



L4: ETERNALISM

ETERNALISM



ETERNALISM

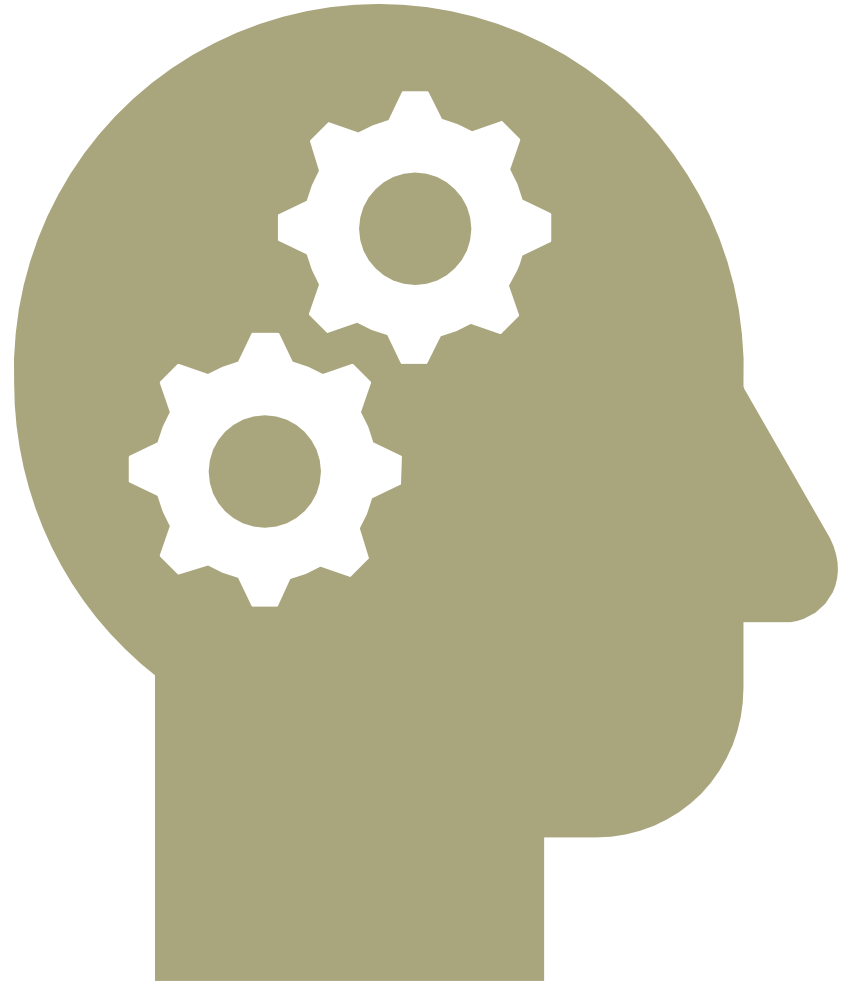
Articulate the theory of eternalism

Present arguments in support of eternalism

Present objections to eternalism

ETERNALISM

The theory



THE MOVING SPOTLIGHT THEORY

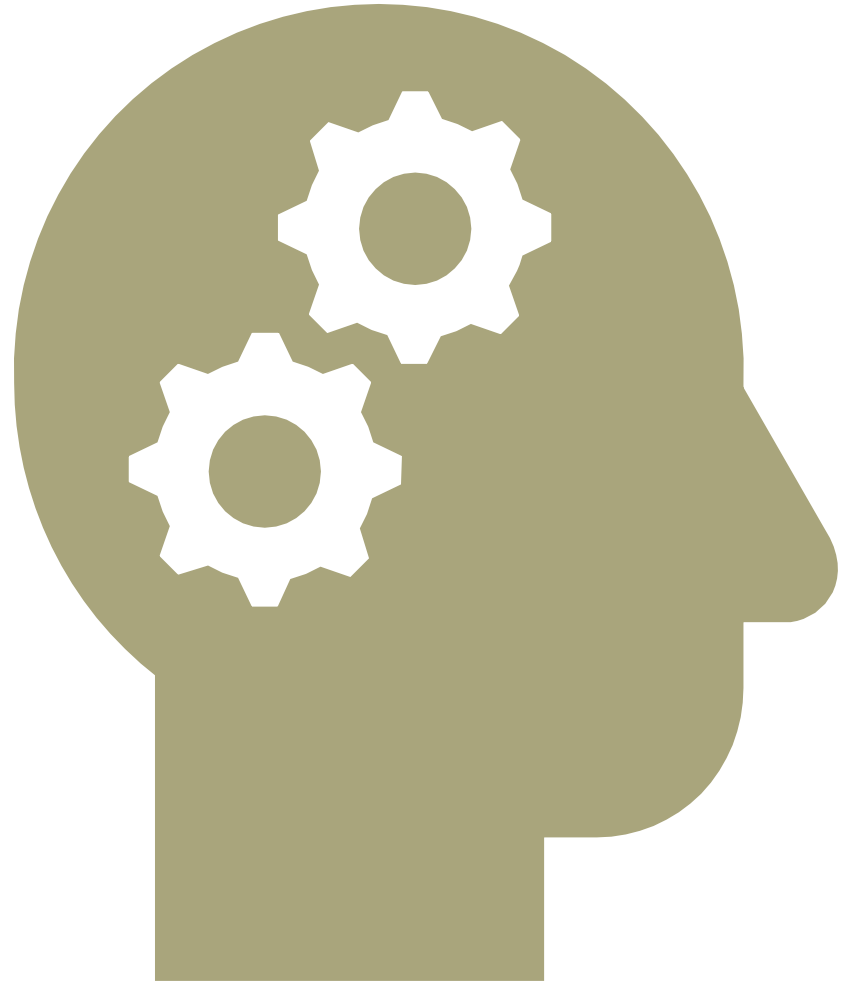
Eternalism consists of three theses:

1. The **eternalist view** that it is always the case that everything exists eternally (an event's position in time does not determine whether that event exists)
2. The **B-theory**: there is some instant of time that absolutely (non-relatively) present
3. The **static theory of temporal passage**: there is no passage of time

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

ETERNALISM

Thesis 1

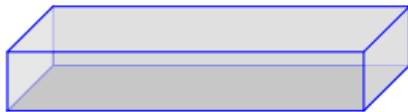


ETERNALISM — THESIS 1

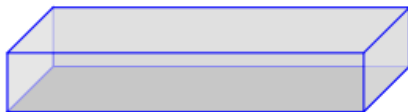


Eternalism accepts the **eternalist view on temporal ontology**:

- It is always the case that everything that exists does so eternally
- This view is sometimes called **permanentism** or **entity-everywhere-ism**



ETERNALISM — THESIS 1



- If t_1 is 2019, then objects and events on later dates exist (e.g. 2020) and objects and events on earlier dates exist (e.g. 2018).
- Many people when the eternalist says that "future" and "past" events **exist**, believe that the word "exist" is being used in a non-standard way.
- For the eternalist, just as things exist here and now, so they also exist elsewhere in time.
- The eternalist says that objects in 2020 are *just as real and real in the same way* as objects in 2019.

ETERNALISM — THESIS 1

- It is helpful to think about a spatial analogy.
- Suppose you are in State College, PA
- The objects and events that occur in State College exist and are real.



ETERNALISM — THESIS 1

- But notice that there are other places that are a certain **spatial distance** from you.
- There is Las Vegas, Los Angeles, San Diego, etc.
- Are these places **less real** than State College?
- Do these places exist?



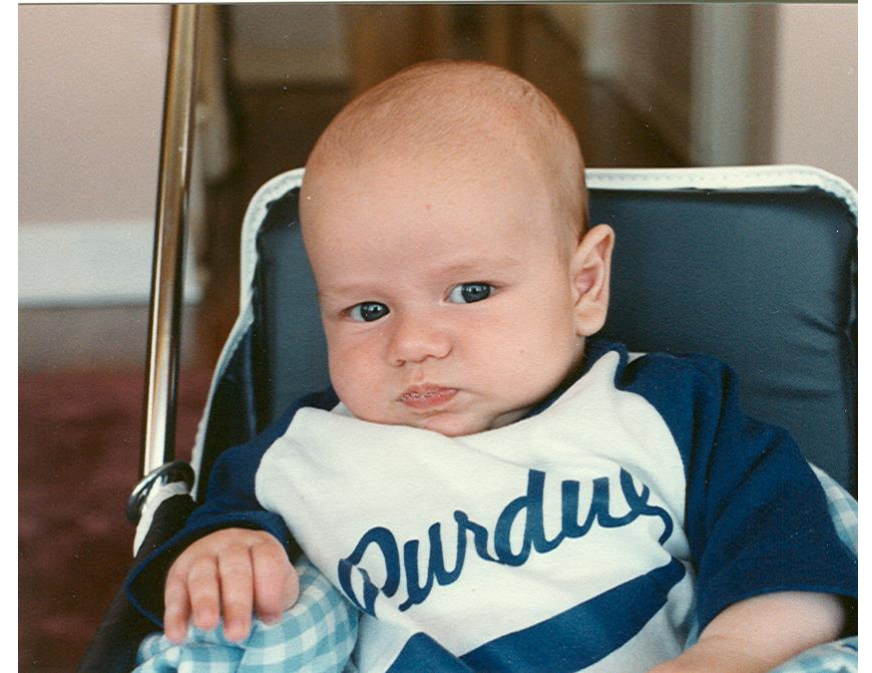
ETERNALISM — THESIS 1

- Of course they do!
- An object's position in space does not determine whether that object exists
- Two objects can be separated in space and both can exist.



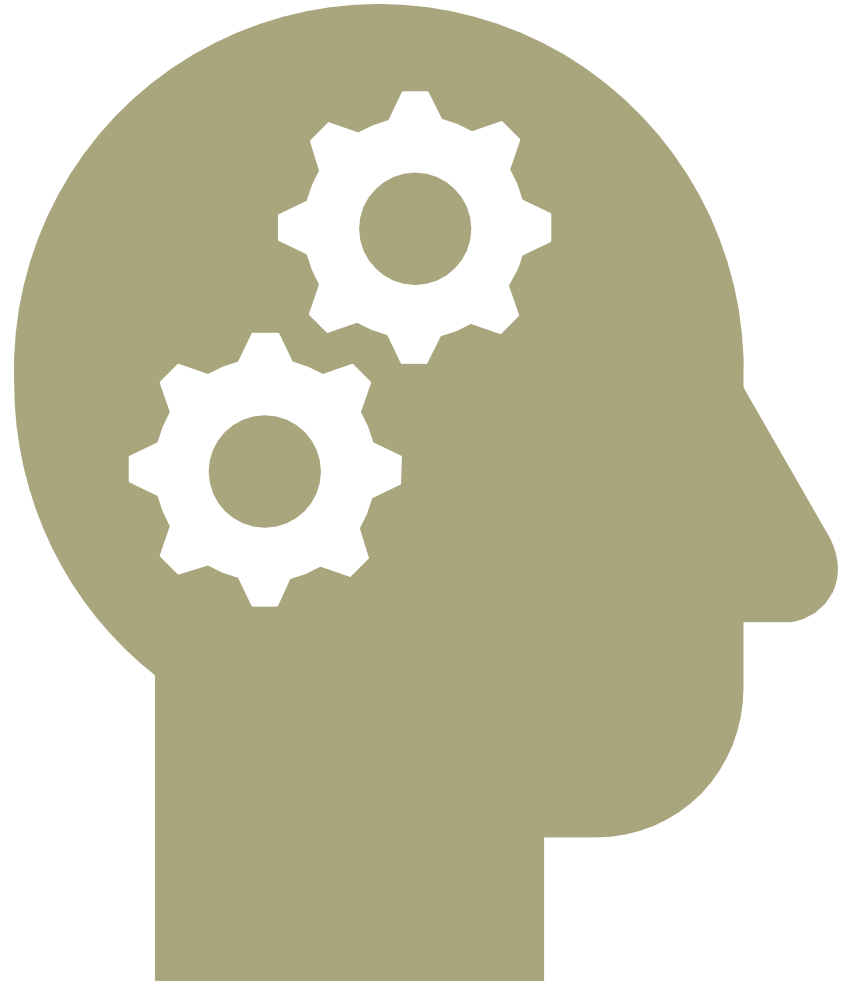
ETERNALISM — THESIS 1

- But consider that at this moment you occupy a certain time. Call it t_1 .
- There are certain times t_2 , t_0 that are a temporal distances from you.
- The eternalist says that **just because a time is a certain distance away from the time you occupy does not make it any less real.**



ETERNALISM

Thesis 2



ETERNALISM — THESIS 2

The eternalist accepts the **B-theory**.

- Time is completely structured by B-relations: earlier than, later than
- There is no need to employ A-terms and A-sentences to account for **absolute** temporal facts.
- Most importantly: **we don't need A-facts / A-truthmakers**



ETERNALISM — THESIS 2

For the eternalist: any so-called A-fact is only a relative or perspectival fact (not one that is absolute):

- *Relative to an individual*: present for me
- *Relative to an observer*: present to my experience
- *Relative to a reference frame*: present to all other objects that are not moving relative to me



ETERNALISM — THESIS 2

It can again be helpful to think of a spatial analogy.

- Look at the person to the left or right of you.
- There is no absolute **leftness** in the universe
- Leftness only makes sense as a relative and perspectival notion
 - X is left to me
 - X is left to that object over there



ETERNALISM — THESIS 2

- We can completely use B-relations and B-sentences to account for absolute temporal facts
- Why?



ETERNALISM — THESIS 2

The eternalist thinks that A-terms and A-sentences are **not necessary** for giving an account of sentences that have to do with time.

- We can say everything we need to say about time and the relations of times to each other by using B-terms and B-sentences
- If we can account for everything we need to account for without A-terms, then **we can get rid of them.**



ETERNALISM — THESIS 2

Two ways to try to show A-sentences reduce to B-sentences:

1. **Translation:** A-sentences can be translated into B-sentences without a loss of meaning.
2. **Reduction:** A-sentences have B-truthmakers



ETERNALISM — THESIS 2

TRANSLATION

The translation account contends that we can take every A-sentence like S1 and translate them into a corresponding B-sentence like S2 (without loss of meaning).

- S1: E is in the future
- S2: E is later than t

If we can translate every A-sentence into a B-sentence, then we don't need the A-theory. We can express all every facts about time with B-terms.



ETERNALISM — THESIS 2

The **translation** approach **does not work** for two reasons.

ETERNALISM — THESIS 2

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First, S1 seems to mean something different than S2 since the truth of S1 varies with respect to the location of the present (it goes from true to false). In contrast, the truth value of S2 never changes: E will always be later than 2019. *Loss of meaning!*

- S1: E is in the future
- S2: E is later than 2019

ETERNALISM — THESIS 2

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- S1: E is in the future
- S2: E is later than 2019

Second, the two sentences seem to employ different **concepts**. We can know the meaning of one sentence without knowing the meaning of the other sentence.

- S1: Tek is angry now
- S2: Tek is angry tomorrow at 3:20PM

I can know the meaning of "now" without knowing the meaning of 3:20PM.

ETERNALISM — THESIS 2

So the **translation** approach **does not work**

ETERNALISM — THESIS 2

REDUCTION

The second way to **eliminate** the A-truthmakers needed for A-sentences is by a **reduction**.

- The truth of A-sentences **seems** to imply the existence of A-facts (A-truthmakers): *the present* needs to be real if "Tek is angry now" is true.

- The eternalist contends that **we don't need these A-facts** (A-truthmakers).
- For every A-sentence, there is a corresponding **B-fact** (a B-truthmaker) that accounts for the truth of that A-sentence.
- SO: even though we use (and can still use) A-sentences, we don't need A-truthmakers (we don't need to suppose the reality of the past, present, future)

ETERNALISM — THESIS 2

A-
sentences



A-facts



ETERNALISM — THESIS 2



ETERNALISM — THESIS 2

Type: general thing, abstract, a concept

Token: a physical or concrete instance of something

- S1: The man rode the bicycle
 - There is one word "the" (type) but there two tokens of that type in S1
- S2: A rose is a rose is a rose.
 - There is one word "rose" but there are two tokens of that type in S2



ETERNALISM — THESIS 2

To reduce: we devise a B-fact for every A-sentence. We can do this in at least two ways:

Token-reflexive account: by putting the E we are talking about in a B-relation with a **token** of the A-sentence (put it in relation to the event of uttering the sentence)

Date-relation account: by putting the E we are talking about in a B-relation with some other event, e.g. a date



ETERNALISM — THESIS 2

Example 1

S1: E is tomorrow (A-sentence)

- B-fact: S1 is true iff E occurs a day *later than* the token (utterance) of S1
- B-fact: S1 is true iff E occurs at 2 Jan



ETERNALISM — THESIS 2

Example 2

S2: E is now (A-sentence)

- B-fact: S2 is true iff E occurs at the same time as the token (utterance) of S2
- B-fact: S2 is true iff E occurs at 2 Jan



ETERNALISM — THESIS 2

- The eternalist denies the absolute reality of the present.
- A-terms are **not meaningless**
- The truth of A-present-sentences commit us to B-facts (which do not involve *being present*)



ETERNALISM — THESIS 2

- The eternalist denies the absolute reality of the present.
- A-terms are **not meaningful**
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A-present-sentences



B-facts



ETERNALISM — THESIS 2

Suppose, we utter "E is present" and this sentence is true. The eternalist says that this does not imply:

- There really is a present moment for all people regardless of their perspective and that is when E occurs.

Instead, it is true when:

- E occurs at the same time as the utterance (token) of the sentence
- OR: E occurs on the date that I am uttering this sentence.



ETERNALISM — THESIS 2

When we say:

- Or if we think to ourselves "what I am experiencing right now is the present"
- This **does not** imply that there is the A-fact of some event **being present**
- It only implies the **B-relation**: "my experience occurs at the same time as my having this thought"



ETERNALISM — THESIS 2

Summary

- Eternalism is a B-theory
- It contends that A-terms and A-sentences are not necessary
- It shows that they are not necessary through a reduction
- Two types of reductions: token-reflexive and date-relative
- The eternalist has an indexical notion of the present



ETERNALISM

Thesis 3



ETERNALISM — THESIS 3

The eternalist adopts a **static theory of temporal passage**. What does this mean?

- It means that there is **no change** in the eternalist view of things
- At least **no change** in the *normal* sense of the term: an object wholly pushing through time like a car through space
- We'll discuss notions of change and identity next time.

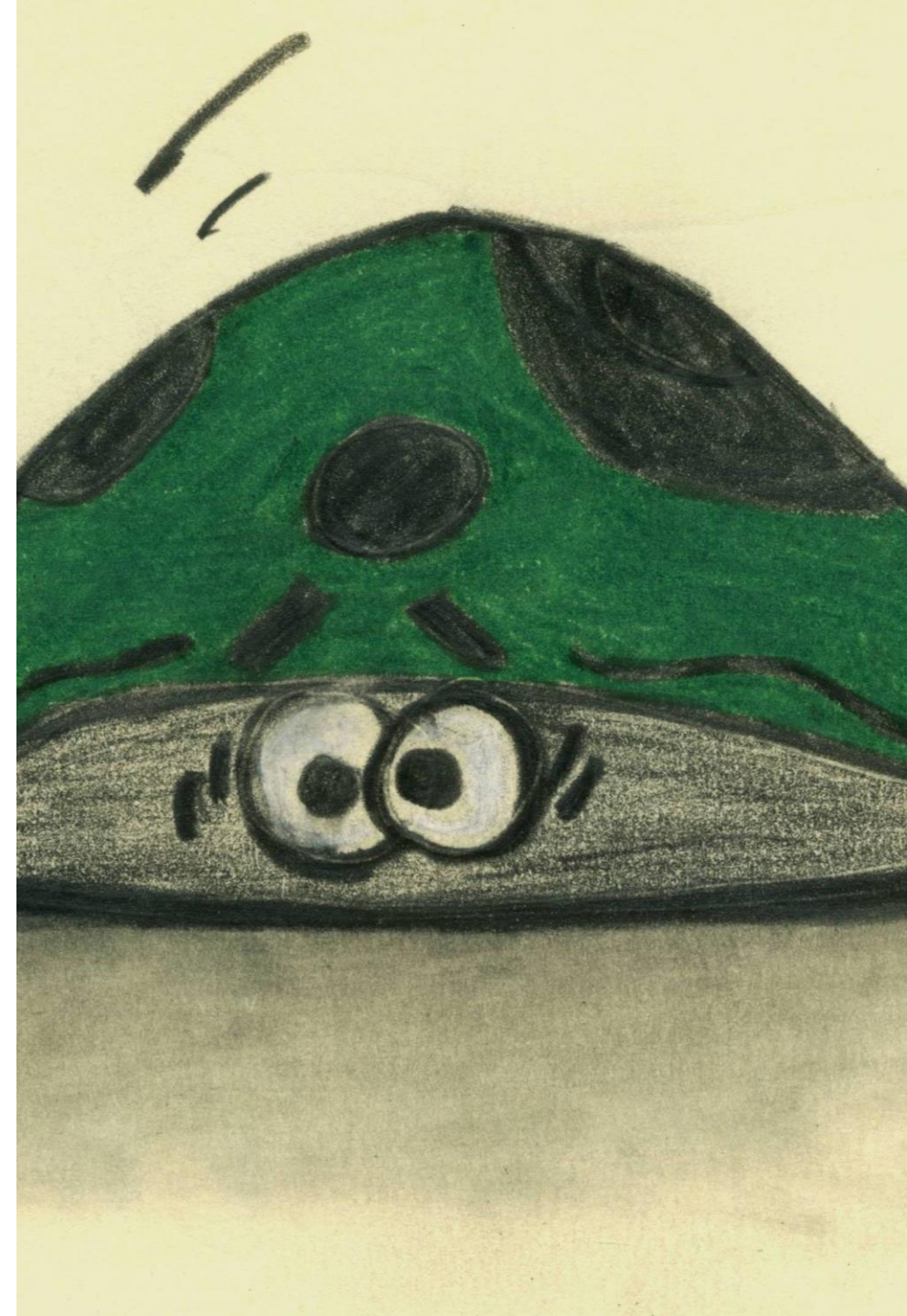


QUESTION - CONTEST

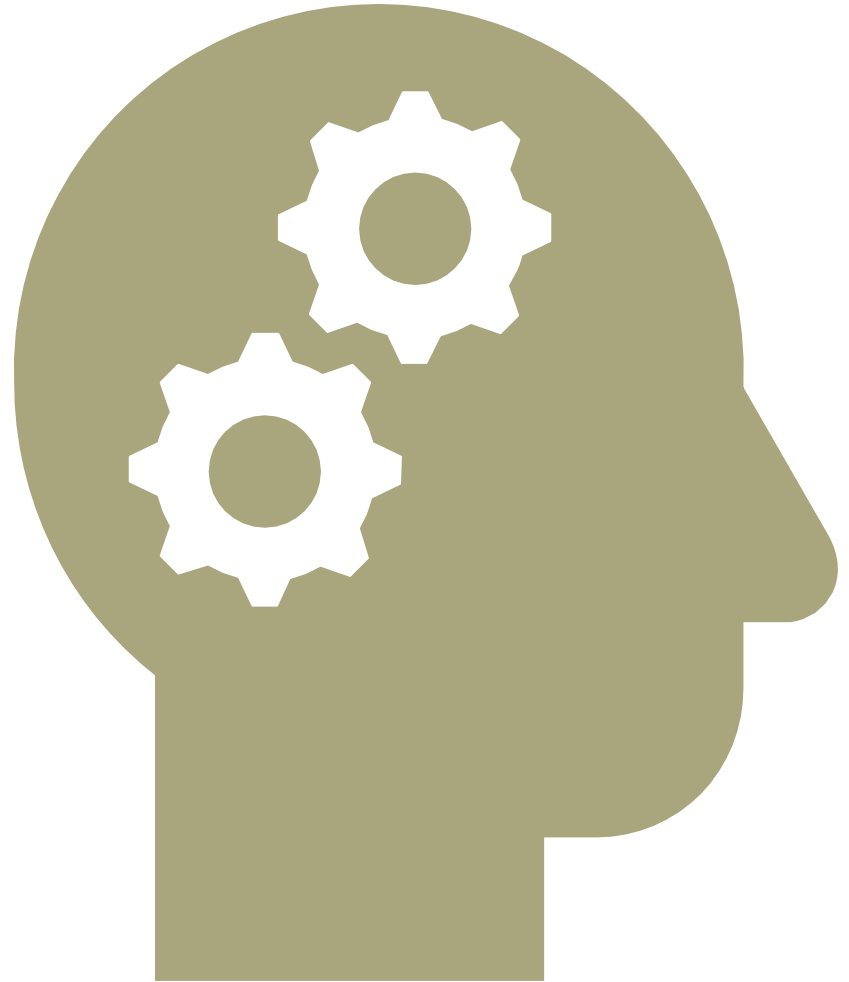
1. Form a small group (5 people max)
2. On a single sheet of paper, articulate the eternalist theory as completely as you can: you can go beyond the content found in these slides
3. Create an illustration, drawing, or diagram that helps to clarify your articulation of the theory.
4. Turn in your sheet to me for a RAP grade.

PRIZES: Your RAP 4 grade (out of 2 points)

- Unsatisfactory explanations will receive 1 point
- Satisfactory explanations will receive 2 points
- The best explanation will receive 3 points



ARGUMENTS FOR ETERNALISM



ARGUMENTS FOR ETERNALISM

There are several arguments for eternalism:

1. Argument from past truthmakers (see MST slides)
2. Argument from past-future relations (see MST slides)
3. Argument from Leibniz's law
4. Argument from special relativity
5. Argument from death's badness

ARGUMENT FROM LEIBNIZ'S LAW

To understand the argument from Leibniz's law, we need some terminology.



ARGUMENT FROM LEIBNIZ'S LAW

- **Leibniz's law:** $x = y$ iff x and y have the same properties
- **Example:** Suppose two objects A and B (and you don't know if they are identical). If A has a property that B lacks (or vice versa), then according to Leibniz's Law, A is not B . The two are not identical.
- **Concrete Example:** If the murderer is lefthanded but Tek is righthanded, then Tek is not the murderer.

Technical Note: the law is the conjunction of two laws.

- **Indiscernibility of identicals:** For every x and for every y , if $x=y$, then for every property P , x is P iff y is P ,
- **Identity of indiscernibles:** For every property P , if x is P and y is P , then $x=y$

ARGUMENT FROM LEIBNIZ'S LAW

Concrete Example

- Suppose you know a murderer is on the loose and that the murderer is lefthanded
- Now suppose you suspect that Tek is the murderer but find out Tek is righthanded
- By Leibniz's law, you know that **Tek is not the murderer**

The **murderer** and **Tek** have **different properties** so they are not identical.

ARGUMENT FROM LEIBNIZ'S LAW

We talk about objects that exists at multiple (different times).

- Tek exists at t_1 and exists at t_2
- If an object can exist at **different** times, then the object is said to **persist through time**



ARGUMENT FROM LEIBNIZ'S LAW

We talk about objects that exists at multiple (different times).

- Tek exists at t_1 and exists at t_2
- If an object can exist at **different** times, then the object is said to **persist through time**



Tek (t_2)

PERSISTENCE THROUGH TIME!

ARGUMENT FROM LEIBNIZ'S LAW

Two accounts of persistence

- **Endurantism (three-dimensionalism)**
- **Perdurantism (four-dimensionalism)**



ARGUMENT FROM LEIBNIZ'S LAW

Endurantism (three-dimensionalism): is the view that objects persist by enduring: by **being wholly present** at more than one time.

- An object O endures if it can be wholly found at each time it exists.
- If presentism is true, then O only exists at t_n (the present). When I see an enduring object O at a moment of time t_i , **I am meeting the whole object**, not a part and not some of the object.



ARGUMENT FROM LEIBNIZ'S LAW

Endurantism (three-dimensionalism): is the view that objects persist by enduring: by **being wholly present** at more than one time.

- An object O endures if it can be **wholly** found at each time it exists.
- If presentism is true, then O only exists at t-present.



Still enduring

ARGUMENT FROM LEIBNIZ'S LAW

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- An object O endures if it can be wholly found at each time it exists.
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Still enduring

ARGUMENT FROM LEIBNIZ'S LAW

Endurantism (three-dimensionalism) has a lot of intuitive support.

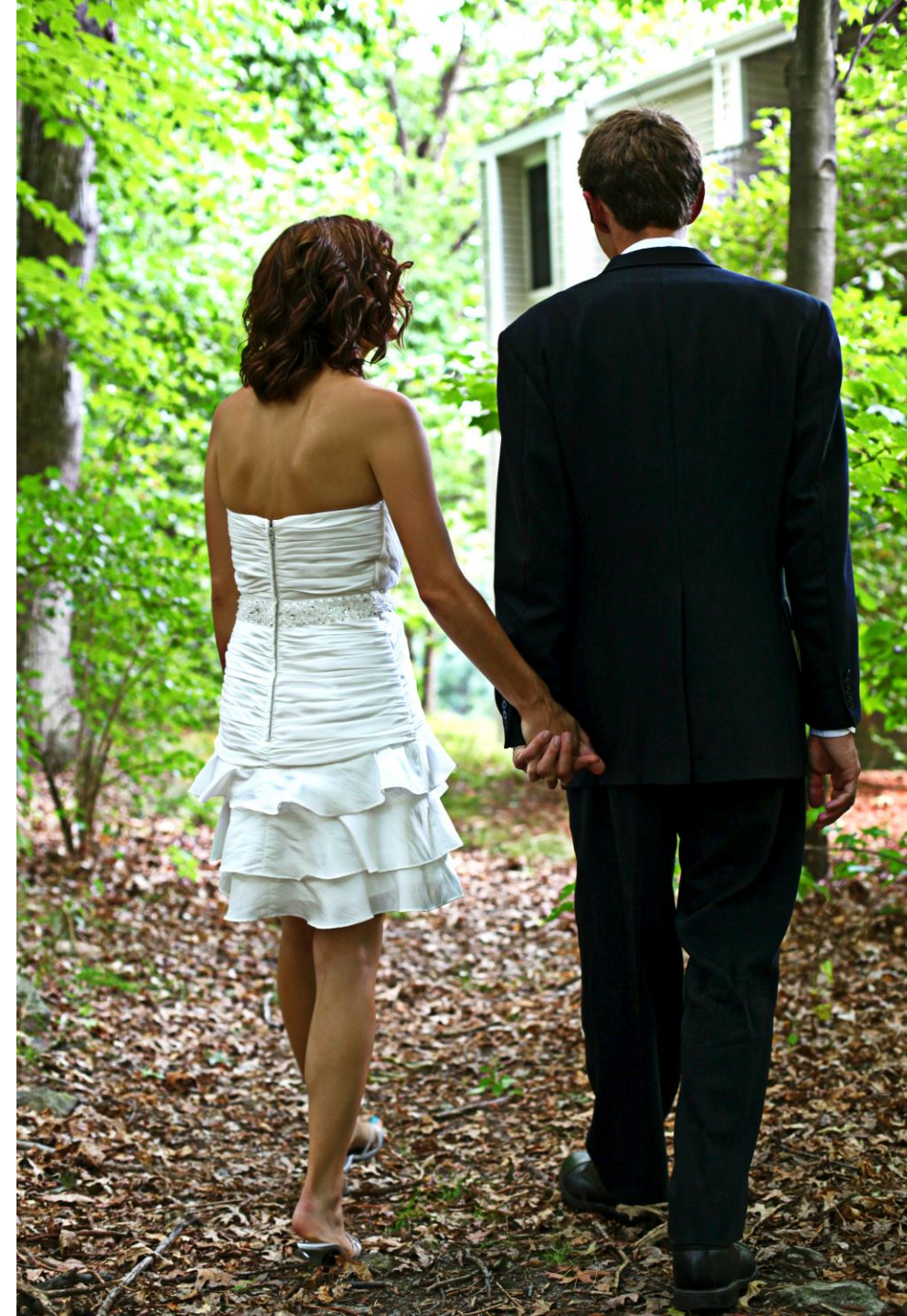
- **Corresponds with beliefs about ourselves:** Tek at t_2 must be the same person as Tek at t_1 since Tek believes that Tek is the same person
- Rewards and punishments



ARGUMENT FROM LEIBNIZ'S LAW

If endurantism is true, when you see an enduring object O at a moment of time t , you **are meeting the whole object**

- You are not meeting a part
- You are not meeting some of that object
- It's sort of romantic. *I see all of you!*



ARGUMENT FROM LEIBNIZ'S LAW



Endurantism gives us an account of **change**

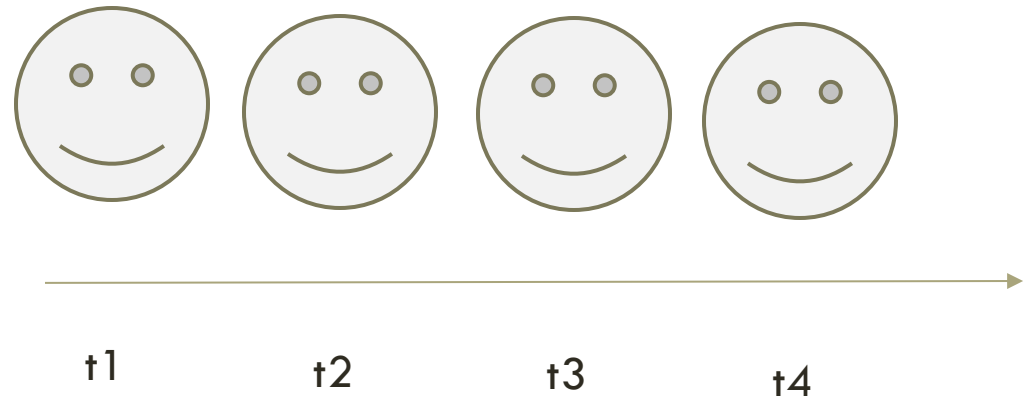


An object O changes if and only if O at t_1 had properties X , Y , and Z , then at t_2 object O had properties X , Y , and W .

FROM LEIBNIZ'S LAW

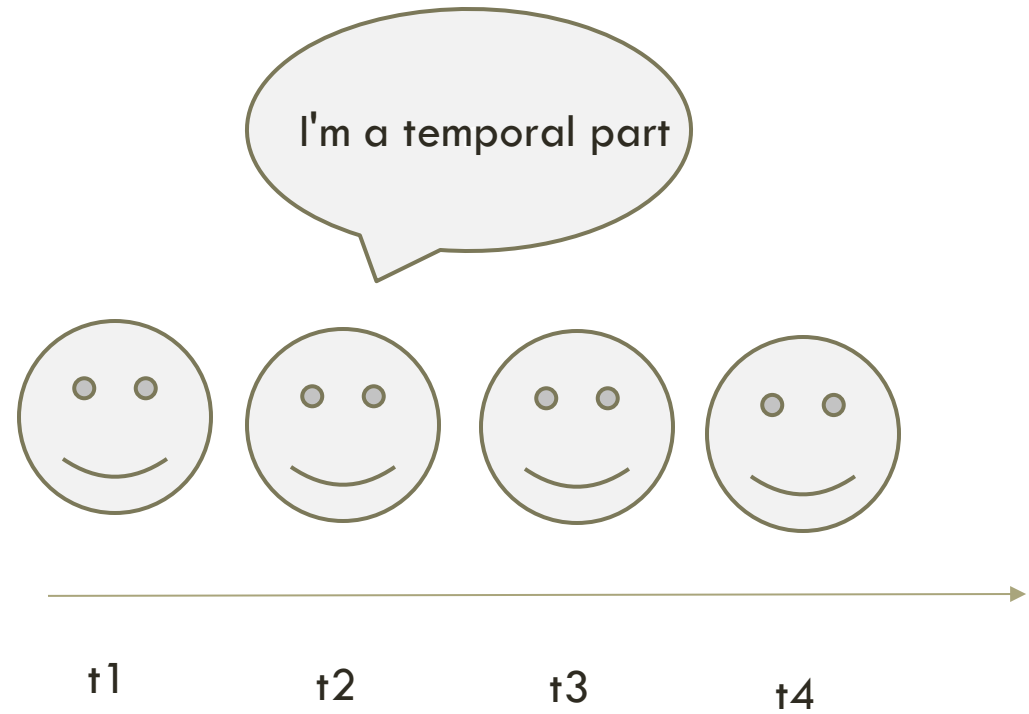
Perdurantism (four-dimensionalism): the view that objects are only *partially* present at a time

An object O perdures if at every time t_1, t_2, \dots, t_n , a **part** of O (called a temporal part) is found at each time t .



FROM LEIBNIZ'S LAW

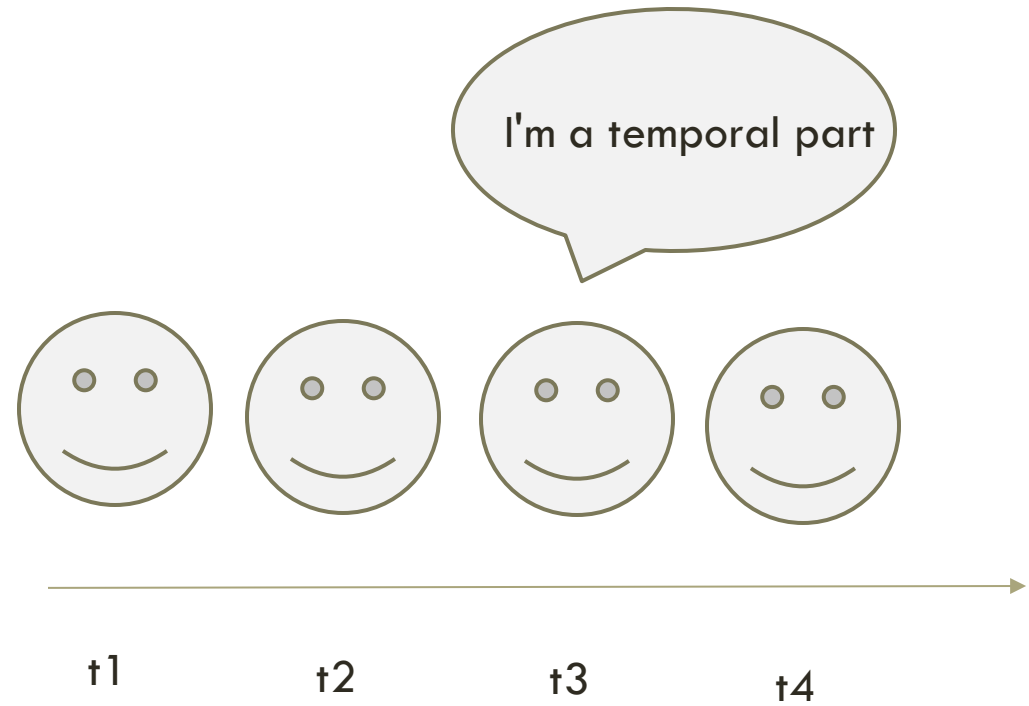
- Objects are more like events with beginnings, middles, and ends.
- Their parts coexist and are spread out like a story or narrative



FROM LEIBNIZ'S LAW

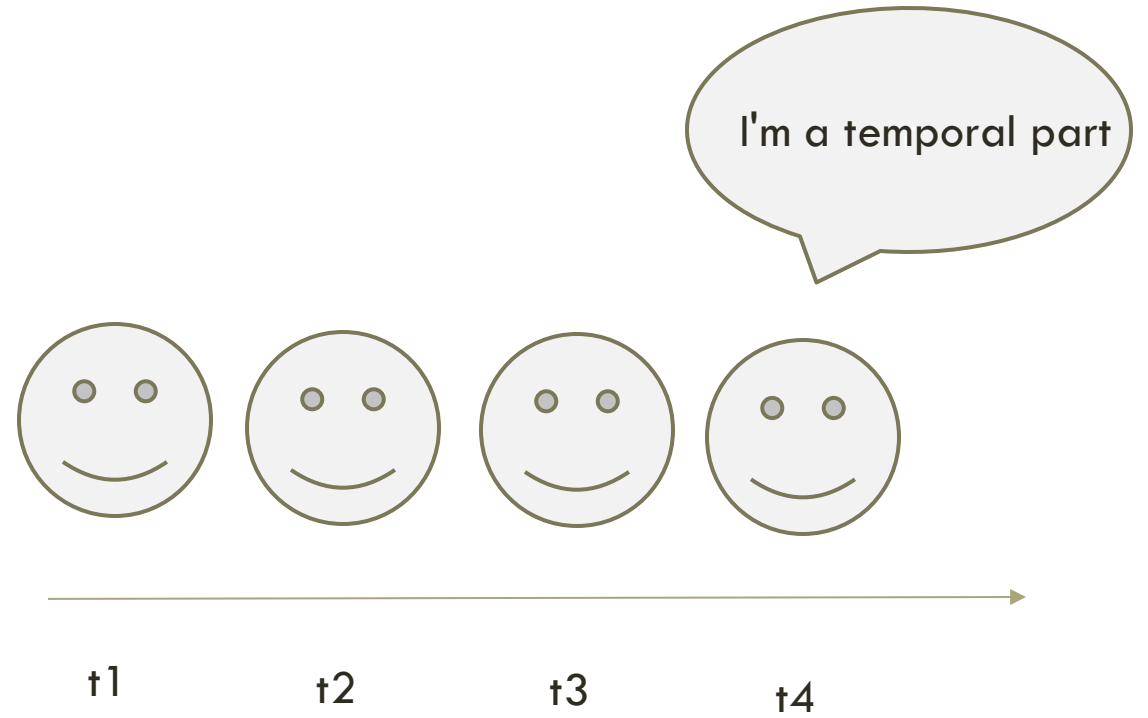
Just as you have **spatial parts** (hands, feet, head), you also have **temporal parts**:

- Temporal part of me at time t_1
- Temporal part of me at time t_2



FROM LEIBNIZ'S LAW

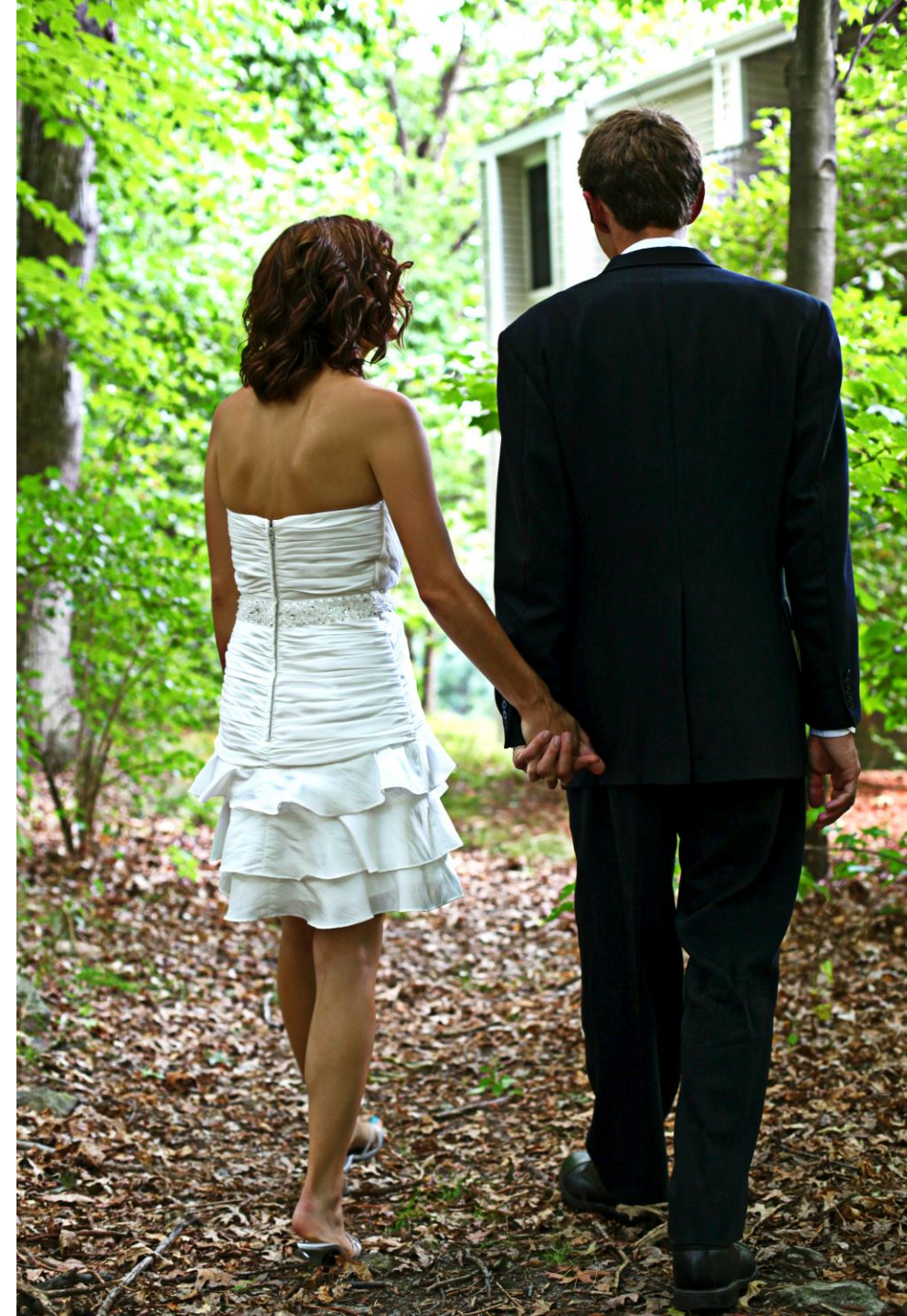
You are just a 4d spacetime worm: the totality of your spatial and temporal parts.



FROM LEIBNIZ'S LAW

When I see a perduring object O at a moment of time t_i , I am **not** meeting the whole object, I am meeting a **proper part** of the object.

- To **really** touch someone, you would need *to hold them in an all-consuming embrace for their entire lives*



FROM LEIBNIZ'S LAW

Let's begin to formulate the argument from Leibniz's laws.

- **P1:** 3D-endurantist theory of persistence **conflicts** with Leibniz's laws ($x=y$ iff x and y have the same properties).
- **P2:** 4D-perdurantist theory of persistence **does not conflict** with Leibniz's laws.

FROM LEIBNIZ'S LAW

P1: 3D-endurantist theory of persistence conflicts with Leibniz's laws ($x=y$ iff x and y have the same properties).

Example:

- T1: Tek without a tattoo (Tek)
- T2: Tek with a tattoo (Tat-Tek)

If 3D and Leibniz's laws, then **Tek** is not identical to **Tat-Tek**. They don't have the same properties.

Tek did not survive the tatoo!



ETERNALISM — THESIS 3



Tek



Tat-Tek

Since Tek and Tat-Tek have different properties,
Tek is not identical to Tat-Tek.



ETERNALISM — THESIS 3

P1: 3D-endurantist theory of persistence conflicts with Leibniz's laws ($x=y$ iff x and y have the same properties).

- We have three options:
 1. Deny Leibniz's laws
 2. Deny 3D-endurantism
 3. Show how P1 is false.



ETERNALISM — THESIS 3

P2: 4D-perdurantist theory **does not conflict** with Leibniz's laws.

Example:

- T1: Tek without a tattoo (Tek)
- T2: Tek with a tattoo (Tat-Tek)

If 4D and Leibniz's laws, then, of course, Tek and Tat-Tek are not identical. They are just **temporal parts** of a larger Tek (the 4d spacetime Tek)



ARGUMENT FROM LEIBNIZ'S LAW

Argument

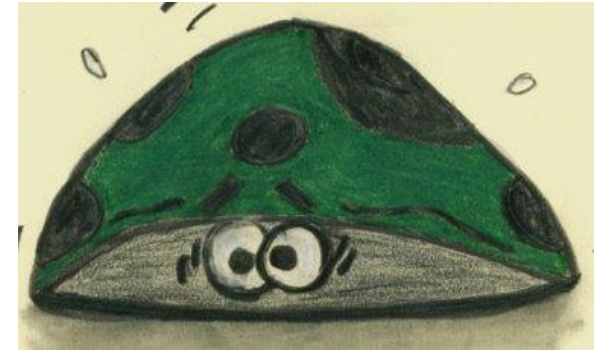
P1: 3D-endurantist theory of persistence conflicts with Leibniz's laws ($x=y$ iff x and y have the same properties).

P2: 4D-perdurantist theory of persistence does not conflict with Leibniz's laws.

P3: Eternalism is the only theory of time that accepts the 4D-perdurantist theory of persistence.

C: Therefore, eternalism is true.

ARGUMENT FROM LEIBNIZ'S LAW



Argument

P1: 3D-endurantist theory of persistence conflicts with Leibniz's laws ($x=y$ iff x and y have the same properties).

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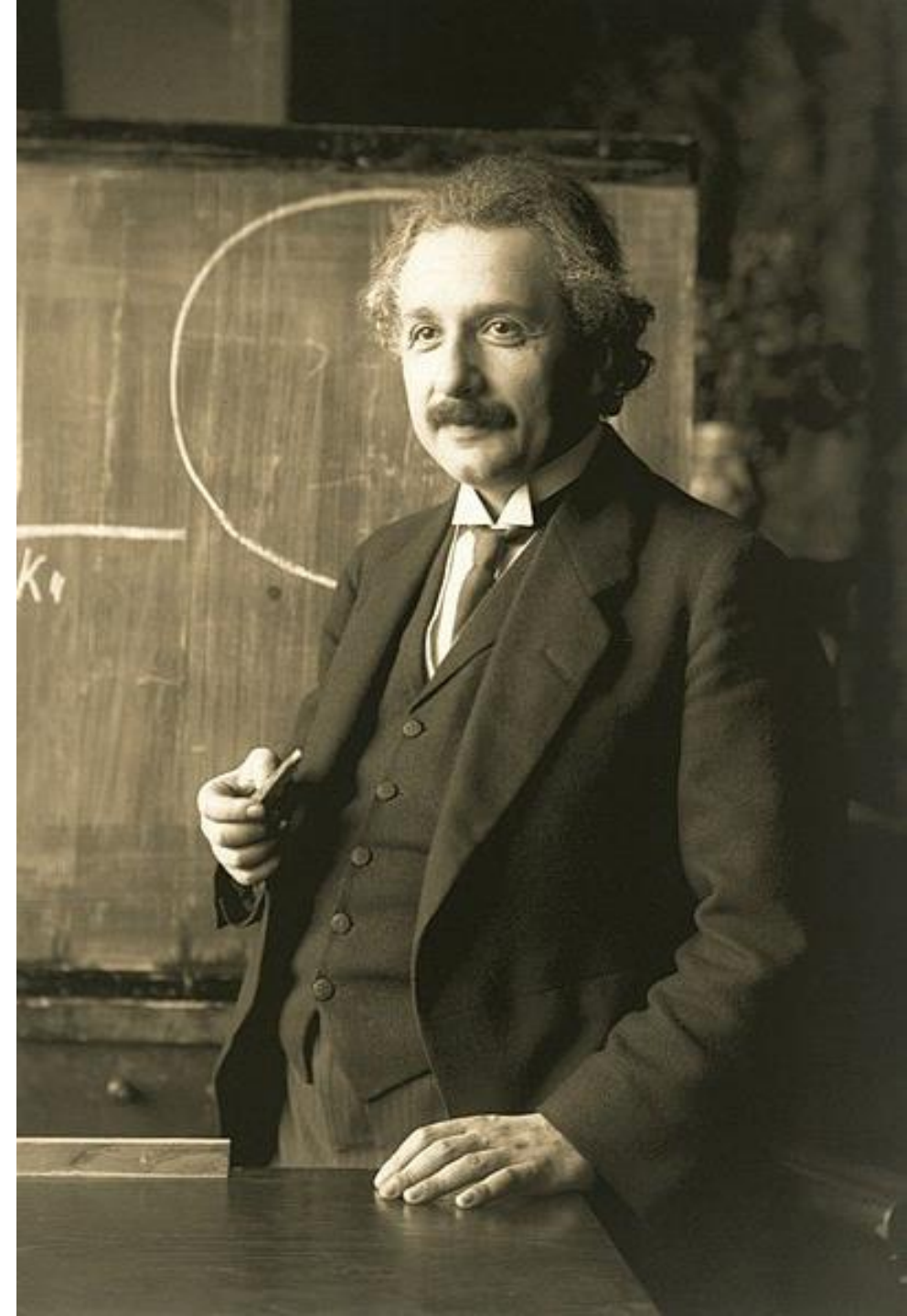
C: Therefore, eternalism is true.

Evaluation

1. What do you think of the argument from Leibniz's law?
2. Is there any premise you would reject?
3. Are there any practical implications of thinking of yourself as having temporal parts?

ARGUMENT FROM SPECIAL RELATIVITY

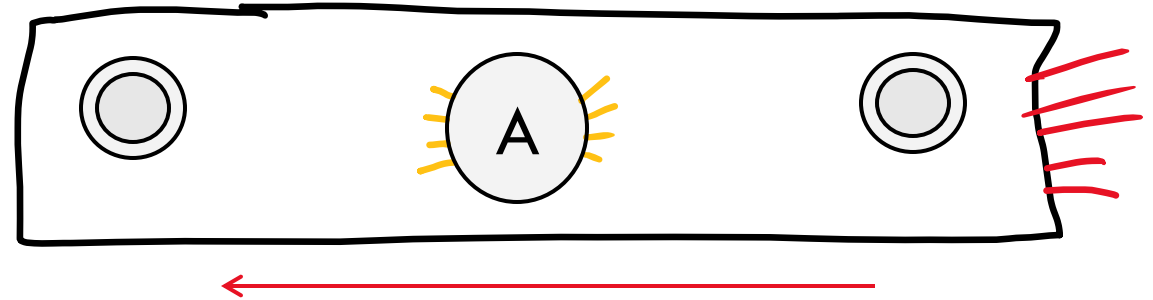
- The last argument is from the special theory of relativity (STR).
- I won't explain STR. There are many good and bad resources that explain STR (see notes). My explanation would likely add to the bad resources.
- Instead, we'll take STR as true, not explain what it is or why it is true, and accept one of its key consequences: **there is no absolute notion of simultaneity**



ARGUMENT FROM SPECIAL RELATIVITY

- There is a classic example to help illustrate the loss of absolute simultaneity.
- I'll mention it but won't really explain it.
- If you are interested in STR, there are lots of resources: books, web resources, videos.

ARGUMENT FROM SPECIAL RELATIVITY

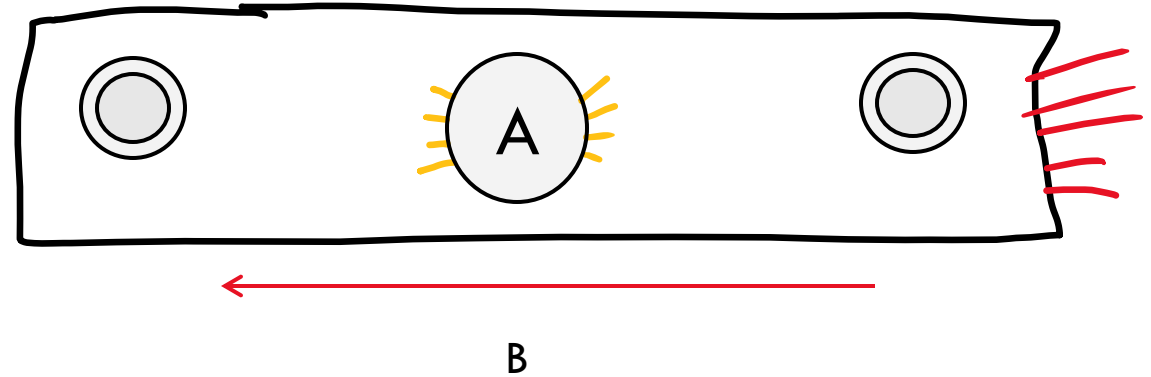


B

- Imagine a light source being emitted from a spaceship containing **A**. The spaceship is moving at a constant velocity v .

ARGUMENT FROM SPECIAL RELATIVITY

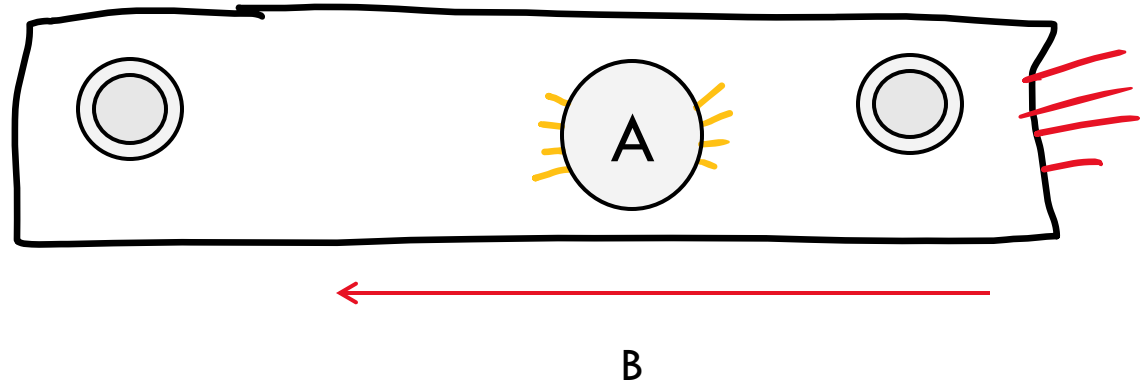
- Imagine a light source being emitted from a spaceship containing **A**. The spaceship is moving at a constant velocity v .



- From **A's perspective**, the light will hit each receptor at the same time (simultaneously).

ARGUMENT FROM SPECIAL RELATIVITY

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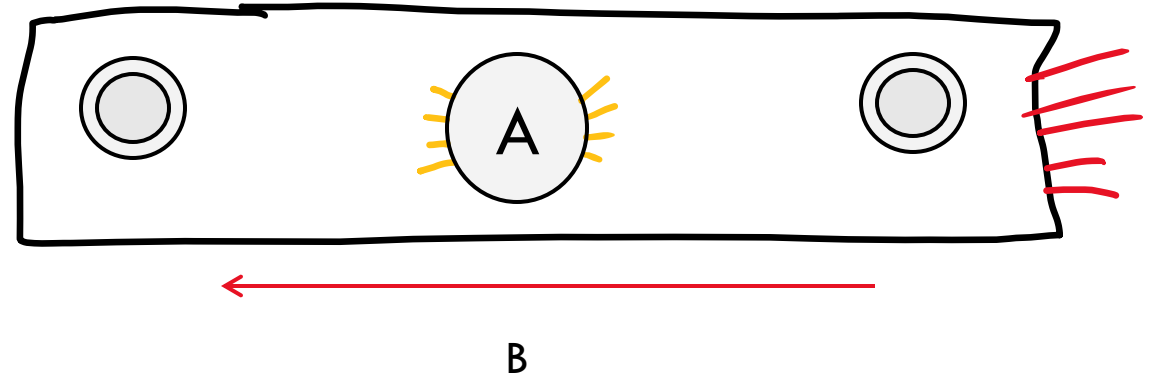


- From **B's perspective**, the light will hit the back (rightmost) receptor first and then later the front (leftmost receptor).

ARGUMENT FROM SPECIAL RELATIVITY

Imagine a light source being emitted from a spaceship containing **A**. The spaceship is moving at a constant velocity v .

- From A's perspective, the light will hit each receptor at the same time (simultaneously).
- From B's perspective, the light will hit the back (rightmost) receptor first and then later the front (leftmost receptor).



No absolute notion of simultaneity. Only simultaneity relative to a reference frame (observer).

ARGUMENT FROM SPECIAL RELATIVITY

SUMMARY

- STR implies that there is **no absolute notion** of simultaneity
- Simultaneity = two events E1 and E2 are simultaneous if and only if E1 and E2 occur occurring in two different locations occur at the same time.
- STR says that simultaneity is a **relative notion** (depends upon the **reference frame** or the observer)
- In short, **what is simultaneous to me is not simultaneous to you.**

ARGUMENT FROM SPECIAL RELATIVITY

The loss of simultaneity has implications for a theory of time.

The absolute reality of the present seems to require that events be simultaneous with each other: if X and Y are present, then X and Y are simultaneous.

ARGUMENT FROM SPECIAL RELATIVITY

P1: If some version of the A-theory (presentism, GBT, MST) is true, then there is an absolute (non-relative) notion of the present.

P2: For any object A and B, if **A is present, then B is present if and only if A is simultaneous with B** (co-presentness implies simultaneity)

P3: According to STR, there is no absolute notion of simultaneity (simultaneity is only relative to an inertial frame).

IC: Therefore, the A-theory is false.

P4: Presentism, GBT, and MST are A-theories but eternalism is a B-theory.

C: Therefore, eternalism is true.

ARGUMENT FROM SPECIAL RELATIVITY (SIMPLIFIED)

P1: A-theories (presentism, GBT, MST) imply the absolute present.

P2: If two events E1 and E2 are present, then they are simultaneous

P3: According to STR, there is no absolute notion of simultaneity

IC: Therefore, the A-theory is false.

C: Therefore, eternalism is true.

ARGUMENT FROM DEATH'S BADNESS

Everyone agrees death is bad, right?

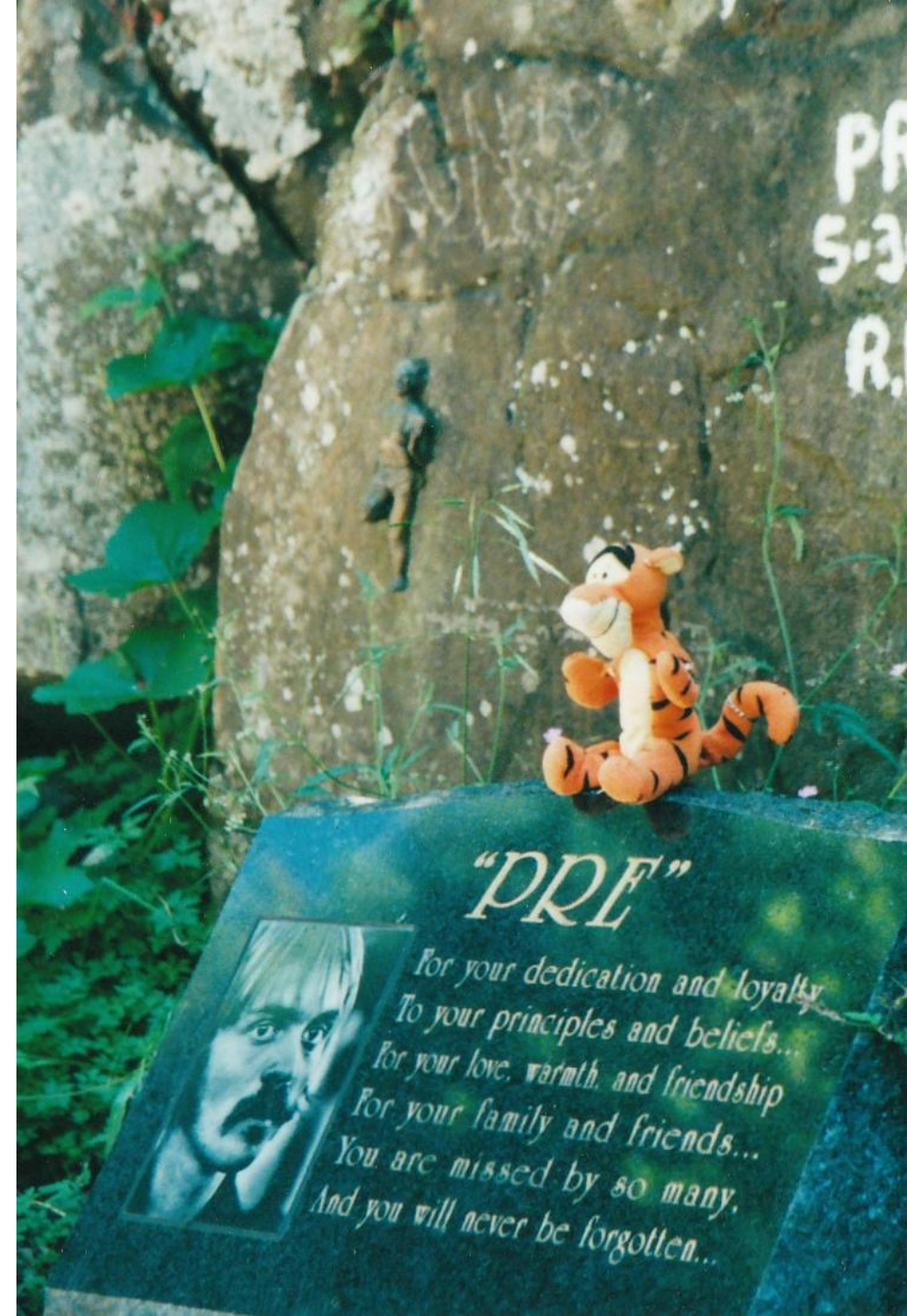
Not just bad for the **friends of the deceased** but for the **deceased as well?**



ARGUMENT FROM DEATH'S BADNESS

Let's assume when you **die**,
you **no longer exist**.

But if you don't exist, how
can something be bad for
you?



ARGUMENT FROM DEATH'S BADNESS

P1: Death is bad for the person (S) that dies.

P2: For something to be bad for S, S must exist.

P3: Presentism seems to suggest: if S dies, then S is not in the present AND if S is not in the present, then S does not exist.

IC2: But, if S does not exist, then death is not bad for S (**contradicts P1**).

P4: Eternalism can explain death's badness because even though S is dead, S exists although not after S's death.

C: Therefore, eternalism is true.

ARGUMENT FROM DEATH'S BADNESS

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P4: Eternalism can explain death's badness because even though S is dead, S exists although not after S's death.

C: Therefore, eternalism is true.

Evaluation

- How might a presentist say that P3 is false?

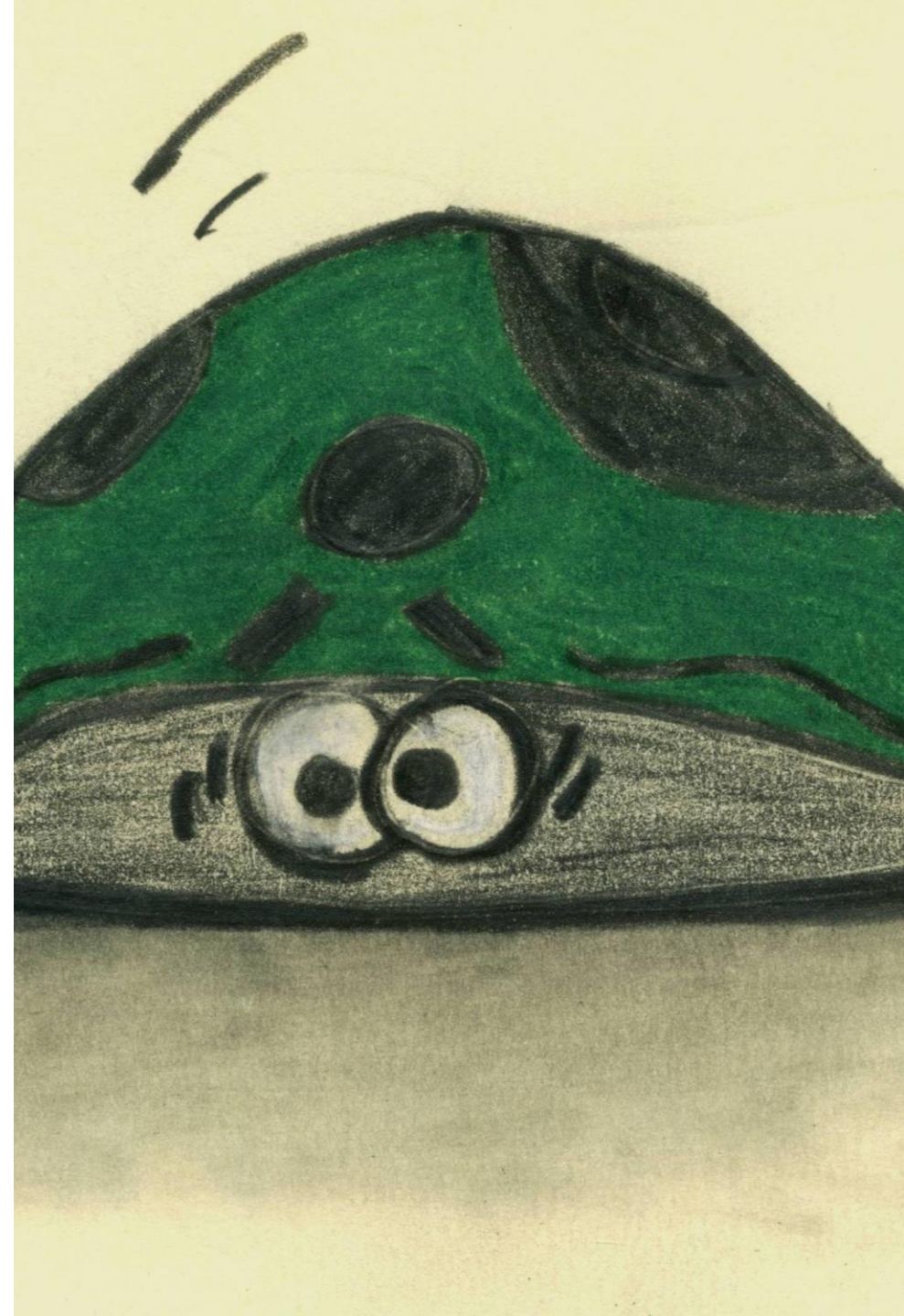


QUESTION

We have considered three arguments in support of Eternalism:

1. Argument from Leibniz's laws
2. Argument from the special theory of relativity
3. Argument from Death's badness

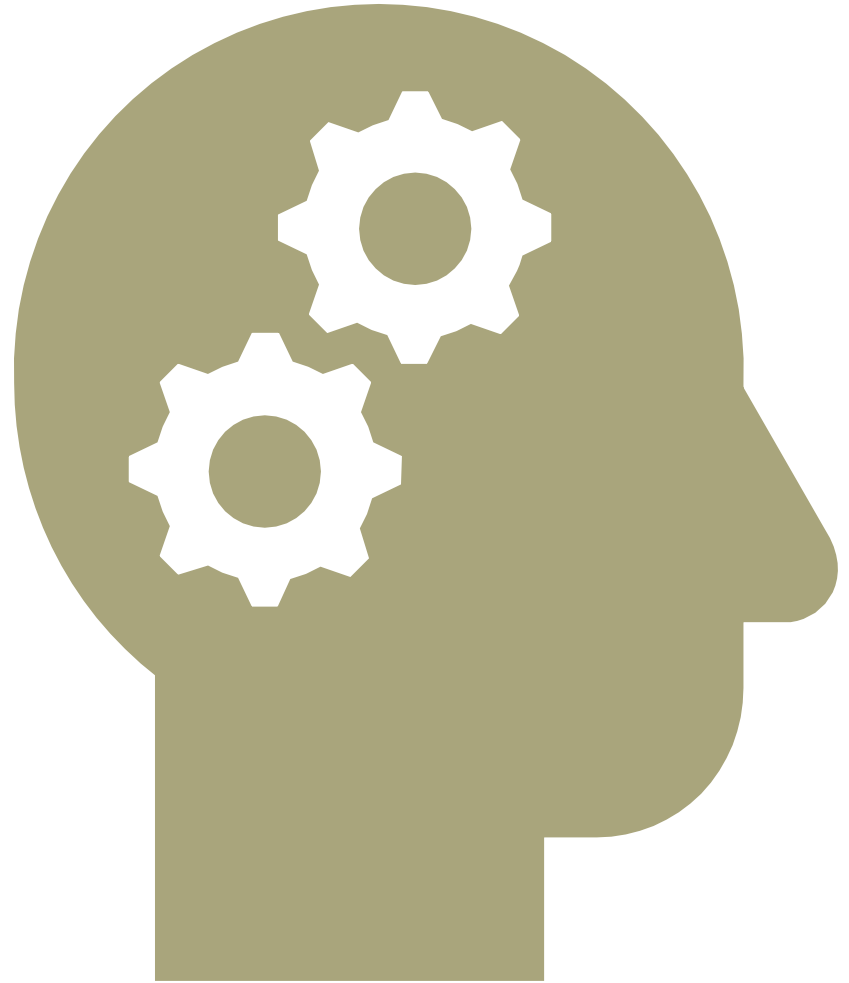
Pick the argument you find most convincing and articulate that argument to your neighbor.



THE COMPOSITE ARGUMENT FOR ETERNALISM

Theory	Past truthmakers	Past-future relations	Leibniz's Laws	STR	Death's badness
Moving spotlight	✓	✓			✓
Eternalism	✓	✓	✓	✓	✓
Presentism					
Growing Block	✓				✓

ARGUMENTS AGAINST ETERNALISM



ARGUMENTS AGAINST ETERNALISM

We will look at several arguments against eternalism:

1. Argument from open future (see MST)
2. Argument from experience of the present
3. Argument from fatalism
4. Argument from temporal passage

ARGUMENT FROM EXPERIENCE OF THE PRESENT

P1: The only events we experience are in the present.

IC: Therefore, only present events are real.

P2: Eternalism says there are events that are not present.

C: Therefore, eternalism is false.

ARGUMENT FROM EXPERIENCE OF THE PRESENT

P1: The only events we experience are in the present.

C: Therefore, only present events are real

C: Therefore, eternalism is false.

If P1 says that your present **experience is of present events**, then P1 is false. If you look at the sun (don't do it), that light took around 8 minutes and 20 seconds to reach your eyes. You are seeing a past event of the **Sun**.



ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

P1: While we may not experience present objects in the present, **all of our experiences are in the present moment** (confinement doctrine: we are confined to the present).

IC: Therefore, only present events are real.

P2: Eternalism says there are events that are not present.

C: Therefore, eternalism is false.

ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

P1: While we may not experience present objects in the present, all of our experiences are in the present (confinement doctrine: we are confined to the present).

IC: Therefore, only present events are real.

C: Therefore, eternalism is false.

P1 is not **obviously** true. Our experience right now could be in the past. What is obvious is the following: **experiences happen when they happen.**

- if an experience happens at t_1 then it happens at t_1 . *I don't know if it is the absolute present.*
- The **true confinement theory is that experiences are confined to when they happen.**
- Earlier experiences happen at an earlier time and later experiences happen at a later time.

ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

But why is my experience confined to specific times?
Why is this time the only one I have access to?

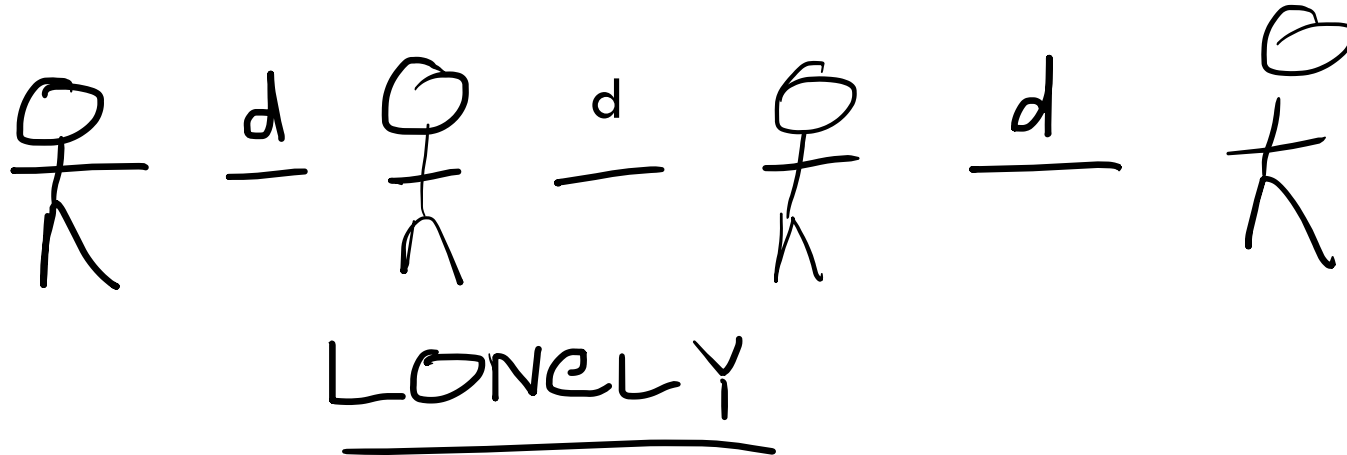
Dainton's (*Time and Space* p.30) answer is that **our consciousness is only capable of being aware of a limited amount of time.**

ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

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spatial separation

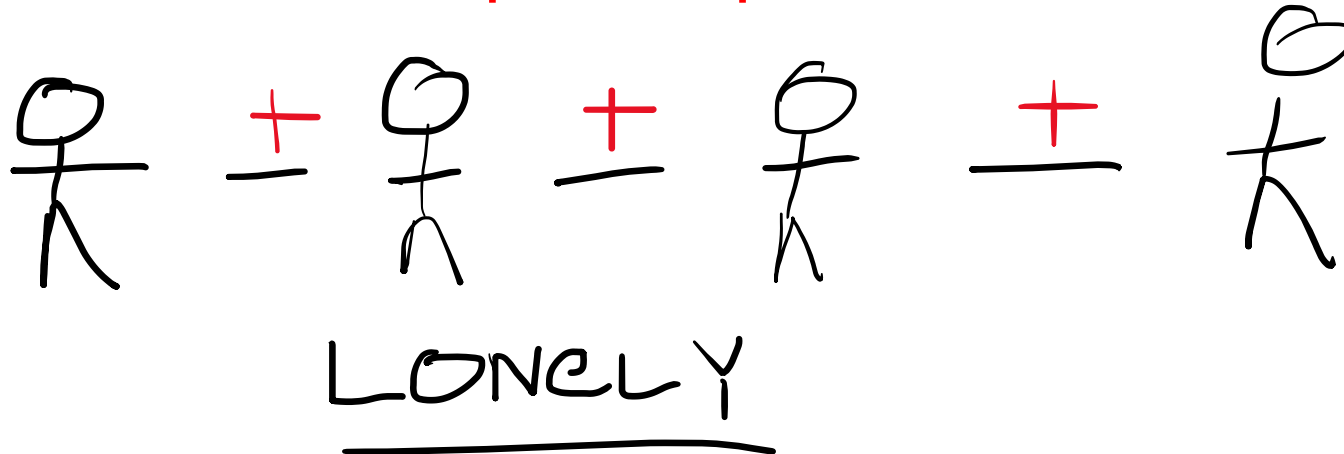


ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

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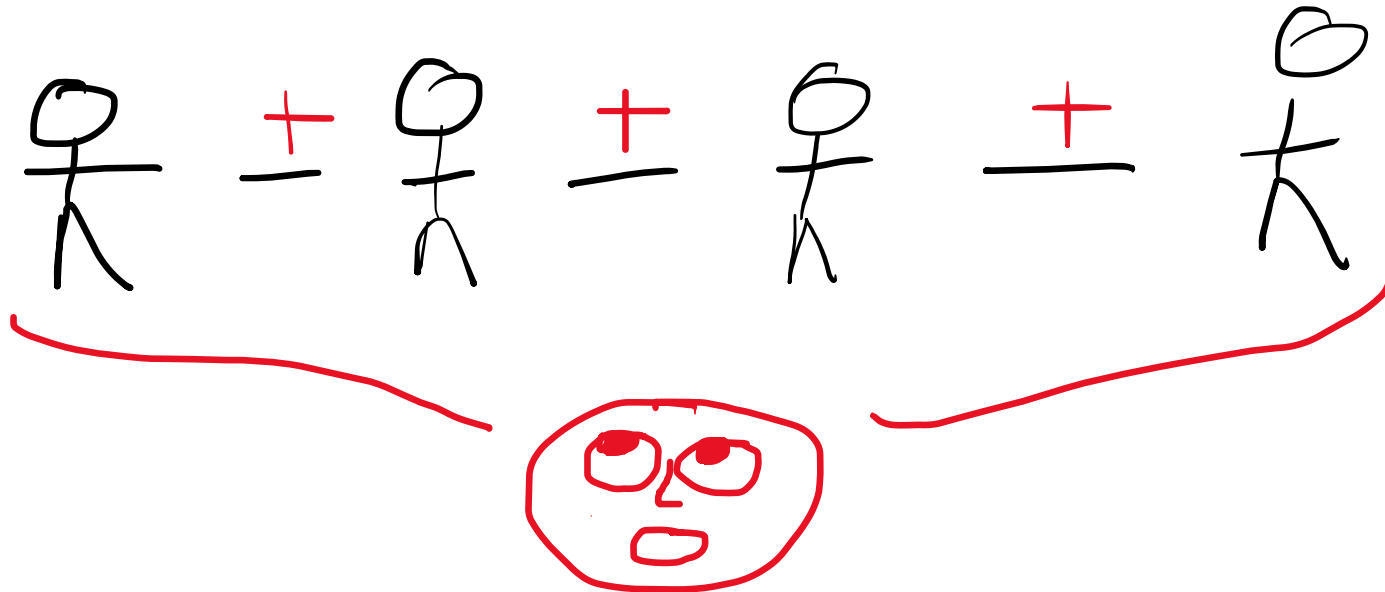
temporal separation



ARGUMENT FROM EXPERIENCE OF THE PRESENT (REVISED)

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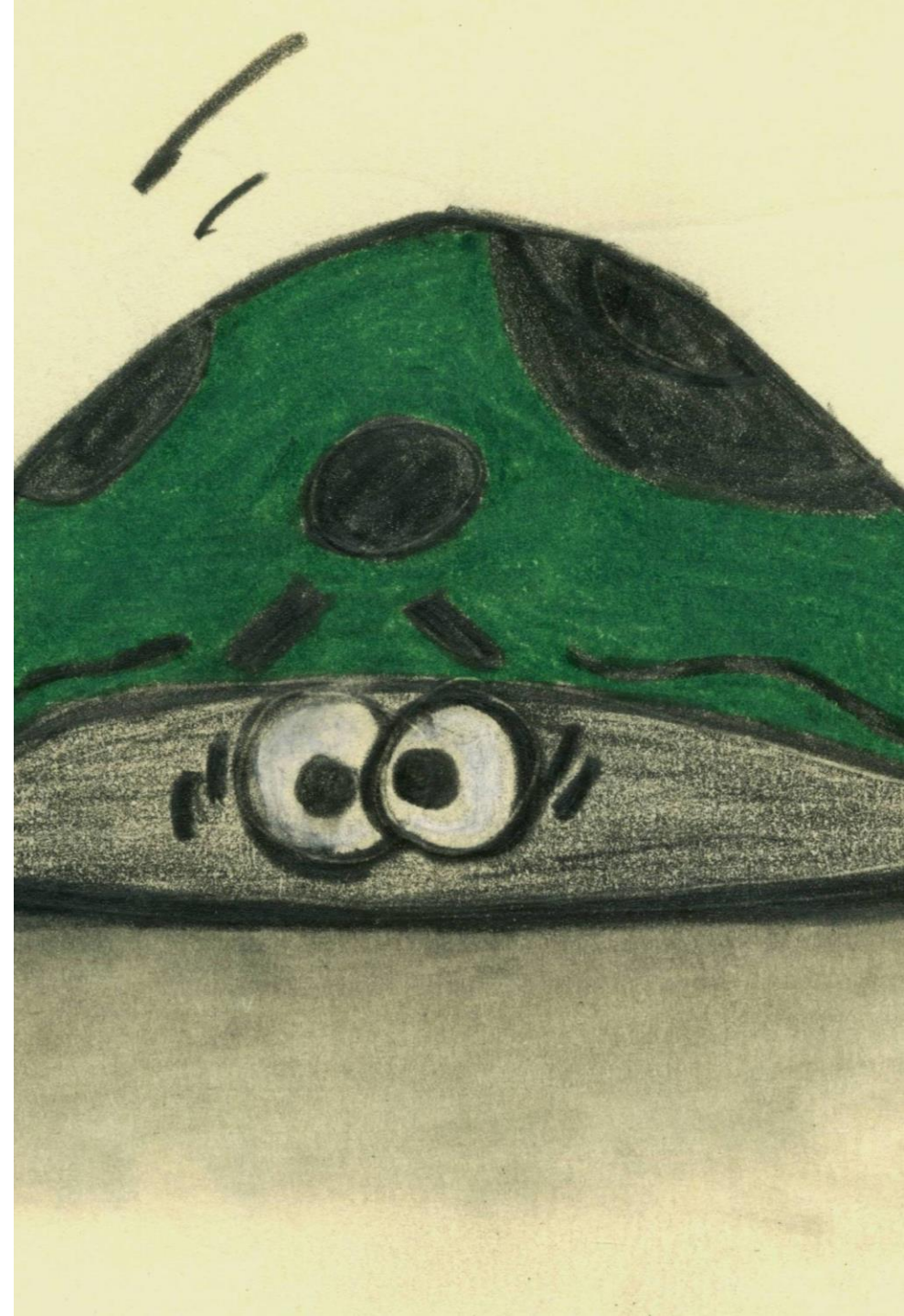
Dainton's (*Time and
Space* p.30) answer is that
**our consciousness is only
capable of being aware of
a limited amount of time.**



Implication is that if there
were a consciousness that
were capable of being
aware of more time, it
would be aware of all
the time we are aware
of.

QUESTION

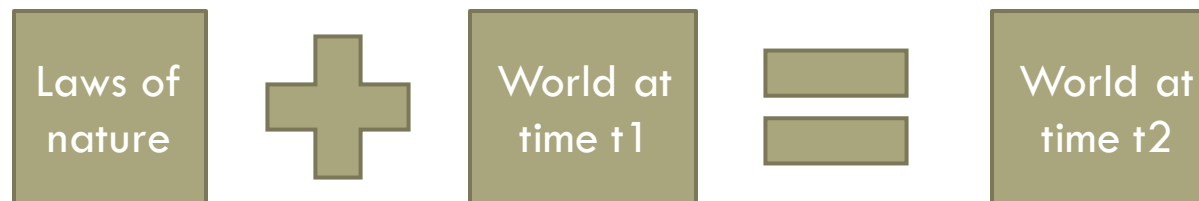
1. State the argument from the experience of the present against Eternalism.
2. How does the eternalist respond?
3. Do you find the eternalist's response convincing (explain your answer).



ARGUMENT FROM FATALISM

Determinism: every future event is determined by the current state of affairs and the laws of nature.

If we had a complete specification of the world at a time t and a complete knowledge of the laws of nature, then we could derive future events.



ARGUMENT FROM FATALISM

Fatalism is the theory that future events occur regardless of any choice you might make.

ARGUMENT FROM FATALISM

Determinism

Future events are determined by the **details of the world** at a time t and **the laws of nature**.
NOTHING ELSE!

Fatalism

Future events are **completely outside of our control for any reason. They could be:**

- fixed by the details of the world and the laws of nature (determinism)
- fixed because God has a plan and will institute that plan regardless of the laws of nature, or
- because of the **logical structure** of the universe: every sentence is true or false (one or the other, not both and not neither), there are future-tensed sentences, these sentences are made true or false by future events, therefore, the future is already determined.

ARGUMENT FROM FATALISM

- Arguments that imply fatalism are often rejected **because they imply fatalism.**
- One reason is that these arguments make use of an **appeal to disgust.**
- Since fatalism evokes a deep-seated disgust (or ``yuck" factor), this is grounds for believing that fatalism is false.



ARGUMENT FROM FATALISM



General Objection from Fatalism

- P1: Theory X implies fatalism.
- P2: Fatalism elicits disgust.
- P3: Any theory that evokes disgust is false (or ought to be rejected).
- C: Therefore, theory X is false.

ARGUMENT FROM FATALISM

- Eternalism entails: all events, regardless of their place in time, are equally real.
- From our current position in time, there is nothing we can do about future events
- Eternalism implies fatalism.

ARGUMENT FROM FATALISM



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Argument from Fatalism against Eternalism

P1: Eternalism implies fatalism.

P2: Fatalism elicits disgust.

P3: Any theory that evokes disgust is false (or ought to be rejected).

C: Therefore, eternalism is false.

ARGUMENT FROM FATALISM

First response

The objection also applies to other theories of time. For if presentism (1) explains the **truthmakers of past-tense sentences** by invoking present evidence and the laws of nature and (2) the laws of nature are symmetrical (apply backwards and forwards), then (3) then fatalism also applies for presentism.

The argument thus provides no relative advantage for other theories over eternalism.

Argument from Fatalism against Eternalism

P1: Eternalism implies fatalism.

P2: Fatalism elicits disgust.

P3: Any theory that evokes disgust is false (or ought to be rejected).

C: Therefore, eternalism is false.

ARGUMENT FROM FATALISM

Second response

P3 is false. There is no reason to accept or reject a theory based upon a *feeling of disgust*. Consider that feelings of disgust have been used to support such things as:

1. Anti-Semitic propaganda
2. That African Americans are inferior
3. Mistreatment of homosexuals

Argument from Fatalism against Eternalism

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P3: Any theory that evokes disgust is false (or ought to be rejected).

C: Therefore, eternalism is false.

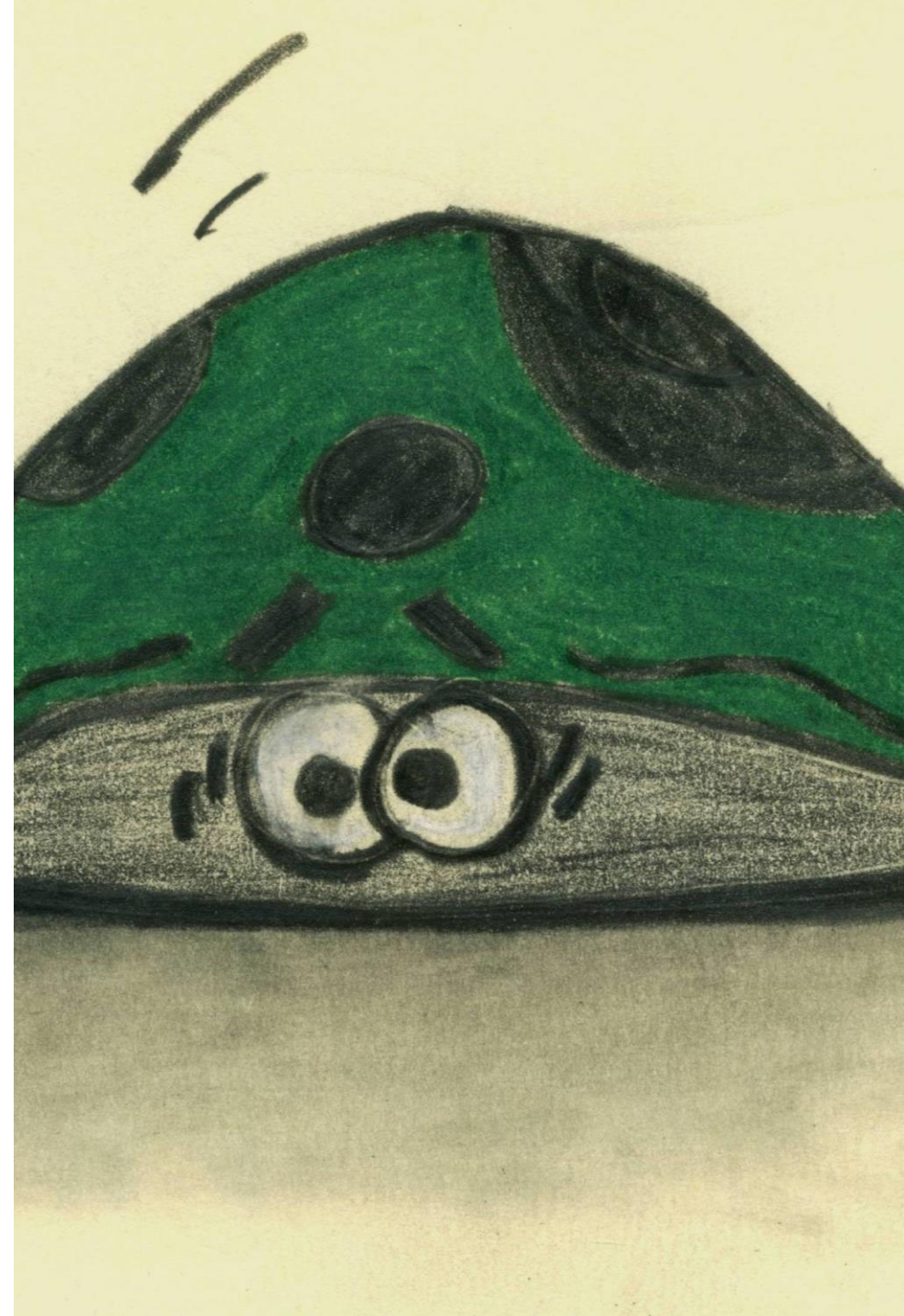
QUESTION

The argument from fatalism against eternalism relies upon the following premise:

P3: Any theory that evokes disgust is false (or ought to be rejected).

One response is that this premise is false and disgust should have no place in theory selection. This is a strong rejection of P3. A weaker rejection would be that feelings of disgust only have **limited application** to what positions to accept.

- Can you think of any area where feelings of disgust might be used to decide the truth or falsity of some matter?



ARGUMENT FROM TEMPORAL PHENOMENOLOGY

The final argument against eternalism is drawn from our experience of change (or our experience of the passage of time).

P1: We have an experience of the passage of time (change).

P2: What would best explain our experience of the passage of time is that **time actually passes (change is an objective feature of reality)**.

P3: According to eternalism, the passage of time is only a perspectival (relative) fact.

C: Therefore, eternalism is false.

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Experience of
time passing

ARGUMENT FROM TEMPORAL PHENOMENOLOGY

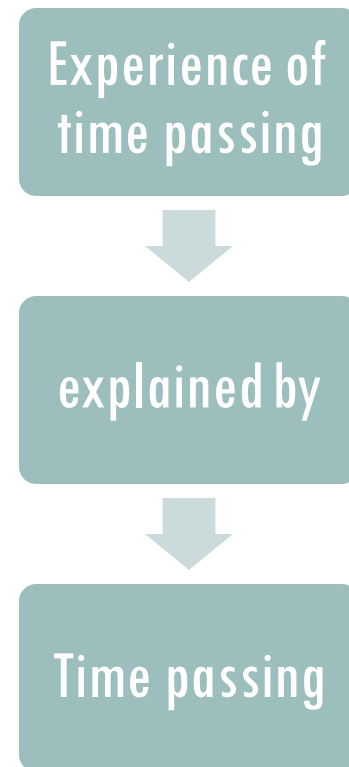
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Evaluation: P1 is false

- Our experiences do represent reality, BUT we **do not** experience of the passage of time
- Instead: we only **believe we experience the passage of time**
- Yes, we may **believe we experience** the passage of time, but **a belief that you experienced X** is different from **actually experiencing X**.

ARGUMENT FROM TEMPORAL PHENOMENOLOGY

Example 1

- **Belief about experience:** I believe I am having an experience of seeing a space in front of me that is continuous.
- **Actual experience:** *I see are a bunch of dots (my brain fills in the gaps)*

Evaluation: P1 is false

- Our experiences do represent reality, BUT we **do not** experience of the passage of time
- Instead: we only **believe we experience the passage of time**
- Yes, we may **believe we experience** the passage of time, but **a belief that you experienced X** is different from **actually experiencing X**.

ARGUMENT FROM TEMPORAL PHENOMENOLOGY

Example 2

- Belief about experience: I see someone take three separate unbroken rings and connect them together
- *Actual experience:*



Evaluation: P1 is false

- Our experiences do represent reality, BUT we **do not** experience of the passage of time
- Instead: we only **believe we experience the passage of time**
- Yes, we may **believe we experience** the passage of time, but a **belief that you experienced X** is different from **actually experiencing X**.

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P3: According to eternalism, the passage of time is only a perspectival (relative) fact.

C: Therefore, eternalism is false.

Evaluation: P1 is false

So while we may **believe we experience** the passage of time, what we actually experience is an **experience at a time t which contains the experience of a memory of an earlier experience t** .

- Example
 - Experience 1: Looking at a clock and it reading 10:15AM
 - Experience 2: Looking at a clock and see it says 10:18AM and the memory of Experience 1.

ARGUMENT FROM TEMPORAL PHENOMENOLOGY

P1: We have an experience of the passage of time (change).

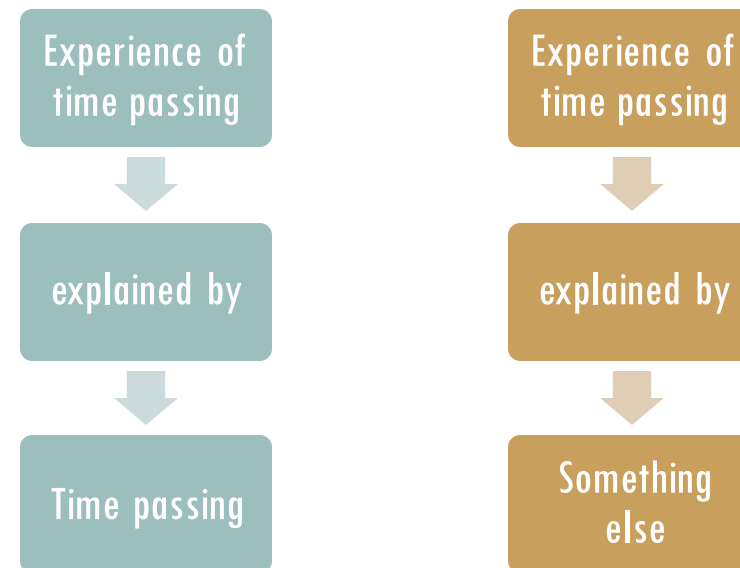
P2: What would best explain our experience of the passage of time is that **time actually passes (change is an objective feature of reality)**.

P3: According to eternalism, the passage of time is only a perspectival (relative) fact.

C: Therefore, eternalism is false.

Evaluation: P2 is false

- We experience the passing of time, but this passing of time is not a feature of reality



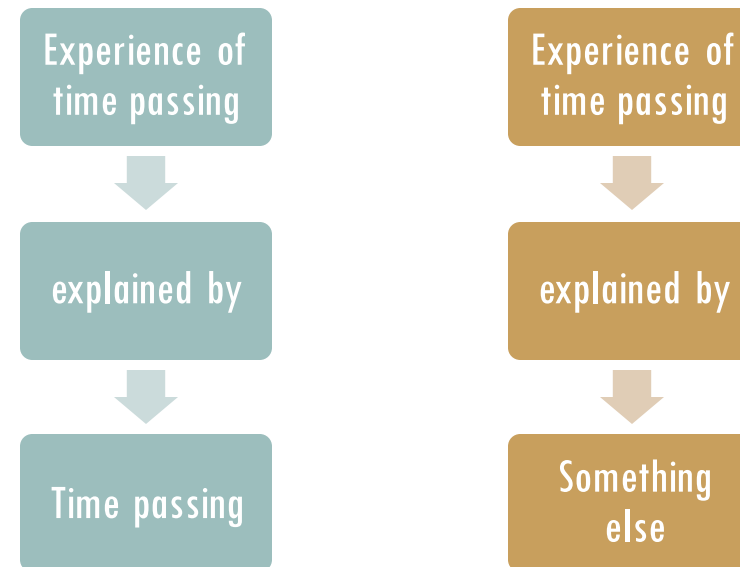
ARGUMENT FROM TEMPORAL PHENOMENOLOGY

Explained by: **phenomenal illusion**

- A phenomenal illusion is a genuine experience of something but that something does not correspond to reality
- We experience the passage of time
- But this experience is an illusion (not a part of reality)

Evaluation: P2 is false

- We experience the passing of time, but this passing of time is not a feature of reality

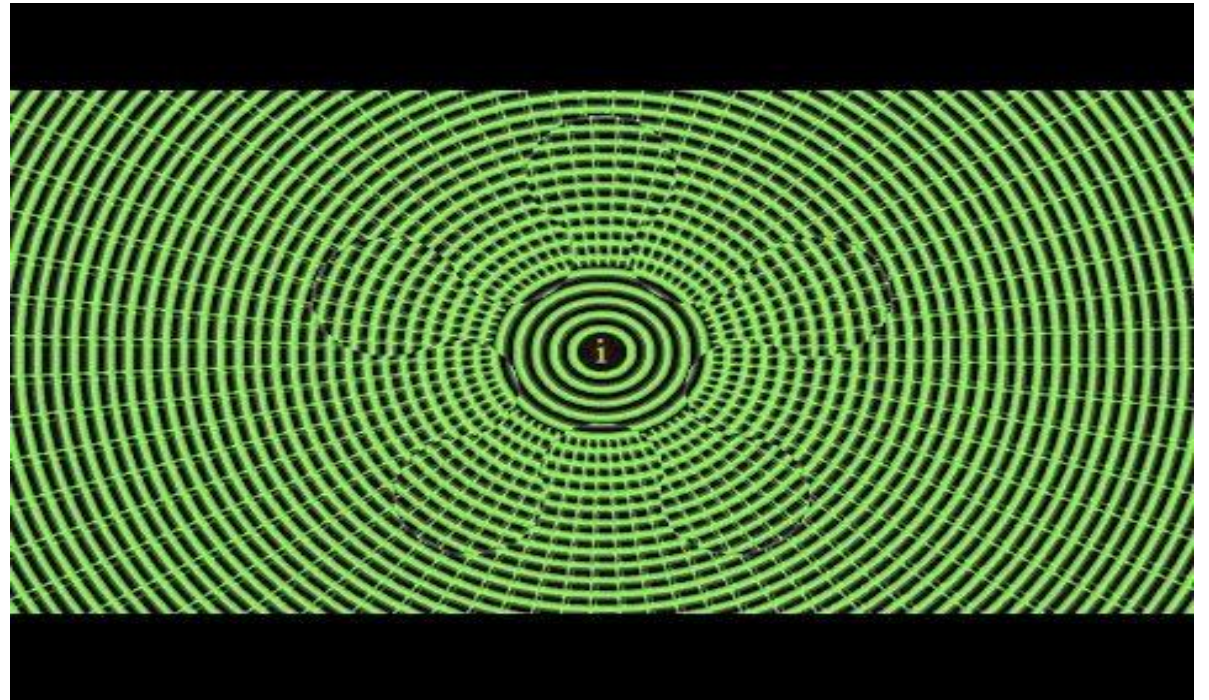


ARGUMENT FROM TEMPORAL PHENOMENOLOGY

Examples

- A **motion aftereffect** occurs when you see motion in a static image *after* viewing a moving visual stimulus
- Example 1 (waterfall illusion): if you stare at a waterfall for a while, then look at the rocks next to the waterfall, it will appear that the rocks are moving upward

CAUTION: Do not watch video if prone to seizures



ARGUMENT FROM TEMPORAL PHENOMENOLOGY

Just as we can have an **experience of motion in a static image**, we can have an **experience of temporal passage in a static universe**.

This idea is perhaps reinforced by other psychological evidence concerning the rate at which time passes:

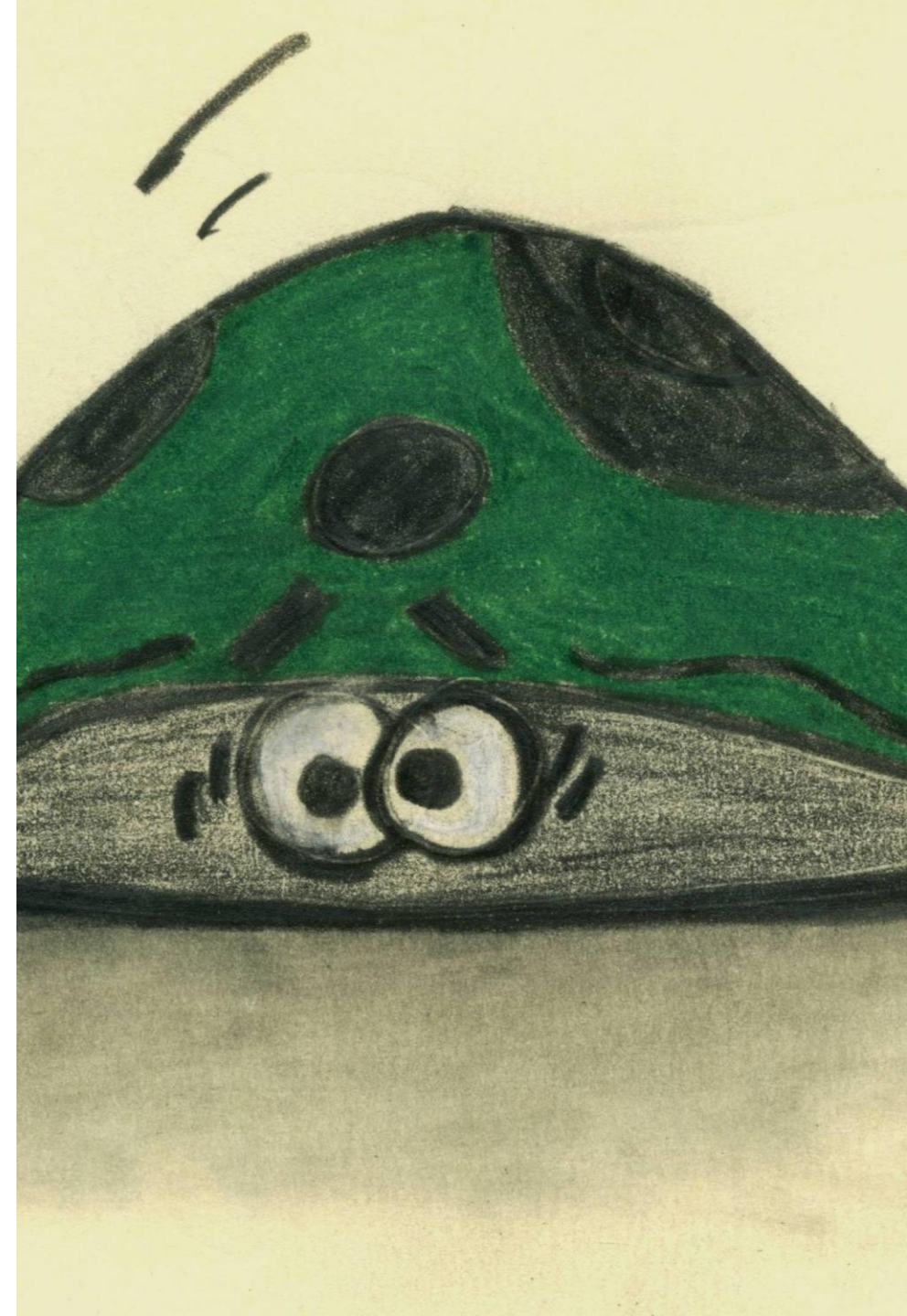
- **Fun:** Time passes when you are having fun (does it really speed up?)
- **Fear** slows down perception of time: arachnophobic testers were presented with spider-stimuli that frightened them (Droit-Volet).
- Time slows down when you are **bored** (does it really slow down?)

THE COMPOSITE ARGUMENT AGAINST ETERNALISM

Theory	Experience of the present	Fatalism	Open Future	Temporal passage
Moving spotlight	✓	✓	✓	
Eternalism	✓	✓	✓	✓
Presentism				
Growing Block	✓		?	

REVIEW QUESTIONS

1. What is the theory of time known as eternalism: articulate each of the three claims made by this theory
2. What are the arguments in support of eternalism?
3. What are the arguments against eternalism?
4. What is a motion aftereffect?
5. What does eternalism say about A-sentences? Do they commit us to the reality of A-properties (e.g. being present). What type of explanation does eternalism use to support that A-sentences can be explained by using B-facts?
6. At least on the surface, which theory is supported by our best science?
7. What is fatalism? How is it different from determinism?



SOURCES FOR ILLUSTRATIONS

1. Photograph of Las Vegas (public domain): https://commons.wikimedia.org/wiki/File:Fremont_Street_1952.JPG
2. Christoph Bernhard Francke: Portrait of Gottfried Wilhelm Leibniz: [https://commons.wikimedia.org/wiki/File:Christoph_Bernhard_Francke -
_Bildnis_des_Philosophen_Leibniz_\(ca._1695\).jpg](https://commons.wikimedia.org/wiki/File:Christoph_Bernhard_Francke_-_Bildnis_des_Philosophen_Leibniz_(ca._1695).jpg)
3. Einstein: [https://commons.wikimedia.org/wiki/File:Einstein_1921_by_F_Schmutzer
- restoration.jpg](https://commons.wikimedia.org/wiki/File:Einstein_1921_by_F_Schmutzer_-_restoration.jpg)