Chapter IV. Worlds, Books and Essential Properties

Worlds are maximal states of affairs – ways things could have been.

Distinguish the actual world from the universe. Are we literally parts of the actual world? Do we inhabit it? In what sense?

p. 45: How does Plantinga prove that exactly one possible world is actual?

1-to-1 correspondence between propositions and states of affairs. Chisholm identified the two.
Plantinga extends the use of the world “entails”: \( w \) entails \( p \) if it is impossible for \( w \) to obtain and \( p \) to be false.

The “book of \( W \)” is the set of propositions \( p \) such that \( W \) entails \( p \). (p. 46)

Threat of set-theoretic paradox:

S. Bringsjord (Analysis, 1985)

Let \( S^* \) be a maximal consistent set of propositions (a world-book). For each set in \( P(S^*) \) (the powerset of \( S^* \)), i.e., for each subset of \( S^* \), there is a proposition \( q^* \) that is about this set (e.g., the proposition that this set is a consistent set of propositions). If \( A \) and \( B \) are distinct subsets of \( S^* \), then \( q^*(A) \) and \( q^*(B) \) are distinct propositions. Hence, there is a 1-1 mapping from \( P(S^*) \) into \( S^* \). But this is impossible – contradicts Cantor’s theorem.

Charles Chihara’s paradoxes:

1. No set of all the states of affairs that obtain.

   For each set of actual states of affairs \( S \), there exists a state of affairs \( s^* \), which is the obtaining of all and only the members of \( S \). So, a 1-1 mapping from \( P(S) \) into \( S \) – contradiction.

2. No set of all possible identity essences (haecceities).

   Assume that each actual state of affairs has its own haecceity. Let \( S = \) set of all haecceities of actual (obtaining) state-of-affairs.

   For each subset \( A \) of \( S \), there is a state of affairs \( \hat{a}(A) \), the state of affairs of each member of \( A \)'s begin an actual state of affairs. This state of affairs \( \hat{a}(A) \) has at least one haecceity. So, there is a 1-1 mapping from \( P(S) \) into \( S \).
Contradiction.

**Three possible solutions to the set theoretical paradoxes:**

1. Limit the propositions to some rank or order. E.g., use only propositions that aren’t about propositions (states of affairs that aren’t about states of affairs).

2. Let some of these collections be proper classes (too big to be a set).

3. Use non-maximal sets of propositions (such as: contingent, atomic propositions involving concrete individuals).

Solution 1 seems arbitrary: aren’t there truths about propositions, states of affairs? States of affairs involving other states of affairs?

Solution 2 - objections.

(1) Chris Menzel (*Analysis*, 1986). The issue isn’t size, it is unboundedness in rank that matters. Propositions, states of affairs are ur-elements, so collections of these should be sets of rank 0. (True enough, but isn’t there an analogous hierarchy of propositions and states of affairs – constructed simultaneously with the construction of the set hierarchy?)

(2) John Divers (*Possible Worlds*, 2002): Plantinga’s semantics for modal language requires a set of possible worlds. (This is doubtful – set theoretic models are just that – models. Besides, possible worlds are not books, and so even if books are proper classes, there
would be no objection to sets of worlds. Worlds are states of affairs, not sets/classes of states of affairs.)

Solution 3. Let Books be sets of contingent, atomic propositions involving concrete individuals. Necessary truths need not be contained in the Books, since they aren’t needed to distinguish one possible world/book from another. The paradoxes involve either (i) necessarily true propositions (to the effect that a set is a set), or (ii) higher-order propositions whose truth or falsity are determined by the obtaining or non-obtaining of contingent states of affairs involving concreta.

Plantinga could instead claim that $W$ entails $p$ iff the book of $W$ entails $p$. I.e., $p$ would be true if every proposition in the book of $W$ were true. The consequences of a Book could form a proper class, even if the Book doesn’t.


(1) How can Plantinga explain supervenience/determination without circularity? He can’t explain $B$ entails $p$ in terms of $p$’s belonging to $B$, or to any maximal set containing $B$. (This really isn’t a problem for Plantinga, since he accepts modality as a primitive. $B$ entails $p$ iff (if and only if) it is impossible for $B$ to be true and $p$ false.)

(2) Once we accept proper-class-many consequences of Books, how can we exclude the possibility of proper-class-many worldmaking elements (i.e., contingent propositions about concreta). (Seems a small price to pay.)
Back to Plantinga:

p. 46. How does Plantinga define ‘true in $W$’? Which is more fundamental, truth simpliciter or truth in a world? Why does Plantinga make this choice of primitives?

What does it mean for an individual to exist “in” a possible world? Why is existence simpliciter more basic? (47)

Why does Plantinga claim that all propositions, books and worlds exist “in” each world? What is the difference between a world’s existing in a world and it’s obtaining in that world?

Is there an objectionable sort of necessary connection between “distinct existences” (as Hume put it) here? Consider: $x$ exists in $W$, $W$ is actual, and $x$ exists (simpliciter). Or, Socrates is snub-nosed-in-$W$, $W$ is actual, and $x$ is snub-nosed.

$W$ and Socrates are distinct existences – so how can Socrates’ snub-nosedness and $W$’s actuality be linked necessarily? (Consider again the definition of being snub-nosed-in-$W$.)

Actuality – p. 48

Each actual world is actual in (according to) itself.

Does this threaten the uniqueness of the actual world? Every possible world is actual in itself.

David Lewis claims: at every world $W$, the name ‘the actual world’ denotes or names $W$. Is this correct?
Is ‘the actual world’ synonymous with ‘this world’?

Plantinga argues, No:

(4) This world is the actual world.

(5) This world is this world.

(6) $\alpha$ is the actual world.

(4) and (6) are contingent – (5) is necessary.

Does Plantinga face a problem similar to Bradley’s regress? (F. H. Bradley was late nineteenth century British idealist.)

Consider two series:

(1) Socrates’ being snob-nosed
(2) Socrates’ being not snub-nosed.

(3) Socrates’ being snub-nosed’s obtaining
(4) Socrates’ being not snub-nosed’s obtaining.

(1), (2), (3), etc, are actual, obtain. (1’), (2’), (3’) do not.

Clearly - all of the states of affairs (in both columns) exist of necessity.

Is there a regress here?

(A) Is (1) $\neq$ (2)? (2) $\neq$ (3)? Why? [States of affairs seem to be very fine-grained.]

(B) Does (1) depend on (2)? (2) on (3)? Is there an explanation of the difference between the two columns available to Plantinga?

Does the dependency run the other way (2 on 1, 3 on 2, etc.)?

Compare:
Socrates is snub-nosed.

It’s true that Socrates is snub-nosed.

It’s true that it’s true that Socrates is snub-nosed.

Is this an infinite regress? Is there a significant difference? (Why or why not?)

A clear case of a regress:

Any state of affairs consists of three things: an \( n \)-ary property \( P \),

an \( n \)ary sequence \( S \) of things, and the further state of affairs that

the sequence \( S \) instantiates \( P \).

The relation of instantiation is itself an ordinary, 2-place property.

But – Plantinga attempts no reduction of states of affairs to sequences, sets, aggregates of objects, properties and “ontological glue”. As far as we’re told, states of affairs are ontologically simple.

Is there a problem of truthmakers? What is the truth-maker for the proposition “Socrates is snub-nosed”? If truthmaker is defined as something whose \textit{existence} guarantees the truth of the proposition, then none of the states of affairs in the right column is a truthmaker for the proposition. What if we defined truthmaker as a state of affairs whose actuality guarantees the truth of the proposition? Then any of the propositions in the left column is a truthmaker. (Each of the states of affairs in the left column is actual in any of the others.)

Is there a problem of un-Humean necessary connections? Each of the states
of affairs in each column entails all of the others (the actuality of each entails
the actuality of the others in the same column). A problem?

Why both states of affairs and propositions? Both exist necessarily. Truth
= actuality.

They correspond to distinct linguistic expressions: gerunds and that + sen-
tence complement. May mark an ontological distinction. (See Jonathan Ben-
nett, *Events and Their Names*.)

In *Realism Regained* (Oxford 2000), I posit situations as partial worlds –
3-valued (true, false, indeterminate). Propositions modeled by certain sets of
situations. In particular: there are disjunctive propositions, but no disjunctive
states of affairs. If $P \& \neg Q$, then the situation of $P \lor Q = \text{the situation } P$. Not so
for propositions. Similarly, the situation $P$ and the situation of the situation
$P$’s being actual are the same – but distinct propositions. Plantinga doesn’t
embrace such looser criteria of identity for SOAs.

**Relative possibility** – pp. 51ff.

Accessibility relation.

If reflexive: $\Box p \rightarrow p$  \hspace{1cm} T

If transitive: $\Box p \rightarrow \Box \Box p$  \hspace{1cm} 4

If symmetric: $p \rightarrow \Box \Diamond p$  \hspace{1cm} B

If transitive & symmetric: $\Diamond p \rightarrow \Box \Diamond p$  \hspace{1cm} 5

Useful for applications of modal logic — e.g., to knowledge.

Is (13) ‘All bachelors are unmarried’ possibly contingent? The word ‘bach-
elor' could have meant “beardless youth”.

Confusion: between 13 being possibly contingent, and the sentence (13)’s possibly expressing a contingent proposition.

p. 54: “We can see that possibility/necessity are necessary.” Plantinga dispenses with relative possibility. What is Plantinga’s reason?

**Truth-in-a-world.**

For any worlds $w$ and $w'$, if the book of $w$ contains $p$, then the book of $w'$ contains the proposition that the book on $w$ contains $p$.

**Essential properties** – p. 56.

Three possible definitions of: Socrates has $P$ essentially:

(23) Socrates has $P$ in every world.

(24) Socrates has $P$ and has it in every world in which he exists.

(25) Socrates has $P$ and there is no world in which Socrates has the complement of $P$.

What is the difference? Why is (24) or (25) superior to (23)?

Are there non-existent objects that have properties? Could there be? Is Santa rotund and jolly?

Why does Plantinga insist that a thing has properties in $W$ only if it exists in $W$?

What should we say about a proposition like $(2 + 2 = 4$ or *Socrates is pale*)? Is it true in worlds where Socrates doesn’t exist? (What truth-tables do we use
for logical connectives, in the presence of propositions that are neither true nor false in a world?

\[(28) \Box (\forall x) x = x\]

\[(29) (\forall x) \Box x = x\]

Valid? Why?

**Buridan formulas:**

\[(\exists x) \Box F x \rightarrow \Box (\exists x) F x\]

Invalid: Socrates is essentially Socrates, but it is not necessary that there exist something with Socrates’ essence.

\[\Box \exists x F x \rightarrow \exists x \Box F x\]

Invalid: there necessarily exists a contingently true proposition, but nothing is essentially a contingently true proposition.

**Barcan formula**

\[(\forall x) \Box F x \rightarrow \Box (\forall x) F x\]

\[(38') \text{ Everything is essentially immaterial.} \]

(39) Necessarily, everything is immaterial.

**Converse Barcan formula**

\[\Box (x) F x \rightarrow (x) \Box F x\]
What properties are essential to Socrates? No ordinary, meat-and-potatoes properties?

**Non-trivial essential properties of Socrates**: being Socrates, being Socrates or Greek. All of Socrates’ world-indexed properties.

Definition on p. 63.

Plantinga assumes that possession of world-indexed properties is world-transcendent (with one proviso: in order to have even a world-indexed property in $W$, $x$ must exist in $W$. If this much variability is possible why not more?)

What are the world-transcendent facts?

1. The world-indexed properties of each individual (with the above proviso).
2. In what worlds each individual exists (with the same proviso: a thing $x$ cannot have the property of belonging or not-belonging to world $w$ in world $w'$ without existing in $w'$).
3. The distinctness of any two actually distinct objects (in any world in which they both exist).
4. Truths of logic and mathematics?
5. The possibility of each possible world.
6. The existence of God.
7. The essences and essential properties of each individual.

Woody the table. Is actually made from wood-mass $M_0$ in actual world. In world $W_1$, would have been made from mass $M_1$, one molecule different from $M_0$. In world $W_n$, mass $M_n$ is made into a table, but it would not be identical to Woody. However, if world $W_1$ had been actual, then Woody would have existed in $W_n$.

Woody’s actual essence includes existing in worlds $W_0$ (actual world) through world $W_{n-1}$, and not existing in world $W_n$. However, if world $W_1$ had been actual, then Woody’s essence would have included existing in world $W_n$. Woody’s actual *essence* is contingent.

So, too, are Woody’s world-indexed properties. such as existing-in-$W_n$. Woody in fact lacks this world-indexed property, but would have possessed it if world $W_1$ had been actual.

Salmon’s account is subtly different. He defines world $W_n$ as a world in which Woody is made from mass $M_n$, an impossible world. So, Salmon insists on relative possibility, and denies transitivity. He is agnostic on symmetry.

On Salmon’s account, world-indexed properties are world-transcendent, but the possibility of worlds is not. On my version, vice versa. I would say that a particular state of affairs which is in fact the possible existence of a table, other than Woody, made from $M_n$, might have been a state of affairs according to which Woody was made from $M_n$. No impossible states of affairs needed.
However, there are “possibilities” in a sense (i.e., possible possibilities, etc.) which are only contingently possible or impossible. That Woody be made from $W_n$ is such a contingently impossible “scenario”. So, the effect of my approach is similar to Salmon’s – in both cases we lose axiom 4.

**Plantinga:**

$\alpha$ does include Socrates’ being snub-nosed. Hence, it includes it in every possible world.

Possible problem here: take a world $w$ in which Socrates does not exist. World $w$ would contain the state of affairs of $\alpha$’s including Socrates’ being snub-nosed. Doesn’t Socrates then have a property in $w$ – the property of being something whose snub-nosedness is included in $\alpha$? Plantinga must deny this. Or, perhaps he should say that $w$ includes the state of affairs of $\alpha$’s including the state of affairs of Socrateity and snub-nosedness being co-instantiated.

Could Socrates have been an alligator? (p. 65)

Depends on whether an alligator is a material body.

**Arguments for Dualism (Descartes)**

1st argument:

1. If I’m identical to any material object, I’m identical to $B$ (my body).

2. It is possible that I exist and $B$ does not.

Therefore, I $\neq B$. 

2nd argument:

(57) Any property P had essentially by anything is had essentially

by everything that has it.

This is not true in general (being Socrates or Greek). Perhaps true for “natural”

properties.

(58) Anything that has M or its complement, has M essentially or

its complement essentially.

If I am not essentially a material being, then I’m not one at all. So, I’m essen-

tially an immaterial being.

Page 63: A thing can have the complement of a world-indexed property in a

world in which it does not exist.

Question: Is this consistent? Having the complement of existence = having

non-existence. Here, “complement” seems to be narrow, weak negation. But

the complement of P-in-W seems to be: not having P-in-W, rather than having

not-P-in-W, i.e., a wide/strong negation.

An apparent contradiction?

• (i) Page 60. “…if we suppose, as I do, that an object has no properties

  in a world in which it does not exist.”

• (ii) Page 73 (including footnote). “Socrates has no properties at all in

  those worlds in which he does not exist.”
“Recall that the complement of having-$Q$-in-$W$ is not-having-$Q$-in-$W$, a property that an object has if it does not exist in $W$. “