



L5: PRESENTISM AND THE GROWING BLOCK

THE MOVING SPOTLIGHT THEORY



PRESENTISM AND THE GROWING BLOCK

There are three goals for this lecture:

1. Articulate both presentism and the growing block theory (GBT)
2. Present arguments in support of presentism (we'll skip GBT)
3. Present objections to presentism (we'll skip GBT)

PRESENTISM AND GBT

The theory



PRESENTISM AND GBT

Temporal ontology

- Presentism: only present events exist
- GBT: past and present events exist

A or B theory

- Presentism: A-theory (there is some instant of time that absolutely (non-relatively) present)
- GBT: A-theory

Dynamic theory

- Ontological-change dynamic theory of temporal passage: time passes because what exists changes

Theory	Ontology	A-theory or B-theory	Passage / Change
Moving spotlight	Eternalist	A-theory	Dynamic property
Eternalism	Eternalist	B-theory	Static
Presentism	Presentist	A-theory	Dynamic ontological
Growing Block	Past-presentist	A-theory	Dynamic ontological

PRESENTISM AND GBT



Dynamical thesis

- Presentism and GBT do not assert (like MST) that there is a temporary intrinsic property of *being present*
- *Being present* is not a property of events, not a part of things, not something we can see
- It simply refers to **what exists**
- The Passage of time does not occur because events take on and lose the property of being present

PRESENTISM AND GBT

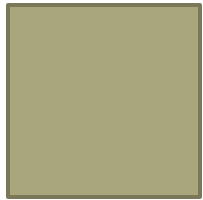
Dynamical thesis

- For presentism: the present is just what exists
 - existence and being present are coextensive
- For GBT: the present is just the latest event to be added to what exists
 - If E is present is specific member of the general class of existents

Presentism and GBT asserts that time passes because **what exists changes**

- For presentists: if there was no change to what exists, time would not pass
- For GBT: if there were no new events being added to what exists, time would not pass

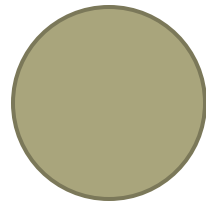
PRESENTISM AND GBT



t1



PRESENTISM



t2



What exists changes

PRESENTISM



t_3



Because of this change:
time passes

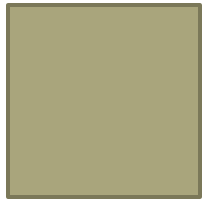
PRESENTISM



t4

For presentism, nothing is left existing (no past events). Reality is exhausted by what's in the present

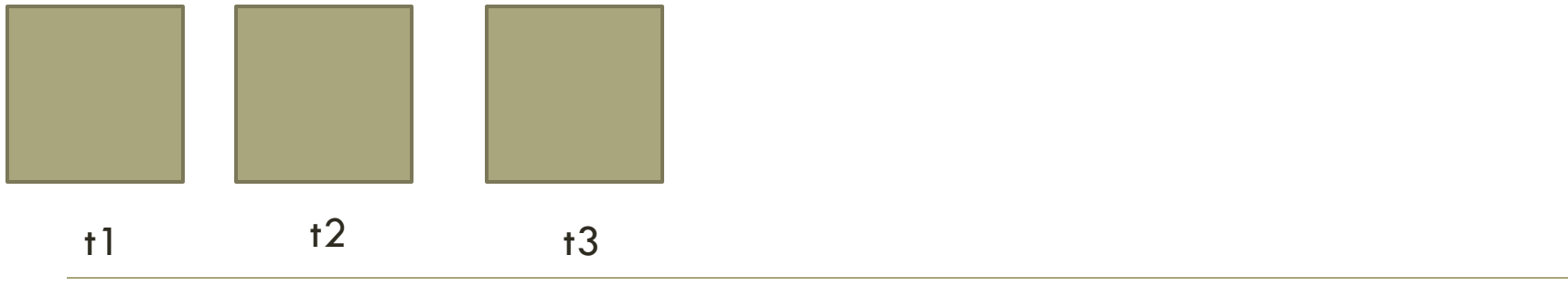
GBT



t1

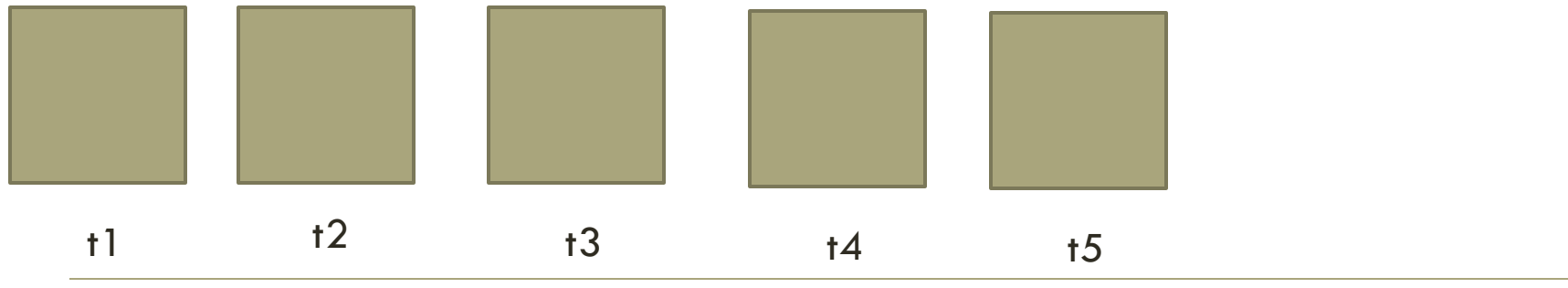


GBT



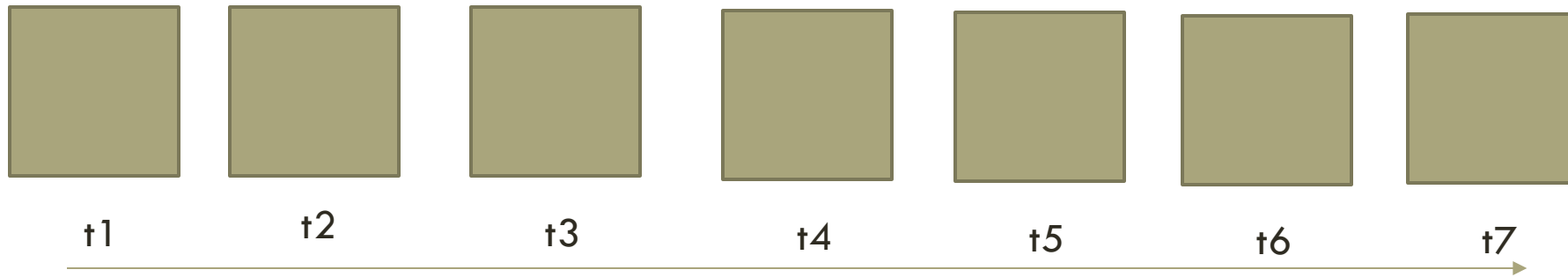
What exists changes, but
for GBT this change is **by
addition**

GBT



The addition of what exists
is what it means to say time
passes

GBT



For GBT, the universe grows.
Past events are just as real
as present events. The
present is just the latest
addition to what exists.

PRESENTISM AND GBT

Dynamical thesis

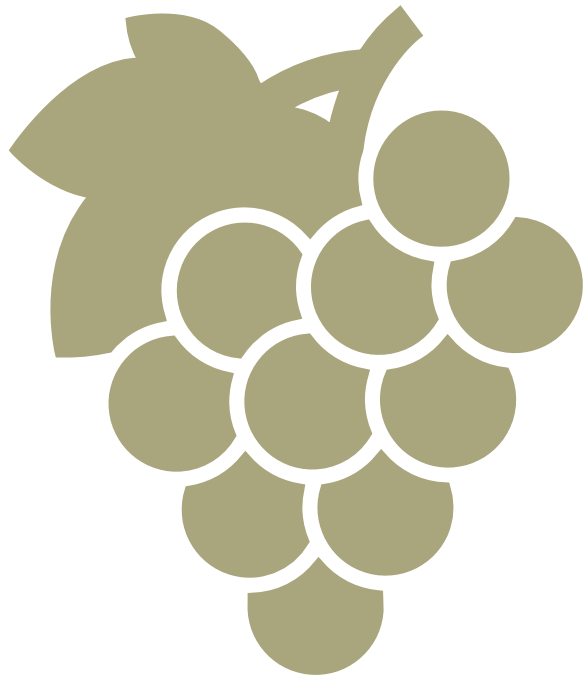
Presentism and GBT thus assert that the present is:

- Not a property of things
- Presentism: what exists
- GBT: the latest addition to what exists

VARIETIES OF PRESENTISM



VARIETIES OF PRESENTISM

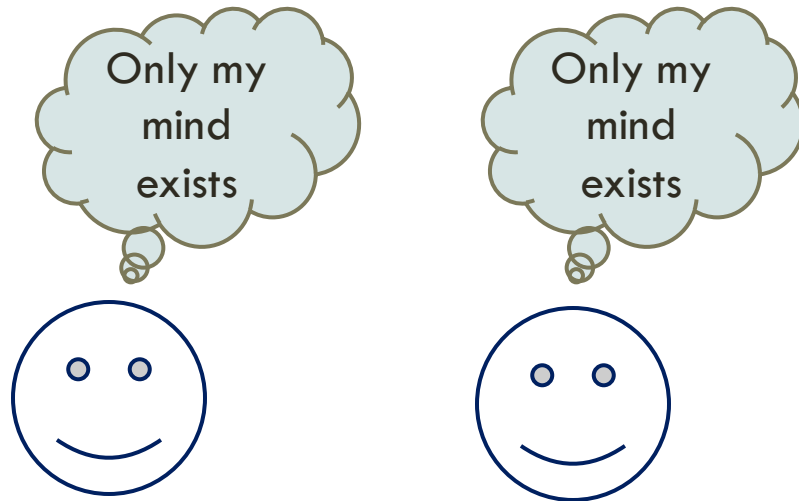


There are several varieties of presentism.

VARIETIES OF PRESENTISM

Solipsism is a theory that the only mind that exists is mine.

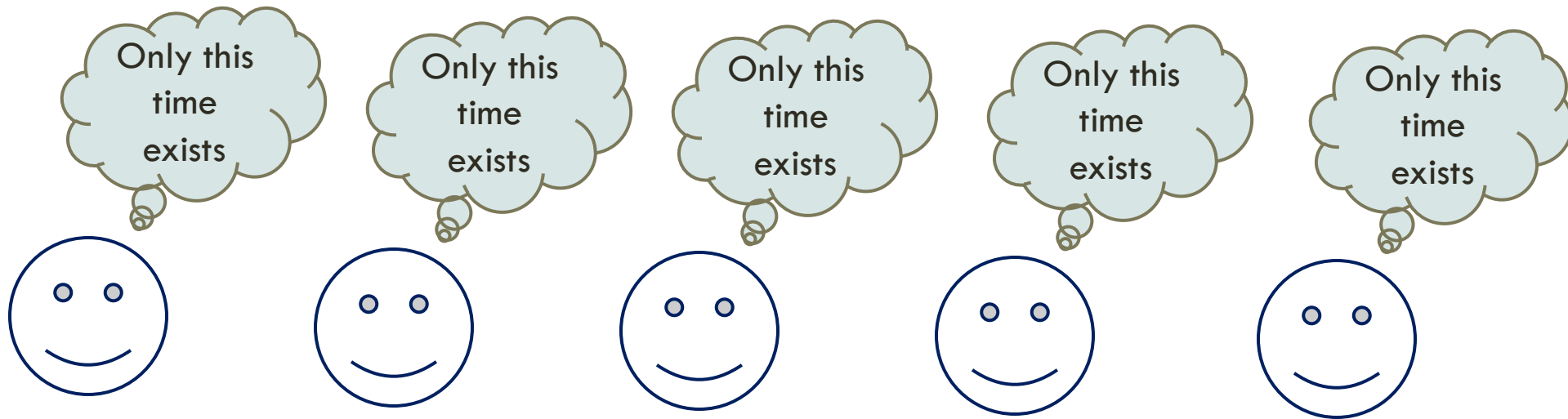
- I have no empirical proof that other minds exist
- I do have empirical proof with my own mind
- My mind is the only mind that exists.



VARIETIES OF PRESENTISM

Solipsistic presentism: there is one and only one present that exists and that has ever existed. It is the one that we are in *right now!*

- I have no empirical proof that other times exist
- I do have empirical proof that this time exists.
- Therefore, this is the only time that exists.



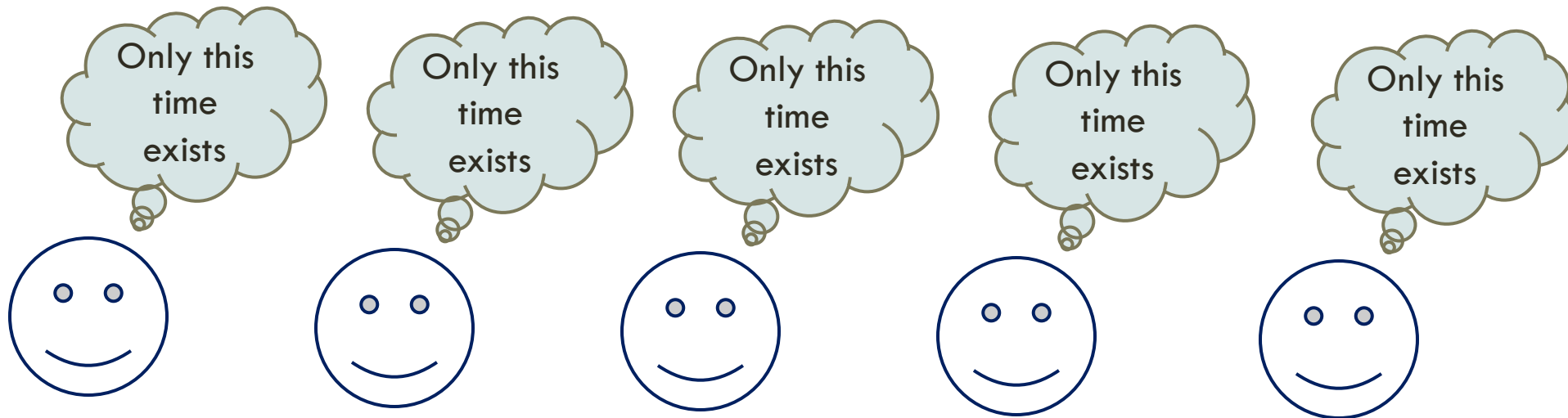
VARIETIES OF PRESENTISM

It is impossible to refute solipsistic presentism if your standard of proof is this:

I will only accept a theory on the grounds I can directly access / experience the objects of that theory.

Solipsistic presentism: there is one and only one present that exists and that has ever existed. It is the one that we are in *right now!*

- I have no empirical proof that other times exist
- I do have empirical proof that this time exists.
- Therefore, this is the only time that exists.



PRESENTISM AND GBT

Consider the following criterion for accepting a theory:

I will only accept a theory on the grounds I can directly access / experience the objects of that theory.

This view seems to support:

1. The view that there are no other minds (solipsism)
2. The view that the only time that exists is this one (solipsistic presentism)

What, if anything, is wrong with the above criterion?



VARIETIES OF PRESENTISM

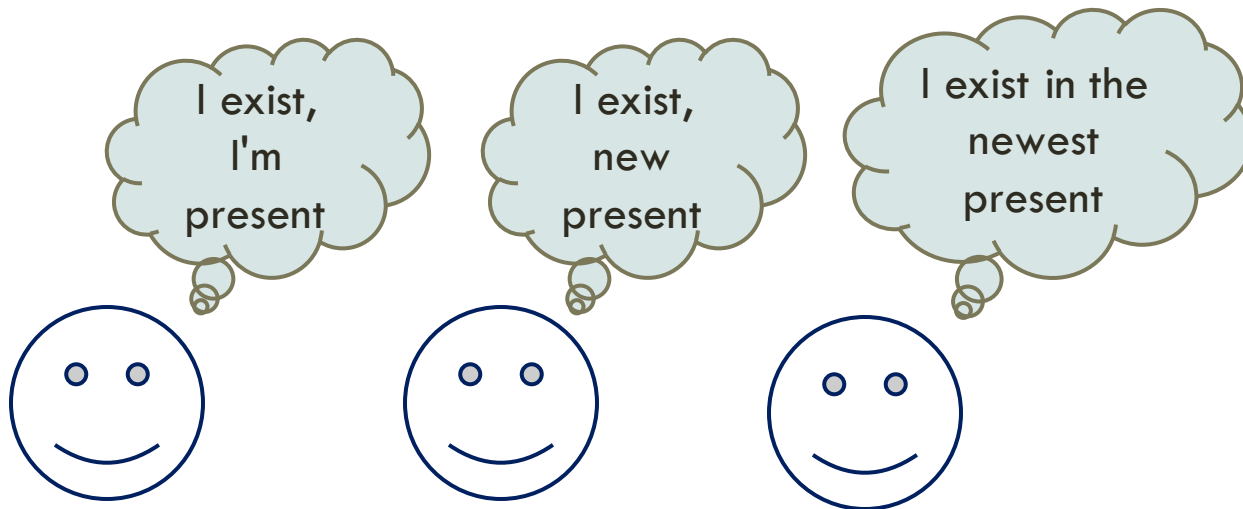
While impossible to refute, it cannot explain a variety of facts:

- Why do you have memories of events that never existed?
- How did the universe become so complex and organized?
- Where did fossils come from?
- How did our society form?



VARIETIES OF PRESENTISM

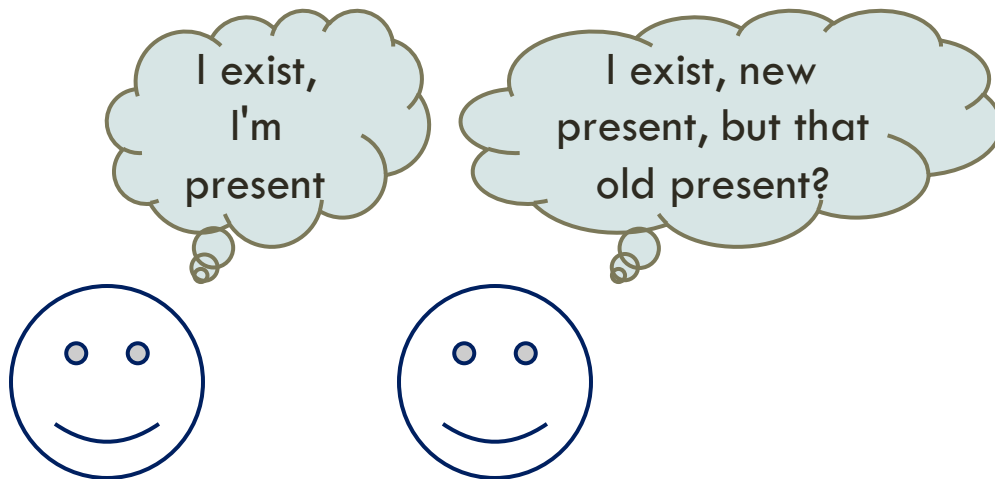
- **Dynamic presentism:** reality consists of successive present moments
- Something exists and while it exists, it is present, then it no longer exists, and it is no longer present.



VARIETIES OF PRESENTISM

Dynamic presentism has a **problem**:

- Reality is a succession of presents
- Only present events are real
- But how can we talk about **past events** if they do not exist



The theory risks collapsing into GBT!

They might say "well past events **did exist**", "future events will exist", but it is only present events **exist simpliciter**"

- But then we want to know: what does "**did exist**" mean? What type of **existence** is that?
- What is "future existence" if it isn't existence?

PRESENTISM AND GBT

Take a moment to articulate presentism and GBT

1. Which do you find more convincing and why?
2. Are they preferable over eternalism and presentism? If so, explain in what ways?
3. Which of the two presentisms do you find more convincing?



ARGUMENTS FOR PRESENTISM AND GBT



ARGUMENTS FOR PRESENTISM AND GBT

There are several **arguments for** presentism and GBT:

1. Consistent with there being an open future and a rejection of fatalism (we'll focus on this one)
2. Consistent with what we can prove empirically
3. Argument from the experience of the present: confinement doctrine

PRESENTISM AND GBT

Fatalism: The future is completely out of your control.

Determinism: The future is entirely determined by the present state of affairs and the laws of nature (or t_2 is determined provided it is fixed by the state of affairs at t_1 and the laws of nature)

Open future: The future is open if and only if (1) fatalism is false and (2) determinism is false.

PRESENTISM AND GBT

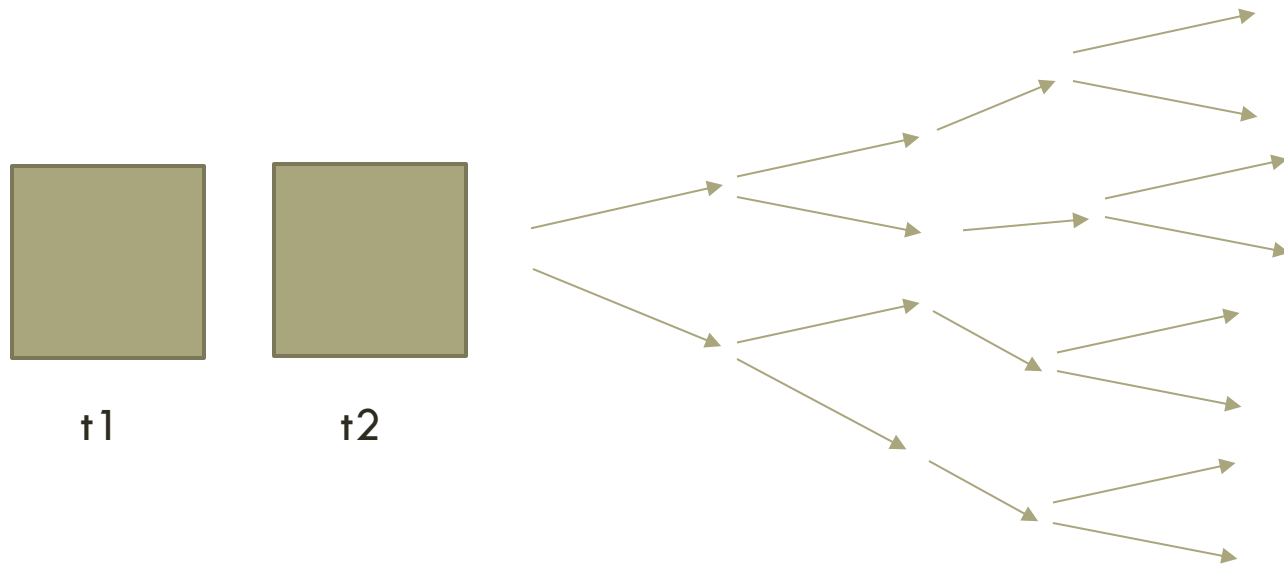
- At least at the outset, it seems like both presentism and GBT are both consistent with there being an **open future**.
- **In contrast:** eternalism and MST are inconsistent with an open future

PRESENTISM AND GBT

Another way of putting this is that presentism and GBT are consistent with a **thinning tree view** of the universe

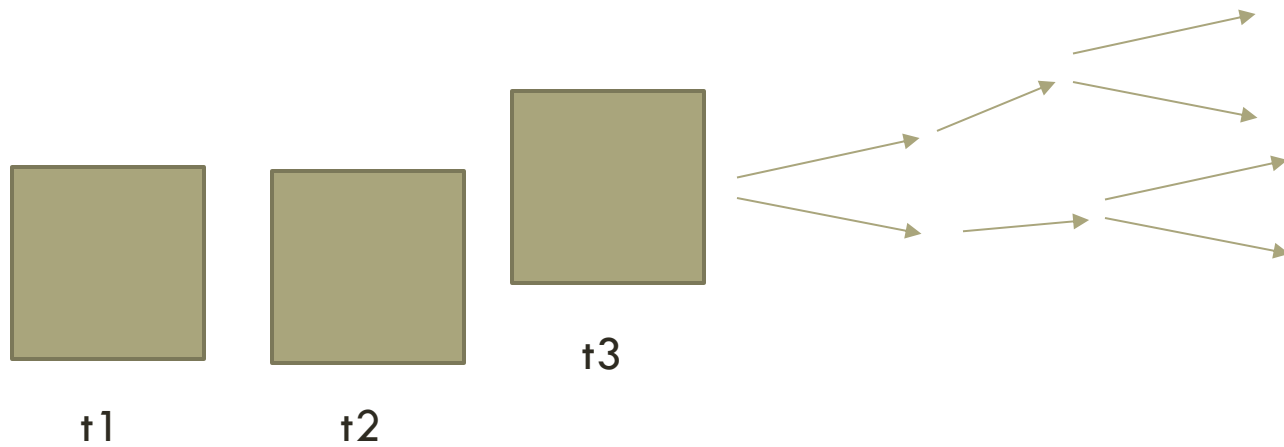
- The future is an **open set of possibilities (Open future)**
- The passage of time is the actualization of these future possibilities
- Intuitive in that we think our decisions (or random physical processes) lead to different outcomes (different existent events).

GBT: THINNING UNIVERSE



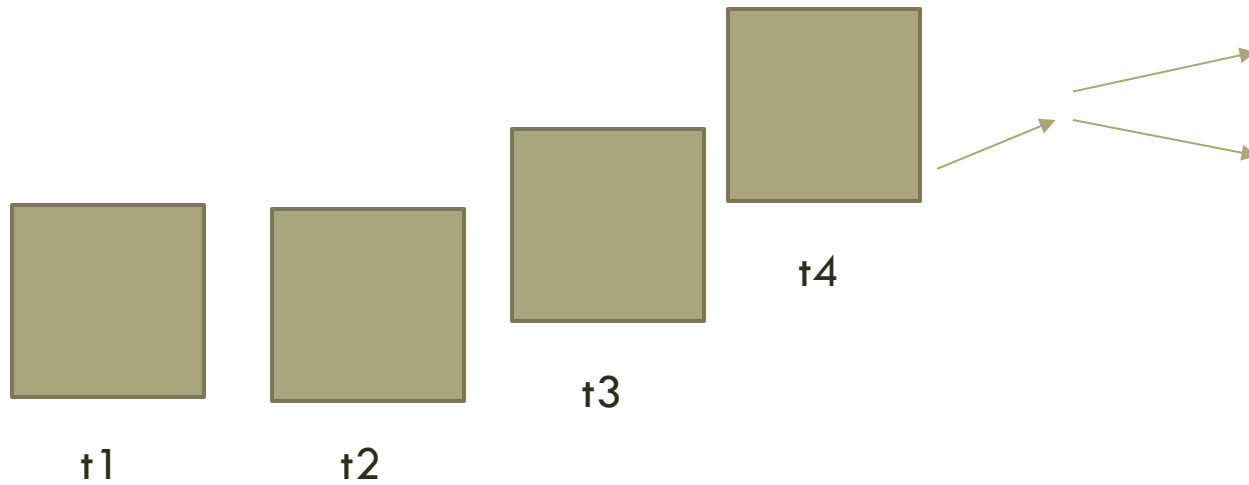
GBT: The universe consists of what exists (past and present) and future possibilities.

GBT: THINNING UNIVERSE



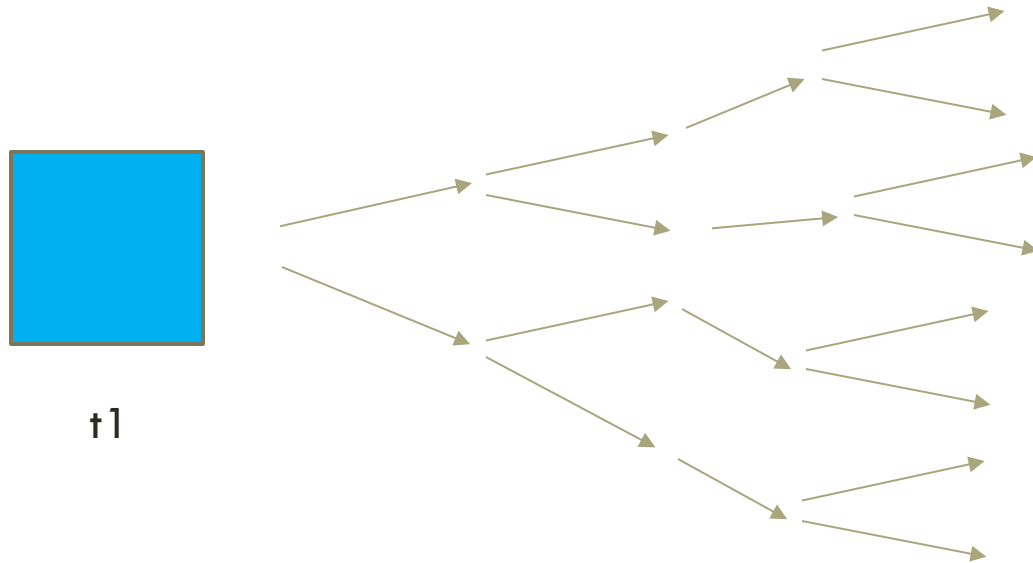
As the universe grows,
certain possibilities become
actualized.

GBT: THINNING UNIVERSE



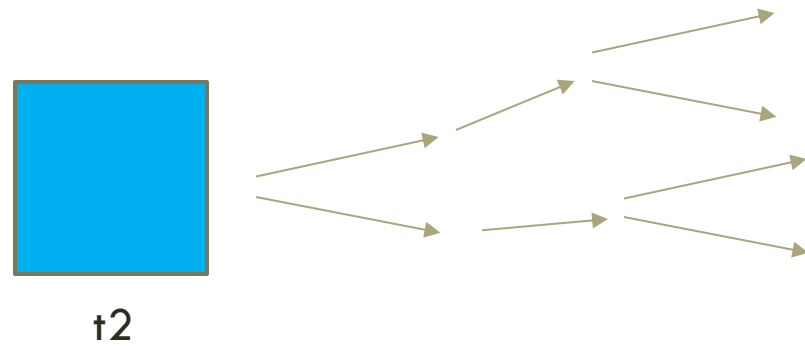
As the universe grows in actuality, it "thins" out since there are fewer and fewer possibilities.

PRESENTISM: THINNING UNIVERSE



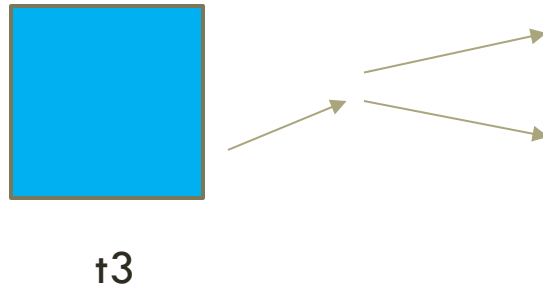
Presentism: the universe consists of what exists and what exists is coextensive with the present.

PRESENTISM: THINNING UNIVERSE



Some future possibilities get actualized.

PRESENTISM: THINNING UNIVERSE



There is no "growth" to the universe but there is a "thinning" since some "future" events are no longer possible.

ARGUMENT FROM OPEN FUTURE AND FATALISM

This picture of the universe is consistent with both the reality of an open future and the rejection of fatalism.

P1: A theory of time should be consistent with the **thinning tree view** of the universe (not deterministic, not fatalistic, open possibilities)

P2: Both GBT and presentism are consistent with the thinning tree view of the universe.

C: Therefore, GBT and presentism are preferable to eternalism and MST.



Evaluate this argument.

- How important is it for a theory of time to accommodate the reality of an open future and the rejection of fatalism?
- What trade-off is there in making these accommodations?
- Criticism of the argument?

ARGUMENTS AGAINST PRESENTISM AND GBT



ARGUMENT FROM THE PAST

Presentism faces several arguments relating to its denial that **past events exist**.

- **Truthmakers for past-tense sentences:** "E was the case" seems to require the existence of past objects / events.
- **Cause-effect relations:** if Y is in the present, and X causes Y, and a cause is always earlier in time than its effect, then X is in the past. But according to presentism, past events / objects cannot exist, so cause-effect relations are impossible
- **Past reference:** We use terms to refer to past objects. How do these terms have meaning if they don't refer to some past object?

ARGUMENT FROM THE PAST

P1: Presentism cannot explain the truth of past-tense sentences, cause-effect relations, or past reference.

P2: A theory of time should be able to explain these aspects of reality.

C: Therefore, presentism is false.

ARGUMENT FROM THE PAST

We will consider three ways the presentist might respond:

1. Bite the bullet
2. Reductionism about the past
3. Lucretian properties

ARGUMENT FROM THE PAST

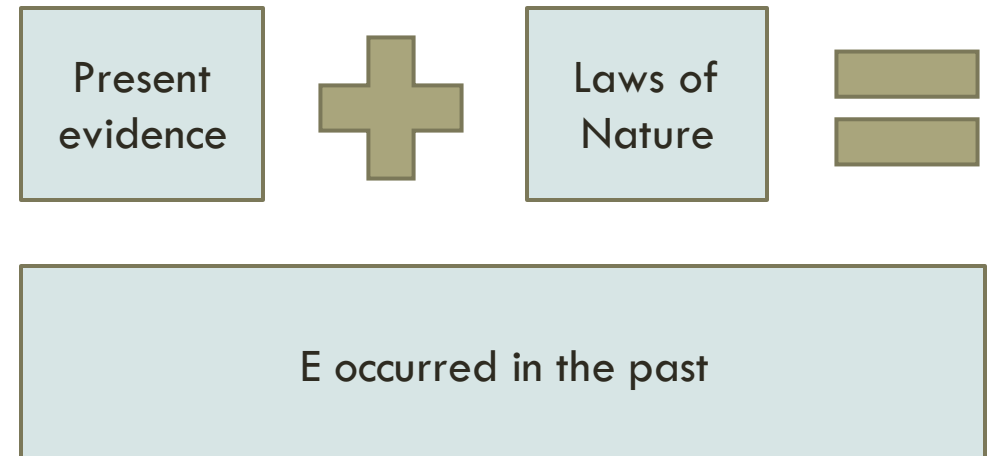
Response 1: Bite the bullet

- You bite the bullet on an objection when you say that some unfortunate consequence of a theory must simply be accepted.
- The presentist bites the bullet on the truthmaker objection simply by saying **there are no true sentences about the past.**
- The problem with biting the bullet is that:
 - It goes against common sense: there is a fact of the matter to whether "I ate sandwich yesterday" is true or false **but presentism says it is neither true nor false**
 - It would mean that efforts to study the past (history, archeology, past murders) are not grounded in past facts.

ARGUMENT FROM THE PAST

Response 2: Reductionism about the past

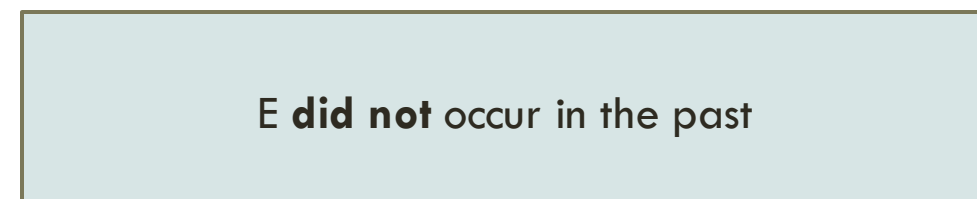
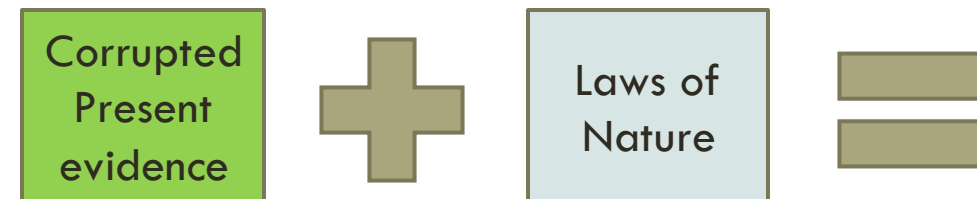
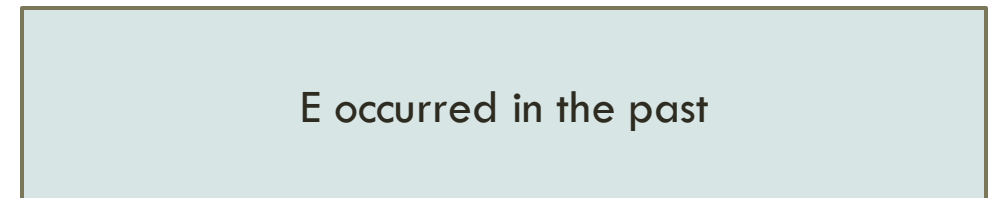
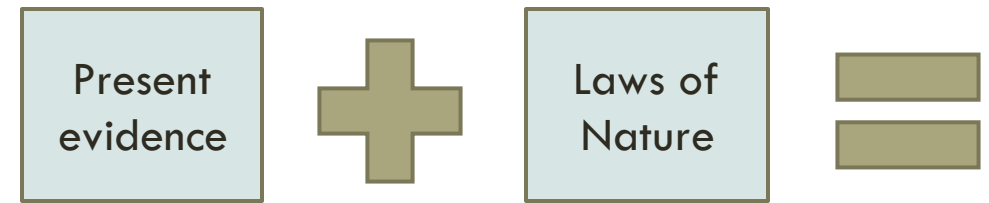
- What makes a past-tense sentence S true are not past objects but **present evidence that can be used to draw conclusions about the past.**
- Idea is that "E is past" is true if and only if (1) with the laws of nature and (2) presently available evidence, we can derive the conclusion that "E is the case" (where E is a past event) is true.



ARGUMENT FROM THE PAST

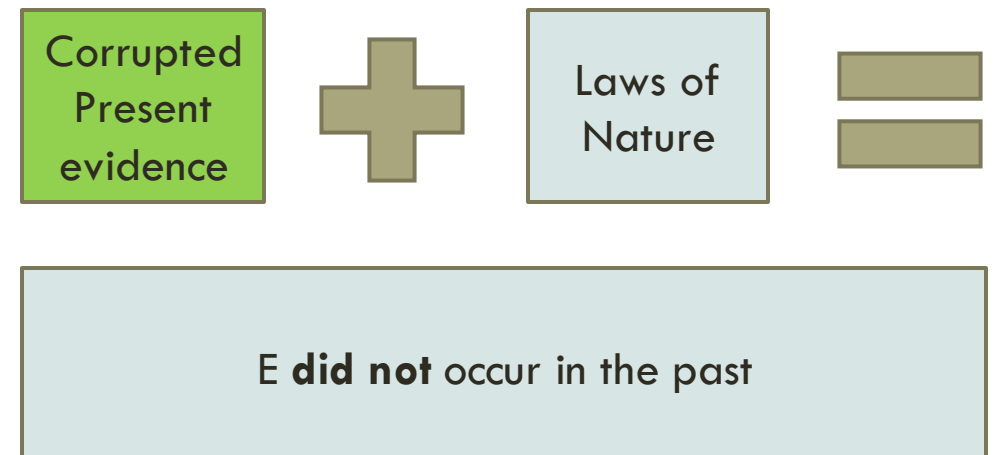
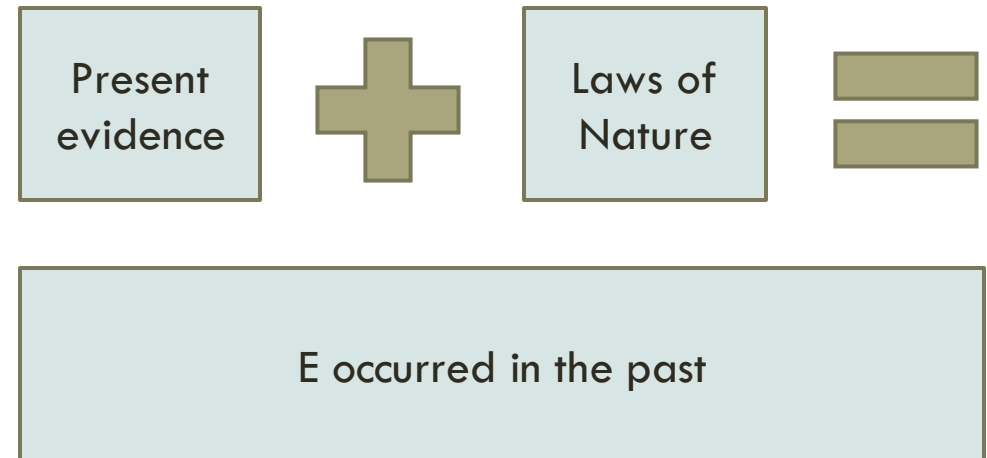
Objection: Past secrets

- **Example 1:** Suppose Tek murders Jon but disposes the body in such a way that there is no present evidence. It would follow then that Tek did not murder Jon
- **Example 2:** Suppose we only have available fossil evidence to conclude that there were 23,438 dinosaurs in the past. Therefore, there were only 23,438 dinosaurs.

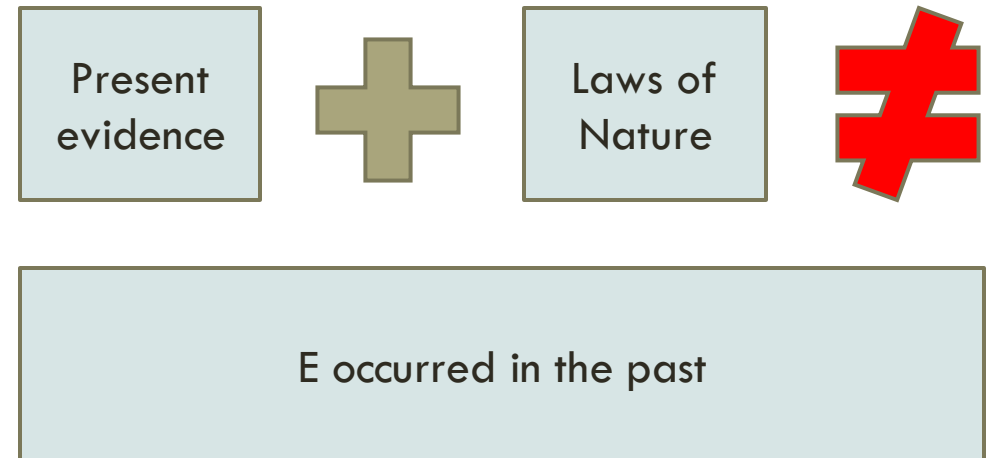


ARGUMENT FROM THE PAST

There still would be **a fact to the matter** determined by the laws of nature (it would just be outside the scope of human inquiry to predict it).



ARGUMENT FROM THE PAST



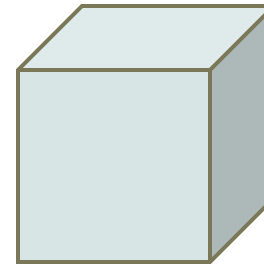
Objection 2: indeterminism

- Suppose the world is **indeterministic**
- Even God could not use the laws of nature and present evidence to determine whether an event E occurred or did not occur in the past.

ARGUMENT FROM THE PAST

Response 3: Lucretian properties

- What makes a past-tense sentence S true are not past objects but present objects containing properties known as **Lucretian properties**.
- Objects have properties beyond their presently visible properties.

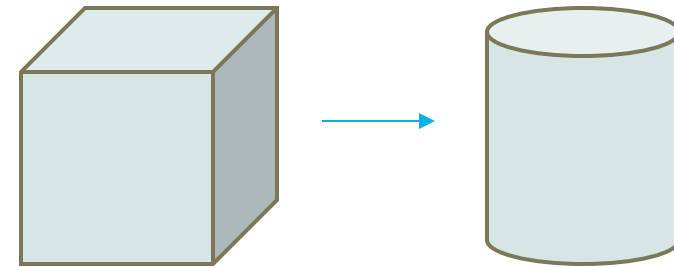


Block of clay

ARGUMENT FROM THE PAST

Lucretian properties

- What makes a past-tense sentence *S* true are not past objects but present objects containing properties known as **Lucretian properties**.
- Objects have properties beyond their presently visible properties.



Block of clay molded into a can.

The can has the property of *being a can* but also the Lucretian property of *being a block*.

ARGUMENT FROM THE PAST

Objection 1: Counterintuitive for some objects

- Suppose I love my grandma and she no longer exists. According to Lucretian presentism, it is not the case that I love a past object.
 - Her corpse contains the Lucretian property of *being my grandma*.
 - If she was cremated, then the ashes contain the Lucretian property of *being my grandma*.
 - If those ashes are scattered and eaten by animals, then the various particles scattered around the globe in various animals contain the Lucretian property of *being my grandma*.



ARGUMENT FROM THE PAST

Objection 2: Unverifiable

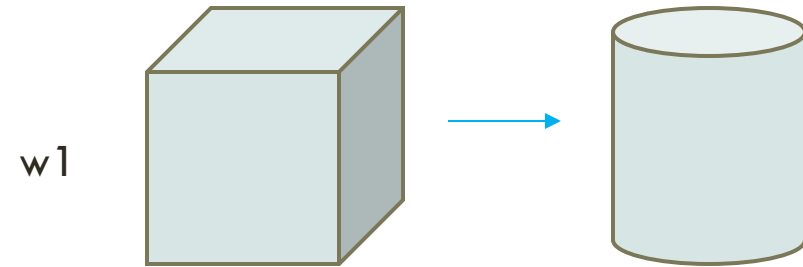
- If a property P does not make a conceivable practical difference, then the property P is meaningless.
- **We can prove that Lucretian properties make no conceivable practical difference in the world**

ARGUMENT FROM THE PAST

Objection 2: Unverifiable

Imagine two worlds: w1 and w2

In w1, we have a block that is molded into a can. So, the can has the Lucretian property *being a block*.

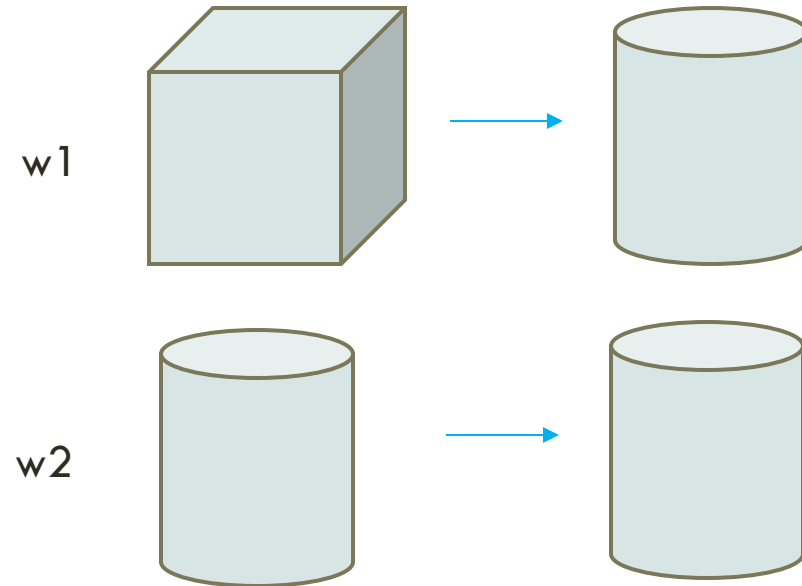


ARGUMENT FROM THE PAST

Objection 2: Unverifiable

Imagine two worlds: w1 and w2

In w1, we have a block that is molded into a can. So, the can has the Lucretian property *being a block*.



In w2, we have a can that stays a can. So, the can does not have the Lucretian property *being a can*.

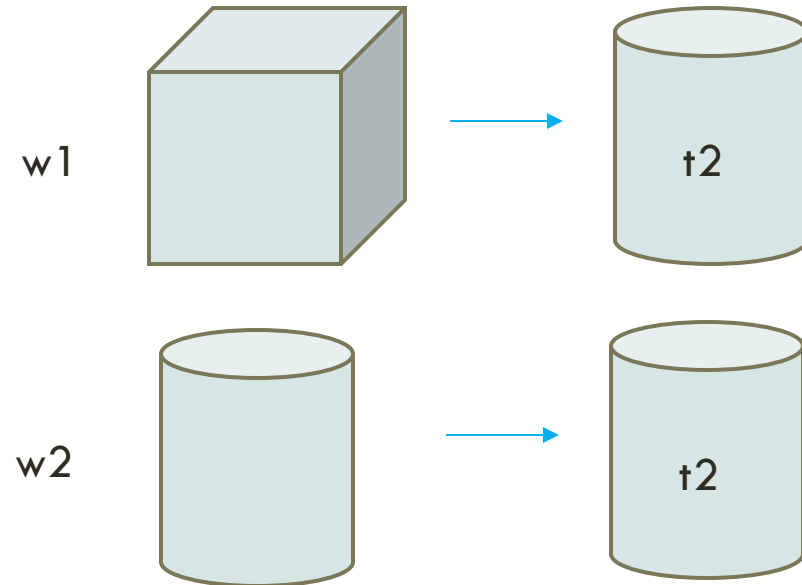
ARGUMENT FROM THE PAST

Objection 2: Unverifiable

Imagine two worlds: w1 and w2

- At time t2, no one (not even God) can tell the difference between the two worlds at time (t2).
- They are basically the same.
- The idea of Lucretian properties is meaningless.

In w1, we have a block that is molded into a can. So, the can has the Lucretian property *being a block*.



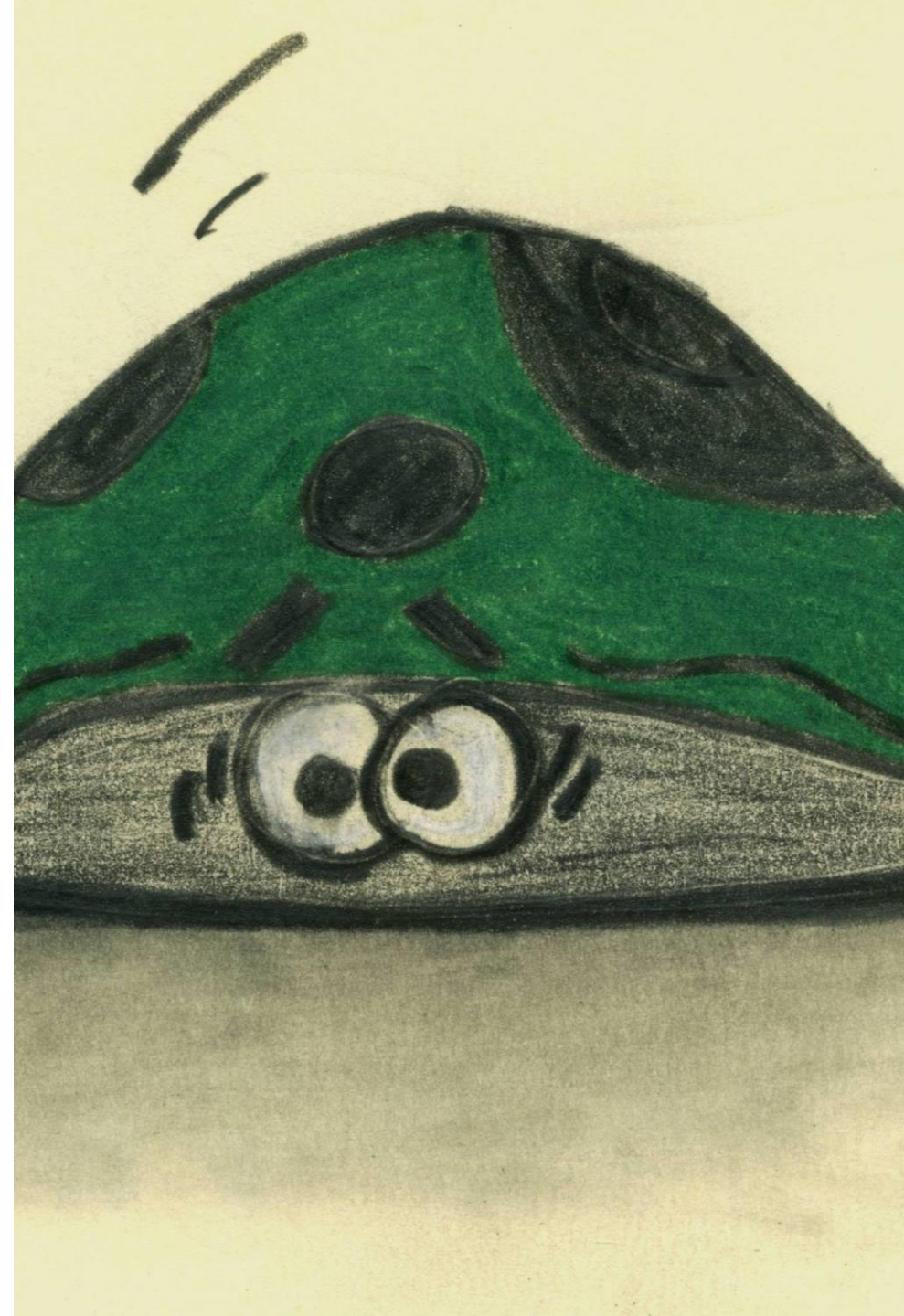
In w2, we have a can that stays a can. So, the can does not have the Lucretian property *being a can*.

QUESTIONS

Presentism faces a set of challenges that involve the past. The difficulty involves explaining how present facts are the case if the past wasn't the case.

- How is there cause and effect if there are no past objects to cause present effects?
- How can we refer to past objects if they don't exist?
- What makes past-tense sentences true if there are no past objects.

We looked at three responses: (1) Bite the bullet, (2) reductionism, and (3) Lucretian properties. Are any of these plausible responses?



REVIEW QUESTIONS

1. What is presentism?
2. What are the two varieties of presentism?
3. What is growing block theory?
4. What is the presentist's and GBT's account of change / temporal passage?
5. What are some arguments in support of presentism and GBT?
6. What are some arguments against presentism?
7. What is solipsism?

