p and q) then z) implies ((q and not z) then not p)
- (7) When two propositions entail a third and one of those two is itself established by further premises, then the other axioma and the further premises together entail the original conclusion.
- (8) "*Either p or not p.*" is always true (follows from anything).
- (9) Conditionalization. An argument is valid if and only if the conditional formed by an antecedent of the conjunction of its premises and a consequent as the conclusion is reducible to a truth of logic.

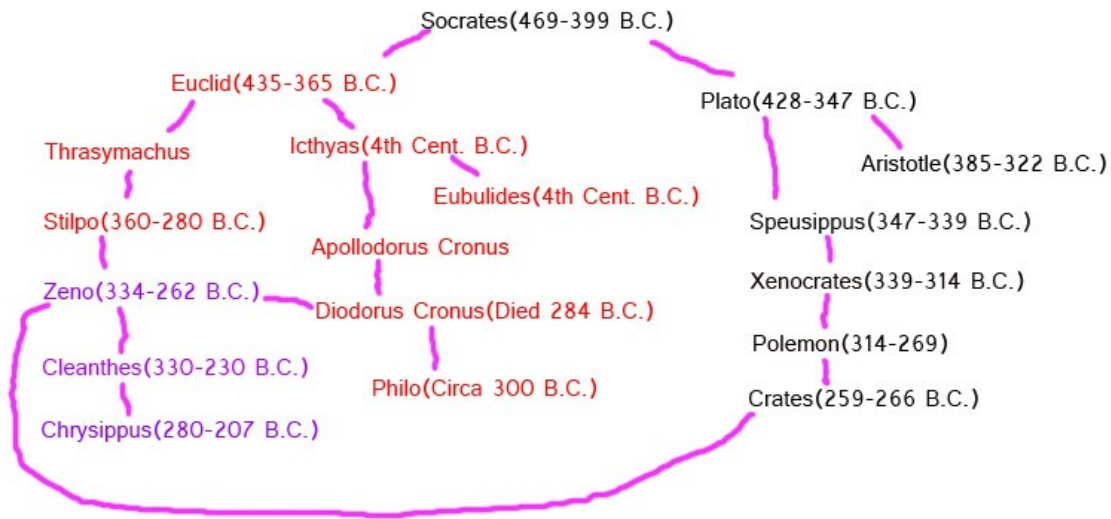
Here is how a proof of the validity of an inference schema would go using the Stoic system (Kneale 171).

<p>Schema. If p then not q; but p; therefore not (if p then q).</p> <p>Proof.</p> <p>(a) If p then not q.</p> <p>(b) p.</p> <p>(c) Not q.</p> <p>(d) If (if p then q) and p, then q.</p> <p>(e) Not [(if p then q) and p].</p> <p>(e) Not (if p then q).</p>	<p>Hypothesis</p> <p>Hypothesis</p> <p>(a), (b), (1)</p> <p>(1), (9)</p> <p>(d), (c), (2)</p> <p>(e), (b), (3)</p>
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Appendix II



Appendix III: Stoic Philosophical Lineage



Appendix IV: Glossary

Glossary entries have the following format: Transliterated English or English translation (Greek spelling) : (1) Stoic technical usage. (2-etc.) Conventional Greek usage (Liddell).

axioma (αξιωμα): (1) A complete lekton corresponding to a declarative sentence. (2) That which is thought fit, a decision, a purpose. (3) In mathematics a self evident theorem.

body (σωμα): (1) That which is extended in three dimensions and has the ability to act and be acted upon. (2) Any material substance. (3) The whole mass of a thing.

dialectic (διαλεξις) : (1) The branch of philosophical discourse which explains the ways in which to gain knowledge. (2) Discourse, arguing.

eristic (ερισ) : (1) A philosophical debate with one participant taking the role of questioner and another taking the role of answerer. (2) Strife, quarrel, debate, contention. (3) A goddess who excites to war, sister and companion of Ares.

incorporeals (ασωματα): (1) That which is neither extended in three dimensions nor has the ability to act nor has the ability to act upon. (2) Unembodied, incorporeal. When used as a substantive in its neuter form: the incorporeal things.

lekton (λεκτος) : (1) The sense as opposed to the reference of a linguistic sign, what is said about something, the pattern of a presentation. (2) Capable of being spoken. When used as a substantive in its neuter form: something capable of being spoken.

logos (λογος) : (1) The physical substance likened to a fiery breath which permeates all unqualified matter, and functions as the active principle which imparts unqualified matter with its defining qualities. For a human this includes the soul (mind) as well as any characteristics of the human body. (2) A word, saying, statement. (3) Discourse. (5) Right of speech. Power to speak. (6) Language. (7) That which is stated. (8) Thought, reason. (9) Account, explanation. (10) Due relation, analogy.

phones (φωνη): (1) A sound, tone. Properly the sound of a voice.

physics (φυσικς) : (1) The branch of philosophical discourse which explains the things which exist in the world. (2) The nature, natural qualities of a person or thing. (3) The order or law of nature. (3) Nature, universe.

presentations (φαντασια) : (1) Sense impressions, thoughts, memories, and feelings; basically anything a person is conscious of. Impressions on, or arrangements of a person's logos which may be made by physical environment or else by the active principle of the logos itself. (2) Imagination.

somethings (τινα) : (1) The ultimate genus in Stoic ontology which has two species: bodies which are equivalent to being (ουσια) and incorporeals which are equivalent to not being (ουκ ουσια) or of somethings (τινος). (2) This is the neuter plural form of the Greek indefinite article which when used as a substantive means the same as the English "some things".

Appendix V: Testimony

These testimonies are taken from the translations of ancient writers on Stoic thought compiled in *The Stoics Reader*.

Diogenes Laertius. *The Lives of the Philosophers*. 3rd Century A.D.

(1) 7.39-40

They say that philosophical theory (λογος) is tripartite. For one part of it concerns nature (i.e., physics), another concerns character (i.e., ethics) and another concerns rational discourse (i.e., logic)...They compare philosophy to an animal, likening logic to the bones and sinews, ethics to the fleshier parts, and physics to the soul...And as some Stoics say, no part (of philosophy) is separate from another, but the parts are mixed.

(2) 7.134

They believe that there are two principles of the universe, the active and the passive. The passive, then, is unqualified substance, i.e., matter whereas the active is the rational principle (logos) in it, i.e., god. For he being eternal and penetrating all of matter, is the craftsman of all things.

(3) 7.135

...body is that which is extended in three dimensions, length breadth, and depth.

(4) 7.140-141

They say that the cosmos is one and limited at that, having a spherical shape...Spread around the outside of it is the unlimited void, which is incorporeal. And the void is what can be occupied by bodies but is not occupied...Things said (lekta) are incorporeal in the same way. Again, so too is time an incorporeal, being the interval of the movement of the cosmos.

(5) 7.155

They believe that nature is a craftsmanlike fire, proceeding methodically to generation, i.e., a fiery and craftsmanly pneuma. And soul is a nature capable of sense perception. And this soul is the inborn pneuma in us.

(6) 7.45-46

A presentation is an impression in a soul, the name being appropriately transferred from the imprints in wax made by a seal ring. Of presentations, some are graspable, some non-graspable. The graspable presentation, which they say is the criterion of facts (pragmata), is that which comes from an existing object and is stamped and molded in accordance with the existing object itself. The non-graspable presentation is either not from an existing object or from an existing object but not in accordance with it; it is neither clear nor well stamped.

(7) 7.51

...some presentations are sensible, some are non-sensible. Those received through one or more sense organs are sensible; non-sensible are those which come through the intellect, for example, presentations of incorporeals and the other things grasped by reason. Of sensible presentations, those which come from existing objects occur with yielding and assent. But representational images which are 'as if' from existing objects are also counted among the presentations.

(8) 7.52

...'sense perception' refers to [a] the pneuma that extends from the leading part of the senses and [b] the 'grasp' that comes through the senses...the grasp occurs [a] through sense perception (in the case of white objects, black objects, rough objects, smooth objects) and [b] through reason (in the case of conclusion drawn through demonstration, for example that there are gods and that they are provident). For of conceptions, some are conceived on the basis of direct experience, some on the basis of similarity, some on the

basis of analogy, some on the basis of transposition, some on the basis of composition, and some on the basis of opposition.

(9) 7.53

On the basis of analogy things are conceived...by shrinking, for example a Pygmy. On the basis of transposition, for example, eyes in the chest. On the basis of composition, the Hippocentaur is conceived of, and death on the basis of opposition to life.

(10) 7.158

They say that there are eight parts of the soul, the five senses, the spermatic principles in us, the vocal part, and the reasoning part...We hear when the air which is the medium between the speaker and the hearer is struck in spherical fashion and then forms waves and strikes our auditory organs, just as the water in a cistern forms circular waves when a stone is thrown into it.

(11) 7.48

The Stoics agree to put in the forefront the doctrine of presentation and sensation, inasmuch as the standard by which the truth of things is tested is generically a presentation, and again, the theory of assent and that of apprehension and thought, which precedes all the rest, cannot be stated apart from presentation. For presentation comes first, then thought, which is capable of expressing itself, puts into the form of a proposition that which the subject receives from a presentation.

(12) 7.42-44

So they include the study of canons and criteria in order to discover the truth. For it is in this study that they straighten out the differences among presentations; and similarly they include the definitional part for the purpose of recognizing the truth. For objects are grasped by means of conceptions. And rhetorical knowledge is about speaking well in expository speeches, whereas dialectical knowledge is about conversing correctly in speeches of question and answer form. And that is why they also define it thus, as a knowledge of what is true and false and neither.

And they say that rhetoric itself is tripartite. For part of it is deliberative, part forensic, part encomiastic. It is divided into invention, diction, organization, and delivery. And the rhetorical speech is divided into the introduction the exposition, the counterargument, and the conclusion.

And dialectic is divided into the topic about the signified and the utterance. And the topic about the signified is divided into that about presentations and that about lekta which subsist in dependence on them: propositions and complete lekta and predicates and the active and passive lekta similar to them and genera and species, and similarly arguments and modes and syllogisms and fallacies caused by the form of utterance or by the facts. These include the arguments about the Liar and the Truth-teller and the Denier...

Pseudo-Plutarch. *On the Doctrines of the Philosophers.* 1st century A.D.

(1) 874c

...philosophy is the exercise of the craft of the 'suitable' and that virtue is the highest and indeed the only thing which is suitable. At the highest level there are three virtues: the one that deals with nature (Phusike), the one that deals with ethics (ethike), and the one that deals with discourse (logike). And that is why philosophy is tripartite, one part being physical, one ethical, and one logical- the physical whenever we inquire about the cosmos and the things in the cosmos, the ethical being the one preoccupied with human life, and the logical is the one concerned with discourse (logos), which they also call 'dialectic'.

(2) The Stoics say when a man is born he has the ruling part of the soul, like a page of clean paper, fit for copying a script. On this part he notes every single concept. The first way of this transcription is by means of the sense.

(3) 4.11.3ff

Among conceptions, some are established naturally according to the way mentioned above and without any art; others, on the contrary, are established by means of our doctrines and activity...They say that reason...reaches its completion...during the first seven years.

Sextus Empiricus. *Against the Mathematicians.* 160 to 210 A.D.

(1) 8.263

According to them, the incorporeal can neither do anything nor have anything done to it.

(2) 10.218

For they say that of 'somethings' some are bodies and some are incorporeals, and they listed four kinds of incorporeals: lekton (thing said) and void and place and time.

(3) 8.397

Every intellection is derived from sensation or not without sensation and by a contact or not without a contact.

(4) 8.11ff

The Stoics maintained that "three things are linked together, the thing signified, the thing signifying, and the thing existing", and of these the thing signifying is the sound (Dion for instance), and the thing signified is the actual thing indicated thereby, and which we apprehend as existing in dependence on our intellect, whereas the barbarians, although

hearing the sound, do not understand it; and the thing existing is the external real object, such as Dion himself. And of these things, two are bodies, that is the sound and the existing thing, and one is incorporeal, the lekton.

(5) VIII 262-74

Nor does he (mankind) differ from other creatures in virtue of simple presentations- for they too receive these - but in virtue of presentations produced by inference and combination. This amounts to man's possessing an idea of logical consequence, and he grasps the concept of signal because of this. For signal itself is of the following form: "If this then that". Therefore the existence of signal follows from the nature and constitution of man.

Seneca. *Letters on Ethics.* 4 B.C. to 65 A.D.

(1) 58.11-15

Moreover, there is something higher than body; for we say that some things are corporeal, some incorporeal...Some Stoics held that the first genus is the 'something'...They say that in the nature of things, some things are and some things are not.

Cicero. *Academica.* 106 to 43 BCE.

(1) 1.41

Not all presentations are trustworthy, but only those that have a "manifestation," peculiar to themselves of the objects presented; and a trustworthy presentation being perceived as such by its own intrinsic nature he termed "graspable" (cataleptic)- But after it has been received and accepted as true, he termed it a "grasp" (catalepsis). resembling objects grasped in the hand...

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