

PHI 1101: Test 1 Study Notes

Statements

A sentence used to make a claim

- True or False – if not T/F, not a statement!
- * Also called Propositions

Property of being either true or false = 2 laws of logic:

1. Law of Non-Contradiction -> 2 premises cannot contradict one another
2. Law of Excluded Middle -> Strictly T/F, nothing in between

Example: Socrates is a man — P (Preposition)

Socrates is not a man — \sim P (Not a preposition)

Sets

Sets/groups of propositions that lead to a conclusion

- Consistent or Inconsistent
 - Only consistent if – all sentences in set are true at the same time
 - Consistent if they do not contradict one another

Example: Socrates is a man

Socrates is mortal

↑

Consistent

Socrates is a man

Socrates is not a man

↑

Inconsistent (Contradiction)

Arguments

Set of statements that justify the conclusion

- Logically strong or Logically weak
- * Statements often referred to as premises

Example: Premise One: Socrates is a man

Premise Two: All men are mortal

Conclusion: Therefore, Socrates is mortal

→ First two premises are true, reasonable to believe the conclusion is true.

Logically Strong – When the premises support the conclusion

Logically Weak – When the premises do not support the conclusion

* If premises are true, conclusion MUST be true.

Example (Logically Weak Argument):

Sally has brown hair.

Therefore, Sally is a bad student.

Deductive vs. Inductive Arguments:

Deductive – Proof of its premises guarantees truth of conclusion

Inductive – Proof of premises makes truth of conclusion probable

→ Not as strong as deductive

Soundness: Argument is sound if it is logically strong and has true premises

* LOGICALLY STRONG + TRUE PREMISES = SOUND *

3 Criteria of a Sound Argument: THINK ACREAD

1. Premises must be ACceptable
2. Each individual premise should be RElevant to the conclusion
3. Premises must provide ADEquate support for the conclusion

Fallacy: An error or weakness that detracts from the soundness of an argument

Some other Argument forms:

Counterfactual Argument – has premises we know or assume to be false

→ Contrary to the facts.

Reductio ad Absurdum – reduce a statement to a contradiction

→ To show a proposition is false, have a contradiction follow

- Demonstrate a certain proposition (P) to be true, by assuming it to be false ($\sim P$) and then determine a contradiction.

Example: Prove Socrates is not an Olympian

P1: Socrates is an Olympian God

P2: Olympian Gods are immortal

P3: Socrates died in 399 BC

→ Socrates is immortal (P2) and mortal (P3)

→ Contradiction

Therefore, P3 is false (by Reductio ad Absurdum) and by Law of Non-Contradiction.

Therefore, the statement, "Socrates is not an Olympian God," is true

→ By Law of Excluded Middle

Anatomy of Reductio ad Absurdum:

Assume P (True proposition)

Derive a Contradiction: $q \ \& \ \sim q$ (True premise and false premise)

Conclusion: P is false (Law of Non-Contradiction)

Conclusion: $\sim P$ is true (Law of Excluded Middle)

Enthymeme:

→ Conclusion or one of the premises has been left unstated

→ Implied, left for reader to understand

Sorites:

→ Connected series of arguments

→ Conclusion of one argument = premise of another

Definitions

Must understand very important distinction:

Sense and Reference

Sense:

What we understand when we understand its meaning, "the concept"

Example:

Bachelor – An unmarried male

Reference:

Class of things the word refers to

Example:

Bachelor – Class of bachelors who exist in the universe now, who will exist in the past and future

- 3 types of Definitions
- 3 types of Purposes

1) Reportive Definition

- Reports on a word in its standard usage (how the word is, used by those who make regular use of it)

2) Stipulative Definition

- To fix a particular meaning of a word
 - Often if it is not precise enough

3) Essentialist Definition

- A theory of what is being defined

Ways Definitions Fail

1. Too broad

- Refers to things not included in reference of term being defined.

Example:

- Typewriter is a means of writing.
 - Includes more than it should

2. Too Narrow

- Fails to refer to some things included in reference of term being defined

Example:

- A school is an institution that aims at teaching children how to read and write.
 - Fails to refer to other types of “schools”

3. Too Broad and Too Narrow

- Refers to some things to which the term does not apply (too broad), and fails to refer to some things to which the term does apply (too narrow).

Example:

- A pen is an instrument designed for writing words.
 - Too Broad: other means of writing words
 - Too Narrow: Other things can be written/drawn with pens

4. Circular

- Includes word being defined or root word

5. Obscure

- Fails to express precise meaning of a word
- Through use of vague, unclear, or metaphorical

Example:

- Vague- a marathon is a long footrace
- Unclear- anything made with interstitial vacuities
- Metaphorical- architecture is frozen music

PHI 1101: Test 2 Study Notes

- Socrates is challenged to prove Thrasymachus' theory of Justice wrong, and to prove it is worth having for its own sake.

The Sophists – Teachers of techniques of persuasion and argument who claim to make a convincing argument for any position.

- Socrates proves Thrasymachus' theory wrong by looking at the truth of his premises: Comparing to shepherds, ship captains who seek advantage of their subjects, not themselves

The Best Life

Thrasymachus believes an unjust life is the happiest, best life
→ Make the laws but don't obey them

Socrates wants to prove a just life = strong, profitable

Thrasymachus agrees that:

Injust leads to -> War, Hatred, Empire
Just leads to -> Friendship, Common Purpose

Socrates: Any group of unjust cannot achieve a common goal
→ Therefore, injustice is not more powerful than Justice.

Neither satisfied at the end of book 1: No essentialist definition of Justice.

Glaucon's Challenge

Arguing Justice is good

3 Classes of Good:

1. Instrumentally good
→ Only good because of the consequences

Example: Bad tasting medicine

2. Intrinsically good
→ Good in itself apart from the consequences

Example: Joy, Listening to music, Reading for pleasure

3. Both Instrumentally and Intrinsically good
→ Good because of its consequences and itself

Example: Being healthy

Challenge: To prove Justice is both Instrumentally and Intrinsically Good.

No one values Justice for its own sake: Only Instrumentally Good.

Pleonexia – the desire to outdo other and to have more and more

The True Man – never makes Justice agreement.
- stronger than to be constricted by the laws of Justice

Socrates will use accounts of:

- The origin of Justice
- Human Nature

...to demonstrate Justice is both Instrumentally and Intrinsically Good.

The Ideal City and its Classes

Ideal City – One that allows human to flourish
→ Kallipolis

City is a necessary condition of human life
→ Food, shelter, clothing
→ Division of labour, distribution of goods

We want luxuries – (more than what we already have)

When will it get too far?: Citizens wanting properties of others, cities wanting properties of other cities?

Too much may result in conflict: Crime, War, Empire

Because of the possibility of conflict, we need a Police/Warrior Class.

Necessary conditions:

- Keen Senses
- Speed
- Strength

Also need a quality of soul/character:

- Spirit

Individually Necessary and Jointly Sufficient conditions.

Problematic class: Could be dangerous to the city and each other.
SO... Guardians must have the correct education

The Complex City:

Two classes—

1. The workers – producer class, meets necessary and unnecessary desires
2. The Guardians – warrior class, deal with conflicts

Warrior class is a result of Pleonexia and unnecessary desires.

These classes are not sufficient – need a ruling class

1. The Workers
2. The Guardians
3. The Rulers

These 3 classes — individually necessary and jointly sufficient for the ideal city

Conditions of a Good Ruler:

Chosen from the Warrior Class

Older than the Ruled

Best of the Warrior Class: knowledgeable and capable

Not sufficient – must also care for the city

- identify good of the city with their own good

Not sufficient – must preserve this belief

Good Rulers must be:

1. Chosen from the Warrior Class
2. Older than the Ruled
3. Best of the Warrior Class: Knowledgeable and Capable
4. Identify Good of the City with their own Good
5. Preserve this Belief

Independently necessary and jointly sufficient conditions

Division of Classes:

1. Guardians – Warriors, to be called Auxiliaries
2. True Guardians – Rulers, to be called The Guardians

Clarifying Meaning

The Principle of Charity

- Ways to interpret what one has said
- To adopt most charitable interpretation of your opponents words
 - One most reasonable, plausible or defensible as possible
- Do this to discover the truth

Vague Sentence: Lacks precise meaning

- Used to be evasive

Ambiguous Sentence: Two or more precise meanings

Two types of Ambiguity:

1. Semantic Ambiguity – from multiple meanings
2. Grammatical Ambiguity – from a confusing grammatical construction, rather than the meaning of words

Two Types of Semantic Ambiguity:

1. Collective/Distributive

- Use of a term

Distributive – members of a class

Collective – class as a whole

2. Use/Mention

Use – use of a word to refer to something else (Sign/Symbol)

Mention – draw attention to the word itself

Other Distinctions:

Synthetic Statement – truth or falsity does not depend on meaning of the terms

Analytic Statement – true by definition

Contradictory Statement – false by definition

Necessary/Sufficient Conditions

X Antecedent Conditions – Conditions that have to be met for a claim to be true

Y Consequent – Outcome or resultant state

When X is absent, Y cannot occur



Necessary condition – likely

When X is present, Y must occur



Sufficient condition – guaranteed

Both necessary and sufficient conditions:

→ When necessary conditions on their own do not guarantee

→ But taken together might guarantee the consequent

=

Individually Necessary and Jointly Sufficient Conditions

PHI 1101: "Test 3" Study Notes

Reconstructing Arguments

Identify:

Premises
Conclusions
Relationship Between

Conventions:

- Conclusion – underline (C)
- Premises – Brackets (P)
- Missing Premises – (MPx)
- Missing Conclusion – (MC)

Example:

[All men are mortal.] (P1) [Socrates is a man.] (P2) Socrates is mortal. (C)

Supplying Missing Premises:

- Add those which increase logical strength
- As plausible as possible

Types of Missing Premises:

Type 1: Supplies information the speaker presumably knows or believes

Type 2: Contains assumption or presupposition

- Explains why speaker believes premises support the conclusion

Structure of Arguments:

- Reveals relationships between premises and conclusion
- Shows how premises support conclusion

Types of Arguments:

Simple – one premise, one conclusion:

P
↓
C

"T" – together premises support conclusion, apart do not support conclusion:

P1 _____ P2
↓
C

“V” – apart have some support for conclusion
P1 P2

C

Housing, Property Arrangements

Auxiliaries need housing that will not encourage them to do evil to the citizens.

Requirements:

- no private property
- storerooms open to all
- eat in common area
- don't need gold — they have it in their souls
- must not touch gold/silver

- Socrates and Glaucon agree this must be put into law

Private Property – leads to money makers, not soldiers

Not Live or Eat Together – leads to money makers, not soldiers

The Auxiliaries and Guardians must not acquire private property and must live and eat together.

Assessing Arguments

Assessing Truth Claims:

Varification – Process of determining if a truth-claim is true

 Showed True = Varified

 Showed False = Falsified

 Neither = Undetermined

Types of Truth Claims:

Emperical – Checked with one of the 5 senses

Non-Emperical – Cannot be checked with one of the 5 senses

Begging the Question:

- Premises presuppose, directly or indirectly, the truth of the conclusion
- Truth of conclusion determines truth of premises
- Premises are not doing their job

Dichotomies:

1. Exhaustive – Covers all the possibilities
2. Exclusive – Choice of one rules out the other

Falloy of False Dichotomy 1:

- Premises of an argument present us with a choice between alternative and assumes they are exhaustive when they are not

Falloy of False Dichotomy 2:

- Premises of an argument present us with a choice between alternatives and assumes they are exclusive when they are not

Justice in the Kallipolis

- Socrates is seeking an essentialist definition of Justice

Cephalus' definition was repective.

Function – What something does best or uniquely

Virtue – The property or characteristic that enables it to fulfill its function well

Functions of the Citizens:

- Working
- Guarding
- Ruling

Virtues of the Citizens:

- Fulfill functions well if they know their natures and can cultivate or express them fully

Definition of Justice as a Virtue

- City is just if its citizens can know their natures and express them fully

Virtue = Instrumentally and Intrinsically Good

Assessing Relevance

Relevance:

- If premises of an argument are relevant to the conclusion, they must make it more likely, if they are true, that the conclusion is true

Irrelevant Premises:

- Certain kinds of appeals to irrelevant premises are very common
- Appeal to factors that are irrelevant to the truth of the conclusion

Fallicies of Relevance:

- Appeals to Pity – appeal to emotion when irrelevant
- Appeals to Force – threatens with force to accept the conclusion is true
- Appeals to Popularity – true because popular/widely held
- Appeals to Authority – so-and-so says X, so X is true
- Appeals to Personal Qualities

Fallogy of Equivocation:

- Arises when a premise has 2 interpretations (it's ambiguous) and the sense in which the premise is true is not the sense required by the conclusion

Assessing Adequacy

Jumping to Conclusion – When relying on inadequate premises to support the conclusion

Criteria of Adequacy:

- Deductive Validity – for deductive arguments (guaranteed truth)
- Inductive Strength – for inductive arguments (probably truth)

Fallogy of Adequacy:

Post Hoc

- Occurs when something that occurs before an event, must be the cause of that event
- Causes always precedes their events

Adequacy and Deductive Reasoning

Deductive Validity – Deductive arguments so strong, adequacy of deductive arguments is referred to as deductive validity.

- “The strongest support”

Validity = Standard of Good/deductive arguments

Deductive Validity – one that can never have, at the same time, true premises and a false conclusion

- To show a particular argument is valid, it is not sufficient to show that its premises and conclusion happen to be true here and now

- Not necessary that the conclusion or any premises of a deductively valid argument actually be true

Inductive Reasoning

Analogical Argument by Properties:

Form of an inductive argument: truth of premises only indicates it is probable that the conclusion is true.

Analogy: an observed similarity between two things or two types of things

-Items similar in observed ways also similar in further observed way

Form:

X has properties A, B, C

Y has properties A and B

Therefore, it is probably that Y has property C

Logical strength of the Analogical Argument by Properties

— Depends on the relevance and number of observed similarities

The Republic and the Analogical Argument by Properties:

From the city to the soul – apply what we know about Justice in the city to Justice in the soul

Relevant similarities:

-Same number and kinds of parts

-Socrates arrived at his definition of the virtues by considering the classes of the city and their functions and virtues

The Argument:

- We experience conflict/contradiction in our soul

Our Conflicts:

-Socrates examines the kinds of conflict we experience in our soul and concludes that the soul has 3 parts:

1. The irrational, **appetite** part which hungers, thirsts and lusts
2. The **spirited** part by which it gets angry
3. The rational part with which it **reasons**

Conclusion:

Guardians — Reason

Auxiliaries — Spirit

Workers — Appetite

Justice in the City:

- The city is Just if its citizens can know their natures and can cultivate and express them fully

Soul:

- As Guardians rule the Kallipolis, reason must rule over the other parts of the soul
- Only if reason rules, it will suppress the other parts.

Intrinsically and Instrumentally Good:

- Justice is harmony, order
- It is to the soul and the city as health is to the body

Sample Exam Questions

Q: Set out the premises and conclusion of Socrates' refutation of Cephalus' definition of Justice. Identify the argument forms involved and note their principal features.

A: Premise 1 – Justice is telling the truth and paying your debts (Cephalus' Definition)

Premise 2 – Justice is not harmful (Implied, P1) (Unstated premise: the argument is an enthymeme)

Premise 3 – Telling the truth and paying your debts is harmful (in case of the insane man and his weapons)

Conclusion – Therefore, Justice is not harmful and justice is harmful (CONTRADICTION)

Conclusion – Therefore, the statement, "Justice is telling the truth and paying your debts," is false (By Reductio d Absurdum; because of the Law of Non-Contradiction)

Conclusion – Therefore, the statement, "It is not the case that Justice is telling the truth and paying your debts," is true (by the Law of the Excluded Middle)

Q: Set out the premises and conclusion of Thrasymachus' argument for his definition of Justice.

A: Premise 1: The stronger are the rulers

Premise 2: The rulers make the laws

Premise 3: The rulers make the laws to their own advantage

Premise 4: The laws constitute what is Just

Conclusion: Justice is the advantage of the stronger

Q: Glaucon thinks the term "good" is ambiguous, set out, explain and give examples of its various meanings.

A: -Glaucon thinks that the term "good" can have the following meanings:

-It can mean, intrinsically good, in this case, it is desirable in itself apart from its consequences, like listening to music or reading for pleasure

- It can mean instrumentally good, in this case it is desirable only because of its consequences, like bad tasting medicine.

- Or it can be both intrinsically and instrumentally good. In this case it is desirable both for its own sake and because of its consequences, like being healthy

Q: Explain Socrates' account of the origin of the city and its classes up to and including the Guardian class in terms of necessary and sufficient conditions for a flourishing human life.

A: The city if necessary condition of a flourishing human life because none of us is self-sufficient; the city meets our basic human needs by the division of labour and distribution of goods.

-Sufficient condition of a flourishing human life? No

- Glaucon objects that this is an animal city, city of pigs. Human nature, which is pleneoxia (desire to outdo others and get more and more) demands luxury; humans want more than we need; must introduce luxuries (things we want, but don't need) into the city

Once we introduce luxury into the city there is nothing we will not ask for: The citizens will want other citizens' properties, the city will want other cities' properties. This means war, crime and empire are more inevitable.

-Worker class sufficient? NO

-We need a warrior class, the Guardians, to deal with conflict in the city and between cities.

Criteria for being a good Guardian

1. Physical: Strong, speed, keen senses

-these are necessary

-are these sufficient? NO

-they must have a certain quality of soul; SPIRIT

-Keen senses, speed, strength, spirit are individually necessary and jointly sufficient conditions of being a good guardian.

BUT the Guardian class is problematic

-They could savage to the citizens and each other

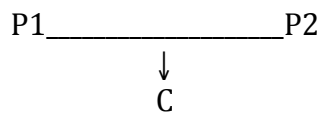
-Therefore, they must have a correct education

Q: State the premises and conclusion of Adeimantus' objection to the housing and property arrangements for the Auxiliaries and Guardians in Kallipolis. Represent this as a tree diagram. Show how Socrates refutes this argument.

A: Premise 1: We should give the Auxiliaries and Guardians the greatest happiness

Premise 2: The Auxiliaries and Guardians will have the greatest happiness if they acquire private property and live in their own private homes

Premise 3: Therefore, the Auxiliaries and Guardians should acquire private property and live in their own private homes



Socrates' Refutation:

— Socrates refutes this argument in 2 ways:

-denies P1: says we are not aiming to give just one class in the city the greatest happiness: we are aiming to see the city as a whole has the greatest happiness.

-then says: he wouldn't be surprised if they were happiest this way because they are doing the activity for which they are naturally suited.

— Since this is a "T" argument in which both premises must be true if the inference is to be supported, he only needed to attack one premise. He was able to attack both.

Q: How does Socrates move from Cephalus' reportive definition of Justice to his essentialist one?

A: Reportive Definition: Reports standard usage.

Essentialist Definition: Usually rooted in standard usage, but then revised to correctly convey the essentialist nature of the term being defined

Cephalus' definition of Justice is that it is telling the truth and paying your debts

-On one level is a reportive definition

-As a representation of the tradition, Cephalus reports what most people think; his definition is close to standard usage

-When Socrates assesses this definition, however, he does not assess it simply as a reportive definition

-he does not simply ask if it accurately reports standard usage

-Instead, Socrates wants to know if this definition reveals the true nature or essence of justice

-He asks if it is a good essentialist definition

-the heart of Cephalus' definition: giving people and the gods what they are owed, or what they deserve.

-Socrates take this notion of giving people what they are owed and revises it in the light of what he knows about the classes of the Kallipolis

-This involves the concepts of "function" and "virtue"

-Function: The function of something is what it does best or uniquely

-Virtue: The virtue of a thing is the property or characteristic that enables it to fulfill its function well

-Functions of the classes in the Kallipolis:

-working (meeting necessary and unnecessary desires)

-guarding

-ruling

- What will allow the citizens of the Kallipolis to fulfill their functions of working, guarding or ruling well?

-They will fulfill their functions well if they know their natures and can cultivate and express them fully

-This is the essence of the virtue of Justice

Q: Concepts Applied:

-Analogical Argument by Properties

-Law of Non-Contradiction

How does Socrates apply what he has established about Justice in the city to Justice in the soul?

A: -Socrates applies what he has established about Justice in the city to Justice in the soul by means of Analogical Argument by Properties

-The strength of the Analogical Argument by Properties depends on the relevance and number of observed similarities.

-Therefore, Socrates must establish that the soul is like the city in a sufficient number of relevant ways if his argument is to be logically strong.

-Socrates shows that the soul has the same number and kinds of parts as the city

-He does this by means of the argument from the law of non-contradiction and the existing conflicts in the soul.

-The law of non-contradiction states that it is possible for a proposition and its negation to be true at the same time and in the same respect. In other words at one and the same time and in the same respect, one cannot truthfully assert and deny that something is the case. That is, it cannot be the case that Socrates is a man and is not a man at the same time and in the same respect.

-Socrates examines the kinds of conflicts we experience in our soul and concludes that the soul has 3 parts: The irrational, appetite part which hungers, thirsts and lusts, the spirited part by which it get angry, and the rational part with which it reasons.

-As these parts of the soul correspond to the classes of the city he can apply what he has established about Justice in the city to the soul.