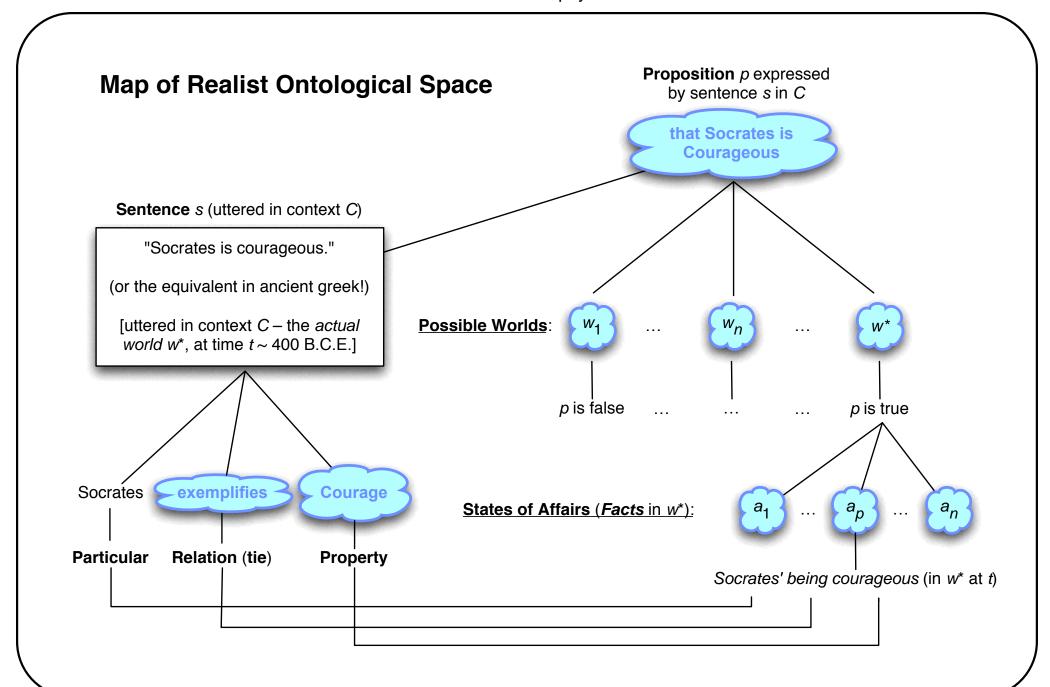# Philosophy 125 — Day 17: Overview

- First Papers and SQ's should be returned within 2 weeks

- Links to materials on the "slingshot" argument posted

- Agenda: Propositions, States of Affairs, Facts, Events
  - Realism & Nominalism — A Broad Overview
    * A Map of Realist Ontological Space (Full Blown)
      · Sentences (types and tokens), Particulars, Universals, Propositions, Possible Worlds, States of Affairs, Facts
  - Nominalism About Propositions
    * Review: Quine, Sellars, and Prior's Metalinguistic Approaches
    * Russell's Multiple Relation Theory & Objective Facts
  - States of Affairs, Facts, and Events
    * Accounts & objections (key players: Russell, Davidson, *et al.*)

Map of Realist Ontological Space

Proposition p expressed
by sentence s in C

> that Socrates is
> Courageous

Sentence s (uttered in context C)

> "Socrates is courageous."
>
> (or the equivalent in ancient greek!)
>
> [uttered in context C – the *actual
> world* w^*, at time $t \sim 400$ B.C.E.]

Possible Worlds: w_1 … w_n … w^*

p is false   …   …   … p is true

Socrates   **exemplifies**   **Courage**

States of Affairs (***Facts*** in w^*): a_1 … a_p … a_n

Particular   **Relation (tie)**   **Property**

Socrates' being courageous (in w^* at t)

Review: Nominalism about Propositions — Three Approaches

- Three sentences the Realist thinks commit us to the existence of propositions:

  1. *That two plus two equals four* is true.

  2. John assertively utters *that two plus two equals four.*

  3. John believes *that two plus two equals four.*

- Quine suggests the following nominalist paraphrases of (1)–(3):

  1_Q. "Two plus two equals four" is a true declarative sentence.

  2_Q. John assertively utters "two plus two equals four."

  3_Q. John *believes-true* "two plus two equals four."

- Sellars suggests the following nominalist paraphrases of (1)–(3):

  1_S. ·Two plus two equals four·s are true declarative sentences.

  2_S. John assertively utters a ·two plus two equals four·.

  3_S. John tokens (or is disposed to) a *Mentalese* ·two plus two equals four·.

- Following Ramsey, Prior adopts a *redundancy theory of truth*, according to which ⌜that *s* is true⌝ is equivalent to *s*. *E.g.*, *that two plus two equals four* is true if and only if two plus two equals four, which leads to these paraphrases:

  1_P. Two plus two equals four.

  2_P. John *says-that* two plus two equals four.

  3_P. John *believes-that* two plus two equals four.

- Here, *saying-that s* and *believing-that s* are *not* relations between a person and a proposition — they are simply properties of the utterer or the believer of *s*.

- Prior and Sellars are able to introduce *quantification* over sentence variables and dot-expressions in order to handle trickier examples like the following:

  4. John believes some falsehoods.

  4_S. There exists an *x* such that John tokens (or is disposed to token) a *Mentalese* ·*x*·, and ·*x*· is a false declarative sentence.

  4_P. There exists a *p* such that not-*p* and John *believes-that p*.

- Objection: What if there aren't enough linguistic expressions (*i.e.*, *tokens* to plug into Sellars' ·*x*· or Prior's *p* variables) around to express all the truths?

Russell's *Multiple Relation Theory* & **Objective Facts**

- Russell (between 1900-1919) was a realist about universals, but *not* about propositions. He had deep worries about *objective falsehoods* (false propositions), which led him to abandon postulating propositions *altogether*.

- Russell thought that there must be objective *facts* which undergird – by correspondence – the truth-values of judgments (or propositions). In the case of false judgment, *there is no fact* to which the judgment can correspond.

- For instance, if Othello falsely believes that Desdemona loves Cassio, there is no fact to which this belief corresponds. There is no such thing as "objective falsehood," (or "false proposition") since an *absence* of fact is *nothing at all*.

- But, if there are no false propositions, then how can there be *any* propositions? Propositions are supposed to be the bearers of *both* truth *and* falsity.

- Russell rejected propositions as the bearers of truth-values in favor of *judgments* as their bearers. On his *multiple relation* view, judgments are relations between persons, objects, and universals (in certain orders).

- For instance, "Othello's believing that Desdemona loves Cassio" can be expressed as $B(o, d, L, c)$. Because Othello might also have believed Cassio loves Desdemona, the relation $B(o, c, L, d)$ must also exist (there need to be *many* such relations B, hence the name "multiple relation theory").

- This construction abstracts out what a number of occurrences of a belief have in common, a believer and various objects and universals, in a certain order.

- The analysis also no longer contains propositions (as units of analysis), since no constituent in the analysis of "x believes that p" corresponds to "p".

- Certain orderings of objects and universals (*e.g.*, $\langle d, L, c \rangle$) appear *only* in the context of a belief. While there *is* a fact that the *judgment* can correspond to $[B(o, d, L, c)]$, there is *no fact* underlying the "part" of this judgment one might be tempted to call a proposition ["that Desdemona loves Cassio" – "$\langle d, L, c \rangle$"].

- One can't take "$\langle d, L, c \rangle$" out of a judgment "$B(o, d, L, c)$" and expect *it* to be a complete bearer of truth or falsity (or even a whole semantic unit). If $\langle d, L, c \rangle$ occurs *in some fact*, Othello's belief is true. If not, Othello's belief is false.

  Some Objections Mentioned by Loux:

- The various "believe-ings" (B's) will be radically different kinds of things (4-place *vs* 3-place *vs* 100-place relations). Why are all of these *believe*-ings?

- How can (*e.g.*) "Loving" play *both* the role of a *term* in a belief relation [$B(o, c, L, d)$], *and* a *relation* which *in facts* [$\langle d, L, c \rangle$] relates persons?

- If it is *mental acts of judging* rather than propositional objects that are the bearers of the truth values, what sense can we give to the enterprise of logic, which seems to treat the truth values as properties of *abstract things* that are the contents or objects of mental acts and acts of statement making?

- Specifically, when we say that "John is a lawyer and an engineer" entails "John is a lawyer", we do not seem to be talking about *judgments* at all. This is especially true in mathematical demonstrations, for instance.

Facts

- Russell's idea that there must be some *state of affairs* or *fact* which *corresponds to* a true statement, and which is the *truth-maker* of a true statement is an idea that now has many adherents (*e.g.*, Armstrong).

- Other Motivation (Armstrong, *et al.*): The mere existence of Socrates, Courage, and Exemplification (all of which are connoted by "Socrates is courageous") is not sufficient to *explain why* "Socrates is courageous" is true.

- What is needed is something in the world which *corresponds to* "Socrates is courageous" (or the proposition it expresses), and thereby explains its truth.

- A *fact* is a "way the world is." It is *the fact that Socrates is courageous* that undergirds the (actual) truth of "Socrates is courageous". Many fact-theorists think that facts are *structured* in a way that mimics sentential structure.

- On this view, facts and propositions both have *constituents*, and it is a *one-to-one correspondence* between the constituents of a proposition and the constituents of a fact which is required to "make the proposition true."

- *E.g.*, Socrates, Courage, and Exemplification must all be *constituents of a fact* — *Socrates' being courageous* — in order for the sentence/judgment "Socrates is courageous" (or *structured proposition* it expresses) to be true.

- This goes along either with taking sentences, utterances, or beliefs (in contexts) to be the bearers of truth or falsity (a la Russell), or with thinking of propositions *themselves* as being *structured* (*e.g.*, as complexes of meanings).

- Those (Loux?) who reject thinking of propositions as *structured* must have a different account of the correspondence between facts and propositions (?). Presumably, the idea would be: whole propositions correspond to whole facts.

- Most fact-theorists think that both facts and propositions have *logical form*:
  - *Particular* propositions/fact are of the form $P(x)$ or $R(x, y, \ldots, n)$, where P is a monadic property, R is a n-adic relation, and $x, \ldots, n$ are particulars.
  - *General* props/facts: "For all x, $P(x)$" or "For all $x, \ldots, n, R(x, y, \ldots, n)$", P monadic property, R n-adic relation, $x, \ldots, n$ *range over* particulars.
  - *Affirmative/Negative* props/facts: "It is not the case that …". (tenable?)
  - *Conjunctive/Disjunctive/Conditional* props/facts? [Loux silent. Why?]

Davidson's "Slingshot Argument" Against Distinct Facts

- In "Causal Relations" (which we read soon) Davidson (following Frege) argues that *there is only one fact*. Here's my rendition (let S = Socrates):

  1. The fact that snow is white = the fact that snow is white.

  2. True identity statements [like (1)] *remain* true under the substitution of coreferential singular terms and/or logically equivalent statements.

  3. (a) "That snow is white" is logically equivalent to (b) "that the unique x such that $(x = S)$ = the unique x such that $(x = S$ and snow is white)."

  4. (c) "That grass is green" is logically equivalent to (d) "That the unique x such that $(x = S)$ = the unique x such that $(x = S$ and grass is green)."

  5. (e) "The unique x such that $(x = S$ and snow is white)" and (f) "The unique x such that $(x = S$ and grass is green)" are coreferential singular terms.

  6. The fact that snow is white = the fact that the unique x such that $(x = S)$ is identical to the unique x such that $(x = S$ and snow is white). [This

follows from (2) and (3), by substituting (b) for (a) in the rhs of (1).]

7. The fact that snow is white = the fact that the unique x such that $(x = S)$ is identical to the unique x such that $(x = S$ and grass is green). [This follows from (2) and (5), by substituting (f) for (e) in the rhs of rhs of (6).]

8. The fact that snow is white = the fact that grass is green. [This follows from (2) and (4), by substituting (c) for (d) in the rhs of (7).]

- This argument goes through for *arbitrary* facts f_1 and f_2, and for *arbitrary* objects x (there's nothing special about snow, grass, or Socrates here). If this argument is sound, *there is only one fact*, which Frege called **The True**.

- Various versions of this "slingshot" argument have appeared in the literature (Gödel, Church, and many others have endorsed arguments like this one).

- Study question: Evaluate this argument, and its consequences for fact theory. Hints: (i) if there is a 1–1 correpondence between facts and propositions, then what follows from this argument? (ii) It's (2) that's doing all the work. Is (2) correct? If not, what's wrong with it? Can you give counterexamples to (2)?

States of Affairs

- States of affairs are (roughly) "ways the world *might be*". Roughly, you can think of facts a just *special (actually obtaining) cases* of states of affairs.

- Presumably, "Socrates is cowardly" is a state of affairs. But, it is a state of affairs that *does not actually obtain* (and, so, it is *not a fact*).

- States of affairs are said either to *obtain* (or not obtain). Some states of affairs obtain (or fail to) *necessarily* (*e.g.*, *2's being less than* 4), and some states of affairs obtain (or fail to) *contingently* (*e.g.*, *Socrates' being courageous*).

- States of affairs *exist* (as opposed to *obtain*) eternally and necessarily — even SOAs that necessarily fail to obtain, like 4*'s being less than* 2. On this standard view, states of affairs are similar to the Universals of the Platonist.

- [Prelude: One can think of possible worlds as *collections of states of affairs*. On this view, "everything that is the case" *is* the *actual* world, and various permutations of this collection constitute *non-actual, but possible* worlds.]

Facts & States of Affairs — Objections

- We've already seen one objection to facts as truth-makers of true propositions. Davidson's argument, if sound, seems to saddle the fact-theorist with the unintuitive consequence that there's only one (actually) true proposition.

- Another objection to fact-theory is that facts are *too similar to true propositions* to *explain why* true propositions are true. Do we have an understanding of facts *independently* of true propositions? How? They're 1–1.

- A similar objection applies more generally to states of affairs and propositions. Again, there is a 1–1 correspondence between them, so why do we need both? Either could serve as objects of thought or assertion (both can be grasped or apprehended, *etc*.), and truth/falsity seems just like obtaining/non-obtaining.

- Why multiply entities by having both states of affairs and propositions, and/or both facts and true propositions? Aren't propositions enough? Study Q.: Can Davidson's "slingshot" be generalized to show there's only 1 *state of affairs*?

Chisholm on States of Affairs, Propositions, and Events

- Chisholm (1970's) didn't see a way to distinguish true propositions from facts or propositions from states of affairs. He concluded they're only 1 thing, not 3. He called them *states of affairs*, and said they have two essential features:

    - States of affairs are things that can be apprehended, conceived, or "entertained" — things that can be the objects of mental acts.

    - States of affairs are things that can obtain or fail to do so; or, as Chisholm puts it, they are things that can occur or fail to occur.

- For (the 1970's) Chisholm, states of affairs come in two varieties:

    - **Propositions**. These are states of affairs that *always* occur (or *always* fail to occur) — SOAs which cannot occur at t but fail to occur at $t' \neq t$.

    - **Events**. These are states of affairs that can *recur* or be *repeated* — SOAs which can occur at t, then fail at $t' > t$ (and then occur again at $t'' > t'$).

- Chisholm (1990's) changed his views on SOAs (maybe propositions can change their truth-values, and events are *non-repeatable particulars*).

Kim *vs* Davidson on Events

- The contemporary view on events is that they are *non-repeatable and particular* (*not repeatable* and *general*, as in Chisholm's 1970's account). *E.g.*, the earthquake that rocked L.A. at 10 a.m. on July 21, 1883 ≠ the L.A. earthquake of 2 p.m. January 14, 1903 — they are *distinct events*.

- Two prevailing contemporary accounts of events – Kim's and Davidson's:

  - **Kim**. Events are specific property exemplifications by specific particulars at specific times. Event e = event e' just in case e and e' have the same constitutive particulars, properties, and times. Events are *structured* on Kim's view. *E.g., Socrates' being courageous on January 1, 400 B.C.E.*

  - **Davidson**. Events are the relata of causal relations. Event e = event e' just in case e and e' have all the same causes and all the same effects. Events are not structured, and can be described in various distinct ways. *E.g.*, A single event can be described as my flipping the switch at t or my causing the light to go on at t'. On Kim's view, these would be 2 *distinct events*.

More on Davidson's Theory of Events

- Davidson sees events playing two key roles:

  - As the relata of causal relations. Davidson argues that facts are not suitable for this role, since there is only one fact ("slingshot"). Davidson also argues that causal relations are not intrinsic properties of events. This constrains what can count as an event, and how events can be individuated.

  - To provide an account of the behavior of adverbs in sentences like:

   (*) The water boiled quickly in the kitchen this morning.

  - According to Davidson, (*) involves an assertion of existence; it tells us that there is an event, the water's boiling, and describes that event as one that was quick, took place in the kitchen, and occurred this morning.

  - This leads to the Davidsonian view that events are particulars – *unstructured particulars that can be described in various ways*.

  - Since distinct property-exemplifications-at-times can have all the same causes and effects, Kim's account is more *fine-grained* and *intrinsic*.