Lecture 1: Philosophical Argumentation: Britain

- Golden Age of Greece

-> In Greece, people were getting their wisdom from Oracles + consult mythology in times of trouble. People accepted this due to a lack of knowledge, and a lack of time to question any of this.

-> As economy improved because of trade with other cultures, many people gained time to pose these questions.

-> In this contact with other cultures, the Greece began to compare and contrast their many gods vs. god(s) of other cultures.

-> Because of these two previous factors, Philosophy (which also included questions of natural science) was created.

-> Since these explanation systems (mythologies), this led to a change in thought, and thinking became argumentative (people wanted evidence to substantiate claims / myths).

- Philosophical Argumentation

-> philosophical argumentation: a system of methods, devices, and means by which philosophical systems are based, philosophical assertions are demonstrated, and their proof becomes evident.

-> it can be systematic (related to the unity of the theory)

-> it can be analytical (related to the exposition of a certain theme)

-> is an explication of concepts to gain more precise meaning

-> substantiates a claim or tries to develop new theses from them

- Aiming at Objectivity

-> in argumentation, we are offered the possibility of understanding a judgement, be it philosophical, of a likeminded thinker, or other school.

-> it believes that mutual understanding is possible.

-> it aims to obtain a definite answer (arguing not comprimising).

-> Philosophical argumentation convinces through evidence + reason, not compriser, and begins with contention of truth.

- Induction vs. Deduction

-> induction: argues from particular claim or fact to make a general claim.

ex: There appears to be a cause for every effect, thus we can make law of causation.

-> deduction: argues from general statements to specific claims.

ex. All noble gases are stable. Helium is a noble gas, so helium is stable.

-> Philosophical argumentation should use both.

Lecture 2: Chapter 1: P. Rusnock

- 1.1: Introduction:

- argument: a set of claims (premisses) / support + a thesis claim (conclusion), and an inference (verb of argument).

- Example: - Socrates is a man. = premiss
  - All men are mortal. = premiss
  - therefore, Socrates is mortal = conclusion

-> no matter how "bad" or even whether the attempts are true or false, an attempt to convince someone with reasons is an argument. ("word of god")

-> An argument is NOT a description, statement of fact, or anything lacking an inference.

-> a good premiss is straightforward, clear, self evident, and does not question why. A bad premiss leads to weak/questionable conclusion

-> An argument can be recognized through premiss + conclusion indicators.

- 1.2: Explanations and Arguments:

- explanations: shed light on something (we know what happened and are stating the reasons/causes for it).
- arguments: claim to prove something (we know the reasons (premisses) and are using them to establish a conclusion in doubt)

-> Arguments as Explanations: recounting an argument faithfully is not itself an argument but a retelling of an argument as a means of explaining the controversy.

- Arguments:
  - main point is debatable, to be proven
  - if its talking about the future, its an argument (its not a fact because it hasn't happened).
  - morality: to say something is good or bad is an argument.
- Explanations:
  - main point is established / fact
  - answers why this fact has happened, why is this the case.

- 1.3: Simple and Complex Arguments:

- Simple argument: has one conclusion or inference. It has the same number of conclusions as inferences. You can have more than one premiss for a simple argument.
- Complex argument: has more than one conclusion or inference. Has one main conclusion, and at least one intermediate conclusion or subconclusion. the number of conclusions = number of inferences.

examples:

- P1. Either the chauffeur or the butler killed Thickson. P2 But the butler was in London on the day of the murder. IC So he didn't do it. MC It must have been the chauffeur.
- IC Creatures are not born with desires unless satisfaction for those desires exists. P A baby feels hunger. Well, there is such a thing as food. A duckling wants to swim: well, there is such a thing as water. People feel sexual desire: well, there is such a thing as sex. FC If I find in myself a desire which no experience in the world can satisfy, the most probable explanation is that I was made for another world. If none of my earthly pleasures satisfy it, that does not prove that the universe is a fraud.

1.4: Arguments in Standard Form:

-> Simple Arguments: Form is easy to identify (the last premiss before the conclusion is underlined):

-> Example: - 1. Premiss
- 2. Premiss
- 3. Conclusion

-> Complex (sub-argument) arguments: Inference is signaled by the numbers after the proposition (statement/claim).

The numbers refer to the numbered statements that support the claim.

-> Example:

1 Desires of babies who are hungry, ducklings who want to swim, and men who desire sex can be satisfied in this world P
2 Creatures are not born with desires unless satisfaction for those desires exists . . . IC 1
3 If people find in themselves desires that no experience can satisfy, then the most probably explanation for this is that they were made for another world . . . FC 2

P/PR = premiss | FC: final conclusion
IC = intermediate conclusion

-> Analysis Strategies

-> not arguments: - conditionals (contingencies): ex. When the sun sets, goblins will come out.
- disjunctions (ors)
- unless (if not)

-> Ask the question Why? (what sentences support the claims?). A conclusion, if you ask why, it is not answered. A premiss answers why.

-> Don't question facts of the argument ("word of God")

-> Analyze the structure of the argument, not the individual thrust of the premisses.

-> Locate: - the main point (thesis)
- minor points (subconclusions)
- support (premises) for minor points

-> Look for connection between ideas, not the truth values themselves.

Lecture 3: Chapter 1: P. Rusnock, cont.

- 1.5: Real Life is Messy:

-> discard conversational elements

-> paraphrase claims if necessary or desired

-> Consider commands, rhetorical questions, exclamations, etc as making claims (these are indicators of conclusions)

-> italisized words and ! indicate main points / conclusions (what the point or thesis is of argument)

- 1.6 the principle of charity

- principle of charity: gives the author benefit of doubt while analyzing the argument (personal opinions don't matter when analyzing the form of argument)

- 1.8: Unstated premisses and conclusions:

-> Arguments can many time miss elements like premisses or conclusions.

-> We may need to add missing claims for clarity.

- Example: - If it were snowing, the streets would be white. (not an argument by itself)

- ex.1: - But they aren't white. - ex. 2: - ?. (missing premiss)

- ?. (missing conclusion) - It's not snowing.

-> Bonus:

Premise indicators	Conclusion indicators
as	as a consequence
as shown by	as a result
as we can see from	for these reasons
because	hence
considering that	it follows that
for	it must be that
insofar as	so
on account of	therefore
since	thus
	we may conclude/infer
	which proves/shows that

- note that similar indicators can be used for explanations.

Simple Argument:

You shouldn't drink and drive because the penalties are stiff if you are caught.

To put this in standard form, we list the premise, followed by the conclusion.

1. The penalties are stiff if you are caught drinking and driving (P).
2. You shouldn't drink and drive. (C: from 1)

The line separating the premise from the conclusion indicates an inference, and the number in parentheses indicates which premise is supposed to support the conclusion.

Complex Argument:

Consider now a complex argument:

You shouldn't drink and drive because the penalties are stiff if you are caught. Besides, you might cause an accident. And you do have to drive tonight. So you shouldn't have anything to drink tonight.

Here, the indicator words *because* and *so* tell us that (at least) two inferences have been made, and thus that two conclusions have been drawn, namely:

You shouldn't drink and drive.
You shouldn't have anything to drink tonight.

1. The penalties are stiff if you are caught drinking and driving. (P)
2. You might cause an accident if you drink and drive. (P)
3. You shouldn't drink and drive. (IC: from 1, 2)
4. You have to drive tonight (P).
5. You shouldn't have anything to drink tonight. (FC: from 3, 4)

Here, we use the abbreviations 'IC' and 'FC' to indicate intermediate and final conclusions, respectively.

Lecture 4: The Ontological Argument

- Saint Anselm of Canterbury:

-> Of Catholic Church, held office of Archbishop 1093 - 1109. Was canonized as saint after death.

- Argument from Faith:

-> As a theologian first, he was seeking faith first vs seeking the truth first (as a Philosopher would).

- The Ontological Argument:

- ontology: study of if being

-> He wants to prove existance of God. Oldest + most famous argument for being of God.

- God Exists: Argument 1:

-> Premiss:

- *Lord, do you, who do give understanding to faith, give me, so far as you knowest it to be profitable, to understand that you are as we believe; and that you are that which we believe. And indeed, we believe that you are a being than which nothing greater can be conceived.*

-> Argument:

- *Therefore, if that, than which nothing greater can be conceived, exists in the understanding alone, the very being, than which nothing greater can be conceived, is one, than which a greater can be conceived. But obviously this is impossible. Hence, there is doubt that there exists a being, than which nothing greater can be conceived, and it exists both in the understanding and in reality. . . .*
- That of which nothing greater can be conceived exists in the understanding. But if in reality existence exceeds the existence in the understanding then an imagined being who exists only in our mind is not a "being than which none greater can be conceived." But a being of which none greater can be conceived must also exist in reality because its greatness includes its existence. Otherwise, this great being would be lacking something essential: being.
- So, A being of which none greater can be conceived must also exist in reality and St. Anselm calls this God.
  - *God cannot be conceived not to exist*

Simplified:

- 1 God is that being of which nothing greater can be conceived. P
- 2 A being of which none greater can be conceived must also exist in reality because its greatness includes its existence. P
- 3. Consequently, being of which none greater can be conceived must exist, and we call this being God. C (1,2,)

- Quiz 1:

- Format
  - Multiple Choice
  - Short Answer
- Content, not limited to
- Rise of philosophy in the history of ideas
- G.A. Brutian
  - Statement of conviction/opinion vs. arguments
  - What is a philosophical argument
  - Faith in objectivity vs. relativism/compromising
  - Philosophy and science
  - Induction vs. deducation
- Chapter I
  - Arguments and explanations
  - Simple vs. complex arguments
  - Standard form
  - Missing premises and conclusions
- St. Anslem
  - Ontological argument

Lecture 5 : Chapter 2 : Evaluating Arguments

- What is a Good Argument:

1. Are the premises good? A good premiss should be obvious + factual. A straightforward premiss = stronger conclusion.

2. Is the reasoning (inference) good? Is the connection strong (from premiss to conclusion) ?

-> Kinds of Arguments

- Good premisses + good reasoning:
  - Reykjavík is the world's most northerly capital, Reykjavík is the capital of Iceland. So, Iceland has the world's most northerly capital.
- Good premisses + bad reasoning:
  - Hot peppers are spicy, spicy foods are are popular. So, hot peppers are popular.
- Bad premisses + good reasoning:
  - Montréal is the capital of Québec, Québec is the smallest province in Canada. So, Mtl. Is the capital of Canada's smallest province.
- Bad premisses + bad reasoning:
  - Fire is made of water, wind is made of water. So, fire is made of wind.

- Evaluating Premisses:

-> Strength: - is evaluated on a scale (absolutely a fact to may be true) ex. 2+2=4 -> there's life on other planets.

- a debatable premiss is not as strong of an argument.

- the strength can vary depending on who makes the claim (an expert has a stronger value)

-> Scope of claims : involves the extent of the claim.

-> Particular claims : - cannot be refuted by counter-example

- in many cases, involves an instance or example, and makes limited claims

ex :
- Kim Campbell was Canada's only female prime minister.
- Some Canadian prime ministers have come from Ontario.

-> General claims : - can be refuted by counter example (includes : all, every, never, etc.)

- involves many to all of a group, and makes a general or comprehensive claim.

ex :
- Many prime ministers in Canada hail form Québec.
- All prime ministers have been human.

-> Source of Information :

- Is the source reliable / have a good reputation ? ex. New York Times vs. National Enquirer
- Is the source competent / an authority on the subject ? ex. Statistics Canada vs. Random person
- Is there a reason to expect the source is biased / conflict of interest ? ex. Industry's claim on climate change.
- Do independent / reliable source agree ? How many ? ex. IPCC
- Do any reliable sources disagree ? How many ?

- Rules of thumb for assessing the claims of experts:
  - *There should be a genuine field of expertise. No one can be an expert in the fields of phrenology or orgone therapy, for example.*
  - *The authority should be an expert in the relevant field. Someone who is a reliable source for matters in his or her field may well be a crackpot when speaking on other subjects.*
  - *Get a second, third, . . . opinion. For there are many cases where experts in a given field disagree.*
  - *You may still decide to take the side of one party of experts even when there is no consensus on a particular topic. If you do this, however, you should at least try to explain how the other party may have come to hold what you consider to be a mistaken view.*
    - The NDP are better at handling social programmes because the Liberals tend to give entitlements to big business.

- Evaluating Premisses cont.

-> Common knowledge: A premiss is strong w/ common knowledge, as it is widely known / not questionable.

-> Inconsistency: A set of claims, where its not possible for all to be true.

ex.

- Whales are larger than butterflies.
- Butterflies are larger than ladybugs.
- Ladybugs are larger than whales.

- The femur is the smallest bone in the human body.
- The stapes is the biggest bone in the human body.
- Thus, the staples and the femur are both the smallest bone in the human body.

- inconsistency can also be self-contradictory: ex. he said vs. she said.

ex.

- He said : You spent all our money on beer.
- She said: No, you did!

Lecture 6: Chapter 2 Continued

- Evaluating Reasoning:

→ Methods to deduct reasoning:

→ **Mathematical Reasoning:** undoubtable once it's understood. Undebatable, only right or wrong for everyone. (ex. $5 \cdot 5 = 25$)

ex. All my family members have 10 digits.

I have 4 family members.

There are 40 digits in my family.

→ **Inductive Reasoning (generalization):** if some x are y, then all x are y. We know it's likely from past experience, however the future cannot be predicted or guaranteed. The strength of the argument can vary depending on the claims/premiss.

ex. It snowed this year on St. Patrick's Day in Ottawa.

So it will snow next year in Ottawa on St. Patrick's Day.

→ the original premiss given can lead to a weak argument.

ex. If she was swimming, her hair would be wet.

Her hair is wet.

So she must have been swimming.

→ Deductive reasoning is a stronger argument, but non-deductive reasoning is more common.

- Deductive and Non-Deductive Reasoning:

→ **Deductive validity:** - The truth of the premiss guarantees the truth of the conclusion.

- The conclusion necessarily follow.

ex. If its a bear, it's a mammal.

It's a bear.

therefore its a mammal.

→ **Non-deductive invalidity:** are not meant to be likely, but conclusions are probable or likely.

ex. Most governor generals in Canada have been men.

So the next gg will be a man.

Lecture 6: Two Models of Scientific Explanation:

- Carl Gustav Hempel:

-> Princeton university professor

-> A logical empiricist:

-> interested in scientific methodology:

-> rejection of metaphysics: rejects complex, abstract, etc. More comfortable in science

-> only claims verifiable by logic, or provable by logic or math are meaningful.

- Introduction:

-> How does science credibly explain the world? How does science work? Why should we trust science?

-> explanandum: that which is to be explained

-> explanans: the explanation of what is to be explained

- Deductive-Nomological Explanation:

-> deducing a phenomenon through a known rule or theory.

-> the argument/deduction:

1. Facts and +
2. Natural laws/principles
3. Explanation or event described

- Expantion of Knowledge:

-> Facts of the natural world, once fitted into applications of principle, become uniformities.

-> these uniformities become new premises, or bases, for a grander theory.

-> the knowledge builds on itself to become more advanced/new theories.

-> Causation:

-> is deductive-nomological in character

-> Usually circumstances cause an event vs. one trigger (more than 1 trigger generates an event)

- Deductive-nomological summary:

-> deduction of uniformities from specific cases:

1. Individual instances
↓
2. Universal laws
↓
3. Expected uniform outcome

- Probabilistic (Inductive) Explanation:

-> is nomological but does not claim a certain likelihood. These laws are statistical (never 0%, or 100%)

-> If certain conditions are met, X is statically likely or probable.

-> these statements state overall, a specific portion of X will have a specific property.

ex. - It's raining.

- It's a statistical probability that rainbows show in 2% of rain-fall.

- Rainbows are unlikely.

- Counterexample:

- the universal theories we use to base our deductive explanations on, are NOT absolute, or 100% likely in all cases.

- As such scientific laws should be regarded as probalistic.

- Elliptic + Partial Explanations:

-> Reasonable partial explanations; unscientific or unsurprising:

-> they leave out important details, and as such they can be thought of as arguments with missing explanations.

ex: Butter melts in the sun" leaves out laws that explain WHY this happens.

-> Unreasonable partial explanations; Scientific:

-> poor explanation due to the fact it is incomplete, due to a lack of laws or findings.

-> Explanatory sketch:

-> occurs in early stages of explanatory formations.

-> missing many elements, and many times, only sensible to the author.

Lecture 7 : Deductive Arguments : Validity and Soundness

- Kinds of Arguments:

- You can have a strong argument that IS invalid.

- Validity:

-> Validity only concerns reasoning structure.

-> sound argument: as far as we know, the info is true, as well as the validity / reasoning.

- A valid argument CAN have wrong, or not true, content or information.

- One statement deductively and validly equals another ONLY if it's possible for the 2nd one to be false, if the 1st one is true

- Deductively Valid Arguments:

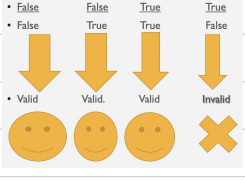
- the conclusion is guaranteed by the premisses. ex.

–If the battery is charged, the car will start
–The battery is charged
–The car will start

- this is a valid argument, but the premiss isn't necessarily true. ex.

–Margaret Atwood is a turtle, all turtles are great writers. Therefore, Margaret Atwood is a great writer.

-> Argument Possibilities:



- Valid Reasoning Forms:

- Modus ponens:

- If P, then Q -> If COVID-19, then SARS-CoV-2
- P -> COVID-19
- Q -> SARS-CoV-2

- Modus tollens:

- If P, then Q. -> If COVID-19, then SARS-CoV-2
- Not Q. -> Not SARS-CoV-2
- Not P. -> Not COVID-19

- Invalid Reasoning Forms:

- Denying the antecedent:

  - If P then Q. -> If COVID-19, then SARS-CoV-2
  - Not P. -> Not COVID-19.
  - Not Q. -> Not SARS-CoV-2

- Affirming the consequent:

  - If P then Q. -> If COVID-19, then SARS-CoV-2
  - Q -> SARS-CoV-2
  - P -> COVID-19