

EPFL Master course
Philosophical perspectives on the
exact sciences and their history

Mind and free will

Michael Esfeld

University of Lausanne

Michael.Esfeld@unil.ch

www.michaellesfeld.com

Peter van Inwagen (1983)

consequence argument



“If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past. **But it is not up to us what went on before we were born,** and **neither is it up to us what the laws of nature are.** Therefore the consequences of these things (including our present acts) are not up to us.”

Peter van Inwagen (1983)

consequence argument



- (1) If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past.
- (2) It is not up to us what went on before we were born.
- (3) It is not up to us what the laws of nature are.
- (4) From (1)-(3): Therefore the consequences of these things (including our present acts) are not up to us.
- (5) If our present acts are not up to us, we don't have free will.

■ **Determinism implies that we don't have free will.**

Determinism



- **Determinism:** Given the laws of nature and the state of the universe at a time t that enters as initial condition into the laws, the past and future evolution of the universe is fixed.
- What does « fixed » mean?
- **Determinism:** Given the propositions stating the laws of nature and the propositions describing the state of the universe at a time t that enter as initial condition into the laws, these propositions entail the propositions describing the past and future evolution of the universe.
- Determinism is about entailment relations between propositions. It does not say that there is something in the universe that predetermines, produces or brings about its evolution.
- What makes these entailment relations true? In virtue of what in the universe do they obtain?

Laws of nature



- **probabilistic laws:** fix objective probabilities for the evolution of the universe = certain evolutions of the universe are more probable than others
- These probabilities don't depend on us.
 - van Inwagen's argument hits probabilistic laws in the same way as deterministic ones
 - The issue is universal laws of nature, be they deterministic or probabilistic.

Peter van Inwagen (1983)

consequence argument



- The argument is correct.
- The argument is independent of determinism. It applies as soon as there are universal laws of nature.
- Giving up (1) amounts to abandoning science / scientific realism.
- Giving up (5) amounts to abandoning free will.
- Premise (2) and / or premise (3) are false.
- Is there a reasonable conception of laws of nature according to which (2) and / or (3) are false?
- Such a conception of laws of nature would have to be distinguished as the best one for reasons that are independent of free will.

(Super-) Humeanism about laws



- patterns / regularities in particle motion
- dynamical parameters, space-time geometry to capture them; laws as expressing the salient regularities
- **modality: truth-makers for laws and counterfactual propositions by keeping the salient patterns fixed**
- explanation through unification in fundamental physics: identifying the salient patterns
- causal explanations in terms of certain particle motions realising the functional roles that define the higher level concepts

Humeanism and free will



- (3) false on Humeanism: the laws depend on the actual particle motion, including the motions of our bodies
- Jenann Ismael (2016): « When we adopt a globalist perspective, our activities become part of the pattern of events that make up history. Since our activities partly determine the pattern, and the pattern determines the laws, our activities partly determine the laws. »
- overkill, since laws needed as guide for actions

Super-Humeanism and free will



- first comes the particle motion, then come the dynamical parameters and the laws
 - laws fixed only « at the end of the world »
- the same goes for the dynamical parameters that enter into the initial conditions
- *future* particle motion of persons' bodies enters into the location of the dynamical parameters
- If a person had done otherwise, then slight difference in dynamical parameters: universal wave function *at the initial state of the universe* slightly different.

Envoi



- philosophy: formulate problem in a precise manner
- designate space of available options; assess them in a precise manner
- There is no «free lunch». Refrain from slogans, do detailed conceptual and argumentative work.