7.4 Necessary Connection and the Definition of Cause

7.4.1 Readings and Study Questions

- Readings: Hume, An Enquiry concerning Human Understanding, selections from section 7, LMP, pp. 90-96
- Study questions:
 - 1. How does Hume argue that we cannot derive our idea of power or necessary connection from our sense-impressions of external objects? Do you agree?
 - 2. How does Hume argue that we cannot derive our idea of power or necessary connection from the operations of the mind, i.e. the operations of the will? Do you agree?
 - 3. Where does our idea of power and necessary connection come from according to Hume? Do you find his account satisfactory?
 - 4. What are the two definitions of cause according to Hume? How do you think these two definitions relate to each other? Is there one correct definition of cause?

7.4.2 A need for a new definition of cause

- We have seen in the previous sections that:
 - We cannot prove that there is an objective causal relation between two objects or events a priori
 - We cannot prove that there is an objective causal relation between two objects or events a posteriori
 - Hence, we cannot ground our belief that similar cause-events will be followed by similar effect-event on anything objective. In other words, the basis for our expectations is not a reasoning based on objective facts.
 - Instead, the origin of our belief that similar cause-events will be followed by similar effect-event is a psychological one: our belief is a feeling that accompanies the ideas of the objects or events that we have repeatedly experienced as conjoined.

- From the analysis above, it follows that:
 - 1. The notions of cause, effects, and causal connection, are among the most important ones in human understanding: these notions are the basis of all reasonings about matters of facts which go beyond the evidence of immediate perception and memory.
 - 2. The notions of cause, effect, and causal connection, are among the less well understood by philosophers:
 - philosophers have been taking that our ideas of causes and effects reflects some features of the world which they have called power, force, energy or necessary connexion
 - we have shown however that the ideas of causes and effects do not rely of simple impressions of objective features of the world

So: we are in need of a proper definition of cause.

• The definition of cause is the opportunity to check on the method for philosophy that Hume advocates, namely, using the copy principle as a criterion of meaning.

The point is then to find which impressions are the basis for our idea of cause and causal connections.

These impressions will exhaust the meaning of our ideas.

7.4.3 Necessary Connection: negative phase

Project: Examination of the impression that correspond to the idea of necessary connection.

Strategy: Investigation of all the sources from which such an impression can derive

We know we have two sources: sensation and reflection

1. First source: the external objects

In this case, the idea of cause would come from sensation

- we do not experience necessary connections in external objects
- all we experience is that one event follows another
- same argument as before: from the first occurrence of a given event, we cannot conjecture what will be the effect

7.4. NECESSARY CONNECTION AND THE DEFINITION OF CAUSE149

2. Second source: our mind

- Hypothesis: we get the idea of power/force/cause from the consciousness of the power of will.

In other words: what we experience as our will is the experience of power/force/cause. From that experience, we can get the idea of power/force/cause In this case, the idea of cause would come from reflection

- There are two kinds of thing on which we believe our mind has some power: our body and our ideas. Hume shows that we get the impression of a necessary connection in none of these.
 - We have no experience of the power of mind on bodily organs per se: all we experience is the sequence: will – effect. The means by means the mind acts upon the organs are unknown to us
 - (a) we do not understand how the mind can influence matter and vice versa
 - (b) we do not master the power of the mind in the same way in all organs
 - (c) we know that the means by which the effect follows the will are very complicated and apparently arbitrary

Note the assumptions here: we are not entitled to say that we have experienced a connection unless:

- 1. we master such connections
- 2. we understand the intermediates

"If the power were felt, it must be known: were it known, its effects must also be known"

SO: our idea of power is not copied from our experience of the power of our minds on our boby

- We have no experience of the power of mind on ideas per se: same arguments:
 - (a) We do not understand the means by which an idea follows our will to conceive it
 - (b) Our power on our ideas is limited we do not master this
 - (c) Our power varies with factors the influence of which we do not understand either.

Note that we need the same assumptions here

SO: our idea of power is not copied from our experience of the power of our minds on our ideas

SO: Hume has shown that we cannot find any impression to which trace back our idea of causal power and necessary connection.

We have to find out where it comes from.

The assumptions were:

- 1. the copy principle
- 2. we do not experience a cause unless we master its consequences and understand the intermediates

7.4.4 Necessary connection: positive phase

There is no impression from which we can derive the notion of cause: is it meaningless? Should we stop talking about causes altogether? Hume gives his account:

- From the repetition of the conjunction, we are determined to imagine a connection
 - custom
 - a particular feeling or sentiment
- Two definitions of cause:
 - 1. External: a cause is "an object, followed by another, and where all the objects, similar to the first, are followed by objects similar to the second"
 - 2. Internal: a cause is "an object followed by another, and whose appearance always conveys the thought to that other"
 - 3. They constitute the proper definition of cause together
- SO: necessary connections are only in our minds!

This is going much further than before. Before, we were told that we cannot prove the existence of a causal connection in the world. This

7.4. NECESSARY CONNECTION AND THE DEFINITION OF CAUSE151

alone does not imply that causal connections do not exist. Now, we are told that causal connection are only in our minds, the result of some natural tendency in our brains. This implies that there are no causal connection in the world!!

- Discussion: To what extend can a Humean be a scientist?

 Does Hume's argument imply that
 - 1. there are no connections between events in the world?
 - 2. there may be such connections but we do not have experience of them such connections remains unknown to us?
 - 3. there are such connections but we do not have experience of them such connections remains unknown to us?
 - 4. there are no necessary connections/immutable laws of nature in the world?
 - 5. there may be necessary connections but they remain unknown to us?
 - 6. there are necessary connections but they remain unknown to us?

7.5 Rationalism, Realism, Empiricism and Scepticism

Two related questions:

- 1. What is the world like?
- 2. How do we know what the world is like?
- 1. is a question of metaphysics
- 2. is a question of epistemology

Your options for answering 1. typically depends on how you answer 2.

7.5.1 Epistemology (theory of knowledge)

Two main options for epistemology in modern philosophy

- 1. Empiricism: all knowledge comes from experience
- 2. Rationalism: some knowledge comes from pure reason

Empiricism

- What empiricism does and does not involve:
 - What empiricism does not involve:
 - that no a priori reasoning is possible
 - that no abstract reasoning is possible
 - What empiricism does involve:
 - that a priori reasonings give us only consistent systems of relations between ideas or concepts.
 - most of the time, that we have no abstract ideas, but rather use our particular ideas in an abstract way.
 - Most importantly: empiricism generally involves that our knowledge of the world is not perfectly grounded there is no true foundation for knowledge –

A form of scepticism about our knowledge accompanies empiricism

- The challenge for empiricism: to give an account of abstract knowledge
 - how did we get the Abstract concepts? we have only particular ideas, and abstract reasoning amounts to reason on particular ideas with abstract reasoning
 - how did we get the logical laws?

Rationalism

- What rationalism does and does not involve:
 - What rationalism does not involve:
 - that all knowledge comes from reason and a priori reasoning: the senses retain an important role. None of the rationalists pretend to deduce the order of the universe in looking solely at the propositions of Logic and Mathematics.
 - that reason is an efficient mean to complete and perfect knowledge all "rationalists" admit limitations of human abilities.
 - What rationalism does involve:
 - defiance vis à vis the senses
 - there is some knowledge which is outside of the power of the senses
 - reason is the means to that kind of knowledge
 - that kind of knowledge is superior to the one, if any, obtained by the senses
 - that kind of knowledge is knowledge of necessary truths (to be contrasted with contingent truth)
- The challenge for rationalism: if not from experience, where do our knowledge come from?
 - innate ideas?
 - innate propositions?

Plus, if we possess innate ideas or innate propositions in our minds:

- How come we are not aware of them all the time?
- How can we become aware of them?

7.5.2 Metaphysics (theory of what the world is like)

- Your metaphysics depends on your epistemology:
 - typically, you accept in your ontology only what you "know" exists.
 - Knowledge is still defined as justified true belief.
 - So: you accept in your ontology what you have good justification to believe is existent in the world.

Therefore, what you accept or not depends on what you take to be acceptable justification for knowledge. In particular, in the context of modern philosophy, it depends on whether you are an empiricist or a rationalist.

- Three important questions for your metaphysics:
 - 1. What kinds of entities exist: material objects? ideas? universals?
 - 2. How are they related to one another: is the world rationally ordered? are there laws of nature?
 - 3. What is our status (as humans) in this world?

Metaphysics for the Empiricist

• Realism concerning the observable:

The senses are to be trusted: what we observe exist. Hence, the material world exists.

- Agnosticism concerning the unobservable:
 - Rule: do not postulate anything existent beyond the observable
 - So: do not postulate the existence of unobservable entities (electrons or universals),

Note that this is not saying that electrons do not exist: only that we would better remain agnostic as to the existence of what we cannot observe.

- Nominalism concerning ideas:
 - ideas are not postulated as mind-independent entities
 - abstract ideas are words: they do not correspond to anything real

- there are no universals
- Concerning the order of the world: 2 options:
 - there is an underlying causal order, but it remains unknown to us
 - there is such such causal order no laws of nature and fundamental contingency
- According to your answer to the last question:
 - EITHER events in the world are determined and/or necessary
 - OR there is room for fundamental contingency (in particular, the regularities may well change)

Metaphysics for the Rationalist

- Typically, as a rationalist, you will consider that there is the world is in rational order, that is to say, there are necessary (causal) connections at the fundamental level. So you are very likely to endorse the following views:
 - Realism about laws of nature and you have to say how much our scientific laws capture of such laws of nature
 - Determinism and/or Necessity of the events in the world.
- Now, you may want to take one or several of the following realist views.
 - Realism about the observable material world
 - Realism about the unobservable entities
 - Realism about ideas
 - Realism about universals
 - Realism about laws of nature and you have to say how much our scientific laws capture of such laws of nature
 - The last one implies: Determinism and/or Necessity of the events in the world.

• NOTE: Being a realist concerning X means that you maintain at least that: X exists.

And, in addition, you can maintain that:

2. X exists independently of minds.