

Time and the Moment Now

Appearance and Reality

The **ideality of all experience** is the doctrine that all experiences (sensations, perceptions, mental representations) depend upon the perceiving subject. For those who hold this view, it is a **self-evident** proposition that follows upon bringing to consciousness the nature of perception: that a perception ceases if consciousness ceases. Therefore, to perceive you must be conscious.

However, in contemporary times the argument has been dubbed **the argument from illusion** by J.L. Austen. and has been re-coded by him as the argument that from the distinction between illusions and veridical perceptions it is possible that all perceptions are illusions. This reforming of the argument is rejected here. [See Appendix for J.L. Austen's argument.]

Empirical and transcendental reality

From the ideality of experience, we infer the Kantian distinction between the world of phenomena that we experience, called **empirical reality**, and the real or objective world that is transcendental to consciousness, called by Kant **transcendental reality**. From this we derive with Kant the **scandal to philosophy** – that it is not possible to prove the existence of a transcendent, “external” reality. A transcendent reality would comprise objects that exist when the perceiving subject ceases to exist. Kant calls these objects either **objects-in-themselves** or **noumena**. These noumena contrast with **phenomena**, whose existence depends on their being perceived. Here we do not adopt the view of Berkely that **all** objects depend for their existence on being perceived (**esse est percipi**), but rather the view that while there does exist a transcendental reality, our knowledge of that reality is less secure than we may realise and involves **philosophical inferences** of which we may be unconscious. An appeal is made to **bring to consciousness** the inferences that we are making so as to be aware that they are inferences and be able to challenge them.

Time

We proposed three conceptions of time: (1) Subjective time, (2) Coordinate time and (3) Objective time. Other conceptions of time, such as (4) Historical time, and (5) Eternity were not presented in the lecture.

Subjective time

Subjective time is time as we experience it. It is experienced in **the moment now**. This is a phrase introduced by Kant to capture and summarise the unique properties of subjective time. Objective time, also called **real time** by such philosophers as D.H. Mellor, is not time as we directly experience but rather a systematic conception of what time is for transcendent reality. Owing to the ideality of all experience, it is possible to doubt whether there is any real or objective time – this is equivalent to the scandal to philosophy. Some of the properties of subjective (space and) time are:

- (1) It is a “container” for mental representations generated **a priori**, that is prior to the specific content. Hence, it is not an agglomeration of perceptions and sensations but something over and above the ideas that form the content of consciousness. Kant calls it a **manifold**.
- (2) It is a “specious present”. We experience subjective time not as a point between the past and present, but as an indefinite extension that has fuzzy boundaries – it has a duration, but

we cannot say how long that duration lasts, nor directly embed that duration in an objective time that we do not experience.

- (3) We have no conscious experience of the boundaries of subjective time; we are not aware of points where subjective time starts and ends; we cannot perceive a time before subjective time started.
- (4) Phenomena presented in subjective time have an intensive quality – we may be more or less aware of them.
- (5) Phenomena presented in subjective time are not permanent; they cease to exist when not perceived. The Greeks expressed this by saying that they are objects “coming into being”. Note that Plato in *The Timaeus* dubbed the real world, “the moving image of eternity”.
- (6) Subjective time is not experienced as the other spatial dimensions. We cannot move about in subjective time, relocate our consciousness to a point earlier in time. It is not possible to move within subjective time, and subjective time is experienced as an manifold that has a sense of motion in which phenomena are coming into being and fading out of being; that objects are in motion. We never experience the motion of an object as the relocation of an object from point to point, which would require us to directly experience a past and present and compare the two, but rather as a property of phenomena – that the perceived object (phenomenon) is in motion. Subjective motion cannot be reduced to coordinates.

Coordinate time

Coordinate time is an idealised conception of subjective time. It is a conception of time that arises from the scientific and mathematical study of subjective time. Specifically, as children we learn to measure our experiences, and come to understand that space (and time) are uniform. We subsequently learn that we can identify an arbitrary point as an origin and measure space in three dimensions relative to this origin. We conceive of time as a coordinatized fourth dimension that could be imposed upon the regularities of subjective time, to create the notion of a coordinate past and a possible future.

Objective or real time

We infer that coordinate time corresponds to an objective or real time in transcendent reality. If this inference takes place unconsciously as a result of cultural training or indoctrination, we can call the inference a projection. It is a thesis that our culture is responsible for the unconscious projection of coordinate time onto transcendental reality, so that we are unaware of the distinction between phenomena and noumena and take the concept of objective time as real time, unaware that we are making an inference. In this respect, we remark that other cultures have exhibited the converse situation. For example, it is said that aboriginal Australians take **dream time** for real and doubt the reality of what we might call objective time.

Modern physics and appearance and reality

It is observed that modern physics unconsciously deploys and exploits the distinction between transcendental and empirical reality and has a strong tendency to argue or claim that time and space in transcendent reality are not copies or do not resemble coordinate time and space.

- (1) The doctrine of **wave-particle duality** is that things may manifest themselves in experience with apparently contradictory properties. All things may manifest themselves as waves or as particles. Therefore, reality comprises real objects that are not perceived directly (reality)

but appear relative to experiment as waves or as particles. These transcendent objects are called **quanta** or **wave-packets**.

- (2) From this wave-particle duality we infer the **Heisenberg uncertainty principle**: it is not possible to simultaneously determine the precise momentum and wavelength of a quantum. This applies to space-time at the micro-level. At the micro-level transcendent, objective space-time is incommensurable. To account for this, physicists sometimes describe space as **like foam**. Thus, objective, real space does not contain points, but rather “foam” and is different from coordinate space.
- (3) In the **general theory of relativity**, it is maintained that real space-time may be warped and have loops – it is theoretically possible to travel in time. While understanding of this doctrine presents difficulties (involving **intrinsic coordinates**) prima facie it suggests that real space-time is not uniform. The uniformity of space-time is related to the conservation laws of physics.
- (4) In **string theory**, physicists postulate that noumena are forms of “string” or **knots** embedded in nine or eleven dimensions. In this speculation, contemporary physics infers that transcendental reality is not at all like our empirical reality; that objective time is not a copy of subjective or coordinate time.

Real time and the thesis of strong AI

The thesis of strong AI is that objects (noumena) in objective, real time cause conscious mental representations. Hence, consciousness is a product (as epiphenomenon) of causal processes taking place in the real world. Specifically, consciousness arises from the firing of neurons in the brain. For this to be valid, we must first conceptualise brains and their constituent neurons as noumena in objective space-time, and then infer that the causal properties of these brains and neurons give rise to all conscious phenomena. This is the reverse transcendental deduction.

To be specific, a model of the human brain must be devised – this is the **digital computer**. We aim to examine whether the properties of subjective consciousness could be replicated in a digital computer. More specifically, we consider whether all forms of human logic (patterns of inference) can be replicated in such a machine.

Transcendental deduction

However, we may already make the claim that the above investigation into the nature of space and time completes the transcendental deduction; this is the transcendental deduction presented by Kant in the *Critique of Pure Reason* and takes the form: *we could not possibly derive the properties of subjective time from noumena in objective time*. The properties of subjective time are so radically different from those of objective time that we cannot postulate any causal mechanism whereby objects in objective time (neurons, brain states) give rise to these properties. According to Kant, the human mind synthesises space-time a priori, so how would it be possible to synthesise a mental representation of space-time as a container for phenomena from the phenomena themselves? Nonetheless, as this kind of reasoning is so alien to the contemporary culture, it is proposed to examine the transcendental deduction further in logic. The model of the mind as a digital computer is precise and imposes definite limits on the nature of what inferences can be explained by it, and if we present inferences that cannot be so modelled, then we complete the transcendental deduction and refute the reverse transcendental deduction – that is refute the thesis of strong AI.

Appendix 1

The doctrine of the ideality of space and time in the work of J.L. Austen, *Sense and Sensibilia*.

J.L. Austen claims that this is an **argument from illusion** arising from “a certain special, happy style of blinkering philosophical English”. He writes: “Of course – this may seem perhaps hardly worth saying, but in philosophy it seems it does need to be said – we make a distinction between ‘a real x’ and ‘not a real x only if there is a way of telling the difference between what is a real x and what is not. A distinction which we are not in fact able to draw is – to put it politely – not worth making.”

Appendix 2

Emmy Noether (1882 – 1935).

Noether's theorem states that every differentiable symmetry of the action of a physical system with conservative forces has a corresponding conservation law. Proven 1915, published 1918.

Errata

J.L. Austen's book is titled *Sense and Sensibilia* not *Appearance and Reality*.

Noether's theorem implies that the conservation of energy is equivalent to the uniformity of time. In the presentation, it is stated that it is equivalent to the uniformity of space.

There is an accidental apparent contradiction in the presentation. It is stated at one point that we cannot know anything about what belongs to transcendental reality, but almost immediately it is stated that we do know that the human mind does belong to it. This is an accidental error – the view here is that we do know that consciousness is a part of transcendental reality, though what consciousness “is” and whether it depends for its objective existence upon other objective entities is not known. Both statements are in a sense valid. We do know that consciousness is a noumenon, but we do not know what kind of noumenon it is. Regarding all other noumena, we have no direct experience of them, so know nothing **definite** about them.