

# What is Free Will?

Kevin Siehl

# Why do we care about free will?

- **Morality:** Free will allows one to be blamed (or praised) for their actions.
- **Being in Control:** Free will allows us to feel as if we're in control.



# What to we think free will is?

- The idea that you could have acted in a different way. -- urban dictionary, def 1
- The idea that you are responsible for your actions. -- urban dictionary, def 5

# Restate First Definition

- “The ability to have acted differently in the exact same set of circumstances.”
- What is meant by ability? We don't observe things that are able to happen, or that could happen, we observe things that do happen.

# An example

- Suppose I hypothesize that all cars/trucks, and other vehicles have a spirit, that can choose to start the engine up at any time, even without a key in the ignition.
- But, because of a strict moral code, they always make the decision to behave in a predictable way, obeying the laws of physics.



# free will = unpredictability?

- Newtonian (pre-quantum) determinism: future (and past) is completely set by state of universe in the present.
- Orthodox view of qm: outcome of measurements is undetermined, and fundamentally random, even if we have all possible knowledge of the present.
- Is quantum uncertainty a doorway to free will?

# indeterminism vs determinism vs free will

- **determinism:** Everything that will ever happen has been preordained by past circumstances (all the way back to the Big Bang).
- **indeterminism:** Random events occur a particular way for absolutely no reason; nothing could have predicted why certain events occurred the way they did. Therefore, no explanation can be given in retrospect for why a random event happened the way it did.
- **free will:** We are (at least part of) the cause of our own actions, and the sum of all “external” factors is insufficient to predict our behavior.

# But what is external?

- prior conditions
- environmental effects
- laws of nature
- “destiny” or “fate”
- divine influence
- physical forces outside of us or within us
- natural causality



# where does free will fit in?

determinism ————— randomness  
free will

determinism ————— randomness/  
free will

determinism/  
free will ————— randomness

determinism ————— randomness



# Why just one definition?

- Spontaneous Free Will: The ability to behave unpredictably (intentionally or not) such that no amount of knowledge could allow anticipation of one's actions in advance.
- Blameworthy Free Will: The ability to make moral (or other important) choices, independently of deterministic causes (genetics, upbringing, fetal development) beyond one's control.

# a thought experiment

- Put someone in a situation where they have to make a decision in a short period of time. Let them make a decision, then “reset” them and all of their surroundings to the “exact same state” as before, repeat...



# a thought experiment (continued)

- For spontaneous free will, make it a trivial decision (what to order to drink, what tie to wear, etc)
- For blameworthy free will, make it a weighty decision (opportunity to steal, kill, or need to save someone, promise)



# The outcome?

- For spontaneous free will, this is an ideal thought experiment.
- For blameworthy free will, not so much. We would expect a moral person to consistently make the ethical choice, and a sociopath to consistently make the selfish choice.
- The ability to predict another's (or one's own) future behavior based on their past actions is something we all rely on.

# moral determinism

- the idea that, given all relevant knowledge of someone (genetic makeup, brain development in utero, past experiences) it can be accurately predicted what their moral character will be in various future scenarios.
- a weaker condition than determinism (in the Newtonian sense).



Fetus - 4 Weeks



Fetus - 10 Weeks



Fetus - 16 Week



Fetus - 20 Weeks

# an example

- take two individuals, both experience the same amount of childhood abuse.
- one becomes an abuser, the other an activist against abuse.
- if we could have predicted this based on their genetics, does this make them less free?

# dualism to the rescue?

- dualism is the notion that human (and perhaps animal) consciousness cannot be entirely reduced to material processes in the brain.
- often takes the form of a soul or a spirit, or a mind that is independent of the physical brain.
- can this be used to avoid moral determinism?  
Psychologically, it may seem to, if someone *externalizes* their body and brain and *internalizes* their mind or soul. However, what if we let go of the question of what's internal and external, and just focus on the causal nature of our actions?





# dualism to the rescue? no.

- Imagine explaining one person's good behavior and another person's bad behavior based on a more or less “moral soul”, or a “stronger spirit”, or whatever other concept one could think of that makes them feel more “free”.

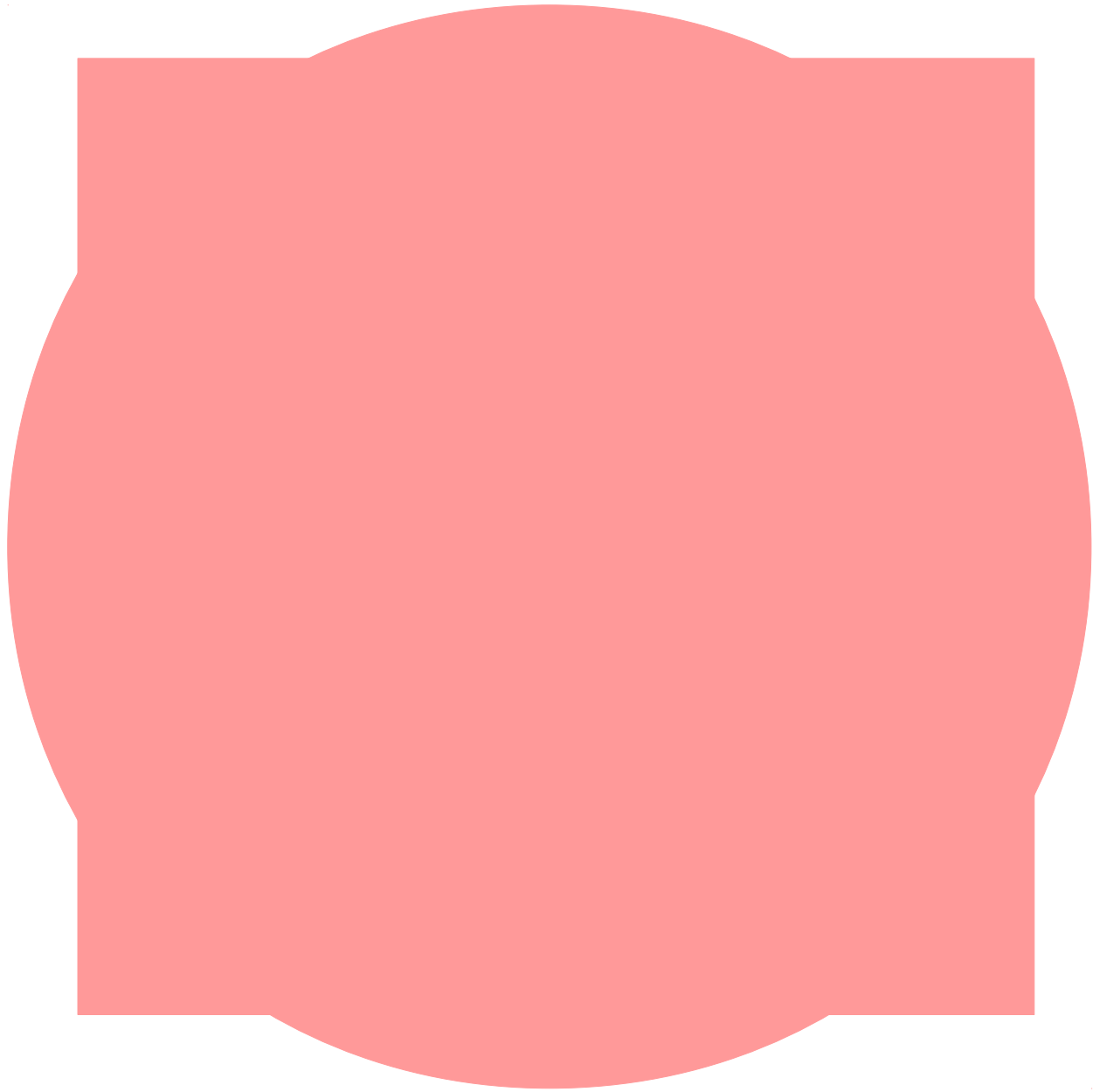


# dualism to the rescue? no.

- Imagine explaining one person's good behavior and another person's bad behavior based on a more or less “moral soul”, or a “stronger spirit”, or whatever other concept one could think of that makes them feel more “free”.
- Is one person's more “moral soul” the result of a choice that they made in the past? No. This would lead to a logical circle.

# dualism to the rescue? no.

- Now, instead of genetic determinism, we have “ectoplasmic” determinism, or “soul-stuff” determinism. Presumably, a soul would follow some “laws” of rationality, just as a brain follows laws of physics.
- ...even if you believe that every human harbors an immortal soul, the picture does not change: Anyone born with the soul of a psychopath has been profoundly *unlucky*. -- Sam Harris



# compatibilism

- Does this mean we lack free will? Maybe not.
- compatibilism is the concept in philosophy that free will is compatible with determinism.
- incompatibilism can take the form of incompatible determinism (or hard determinism), and libertarianism (no relation to the political philosophy).

*28 Assemble before me all the elders of your tribes and all your officials, so that I can speak these words in their hearing and call the heavens and the earth to testify against them. 29 For I know that after my death you are sure to become utterly corrupt and to turn from the way I have commanded you. In days to come, disaster will fall on you because you will do evil in the sight of the Lord and arouse his anger by what your hands have made.*

Deuteronomy 31:28-29

# Free Will From Self-Awareness

Is it possible to predict peoples' actions on the basis of neural activity that precedes their conscious decisions?

If so, then free will is an illusion.

-- Chris Frith

# Free Will Without Awareness?

- There has been a long controversy as to whether subjectively 'free' decisions are determined by brain activity ahead of time. We found that the outcome of a decision can be encoded in brain activity ..... up to 10 s before it enters awareness. This delay presumably reflects the operation of a network of high-level control areas that begin to prepare an upcoming decision long before it enters awareness. -- JD Haynes experiment (Nature Neuroscience 11 543-545 2008)



# arguments for

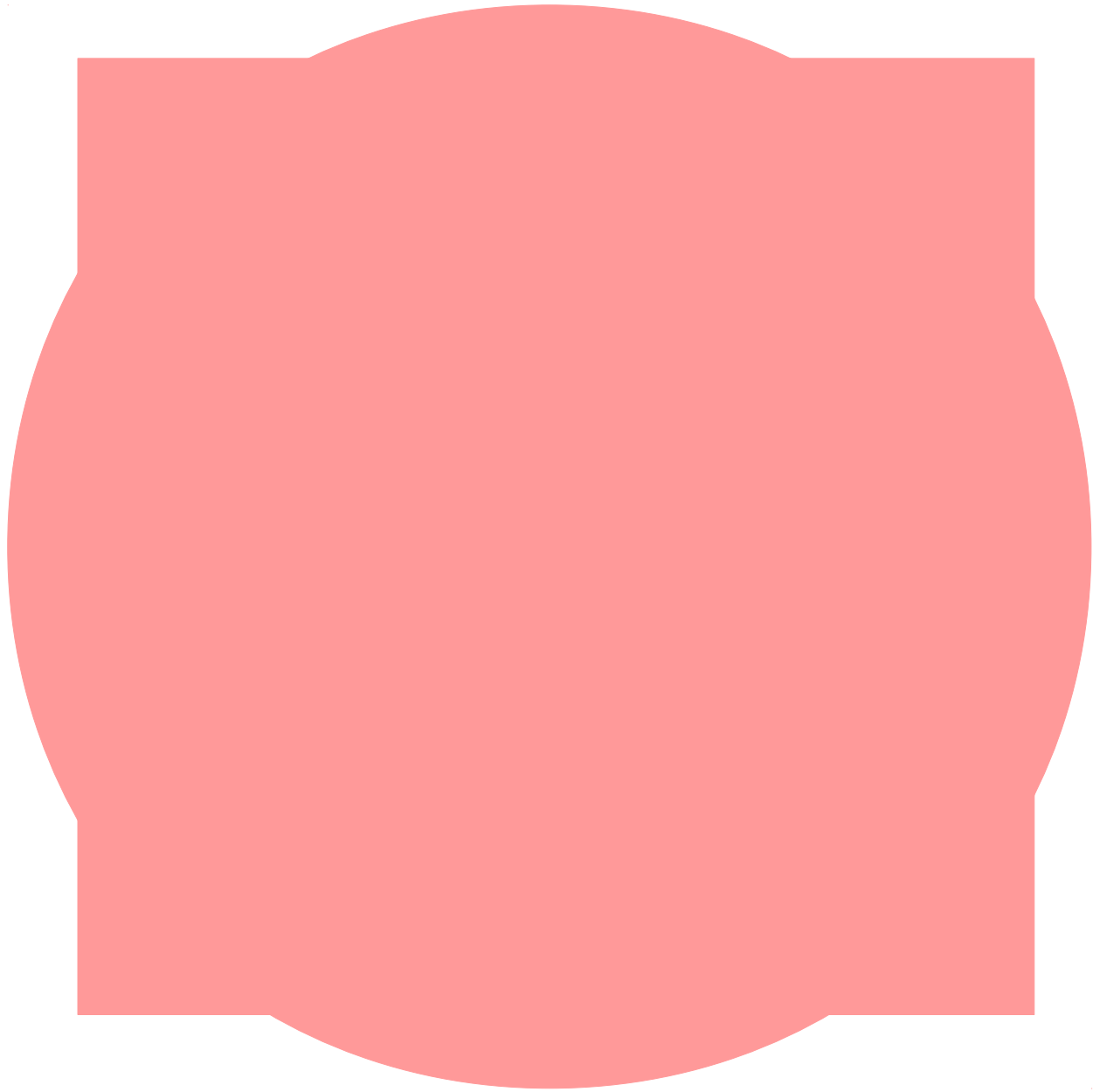
- ...this problem can be solved as long as we do not think of free will as a momentary act. Once we understand that deliberation and decision are processes that are spread out over time...then there is plenty of room for conscious components.... --- Sean Gallagher
- Such a question betrays a deep confusion, for it presupposes that what *you* are is something *else*...in addition to all this brain-and-body activity. What you are...just is this organization of all the ... activity...that your body has developed. You “automatically” know about these things going on in your body, because if you didn't, it wouldn't be your body. -- Dan Dennet

# arguments against

- where is the freedom in doing what one wants, when one's desires are the products of prior events that one is completely unaware of and had no hand in creating? -- Sam Harris
- to say that you are responsible or identical to everything that goes on inside your brain and body is to make a claim about you that bears no relationship to the experience of conscious authorship and subjectivity that has made free will a problem for philosophy in the first place. -- Sam Harris

# Is awareness essential for free will?

- If so, how would we handle self-deception?
- What about other neurological “tells” that people could have?
- Is there even a clear divide between conscious and unconscious?
- Is it logically possible for our thoughts not to be preceded by unconscious activity?
- If we were aware of all of our future decisions, could this make us less free?



# Poor Man's Free Will

- Can we make a qualitative distinction between brain conditions that are caused by illness or injury (i.e. brain tumors), and “ordinary” brain varieties?
- One possible distinction could come from the question of whether or not it would be ethical to “cure” a certain brain condition, like selfishness or shortsightedness.

# Afterthought: Ethical Questions for Possible Future Talks

- Could genetic engineering destroy the public's trust in free will?
- Would a lack of free will invalidate the justification for retribution?