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

#### Mind and free will

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### 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 predeterminies, 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 do not 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.
- **Trying to rescue free will by giving up (5) is desperate.**
- → 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 realizing 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
- I 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.
- (Super-)Humeanism rebuts only argument from determinism in physics against free will; nothing specific about free will here.

### Scientific image of the world

- matter in motion
- Everything else conceived in terms of functional role for matter in motion → realized by certain configurations of matter in motion.

#### **Problems:**

- conscious experience
- meaning (semantics)
- normativity

manifest image: persons and their experience as ontologically primtive; everything else conceived in analogy to persons

#### Three stances

- scientific image complete: materialism / naturalism (Lewis, Jackson)
- manifest image complete: traditional metaphysics
  - (Aristotle, Hegel, Husserl)
- dualism of facts and norms (Kant, Sellars)

#### Freedom: Envoi

- (1) no threat to freedom from science: first comes the motion of the objects in the universe, then come the laws, including the dynamical parameters that enter into the initial conditions
- (2) free will as deliberation that is subject to justification (giving and asking for reasons)
- scientific image: freedom (1): motion that occurs, nothing predetermines it
- manifest image & any dualism: freedom (2): norms, deliberation, justification distinct from realm of facts