An Introduction to PHILOSOPHY

WHAT IS PHILOSOPHY?

Ironically, "philosophy" is difficult to define. However, if you encounter....

smart people saying crazy things *or* crazy people saying smart things

... they're probably philosophizing.

THE MAJOR DIVISIONS OF PHILOSOPHY

D IVISIΩΠ	Δ ΣΓΙΠΙΤΙΩΠ	ΚΣΨ ΘηΣειώπε
Logic	The basic rules of reasoning	 What make an argument "good"?
Epistemology	Philosophy of knowledge	What is knowledge?How do cognizers acquire knowledge?
Metaphysics	Philosophy of being	What does it mean to exist?What sorts of things exist?
Ethics	Philosophy of right and wrong	 Which acts are moral actors obliged to do? Which acts are moral actors prohibited to do? Which acts are moral actors permitted to do?

LOCIC

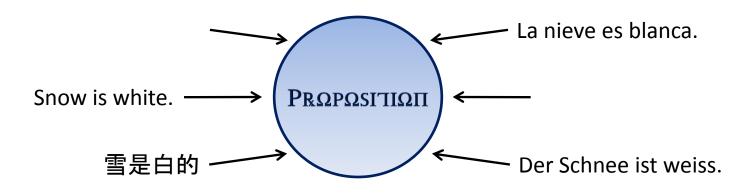
LOGICAL AXIOMS

- **†** The law of non-contradiction
 - *Metaphysical formulation:* Something cannot be both A and non-A.
 - *Epistemic formulation:* A claim cannot be both true and false.
 - Logical formulation:
 - $\neg \diamond (p \land \neg p)$
 - $\Box(p \lor \neg p)$

THE LAW OF NON-CONTRADICTION

† Claims and propositions: Propositions are...

- ... non-grammatical...
- ... truth-valued entities...
- ... which are grammatically expressed by indicative statements (or claims).



THE LAW OF NON-CONTRADICTION

+ *Contradictories:* The contradictory of any proposition *p* is ¬*p*, where "¬" represents negation.

Ρέωρωσιτιωπ

"Giraffes are indigenous to Iowa."

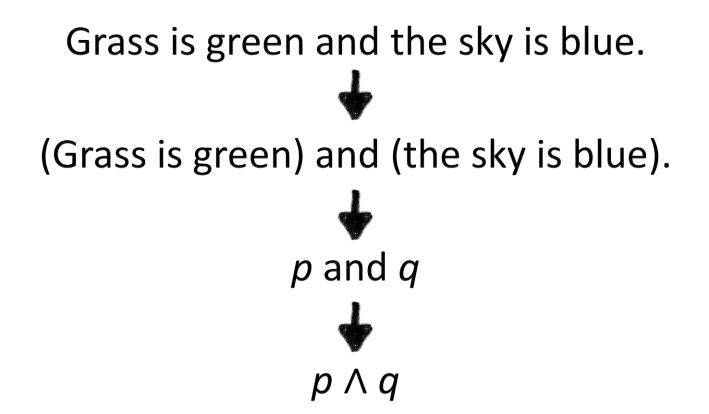
ϹΩΠΊℝΛΟΙϹΊΩℝΨ

"It is not the case that giraffes are indigenous to Iowa." or "Giraffes are not indigenous to Iowa."

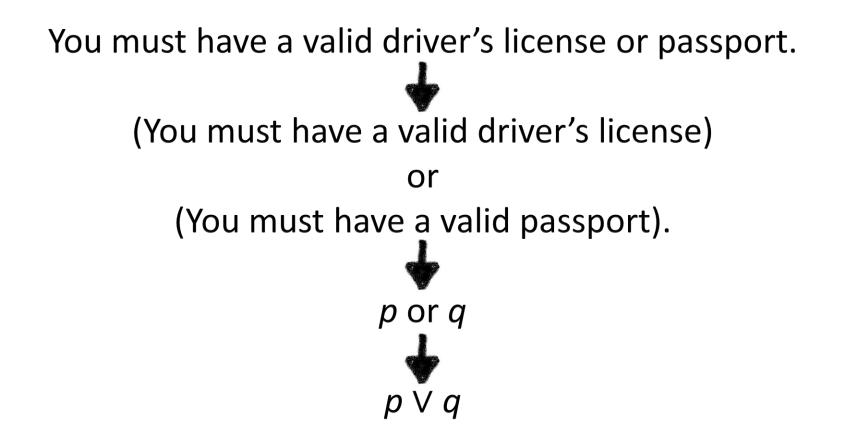
TYPES OF LOGIC

- **†** Sentential logic
 - The logic of propositions
- **†** First-order predicate logic
- **†** Modal logic
 - The logic of modalities

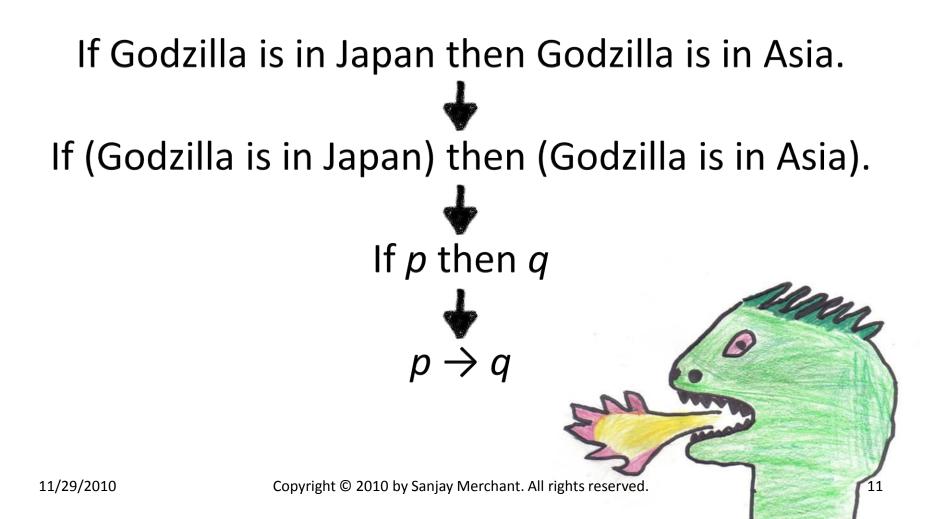
CONJUNCTS



DISJUNCTS



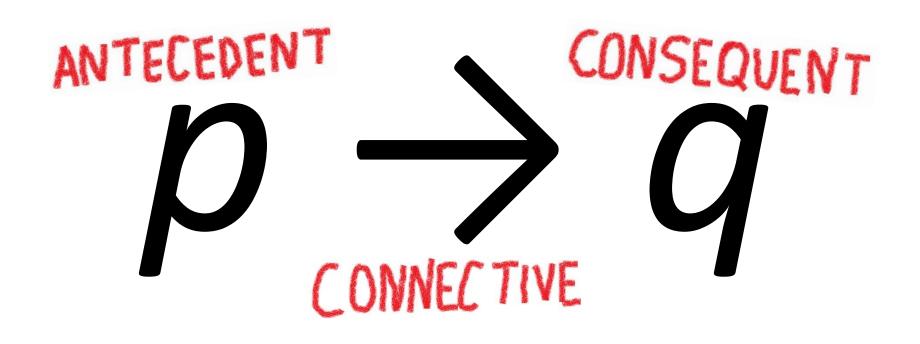
CONDITIONAL STATEMENTS



CONDITIONAL STATEMENTS

"If p then q." Or "P implies q."

CONDITIONAL STATEMENTS



BICONDITIONAL STATEMENTS

The water is frozen if and only if it is below 0° Celsius. (The water is frozen) if and only if (The water is below 0° Celsius). p iff q $p \leftrightarrow q$

BICONDITIONAL STATEMENTS

"P implies q." and "Q implies p."

DEDUCTIVE ARGUMENTS

† A sound argument is...

- ... logically valid and...
- ... contains true premises which are...
- ... more plausible than their contradictories.

★ A sound argument (SA1) All humans are mortal. ✓ TRUE (SA2) Socrates is a human. ✓ TRUE (SA3) Therefore, Socrates is mortal.

DEDUCTIVE ARGUMENTS

- + An unsound argument (invalid inference)
 (UA₁1) All men are humans. ✓ TRUE
 (UA₁2) Socrates is a human. ✓ TRUE
 (UA₁3) Therefore, Socrates is a man.
- + Another unsound argument (false premise)
 (UA₂1) All humans are men. × FALSE
 (UA₂2) Socrates is a human. ✓ TRUE
 (UA₂3) Therefore, Socrates is a man. VALID

Modus Ponens

- 1. If Bruce Banner is angry then he has transformed into the Hulk.
- 2. Bruce Banner is angry.
- 3. Therefore, Bruce Banner has transformed into the Hulk.

(MP1) $p \rightarrow q$ (MP2) p (MP3) ∴ *q*





MODUS TOLLENS

- 1. If Clark Kent is farsighted then he needs glasses.
- 2. Clark Kent does not need glasses.
- 3. Therefore, Clark Kent is not farsighted.

$$(MT1) p \rightarrow q$$
$$(MT2) \neg q$$
$$(MT3) \therefore \neg p$$



DENYING THE ANTECEDENT

- 1. If Peter Parker has x-ray vision then he is superhuman.
- 2. Peter Parker does not have x-ray vision.
- 3. Therefore, Peter Parker is not superhuman.

$$(DA1) p \rightarrow q$$
$$(DA2) \neg p$$
$$(DA3) \therefore \neg q$$

INVALID

AFFIRMING THE CONSEQUENT

- 1. If Bruce Wayne owns LexCorp then he is rich.
- 2. Bruce Wayne is rich.
- 3. Therefore, Bruce Wayne owns LexCorp.



MODAL LOGIC

ΜωdΣ	Δ ΣFΙΠΙΤΙΩΠ	Σχαμρίς	Formal
Necessity	Necessary propositions cannot be false.	"Two plus two equals five."	$\Box p$
Possibility	Possible propositions can be either true or false.	"Crows are white."	<i></i> ¢ <i>p</i>
Impossibility	Impossible propositions cannot be true.	"Circles have four sides."	$\neg \Diamond p$

Σριστεμαίας μαιαγικά μαιαγικά

WHAT IS KNOWLEDGE?

- **†** An item of knowledge is a...
 - ... justified,
 - ... true,
 - ... belief.

† The Gettier problem

- JTB is "bull."
- There is a fourth condition for knowledge.

THEORIES OF KNOWLEDGE

VIΣŵ	DΣFIΠΙΤΙΩΠ
Foundationalism	
Coherentism	
Pragmatism	

ΜΣΤΛΡΗΨSICS

SPECIAL METAPHYSICS: FREE WILL

VιΣφ	Δεγιπιτιωπ
Libertarianism	 Free will is the ability to chose between and undertake one of two (or more) incompatible courses of action. There are free will agents.
Indeterminism	There is more than one physically possible future.
Determinism	There is only one physically possible future.
Compatibilism	Determinism is compatible with the existence of free will agents.
Incompatibilism	Determinism is incompatible with the existence of free will agents.

A STATEMENT OF INCOMPATIBILISM

"If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past. But it is not up to us what the laws of nature are. Therefore, the consequences of these things (including our present acts) are not up to us."

Peter Van Inwagen An Essay on Free Will

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