

L1: INTUITIONS ABOUT TIME

INTRODUCTION

Time plays an important role in various facets of human life and the world more broadly.

INTRODUCTION

We measure time with clocks, watches, phones, calendars, etc.



INTRODUCTION

Countless metaphors about time:

- "time is money"
- "time is a thief you cannot banish"
- "time is a river"
- "the arrow of time"



INTRODUCTION

We memorialize certain times, e.g. birthdays, deaths, anniversaries, etc.



INTRODUCTION

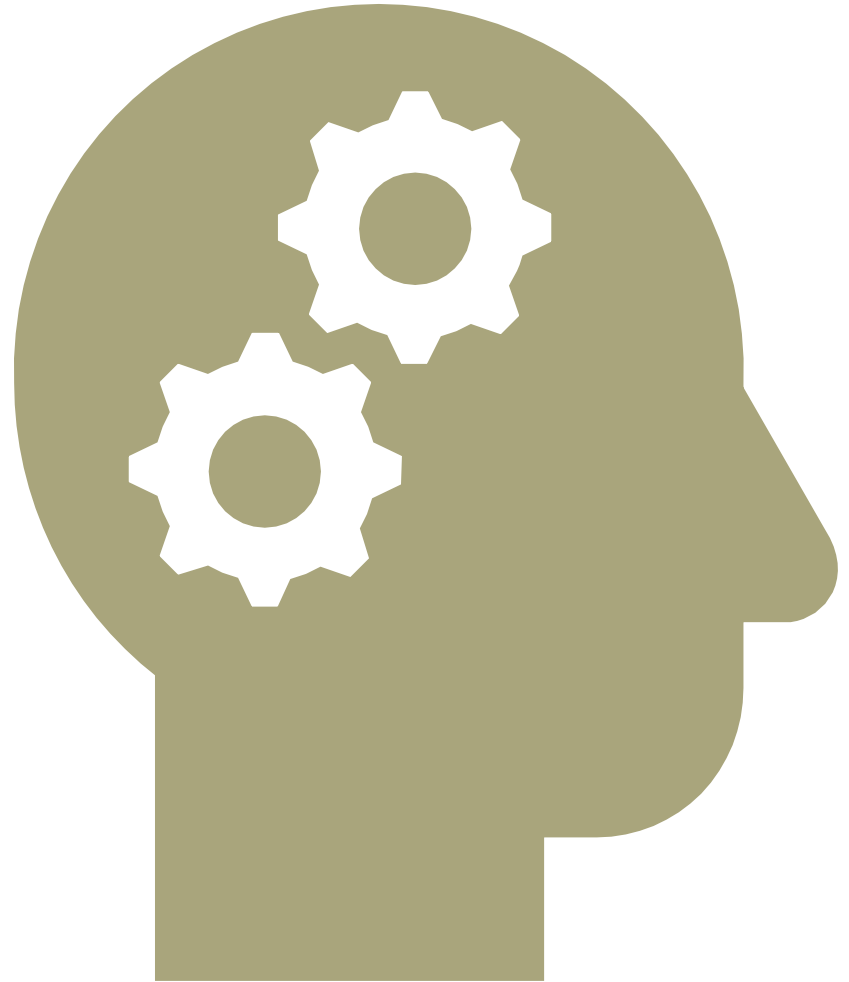
All physical events occur in time, especially those important to life, e.g. birth, growth, decay, death.



INTRODUCTION

- But what exactly is time?
- What does it mean for an object to exist in time?
- What role does time play as to whether an object exists?
- What role does it play for an object's identity in time?
- What is the past, present, and future? Are they real or illusory?

PHILOSOPHICAL METHOD



PHILOSOPHICAL METHOD

- We could ask an **expert** and accept their view.
- We could try to reason directly from **logical truths**
- We could try to reason from **metaphysical first principles**
- We could employ the **method of doubt**: doubt everything, see what's indubitable, and then reconstruct



PHILOSOPHICAL METHOD

- The method we will use is to **start** with our commonsense beliefs (intuitions) about time
- Then we will **critically analyze** these beliefs. Test them against arguments, experience, logical criteria, the results of science.
- If our beliefs **do not conflict** with our critical analysis: We keep our belief!
- If beliefs **conflict** with our critical analysis: We need to revise our belief or substitute it with a new belief.

NOTES ON INTUITIONS

A couple notes about intuitions:

1. **Starting point:** We are only using intuitions as a **starting point**. We are not assuming they are right or wrong.
2. **Disagreement:** There is **not always agreement** about these intuitions. One person's intuitions may differ from another person's intuitions.
3. **Convergence:** The hope is that no matter what intuitions you start with, we will all end up at the same place through critical analysis.

PHILOSOPHICAL METHOD



Intuitions

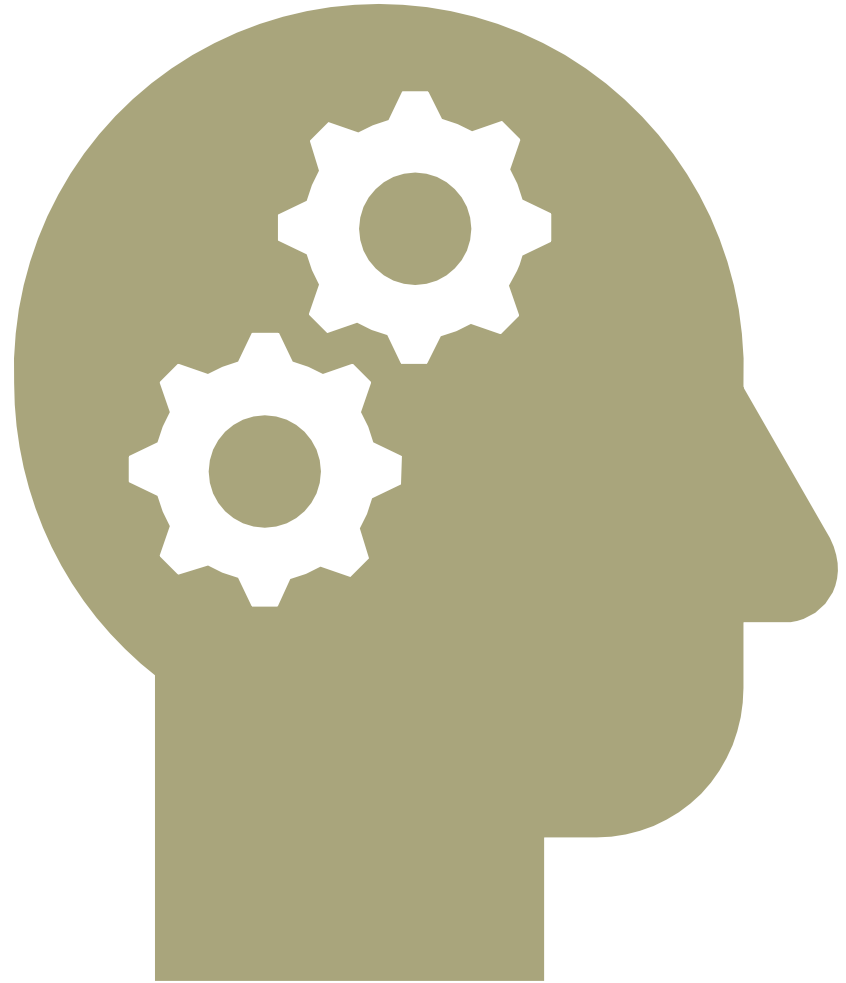


Critical Analysis



Keep, revise, or replace
belief

INTUITION 1: PAST, PRESENT, FUTURE



INTUITION #1: THERE IS A PAST, PRESENT, FUTURE

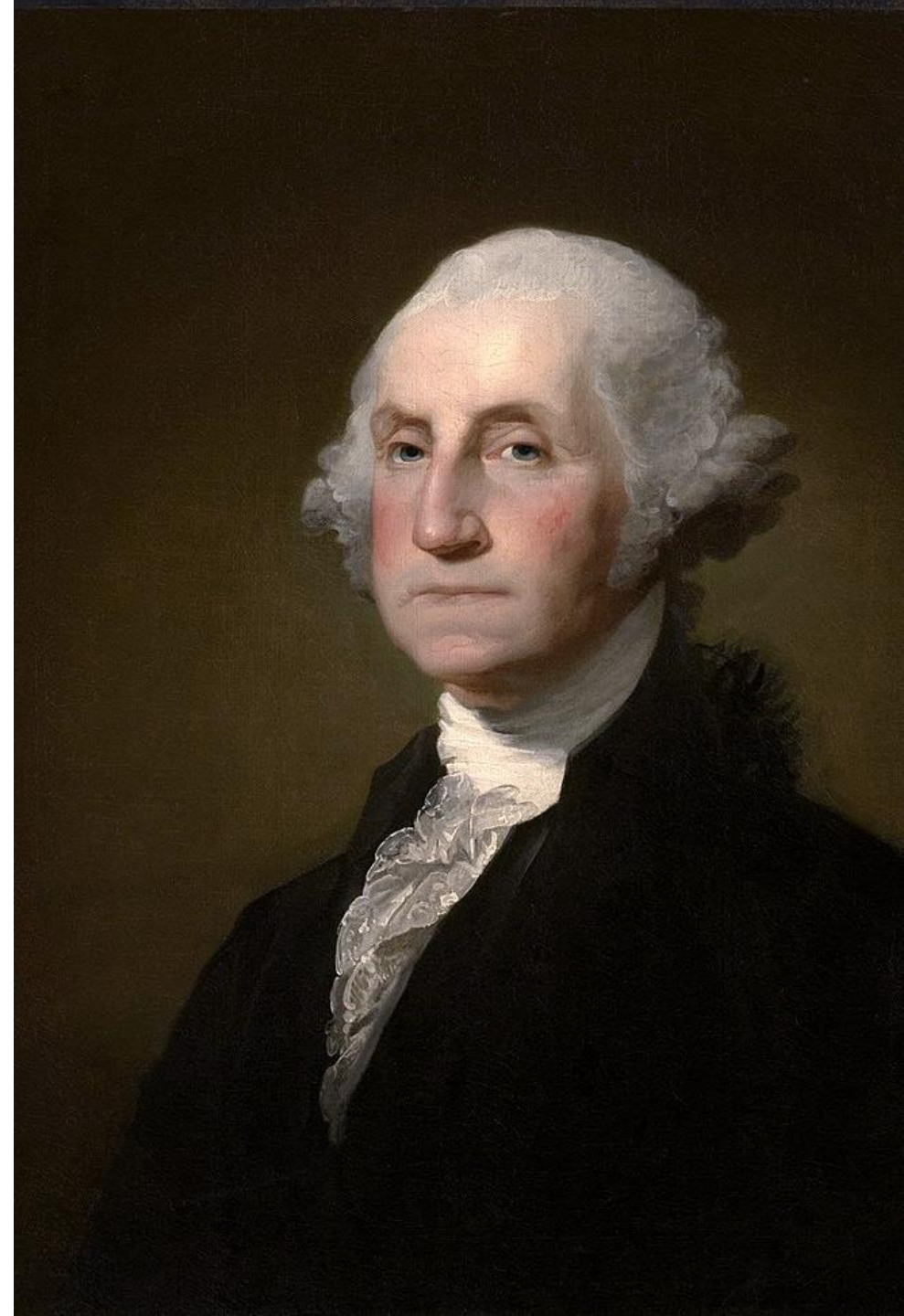
Our first intuition is that **there is a past, present, and future.**

- This is an objectively real distinction.
- Events or states of affairs have the property of *being past, being present, and being future.*
- For the most part, we know the temporal property of an event.

INTUITION #1: THERE IS A PAST, PRESENT, FUTURE

We speak as though these properties are real.

- Death of George Washington **is past**.
- To say "George Washington died in the past" would be to say something true.
- The event *Death of George Washington* has the property of *being in the past*.

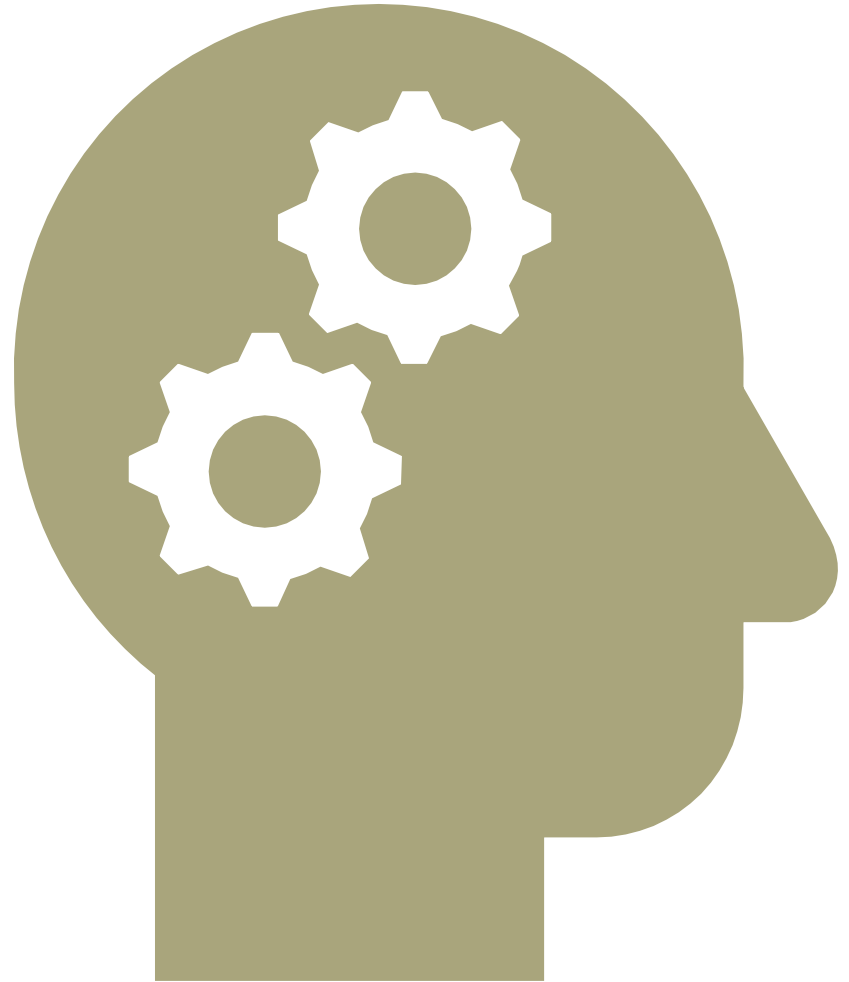


INTUITION #1: THERE IS A PAST, PRESENT, FUTURE

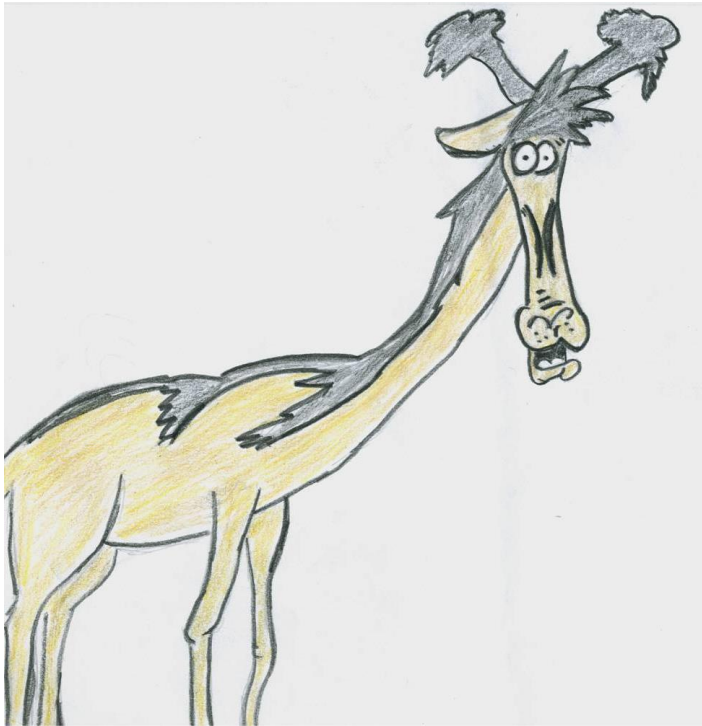
The past, present, and future are also mutually exclusive and jointly exhaustive of events in spacetime.

- **Mutually exclusive:** no event is both present and past, or past and future, or present and future
- **Jointly exhaustive:** every time can be characterized as either past, present, or future. There is no other temporal property, e.g. superfuture.

**INTUITION 2:
OUR BELIEF IN PAST,
PRESENT, FUTURE IS
RATIONAL**



INTUITION #2: INTUITION #1 IS RATIONAL



If the first intuition is that **there is a real past, present, and future**, then the second intuition is that **there is evidence to support this first intuition**.

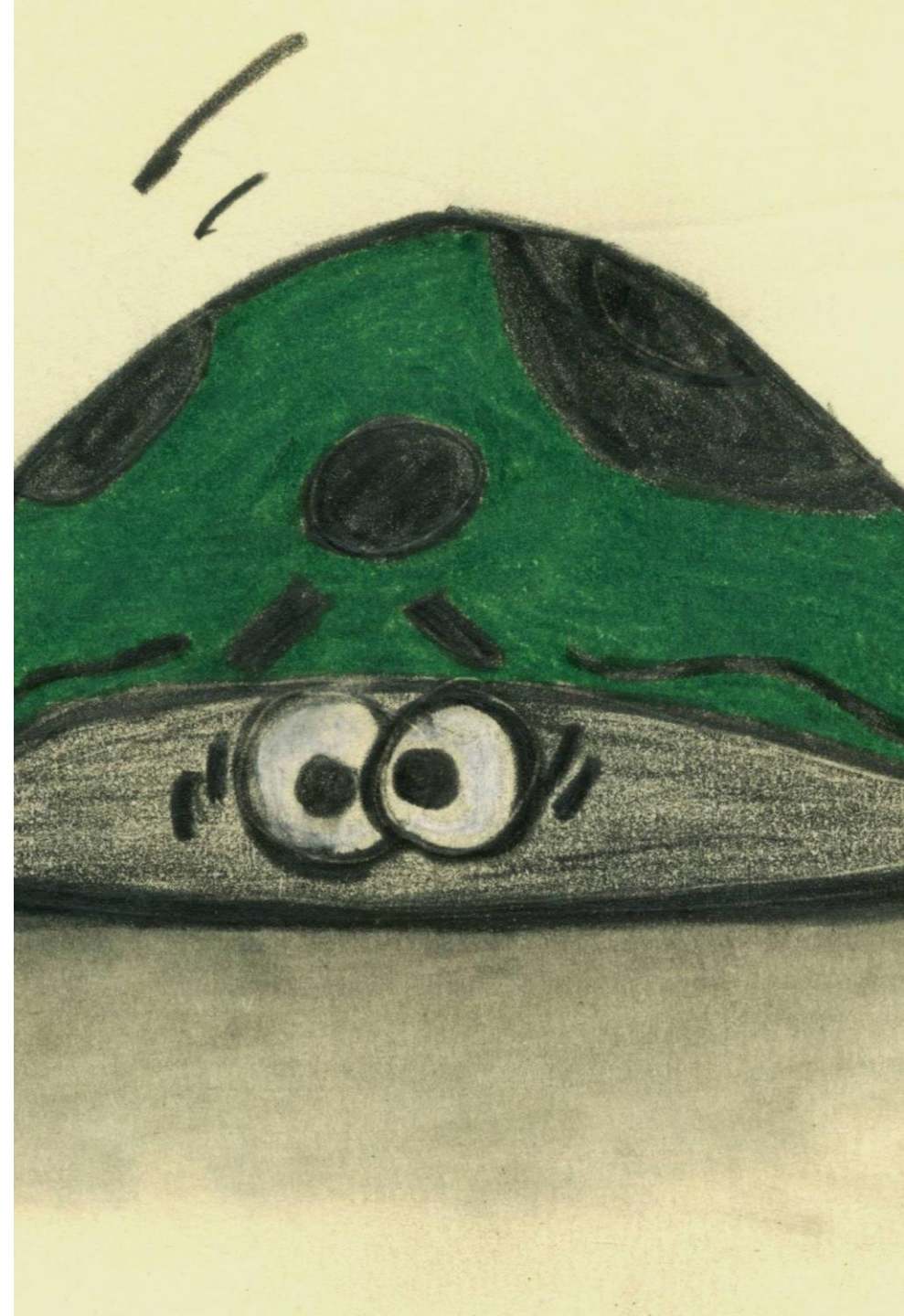
- We have intuitions that on reflection are **irrational**
- In the case of our first intuition, we have the intuition (a second-order intuition) that it is **rational** (supported by argument, experience, evidence).

QUESTION

What are some intuitions (common-sense or widespread beliefs) people have but we know them to be *irrational*?

Example 1: I cannot make a mistake or I'll be a failure

Example 2: People that lack superiority in field X overrate their expertise in X because they lack the knowledge to know how much they know (Dunning-Kruger effect)



DUNNING-KRUGER EFFECT



INTUITION #2: THE EVIDENCE

What evidence is there to support intuition #1? We will use a basic argument to support intuition #2. This argument is an **inference to the best explanation**.

An **inference to the best explanation** has the following form:

- P1: X is the case.
- P2: X is best explained if Y is the case.
- C: Therefore, Y is the case (or it is rational to believe Y).

INTUITION #2: THE EVIDENCE

Example: Inference to the best explanation (IBE)

- P1: There were three cookies, but now only two.
- P2: The missing cookie is best explained by the mogwai eating that cookie when I left.
- C: Therefore, the mogwai ate the missing cookie when I left

The quality of an IBE argument depends a lot on whether **P2** is true or not.



INTUITION #2: THE EVIDENCE

Inference to the best explanation:

- P1: X is the case.
- P2: X is best explained by the objective reality of the past, present, and future.
- C: Therefore, it is rational to believe that the past, present, and future are objectively real.

What is X?

1. X = Our attitudes toward the past, present and future differ
2. X = The scope of our control over past, present, and future differs
3. X = Our knowledge of the past, present, and future differs

THE EVIDENCE



EVIDENCE #1: ATTITUDES

Consider that our **attitudes** toward the past, present, and future differ.

- We **prepare** for the future (but not the past)
- We **worry** about the future (but not the past)
- We **hope** for the future (but not the past or present)
- We are **nostalgic** about events that are in the past, viz., that are no more (but not the future or the present)
- We try to **relive** the past, but not the present or future
- We regard the past as **less important** than the future or the present

EVIDENCE #1: ATTITUDES (CONTINUED)

Suppose there is the event of you having a cavity filled with no anesthesia (call this event E)

- If E is in the future, then we may **dread** (worry about, be nervous concerning) E.
- If E is in the present, then we may **despise** (squirm, agonize, howl over) E.
- If E is in the past, then we may be **thankful** E is over.



EVIDENCE #1: ARGUMENT FROM ATTITUDES

Let's consider our inference from the best explanation argument.

P1: Our attitudes differ with respect to an event's position in time (call this X).

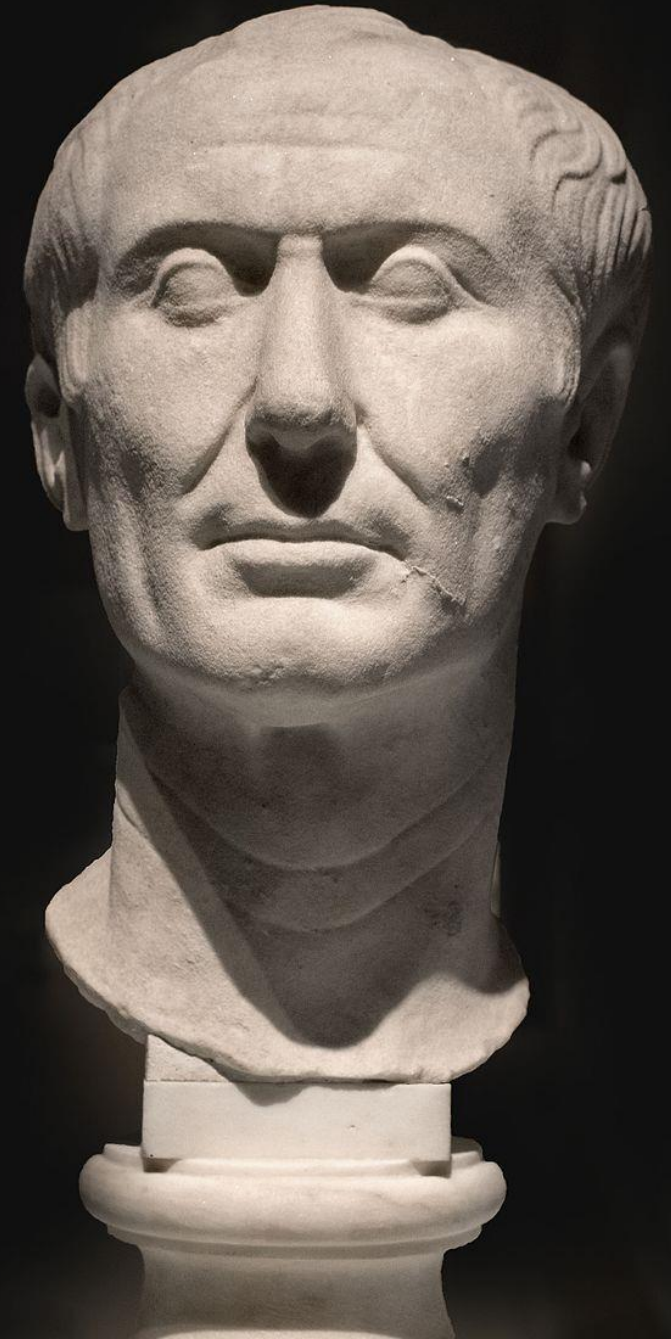
P2: X is best explained by the objective reality of the past, present, and future.

C: Therefore, the past, present, and future are objectively real.

EVIDENCE #2: CONTROL

Consider that the **scope of our control** is limited by an object's position in time.

- We cannot change *the past*
- We cannot change the fact that Caesar crossed the Rubicon in 49 BC



EVIDENCE #2: CONTROL

- While we cannot change the past, we may be able to change the future (assuming all our behaviors are not determined).
- Thus the scope of our control with respect to past events and future events differs (if only modally)
- **We cannot change any past event while we may be able to change some future events**



EVIDENCE #2: ARGUMENT FROM CONTROL

Let's consider our inference from the best explanation argument.

P1: The scope of our control differs with respect to an event's position in time (call this X).

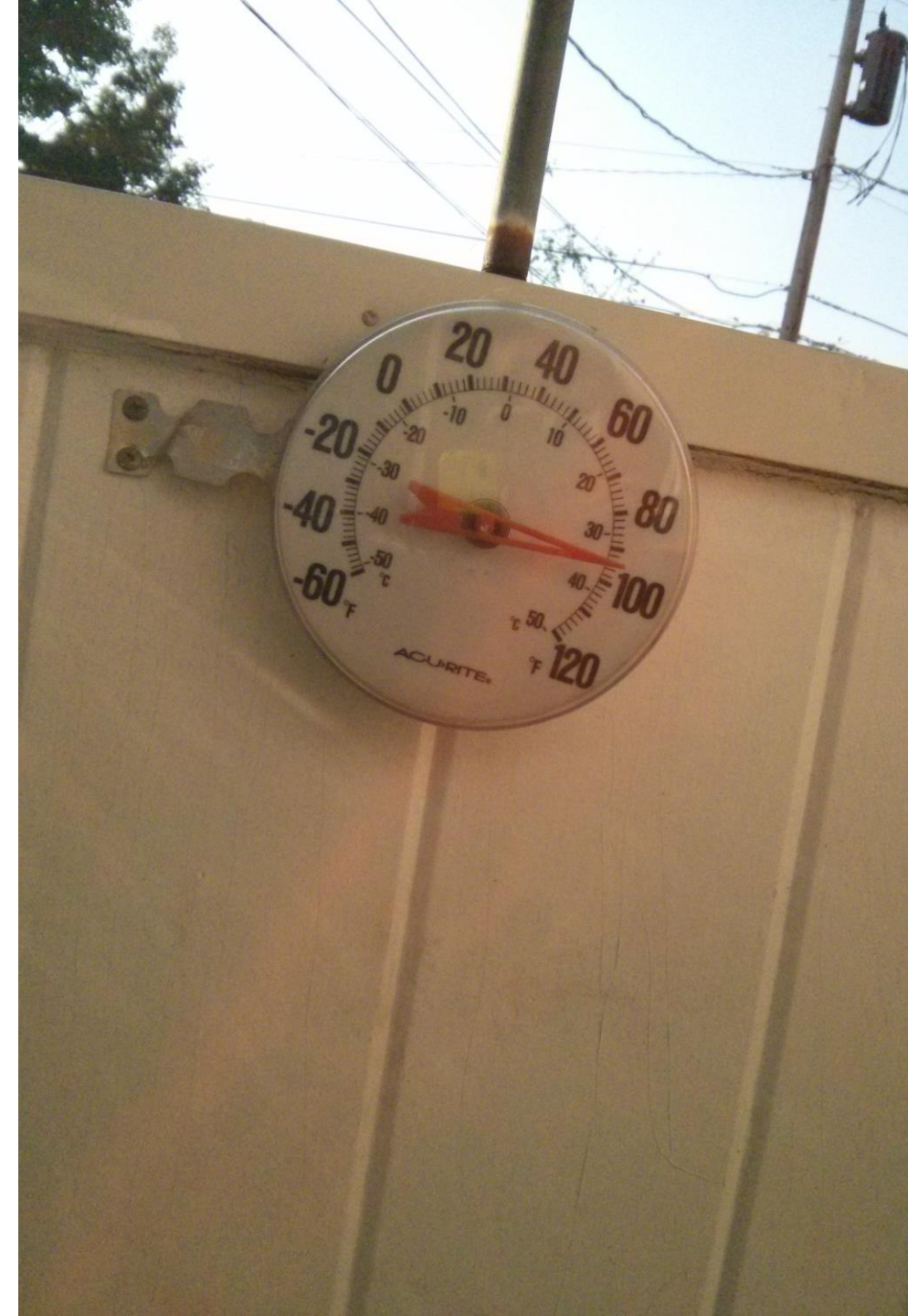
P2: X is best explained by the objective reality of the past, present, and future.

C: Therefore, the past, present, and future are objectively real.

EVIDENCE #3: KNOWLEDGE

Consider that **how we know** an events depends upon its position in time.

- We know about **present events** through direct experience, reasoning based upon direct experience, and registering devices.



EVIDENCE #3: KNOWLEDGE

We know **past events** through memory and records

- I remember doing X, therefore X is in the past
- This photograph is old and grainy and dated from 1941 and along with the mechanics of cameras, these people must have existed in the past.
- You don't remember the future or the present.



EVIDENCE #3: KNOWLEDGE

We ``know" **future events** by reasoning from available information and various laws (habits).

- Some people say we can never "know" the future, but this use of "know" is rather strong (certainty). We *know* the future in cases where we can *predict* the future with a high degree of accuracy.
- I know I will be sick (future event) if I eat this week-old pancake.



EVIDENCE #3: ARGUMENT FROM KNOWLEDGE

Let's consider our inference from the best explanation argument.

P1: How we know certain events differs with respect to an event's position in time (call this X).

P2: X is best explained by the objective reality of the past, present, and future.

C: Therefore, the past, present, and future are objectively real.

CONCLUSION: PAST, PRESENT, AND FUTURE

Intuition 1: There is a real past, present, and future.

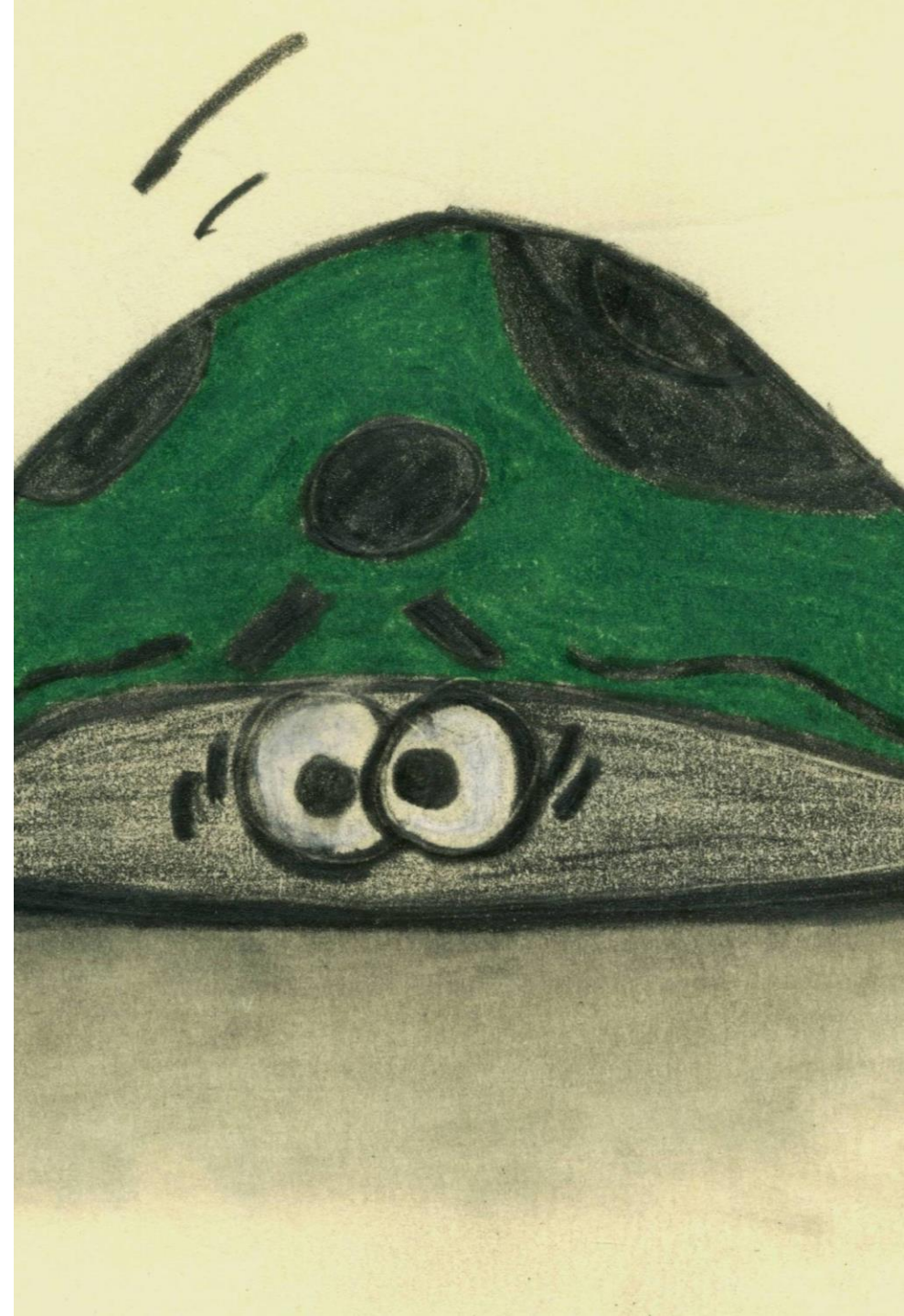
Intuition 2: Intuition 1 is rational (supported by evidence)

1. Attitudes
2. Scope of our control
3. Knowledge

Given intuition 1 and intuition 2, we might assert that not only do we **believe** there to be a past, present, and future, but **there is** a past, present, and future.

QUESTION

1. Do you think that (1) there is an intuition that the past, present, and future are real and (2) there is an intuition that this intuition is rational?
2. What other evidence might you cite in support of (2)?



INTUITION 3: THERE IS SOMETHING SPECIAL ABOUT THE PRESENT



INTUITION #3: PRESENT IS SPECIAL

- The third intuition is that there is something special about the present.
- Events in the present are somehow **more real** than events in the past or future.
- The intuition then is that the present moment (present events) is **metaphysically special**

INTUITION #3: PRESENT IS SPECIAL

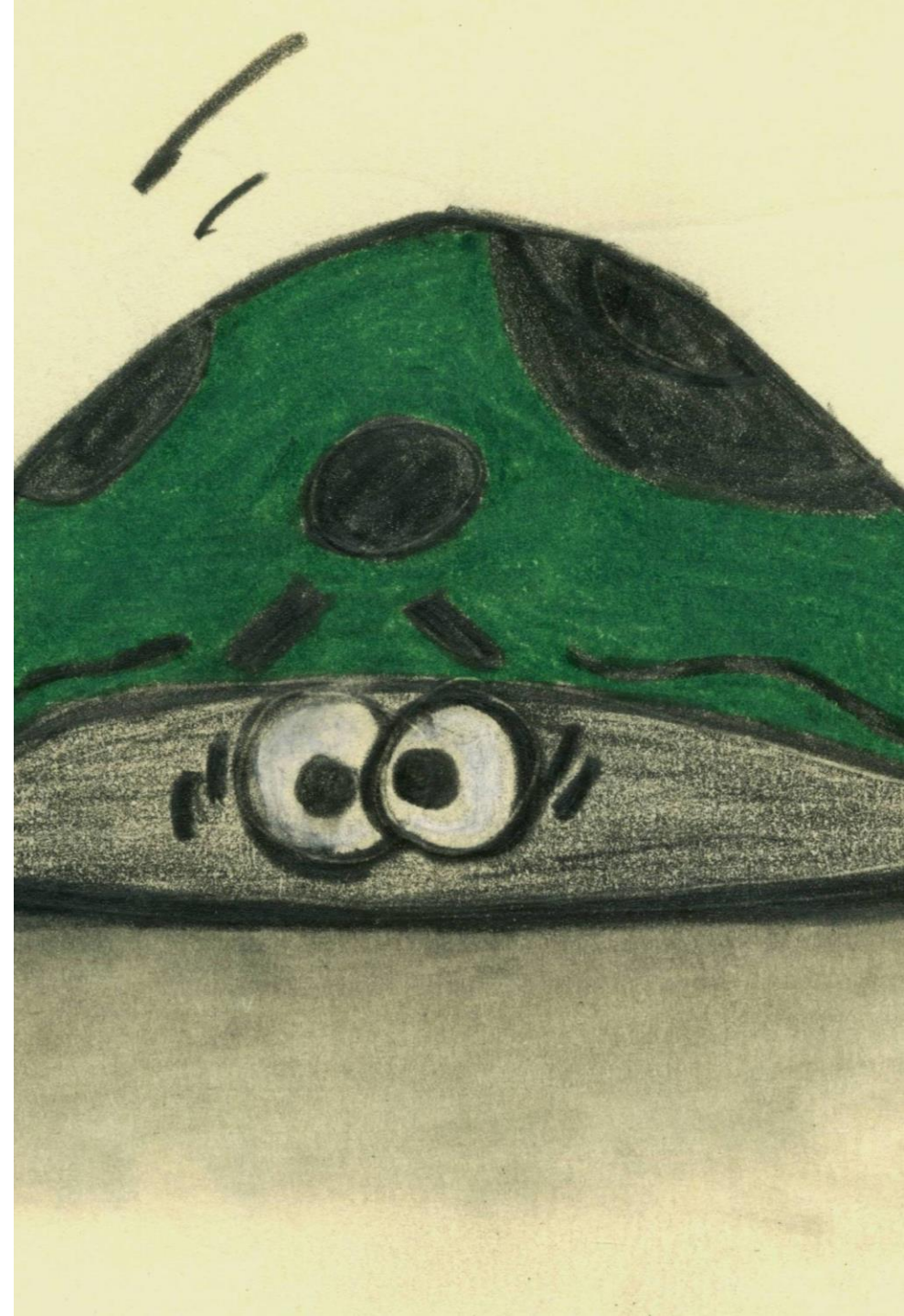
How exactly the present is metaphysically special is unclear. One thought people have is that present events **exist simpliciter** (it simply exists! It exists with no qualification) .

- Events in the past **did exist** (were real) — we qualify their existence
- Events in the future **will exist** (will be real) — we qualify their existence
- BUT, events in the present **exist** — no qualification, they exist simpliciter (simply)



QUESTION

1. Do you think that there is anything metaphysical special about the present moment?
2. That is, is the present moment's reality (or existence) somehow *more real* than events in the past or future. How so?

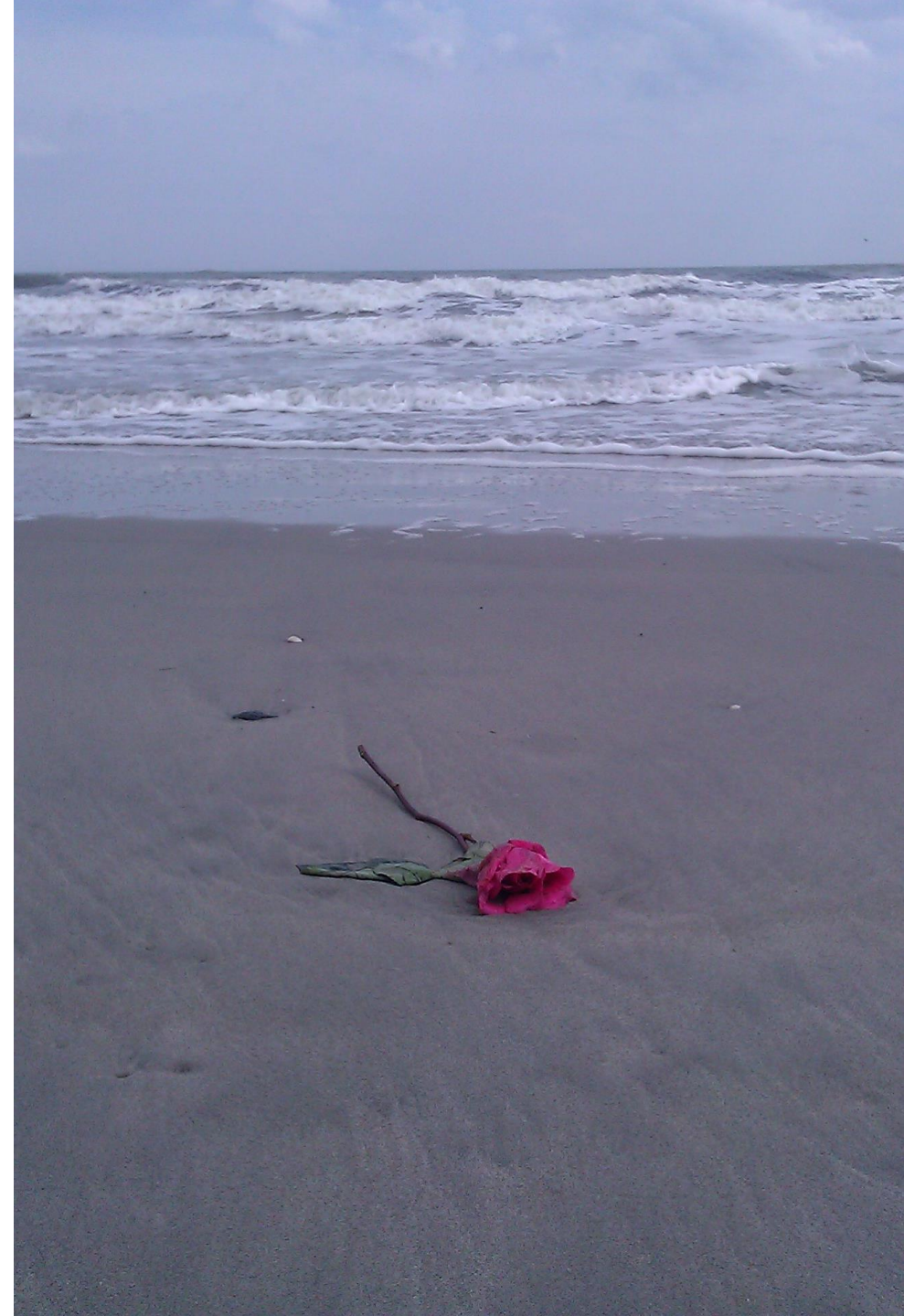


INTUITION 4: THE PRESENT MOVES



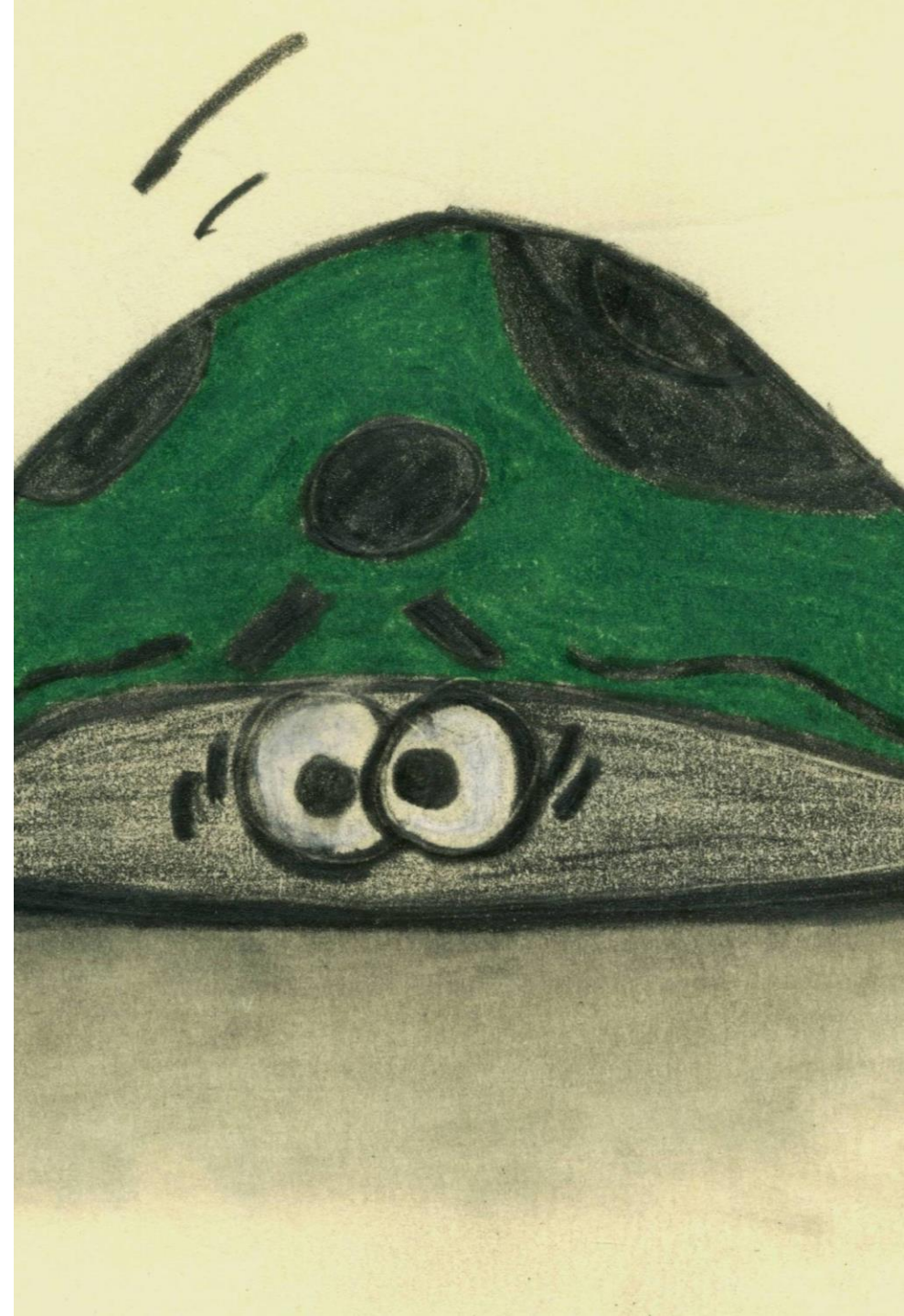
INTUITION 4: THE PRESENT MOVES

- Another intuition is that the event that is present changes.
- In other words, the present movement is constantly moving.
- Events that were present slip away into the past.
- It does not ebb and flow like the waves but has a single direction like an arrow



QUESTION

1. Do you think that which event that is present moves?
2. That is, does that event that **is present** change?



SOURCES FOR IMAGES

1. Picture of George Washington: https://commons.wikimedia.org/wiki/File:Gilbert_Stuart_Williamstown_Portrait_of_George_Washington.jpg
2. Bust of Caesar: [https://en.wikipedia.org/wiki/Julius_Caesar#/media/File:Retrato_de_Julio_C%C3%A9sar_\(26724093101\).jpg](https://en.wikipedia.org/wiki/Julius_Caesar#/media/File:Retrato_de_Julio_C%C3%A9sar_(26724093101).jpg)
3. Photo of Outerspace: https://commons.wikimedia.org/wiki/File:LH_95.jpg