1 Properties

Survivial of the species, consciousness as an **adaptation**. No consciousness without death. Examples of good adaptation: it allows to create models of the world that can run faster than the physical world (as John suggested), which can lead to a more effective interaction with the environment or others. Maintaining a flow of information (as suggested by Renske). Both: **temporal dimension**.

How embodied is consciousness in the body? Or in the interactions? (Or in concrete areas of the body?) Embodied in both **interactions and body**.

Consciousness only in the interaction with the environment. A reaction (interaction), not a potential capacity. (more strict) Consciousness only with interactions with others like us. One can create an image of itself only once it has interact with analogous creatures.

The **role of language** in the understanding of consciousness. What can languages show us about our cognition? Many languages don?t make (or in some periods have not made) a distinction between various concepts as:

- to have, to be, to think, to want
- to want, to need, to can
- to have, to exist, to get
- right, possible, enough
- to do, to finish
- . . .

And more essentially, they have different way to structure **discourse** (reference to come).

also: the ?unity of language and consciousness? view (socialism).

The **role of learning**. Implicit learning and explicit learning. Second language acquisition (L2).

What sort of window can **AI** be for all of this? Where are its limits?

Sensory-perceptual system, attention, shared attention, (real) free will.

Insight problem solving and insight learning vs consciousness-parallel vs lineal.

Open questions:

Degrees or types of consciousness (3 for some people). Does it make sense to talk about degrees or types?

How far it extends to bacteria or other unicellular species, or even, to particular cells of our body (autonomous nervous system, heart cells, pain, ?). (Cell memory, cell trauma, cell adaptation, looking for more lit.)

External-internal stimula: pain.

Dreaming.

Biotic communities

2 Table

1.	Requires matter	yes
2.	Exclusive property of biological systems	yes
3.	Has parts	Def-dep
4.	Admits of gradations or degree (continuous or discrete)	Yes
5.	Likely to be artificial created in the AI lab	No
6.	Intrinsically paradoxical research area. (involves strange loopy-ness Gödel, Turing)	No
7.	Requires interaction with external environment (perception?)	yes
8.	Requires interaction with internal environment (reflection?)	?
9.	Necessarily Embodied (result of sensor interactions, hormonal environment etc.)	yes
10.	Necessarily Embedded (result of large scale system interactions)	yes
11.	Deterministic system with stochastic inputs.	
12.	Relies on quantum things that I do/do not understand	Yes
13.	Defined by its ineffability, will always recede from scientific apprehension.	No
14.	Encodes history (requires memory, genes)	Yes
15.	Is multifunctional?	Yes
16.	Ever changing?	Yes
17.	Life-contingent?	Yes

Some words that people have been using and I suspect their definitions might not be the same for everyone.

Entity, awareness, reflection, think, emotions, feelings, be, exist,

http://people.duke.edu/ ojf/ConsciousnessAdaptationAndEpiphenomenalism.pdf

http://nflrc.hawaii.edu/PDFs/SCHMIDT

(more to add)