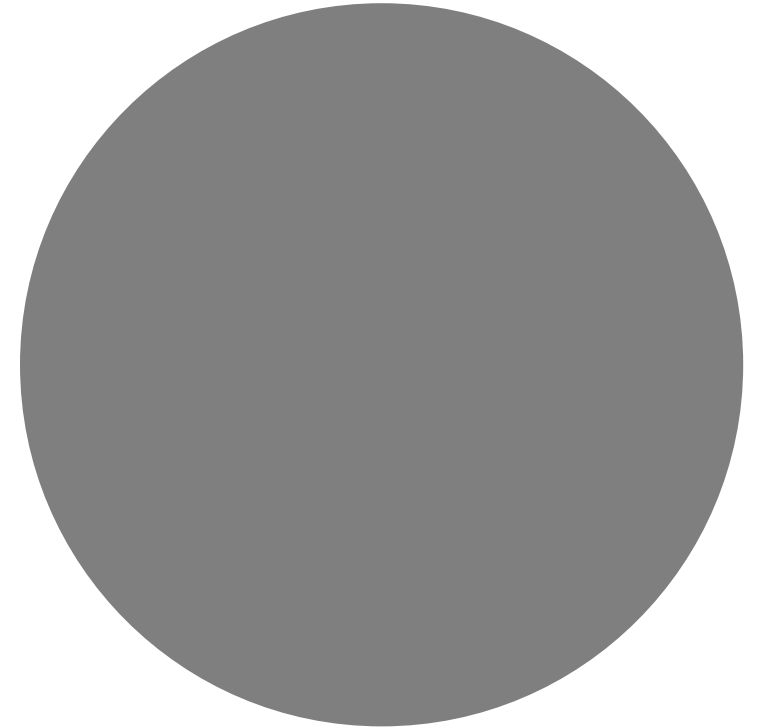


Physical Theories



In earlier lectures, we examined the psychological approach to personal identity

Psychological approach to persistence: A at t_1 is the same person as B at t_2 if and only if some aspect of A and B's psychological nature accounts for them being the same person.

We now turn to a physicalist approach to persistence:

Physicalist approach to persistence: A at t_1 is the same person as B at t_2 if and only if some aspect of A and B's physical nature accounts for them being the same person.



Thought Experiments as Evidence

Thought experiments as evidence

Some of the evidential support for psychological theories comes from **thought experiments**

- Consciousness swapping
- Teletransportation

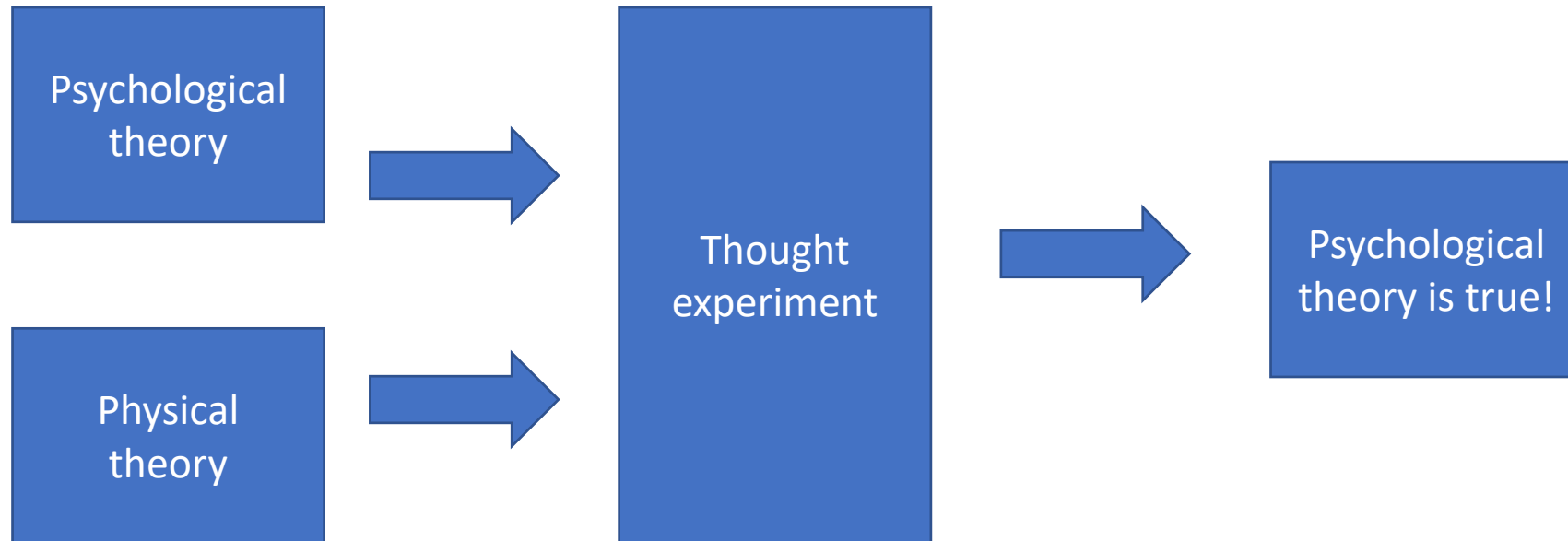
Thought experiments as evidence

Another thought experiment supporting psychological theory: **Torture**

1. John and Tek go on a game show.
2. The winner receive 1B dollars, the loser is tortured.
3. John and Tek have their psychologies downloaded and then permanently uploaded into the other's brain.
4. Thus, Tek's psychology is in John's body, while John's psychology is in Tek's body.
5. Now suppose that **Tek's body** is told that he is the winner. Intuitively, we would think that:
 1. John (in Tek's body) will feel happy since he will remember hoping to receive the 1B dollars and avoid torture.
 2. Tek (in John's body) will feel horrified since he will remember hoping to receive the 1B dollars and now will have to undergo torture.

Thought experiments as evidence

The thought experiment triggers the intuition that psychological theories are preferable to physical theories



Thought experiments as evidence

But **other thought experiments** might trigger the intuition that physicalist theories are true!

Thought experiments as evidence

Evil Doctor: Suppose Dr. Kat kidnaps Tek. She tells Tek that Tek will undergo the following procedure:

- Step 1: She will eliminate all of his psychology (memory, habits, etc.)
- Step 2: Give Tek's body a new psychology (memory, habits, etc.), and then
- Step 3: Torture Tek's body for seven years.

If the psychological theory is true, then **we ought only to be worried by the first stage** and not the second or third stage (the reprogramming and torture should not concern us).

However, it seems intuitive to be worried about (2) and (3).

Thought experiments as evidence

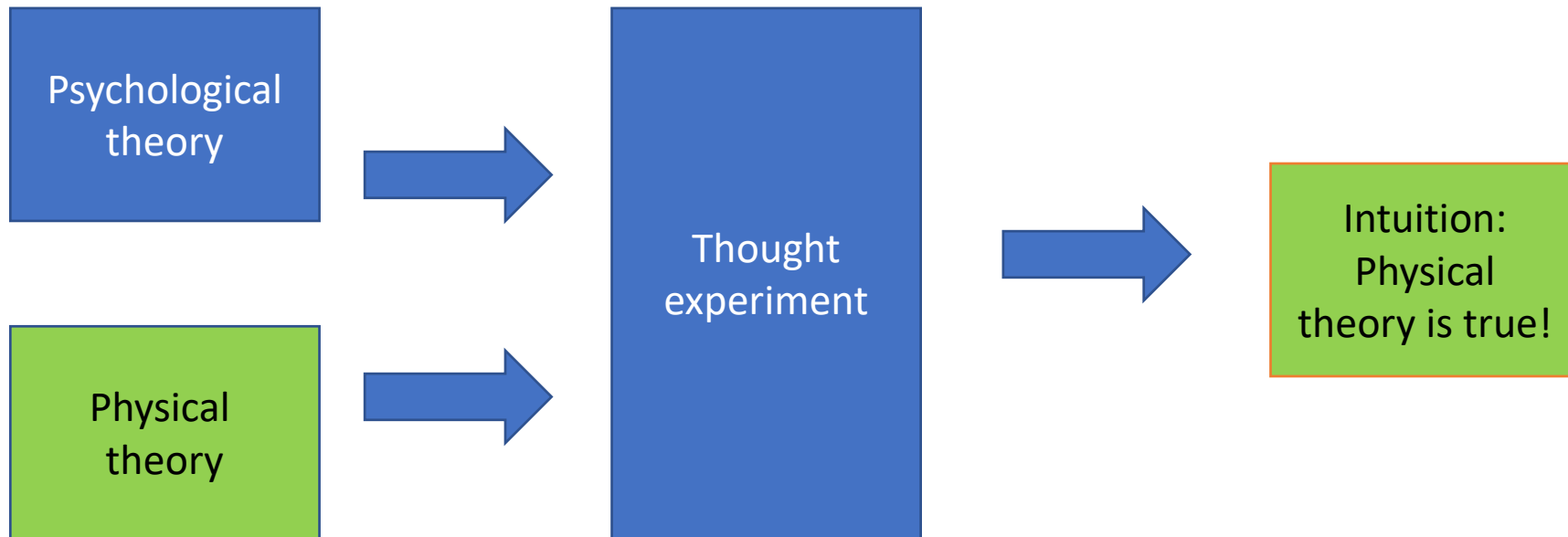
What would explain this additional fear?

Explanation

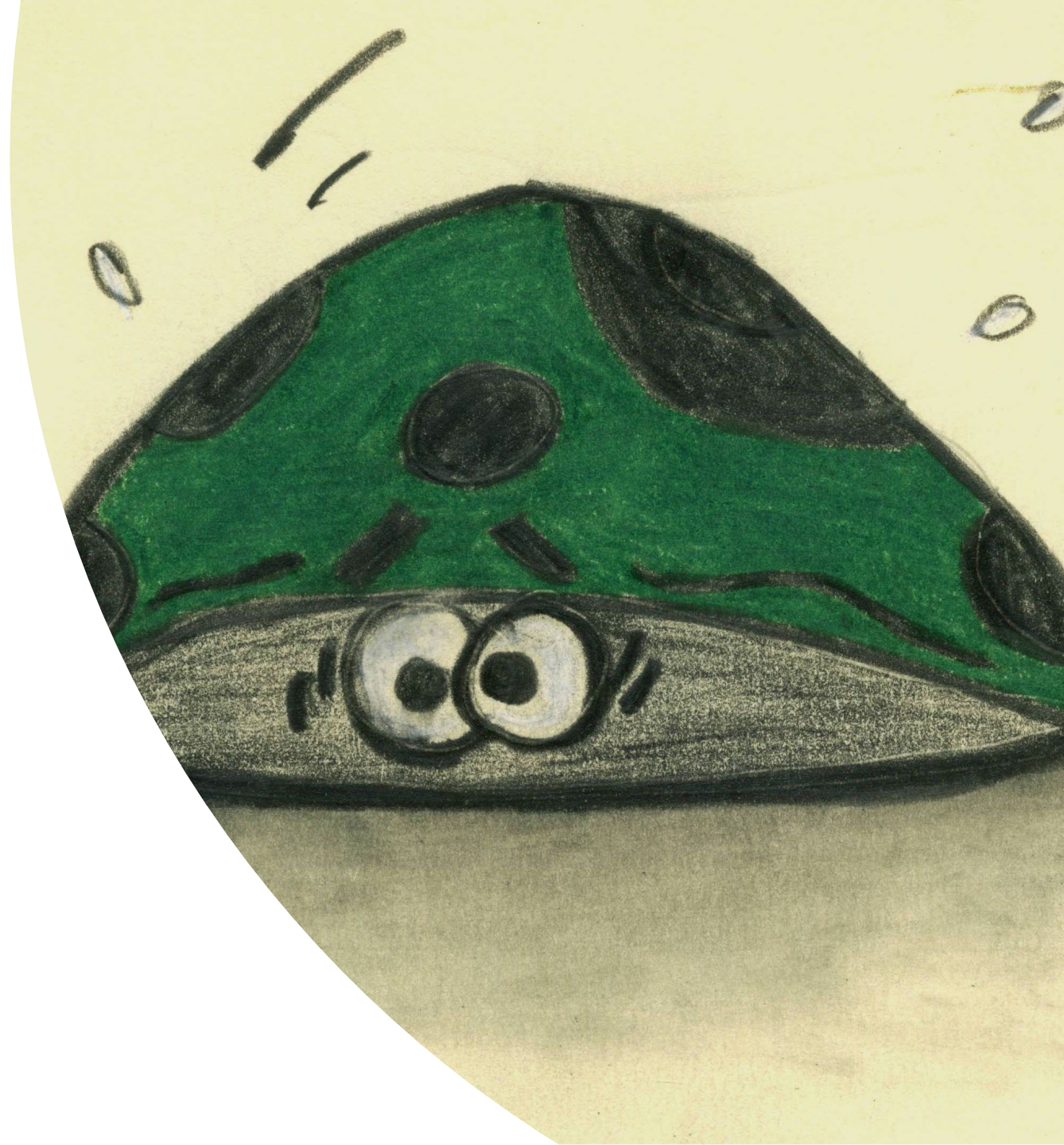
- If **we will persist with our bodies**, then it would be rational to worry about damage to "our" bodies.
- Damage to our bodies is damage to us as persons

Thought experiments as evidence

- The new thought experiment **does not** prove the physicalist theory.
- Thought experiments can be raised in support of both theories (they only trigger intuitions that theories are true).



-
- In a small group (1-5) put your names on the top of a piece of paper
 - Would you be concerned about the second and third stages involving the mad scientist?
 - If so, what would explain this worry? If not, what would explain why other individuals would be worried about these stages?



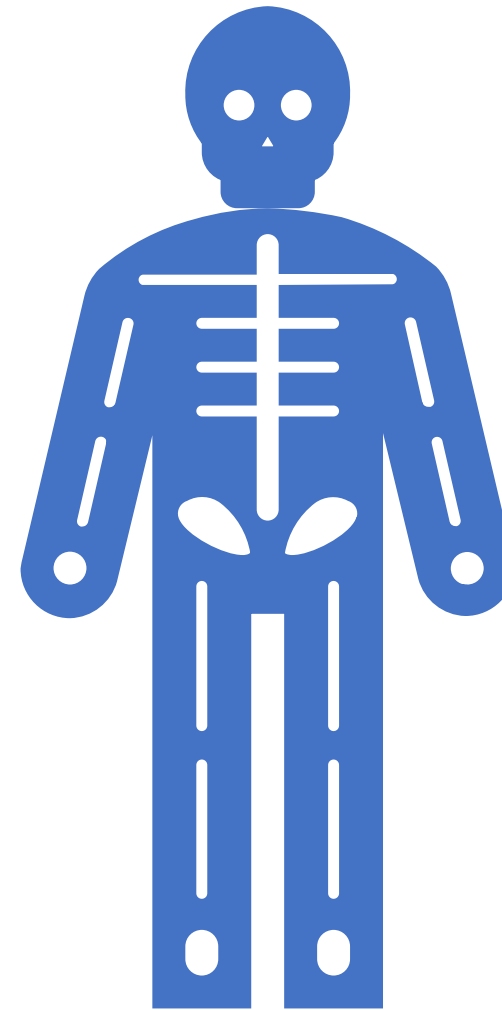


Physicalist theories of personal identity

We now turn to
physicalist theories
of personal identity:

- Same body theory
- Animalist theory
- Same brain theory
- Embodied mind theory

Same body
theory



Same body theory

Same body theory – A is a person at t_1 and B is a person at t_2 , then A is the same person as B iff A and B have the same body.

- I'm the same person as I was yesterday since I have the same body I had yesterday.
- I know that you today is the same person as you tomorrow because you have the same body
- ALSO: I know that you today is **not the same person** as me yesterday since we have different bodies.

Same body theory

The body theory is supported by how we talk about ourselves:

1. If you punch me in the arm, *you have punched me*. If you punch me again, you have *punched the same person*.
2. If you hugged me, it isn't the case you haven't hugged me because you haven't hugged my psychology. No you gave *me* (and I'm my body) a hug

Same body theory

It is also supported by other facts:

1. **Facts about death:** If my body dies, I die (me as a person).
2. Allows us to make sense of ourselves before we were persons:
Some people talk about themselves as though they have had continued existence from the *time they were a fetus to now*. The body theory (unlike the psychological theory) can accommodate this intuition.

Same body theory

Objection – Theory is unclear since it fails to state how much of the body is required for preservation. A whole body theory is not necessary for personhood:

1. People lose limbs, arms, fingers
2. people have transplants
3. people have implants
4. the body decays, regenerates (e.g. cells die and are replaced)

Same body theory

Objection -- Bodily theory cannot address teletransportation and other cases.

- **Sci-Fi intuitions:** There are intuitions that we could survive in new bodies. *But the body theory suggests that we would die*
- **Tele-transportation intuitions:** The bodily theory doesn't seem to give a convincing answer to teletransportation, swapping psychology, etc. Experiments. The body theory suggests that we would die
- **Religious intuitions:** There are some intuitions that we could survive without a body (soul)

Same body theory

Objection -- Brain transplants.

- It is claimed that brain (full head) transplants have been performed with very limited success on monkeys and rats
- No human head has ever been fully transplanted



Same body theory

Objection -- Brain transplants.

- Suppose brain transplants are possible. A doctor swaps your brain with the brain of your friend: puts your friend's brain in your body and your brain in your friend's body.
- If this were to occur, you would likely say that you would continue to exist but your existence would take place in your friend's body.
- If A and B were to swap bodies at t_2 via brain transplant, A would persist as A in B's body while B would persist in A's body.

Same body theory

The body theory might be correct in outline but it needs to explain:

1. Specify **what parts of the body** are necessary and sufficient for preservation of personal identity (presumably this is the brain)
2. how to undermine the intuitions we have about thought experiments: teletransportation cases, psychology swapping, etc.

Animalism



Animalist theory

Animalism – An organism A at time t1 is identical to an organism B at t2 if and only if there is *biological continuity* between A and B (viz., they are the same animal).

Animalism (or the biological theory) takes the individual **animal** that you are to be an essential feature of your identity.

Animalist theory

Contrast to psychological theory

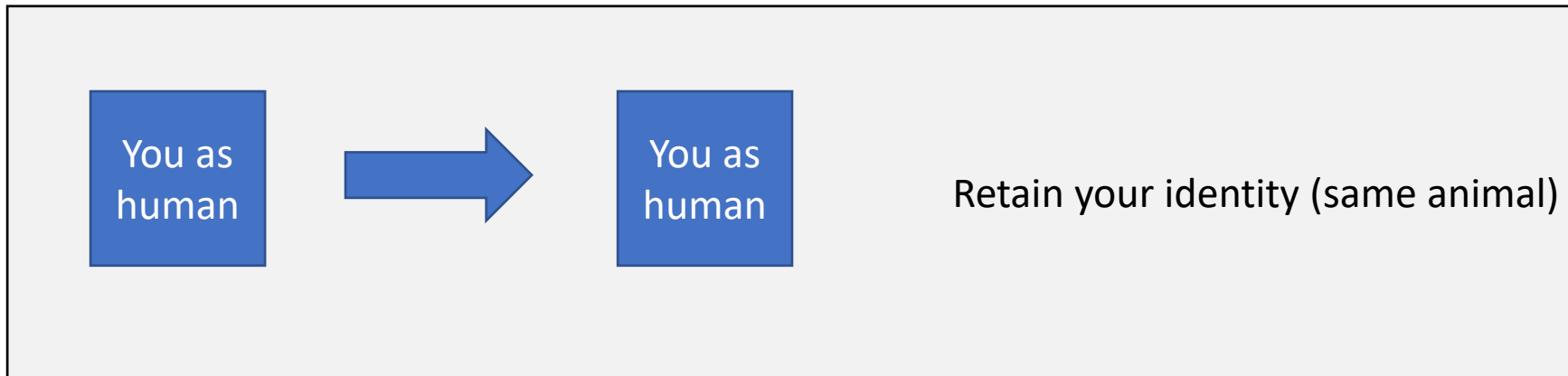
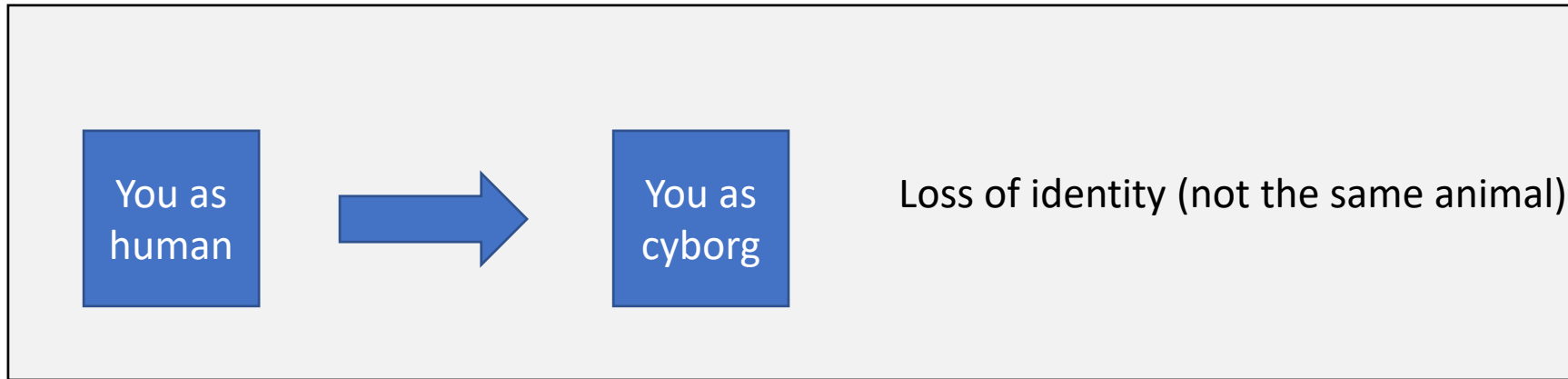
- psychological theory says your *bodily material and you being a specific human animal* is not essential to who you are. *You could be you but in a non-human body.*
- the animalistic theory takes the individual animal you are to be an integral (essential) ingredient of your identity. *If you became a different organism, you would lose your identity*

Animalist theory

Contrast to body theory

- Body theory says that as long as you have the same body (or body-continuity) then you are the same person. You could, through small (genetic alterations or accelerated evolution) become a different organism / animal.
- the animalistic theory takes the individual animal you are to be an integral (essential) ingredient of your identity. *If you became a different organism, you would lose your identity*

Animalist theory



Animalist theory

The animalistic theory answers the question of **persons as persisting** (what makes two individuals the same person over time) by giving a more general account of the persistence of biological organisms (if x and y are beings at t_1 and t_2 respectively, what makes $x=y$?).

Your persistence as a person is answered by giving an account of your persistence as an animal / organism.

Animalist theory

One reason to accept animalism is that it solves the fetus problem.

The fetus problem

- Liz has a child Renna.
- Renna asks if she was ever in Liz's belly.
- Liz shows her a sonogram, points to a fetus (sometime prior to 24 weeks), and tells Renna that *the fetus is Renna*.
- IF PC is true and Renna is not psychologically connected to the fetus then Renna is not the fetus (Liz has lied)
- Intuitively, we think Liz is stating the truth, Renna once was the fetus.

Animalist theory

P1: Renna at t2 is a person.

P2: Renna was once a fetus.

P3: Renna as a person is the same being as Renna as a fetus.

P4: Per P1-P3, if the psychological theory is correct, then there must be some relation of psychological connectedness between Renna and some fetus that existed

P5: No such relation holds.

C: Therefore, the psychological theory is false.

Animalist theory

The reason we would accept animalism then over the PC theory is that animalism can explain why Renna-fetus is the same as Renna-child.

Because they are the same animal! - Biological continuity

Animalist theory

Objection - cannot explain dicephalus.

- If a single human animal has two heads, then the biological theory says there is a **single person/object** since there is one biological organism (one animal).
- But this seems to get things wrong since there are two persons.

Animalist theory

Objection - against the intuitions about upload

- If an x is y iff they are the same biological organism (animal), then you cannot upload yourself to a computer since you would not be the same animal.
- This goes against the intuitions about the case. Theory needs to explain why the intuitions are wrong.

Animalist theory

Objection - against the intuitions about brain transplants

- If x is y iff they are the same biological organism (animal), then brain transplants would imply the death of the person.
- What does it mean to say I am the same organism / animal over time?
- What parts of my organic life are essential? Only my brain or other parts?

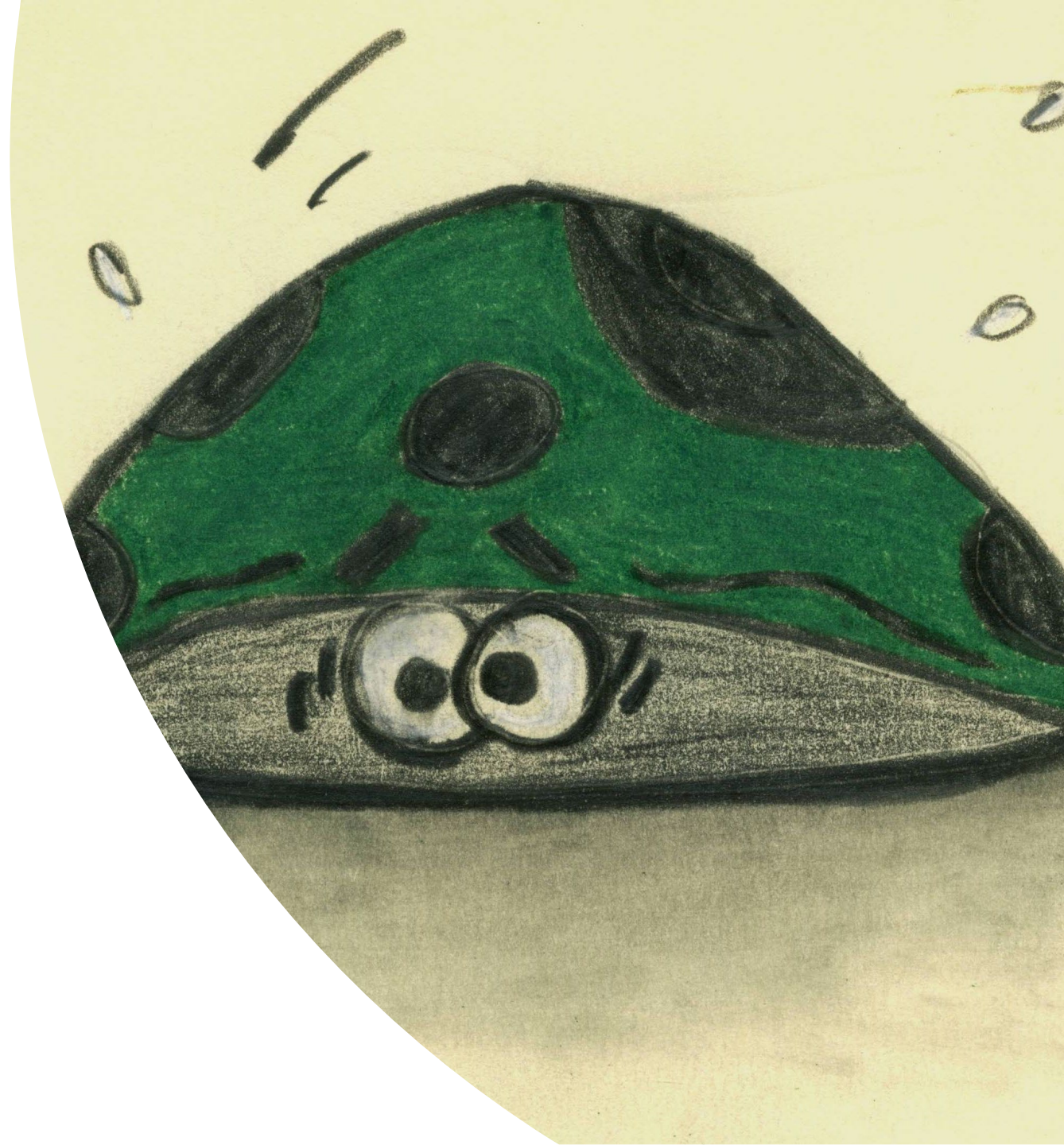
Animalist theory

Summary: The animalistic theory might be correct in outline but it needs to explain:

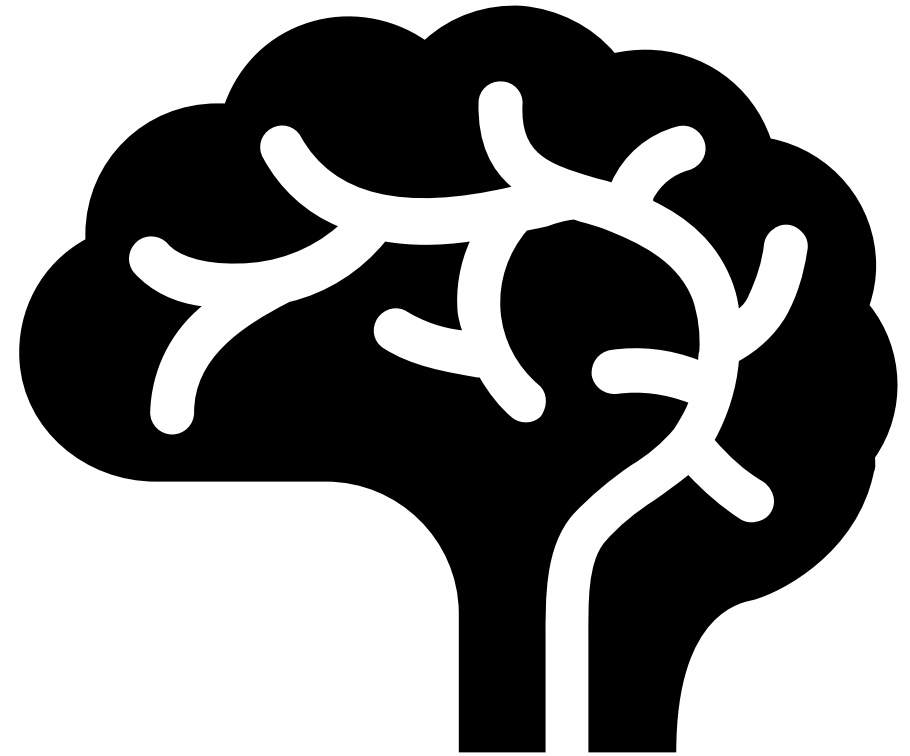
1. Specify what parts of the animal are required for preservation of personal identity (again, presumably this is the brain)
2. how to undermine the intuitions we have about teletransportation cases

The animalist theory **constrains** the types of changes that I can undergo and still be the same person. I might change as an animal, but the theory implies that I can't retain my identity if I became a radically different type of organism. On the piece of paper, answer the following questions:

1. Is the biological theory correct? Can you still be you if you were transformed into a really smart dog?
2. What are the limits of change that a person can undergo?
3. Draw a picture to illustrate



Brain theory



Two guiding thoughts:

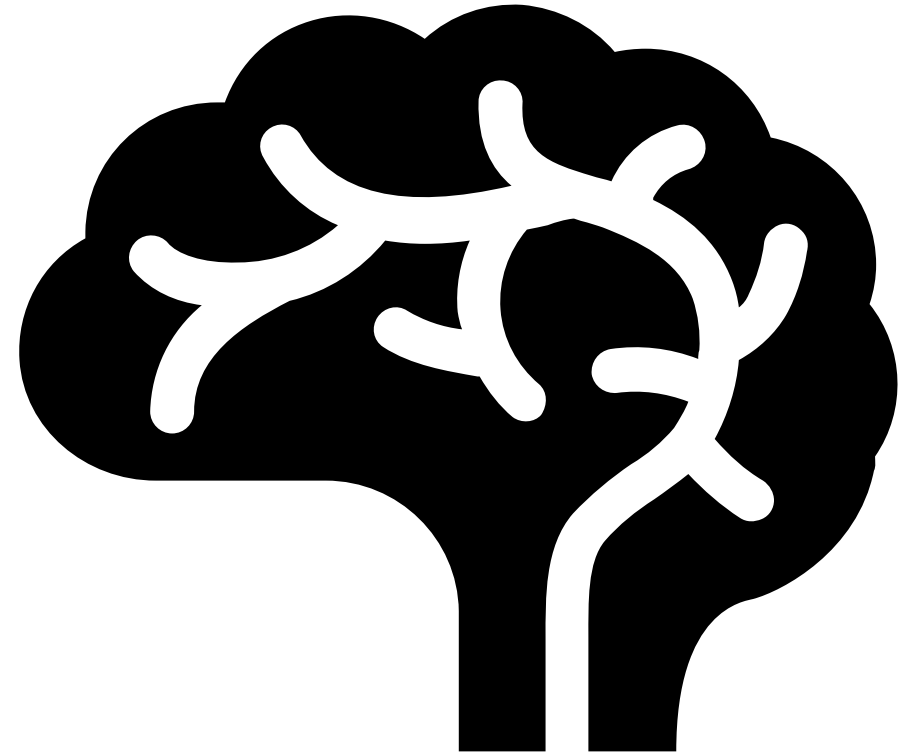
1. Having the *same body (all or even most of the parts)* is not necessary to preserving one's existence: we would survive a number of organ transplants
2. Keeping a physicalist approach, we might say that what is both necessary and sufficient for preservation is having the same brain

Same brain theory – if A is a person at t_1 and B is a person at t_2 then A is the same person as B if and only if they have the same brain.

Objection 1: the theory needs clarification. If by "having the same brain" it is meant "having the same brain material", then any change to material would result in a new brain.

Objection 2: susceptible to teletransportation cases

Embodied
mind theory



Embodied mind theory (EMT) – if A is a person at t1 and B is a person at t2 then A is the same person as B if and only if there is sufficient non-branching **physical and functional continuity** between A's brain and B's brain to preserve basic psychological capacities, particularly the capacity for consciousness.

A few points of clarification:

1. to be the same person is to have the same mind but since the mind is nothing more than the functional capacities made possible by the brain to be the same person is to have the same brain that is capable of fulfilling a certain capacity (namely consciousness)
2. preservation of identity only requires **preservation of the capacity for consciousness**, not the content (memories, beliefs, etc.) of the consciousness
3. requires not only the functional continuity of the brain (its capacity for consciousness) but also its physical continuity (not sameness of matter but relative **persistence of matter** through gradual change)

Embodied mind theory

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graph LR; A[Embodied mind theory] --> B[Functional continuity]; A --> C[Physical continuity];
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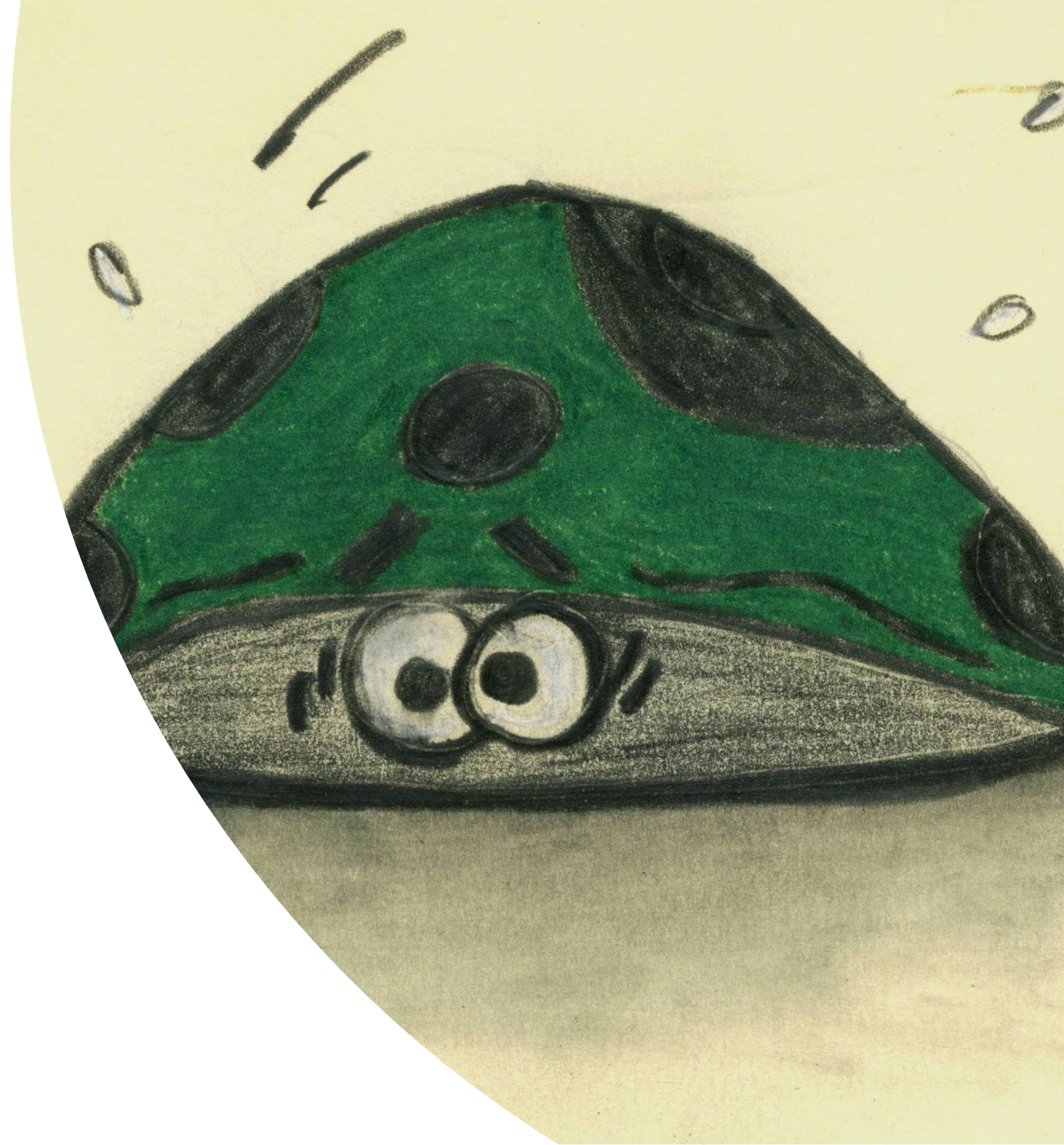
The diagram consists of three blue rectangular boxes. On the left is a box labeled 'Embodied mind theory'. To its right are two boxes stacked vertically, labeled 'Functional continuity' (top) and 'Physical continuity' (bottom). Two blue arrows originate from the right side of the 'Embodied mind theory' box. One arrow points diagonally upwards to the 'Functional continuity' box, and the other points diagonally downwards to the 'Physical continuity' box.

Functional continuity

Physical continuity

1. EMT accommodates the intuition that were an individual's brain transplanted into another person's body, then identity goes with the brain
2. EMT accommodates the intuition that in cases of dicephalus (two brains in one body), there are two people since there are two brains (rather than one person with two brains)
3. EMT implies that teletransportation leads to death since there is no physical continuity
4. EMT implies that uploading our consciousness leads to death
5. EMT the theory implies that fission (assuming it is rapid) leads to death

-
1. On the same sheet of paper, state whether you think EMT is true.
 2. Given one reason in support of EMT.

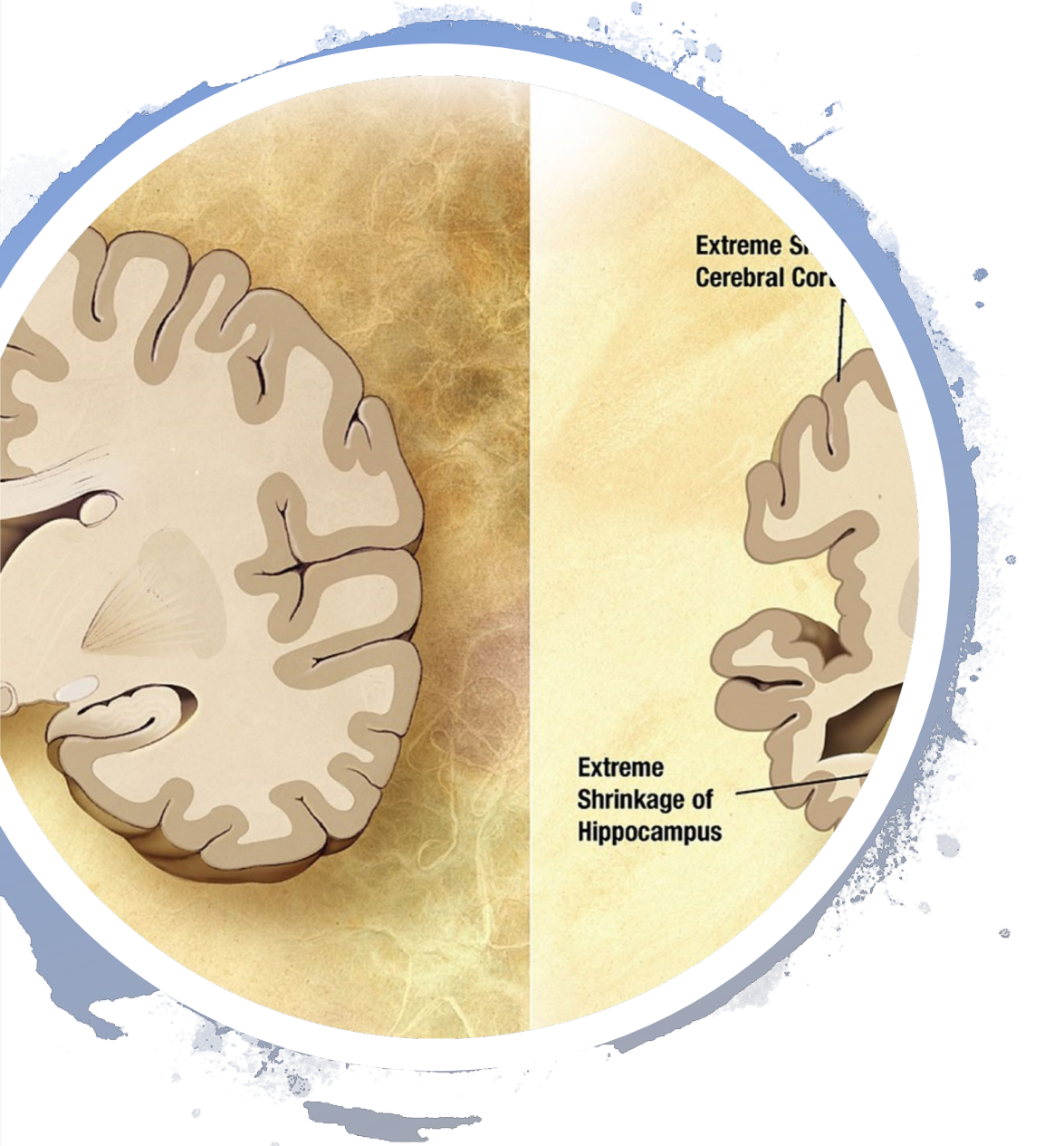




Evaluating EMT

Recall that EMT says that you persist through time if and only if

1. No branching
2. You maintain physical continuity through time
3. You maintain functional continuity through time (capacity for consciousness)



Medical cases

Let's compare this against the psychological and body/animal theories using three cases:

1. Persistent vegetative state
2. Deep coma
3. Alzheimer's disease

	EMT	Psychological Theory	Same body / animal
Persistent vegetative state (no capacity for consciousness, no brain activity)	No-persistence (no capacity for consciousness)	No-persistence	Persists
Deep coma (parts resp. for the capacity for consciousness are intact but unactivated)	Persists (capacity for consciousness)	No-persistence	Persists
Advanced Alzheimer's disease (dementia – loss of memory, lang., problem-solving abilities)	Persists (loss of psychological <i>content</i> but not capacity for consciousness)	No-persistence if very severe – loss of psychological content (memories, desires, etc.)	Persists

Argument from Medical Cases

Objection 1: EMT gets the cases wrong (two versions)

Physicalist objection: you persist in vegetative State

P1: Suppose S at t1 is a person then S at t2 enters a persistent vegetative state.

P2: EMT says that S at t2 is no longer persists, but this is false.

C: Therefore, EMT is false.

Psychological objection: you do not persist in Coma / Alzheimer's

P1: Suppose S at t1 is a person then S at t2 enters a deep coma or develops a serious case of Alzheimer's.

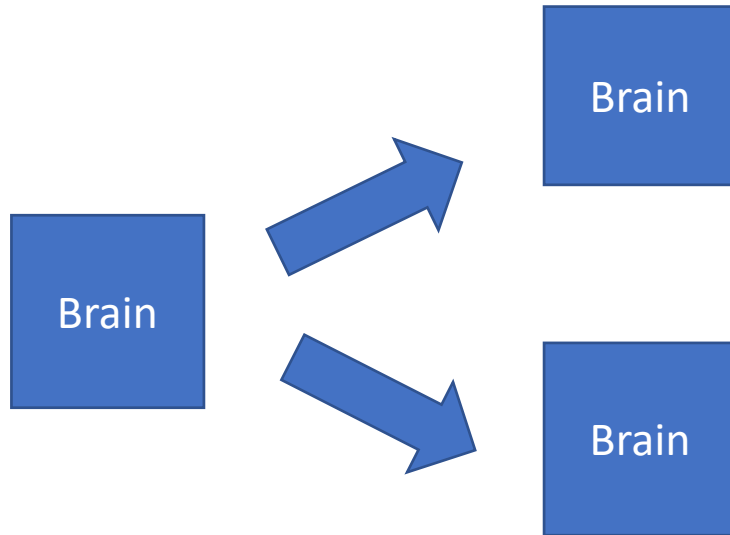
P2: EMT says that S at t2 persists, but this is false.

C: Therefore, EMT is false.

Objection 2 - multiplicity objection to physicalism

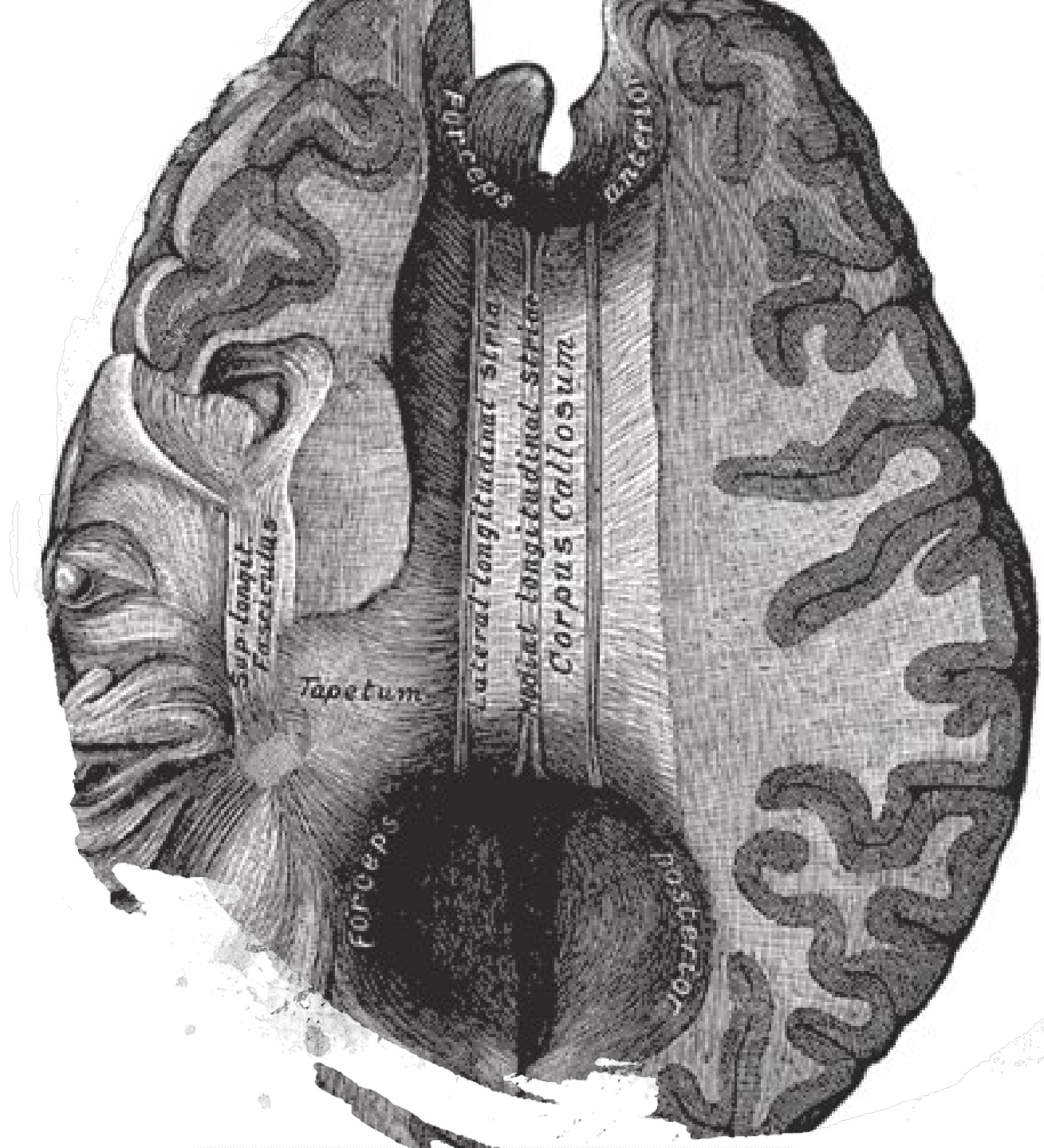
- P1: Physicalist approaches to personal identity assume that bodies and persons exist in a 1:1 correspondence. *If there is a person, then there is a single body/animal/brain in which that person inheres.*
- P2: Cases of dissociative identity disorder, split brains, demonic possession, and psychic mediums that channel spirits are cases where **there is a single body/animal/brain but multiple persons inside of that body** (1:1 correspondence is false).
- C: Thus, the physicalist theory (including EMT) is false.

- **P1** (1:1 correspondence between brain and person) is intuitive but it isn't clear that it is obvious.
- Not clear why EMT isn't consistent with the idea of a single brain hosting multiple (distinct) persons: functional and physical continuity



The controversial premise is thought to be P2.

- It says that there are **cases** where there is a **single brain but multiple persons inside of that brain** (1:1 correspondence is false).
- This is supported by (i) dissociative identity disorder, (ii) individuals have that have had their corpus callosum severed (split brain), and (iii) mediums, possession, etc.



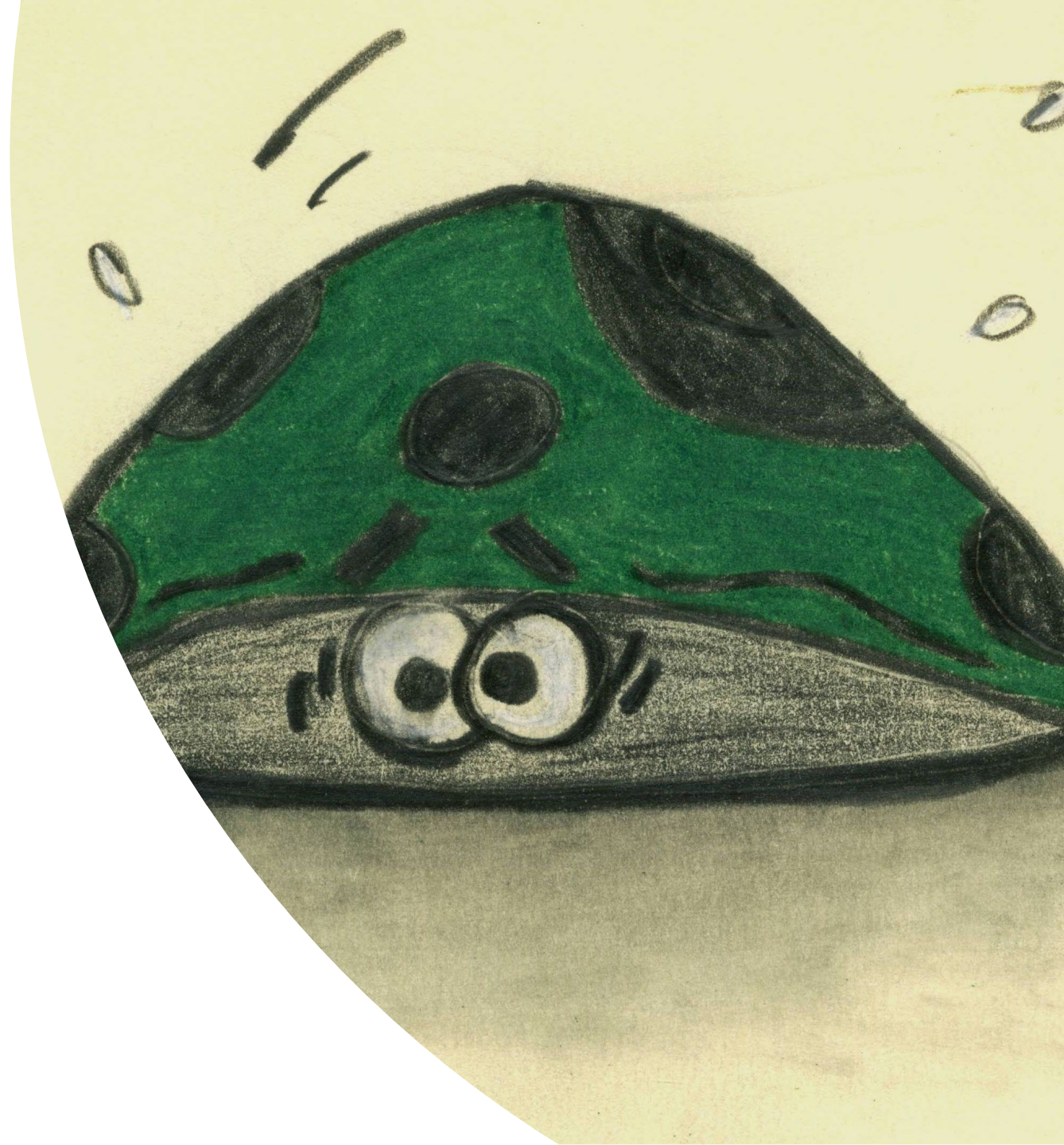
Demonic possession, mediums, etc.

Demonic possession refers to cases where individuals are possessed (occupied) by malevolent beings outside of nature.

- Many forms: minor agitation to do certain acts from full-blown occupation and control of the agent
- Evidence for possession: individuals acquire capacity to speak foreign languages, have access to special knowledge, drastic changes to vocal intonation, appearance of strange marks (mutilation), acquisition of superhuman strength, wild changes to personality (e.g. rage)
- **Extremely controversial**



-
1. Form a small group, write your names on the top of a piece of paper
 2. State your view on whether you think various forms of possession (demonic possession, mediums channeling spirits, spiritual possession) should count as evidence in considering theories of personal identity.



Dissociative identity disorder (DID)

Dissociative identity disorder (DID) is characterized by the possession of two distinct psychological personalities (no precise medical definition)

- **Significant memory gaps:** Two people A and B in one body. When A is active, A cannot remember B. When B is active, A cannot remember B.
- **Functional differences:** Two people A and B in one body. Person A can speak a language that Person B cannot.
- **Personality differences:** Two people A and B in one body. Person A acts one way. Person B acts drastically different.

DID is also controversial (medically and legally)

Corpus Callosum (split brain)

- Corpus callosum connects the left and right cerebral hemispheres
- Intuitively, it allows your L-brain and R-brain to communicate
- Sometimes it is **severed** to deal with epilepsy (prevent large seizures)



Corpus Callosum (split brain)

- There are several experiments on individuals who have had their corpus callosum severed.
- Many of these pertain to certain losses of functional capacity
- Example:
 - Ability to draw but not name objects that are processed by the right hemisphere
 - Ability to name but not draw objects that are the left hemisphere



Corpus Callosum (split brain)

Consider that if S1 at t1 has the capacity to do X and S2 at t2 does not the capacity to do X, then S1 and S2 are not the same person.

- Example: If you have the capacity to throw a football 60 yards and I don't, then we are different persons.
- Example: If you have the capacity to understand a language and I don't, then we are not the same person
- Example: If you can see and name an object but I can't, then we are different persons.

Corpus Callosum (split brain)

- If the difference in capacities of S1 and S2 imply S1 is not S2, then the differing functional capacities of split-brain individuals give rise to the idea of there being two persons.
- **The only difference is that these two persons are embodied by one brain**
- One side of the brain is not conscious of the other side
- One side of the brain can do certain tasks that the other cannot do



-
1. Consider the charge of multiplicity against the physicalist theory and all of the evidence against it: (1) possession, (2) DID, and (3) split brain
 2. Are **distinct persons** inside a single body (or is this one, fragmented person)? Explain your reasoning.

