

# MERLIN CCC: January 2019 TED Talk Film Overview Notes 1

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## Thinker: David Chalmers

Event: Merlin Mini-Drive-In

Date: January 2019

Topic: Consciousness



### Brief Bio/Summary

- Australian philosopher and cognitive scientist specializing in philosophy of mind and philosophy of language. Chalmers is best known for formulating what he calls the “[hard problem of consciousness](#)” in both his 1995 paper “[Facing up to the Problem of Consciousness](#)” and his book [The Conscious Mind](#). He offers a non-reductive approach to consciousness and argues that conscious experience “must be understood as an irreducible entity (similar to such physical properties as time, mass, and space) that exists at a fundamental level and cannot be understood as the sum of its parts.” His approach is often referred to as “naturalistic dualism” — naturalistic because he believes mental states are *caused* by physical systems (such as brains); dualist because he believes mental states are ontologically distinct from and not reducible to physical systems.

### TED Talk Synopses

- Our consciousness is a fundamental aspect of our existence, says philosopher David Chalmers: “There’s nothing we know about more directly.... but at the same time it’s the most mysterious phenomenon in the universe.” He shares some ways to think about the movie playing in our heads.

### Key Points

- Consciousness is a fundamental fact of human existence and universal.
  - Our list of things that are fundamental (e.g., mass, space, time) need to expand to include consciousness.

- Every system has some degree of consciousness (i.e., panpsychism is real).  
Wherever there is information processing, there is consciousness.
- Consciousness is our subjective experience of the mind and the world.
  - What goes on in our head is like a movie, with all sorts of sensory elements (e.g., smell, touch), a sense of your body, emotions, memories, and a constant voiceover narrative. At the heart of this movie is “you” experiencing all of this directly. This movie is your stream of consciousness. The subject of experience of the mind and the world.
- Consciousness is what makes life worth living. If we weren’t conscious, nothing in our lives would have meaning or value.
- A purely physical explanation for consciousness falls short.
  - What you get from purely reductivistic explanations about the functioning of a system cannot answer the deeper questions about our subjective experience (why does all of this feel like something from the inside).
  - Neuroscience answers some of the questions of consciousness (e.g., what brain activities are related with what experiences) but not all of the questions; it doesn’t address the mystery of WHY it is that all of the physical processing in the brain should be accompanied by consciousness at all? Why is there this inner-subjective movie?

### How Can Science Explain Consciousness?

- To integrate consciousness into science, radical ideas are needed.
  - Is this impossible? Some say that science by its nature is objective and consciousness by its nature is subjective, so there can’t be a science of consciousness. This belief has held tight for a long time. 20 years ago this began to change (e.g., Kripke, others).
- The centerpiece of the science of consciousness has been the search for correlations between areas of the brain and certain states of consciousness (e.g., brain areas that go along with seeing faces, feeling pain, etc.). This is helpful but this is still just a science of correlations, not explanations. We know THAT something goes along with consciousness, but not WHY. Neuroscience answers some of the questions of consciousness (e.g., what brain activities are related with what experiences) but not all of the questions; it doesn’t address the mystery of why it is that all of the physical processing in the brain should be accompanied by consciousness at all? Why is there this inner-subjective movie?
- The classical cases of emergence are all cases of emergent behavior (e.g., how a traffic jam behaves, how a living organism reproduces, adapts, and metabolizes — all cases of objective functioning). We can apply this to the human brain in explaining in some of the behaviors and functions of the human brain as emergent phenomena (e.g., how we walk, play chess, etc.).
  - When applied to consciousness, this helps to solve the “easy problem of consciousness” (the how - behavior), but not the “hard problem of consciousness” (the why — why is behavior accompanied by subjective experience).

## Consciousness as More than Just the Physical

- A purely physical explanation for consciousness falls short.
  - What you get from purely reductivistic explanations about the functioning of a system cannot answer the deeper questions about our subjective experience.
- We have phenomenal chains of explanation: Physics explains chemistry, chemistry explains biology, biology explains parts of psychology. But we have not been able to integrate consciousness this into the picture.
- Two possible ideas that might help to provide an explanation for the WHY are:
  - Consciousness is fundamental (just like space, time, mass). We need to expand our list of what sorts of things are included.
  - Consciousness is universal. All systems have some degree of consciousness (e.g., pan psychic).

## Consciousness is Fundamental

- **Consciousness is fundamental** (just like space, time, mass). There are fundamental laws that govern it — laws that we recognize and build up from. Sometimes the list of fundamentals expands (e.g., Maxwell's electromagnetism). The same goes for consciousness.
- If you can't explain consciousness in terms of the existing fundamentals (e.g., space, time, mass), then we need to expand the list. Consciousness is a fundamental building block of nature.
  - BENEFIT 1: Scientifically, we then focus our attention on figuring out the fundamental laws governing consciousness — the laws that connect consciousness to other fundamentals.
  - BENEFIT 2: We can arrive upon fundamental laws about consciousness that are so simple we could write them on a t-shirt. This is what we want (Ockham's Razor)

## Consciousness is Universal (Panpsychic/Everywhere)

- Consciousness is universal. Every system has some degree of consciousness. This view is called [\*panpsychism\*](#) ('pan' for all, 'psych' for mind). Humans, dogs, microbes, photons.
  - This does not mean that photons, for example, are intelligent or thinking things (e.g. they are not full of angst!) but rather that photons might have some element of raw subjective feeling — some primitive precursor to consciousness.
  - *NOTE: Panpsychism is not a formal theory of mind — it does not attempt to define “mind”, though many panpsychists do this, nor does necessarily it explain how mind relates to the objects that possess it. In order to be a formal theory, it would need to be able to do this. Panpsychism is a meta-theory of mind or overarching concept and claim about how widespread the phenomena of mind is in the universe.*

## WHAT SORT OF REASONING SUPPORTS PANPSYCHISM?

### Fundamental Connection

- Some motivation for thinking this comes from the idea that consciousness is fundamental. If consciousness is fundamental (like space, time, mass), wouldn't it follow that its universal in the same way its fellow fundamental brethren and sistren are?
  - Cultures that see the human mind as being in unison/harmony/continuous with nature have much less difficulty accepting this.

### Information Connection

- A deeper motivation comes from the idea that perhaps the most simple and powerful way to find fundamental laws connecting consciousness to physical processing is to link it to information.
  - *Wherever there is information processing, there is consciousness.*
    - Complex information consciousness (like in a human) = complex consciousness; simple information processing = simple consciousness.
      - *Ex: Neuroscientist Julio Tannoni's has developed a mathematical theory and measure of information integration called 'phi' that supports this idea. Phi goes along with consciousness — high degree of 'phi' (of information processing), high amount of consciousness; low degree of phi low amount of consciousness. But it never falls off completely; there is still a non-zero degree of consciousness that remains in all living systems.*

### Integration Connection

- A final motivation comes from the idea that panpsycism might help us integrate consciousness into the physical world.
  - Physics is very abstract. It describes the structure of reality using equations but doesn't tell us about the reality that underlies it. As Stephen Hawking puts it: "What puts the fire into the equations?"
- A panpsychic view allows the equations of physics as they are but take them to be describing the "flux of consciousness." It's consciousness that puts the fire in the equations. On this view, consciousness doesn't dangle outside of the physical world as some sort of extra but is there right at its heart.

### Some Implications of Panpsychism

- Panpsychic view has the ability to transfigure our relationship to nature with some serious social and ethical consequences (what matters for ethical purposes and moral considerations is now not about the fact of consciousness but the degree of

consciousness).

- *Food choices* — What is left that I can eat?
- *Other systems like computers/AI* — What ethics ought to be employed for the development and destruction?
  - The idea that wherever there is information processing, there is consciousness allows for the claim that artificial intelligence consciousness and that AI with a high degree of phi/complex information processing might be "the same as or better than" humans (in terms of degree of consciousness)? What are the ethical implications of this?
- *Whole groups/collective consciousness* — Does the planet have its own consciousness? Does Canada have its own consciousness? Does this group have its own consciousness?

## Some Questions

Chalmers expresses frustration with a purely physical explanation of consciousness because it cannot answer the “hard problem of consciousness” (WHY physical processing is accompanied by subjective experience at all). But do explanations of consciousness being fundamental and universal address the WHY? (To be fair, however, Chalmers doesn’t necessarily say that they do...but that they might be good/radical new ways to look at consciousness that might help provide answers).

- Why and how does expanding our list of fundamental building blocks of nature to include consciousness explain the WHY?
  - How can something being fundamental to our existence provide an explanation about WHY we have it?
  - At the same time, we DO accept some things as fundamental to our existence — mass, time, space, etc. So what is the harm of including consciousness in this cosmic soup (even if it doesn’t answer the WHY)? Is there an advantage to doing so? Is there a disadvantage? Do other fundamentals answer the WHY?
- Why or how does panpsychism help to explain the WHY of consciousness? How does something being universal explain WHY we have it?
  - Is an appeal to a fundamental connection epistemically unstable? What happens if we discover its not fundamental sometime down the line? Why not search for something more coherentist that can withstand a but more shaking up?
  - Is an appeal to an information processing connection enough?
  - What about integration? Just because something can be integrated into a system of thought, how does this answer the why?
    - A panpsychic view allows the equations of physics as they are but take them to be describing the “flux of consciousness.” It’s consciousness

that puts the fire in the equations. *But why must there be a “fire” in the equations?*

Chalmers mentions emergent things in the beginning of his talk...and seems to somewhat dismiss them as being able to answer the WHY. (*Neuroscience and other reductive approaches are able to answer the HOW for some emergent behaviors — as opposed to the emergent things in themselves*). But, it is not entirely clear how his discussion about consciousness as a thing differs from something that might be considered emergent. *Why or how is Chalmers version of consciousness different than an emergent thing? Can something be fundamental and emergent?*

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