The Causes of the Hard Problem: A Note

Greg P. Hodes

ABSTRACT

This note calls attention to the fact that efficient causes – the sort of cause that changes something or makes something happen – can play no constitutive role in the immediate cognitively conscious relation between cognitive subject and a cognitive object. It argues that: (1) it is a necessary condition for there being an efficient causal relation that it alter its *relata;* and (2) it is a necessary condition for being a conscious cognitive relation that it does *not* alter its r*elata*. This has important implication for the theories of knowledge and consciousness the "Hard Problem," and related puzzles.

Key Words: Cognitive Consciousness, Hard Problem, Mind-Brain, Causes of Consciousness, Consciousness, Efficient Causes

DOI Number: 10.14704/nq.2018.16.9.1599 **NeuroQuantology 2018; 16(9):46-49**

I.

Theories of cognition commonly require that there be a causal relation, at least in some cases, between perceiving and knowing and what is perceived or known. However, the nature of this cause and its relation to what is properly conscious in cognition is left un-clear. For radical reductionists, this is not a problem; but for those for whom cognitive consciousness is a fact to be taken, at least *prima facie*, "as is," it is central.

Here I call attention to the impossibility of a relation of cognitive consciousness (CCR) being wholly or partly constituted by an efficient cause (EC) – the sort of cause that changes something or brings something about: (1) It is a necessary condition for being an efficiently causal relation (ECR) that its *relata* be altered[1]; and (2) it is a necessary condition for being a CCR that its relata *not* be altered. The second condition follows analytically from the notion of change and the tautology that one is conscious of that of which one is conscious. Obviously, one and the same relation cannot both change its *relata* and leave them as they are.

I shall refer to (2) as *the "Noninvasieness of conscious cognition"* ("NICC"). This non-invasive access is, I suggest, the point of cognitive consciousness.

To see intuitively that the denial of (2) results in a RAA, think of a cognitively conscious relation functioning as an efficient cause as a cognitive "King Midas's Touch" that changes King Midas to some other toucher, and simultaneously changes whatever the toucher wishes to touch to something else.

Similarly, an object of cognition (CO) could not be consciously "present" to a cognitive subject (CS) if by, and continuously with, the very same act by which the CS was to make it present, the CO were altered.

As consciously present to the CS, the CO would be present to her as it is (How else could one item be consciously present to another?); and as simultaneously altered by the CS, the CO would be present to her as something else.

[1]In physical objects, conservation of matter-energy requires that both *relata* be altered.

Corresponding author: Greg P. Hodes
Address: University of Kansas, United States
e-mail ✉ ghodes@juno.com

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.
Received: 6 May 2018; **Accepted:** 27 July 2018

It might seem that this "deconstruction" would be iterated through a regress of failed CCR and always-altered *relata*; but in fact, the radically opposed "causalities" would block each other. There would be no CCR's. Nothing would be consciously known or perceived. and there would nothing that could know or perceive it.

Call NICC as it applies to these two causal "vectors" NICC(1) and NICC(2), respectively.

II.

For ease of exposition I have been using elementary perceptual consciousness as a model. I will continue to do so in what follows. But if NICC applies at all, it applies at every level of conscious cognition: from vague perceptions, barely distinguish-able from no cognitive awareness at all, to full, rational cognition. Indeed, the degree to which NICC is instantiated is the degree to which objectivity is achieved.

It makes no difference whether the CO is internal or external to the mind or brain. In neither case is one the subject of a CCR by virtue of being changed by that same relation to some other cognitive subject; nor is something an object of a cognitively conscious relation by virtue of being changed to some other object.

The difficulty is not, as with Plato, about knowing change or things that change; it is about *how we can know anything by changing it or being changed by it.* For what is changing to be present as it is, is for it to be present as changing; indeed, NICC forbids that what is changing can be known as not changing.

Nor does NICC prevent a CO in a cognitively consciousness relation being changed, provided it is not being changed by that CCR. Similarly, what is ruled out by the current proposal is not the possibility of having a conscious cognitive relation *to* an efficient cause, but the possibility of an efficient cause making itself present to a CS by acting on it as an efficient cause.

In the Platonic problem, what is changing is thought to be unknowable
precisely because it is changing and, therefore, has no *is* to be known as it really is. NICC simply implies that if something is unknowable because it is changing, it will not be made know-able by causing it to be unchanging.

I suggest that if the attempt to know what is changing is *aporetic,* the *aporiae* is a metaphysical problem ab-out the nature of change, not an epistemic problem about the nature of cognition. If this puzzle must be assigned a locus, it is, surely, better that it be metaphysical rather than cognitive; for what compromises the latter compromises our ability to know anything about such problems

Nor, as far as I can see, is there anything to prevent the *capacity* for cognitive consciousness being efficiently caused. Causing things to instantiate properties is the sort of thing efficient causes do. (Whether a non-conscious item can be the efficient cause of another non-conscious item being *capable o*f cognitive conscious-ness remains an open question.).

Unlike the standard characterization of cognitive consciousness as a subset of "what it is like something to be," NICC does not merely point someone familiar with the English idiom in the right direction. Neither the *definiens* nor the *definiendum* of NICC refers to any actual state or act of consciousness as experienced.

Instead, it offers an account of, and a means of identifying, one's cognitive consciousness that exploits a defining abstract property of such consciousness – a property that we can do something with and that relates cognitive consciousness to what is nonconscious in a fundamental way.

(As far as I can see, NICC is also a sufficient condition for a conscious cognitive relation; but it is not straightforward to eliminate *a priori* the bare possibility of there being some other relation that "makes a difference because it makes no difference" but is not conscious.).

For examples of NICC's fruit-fulness, consider that non-invasive-ness suggests a novel approach to the role consciousness in evolution, and, more generally, offers insight into the relation of cognitive consciousness to the self-contained world described by physics. (And, incidentally, rules out at least one version of the "Copenhagen" interpretation of quantum wave function collapse.)

III.

Why has NICC been so long overlooked? Several possible explanations suggest themselves. One is the notion, possibly as old as Aristotle's' "intelligible species," that knowledge consists in having a mental (or neural) "representation" of something causal-ly reproduced in the mind or brain. The classical empiricist example is the "wax-like" mind "stuff" upon which objects of sense are said to impress

their likeness (or the *tabula rasa* on which it is "written")

The present objection to this "efficiently caused mental replica" view is that such an "impression" would alter the "mind stuff" ("passive intellect," brain state, neural network, functional relation, biocomputational"soft-ware") acted upon; and if there is not to be a regress, the "mind stuff" altered would have to *be* the CS itself, insofar as he or she is cognitively conscious. Obviously, this, violates NICC(2).

Another reason may be the cur-rent focus on *qualia* as the only, or at least the most fundamental and instructive, instance of consciousness. But focusing on the mysterious occurrence of pains, pinches, patches of color, and the like, diverts attention from what it is for one item to be consciously present to another item. Alternately, Cognitive conscious-ness is imagned as a source of illumination emanating (somehow) from the brain, without considering what it is for it to illuminate an object for a cognitive subject.

V.

But this is as note about the 'Hard Problem," and so it cannot neglect to mention that, absent efficient causes operating within the brain and bet-ween the brain and the world, we would have no cognitive conscious-ness of either; and without cognitive consciousness acting as an efficient cause of brain events we would not be having this discussion. If this makes the "hard problem" even harder, it at least casts a new light on what that problem is.

Whatever intractable puzzles NI-CC may present for philosophers, cognitive scientists, and physicists (be-cause of its implications for efficient causes in physics), neither is some-thing we can do without. If efficient causal relations did not change their *relata,* nothing would happen; and if conscious cognition did not relate things without changing them, nothing would be known.

Since this cognitive "deconstruction" would iterate for all candidates for a CO – including any alleged successors of the original candidate – the CS would always be conscious of a CO other than the CO of which she is conscious.

Similarly, if, as in the usual view, the efficient causality flows in the opposite direction – from the CO that is to be perceived or known to the CS who is to perceive or know it – the CS who is conscious of the CO would always be other than then CS who is conscious of it.

Call NICC as it applies to these two causal "vectors" NICC(1) and NICC(2), respectively.

II

For easy of exposition I have been using elementary perceptual consciousness as a model, and I will continue to do so in what follows. But if NICC applies at all, it applies at every level of conscious cognition: from vague perceptions hardly distinguish-able from no cognitive awareness at all, to rational cognition. Indeed, the degree to which objectivity is achieved is the degree to which NICC is instantiated.

It makes no difference whether the CO is internal or external to the mind or brain. In neither case is one the subject of a CCR by virtue of being changed by that same relation to some other cognitive subject; nor is something an object of a cognitively conscious relation by virtue of being changed to some other object.

The difficulty is not, as with Plato, about knowing change or things that change; it is about *how we can know anything by changing it or being changed by it.* For what is changing to be present as it is, is for it to be present as changing; indeed, NICC forbids that what is changing be known as not changing.

Nor does NICC prevent a CO in a cognitively consciousness relation be-ing changed, provided it is not being changed *by* that CCR. Similarly, what is ruled out by the current proposal is not the possibility of having a conscious cognitive relation to an efficient cause or its *relata*, but the possibility of a CO making itself present to or in the consciousness of a CS by acting on it as an efficient cause or *vice versa.*

In the Platonic problem, what is changing is thought to be unknowable precisely because it is changing and therefore has no *is* to be known as it really is. NICC simply implies that if change is unknowable, it will not be made knowable by changing it.

I suggest that if the attempt to know what is changing is *aporetic,* the *aporia*is a metaphysical problem about the nature of change, not an epstemic problem about the nature of cognition. If this puzzle must be assigned a locus, it is, surely, better that it be metaphysical rather than cognitive; for what compromises the latter compromises our ability to know anything about such problems

[2]If only the effect is changed, then, nevertheless, when the CS is the cause, the CO will not be known as it is; in the reverse case the SE will n not be the CS was to know.

Nor, as far as I can see, is there anything to prevent the *capacity* for cognitive consciousness being efficiently caused. Causing things to instantiate new properties is the sort of thing efficient causes do. (Whether a non-conscious item can be the efficient cause of another non-conscious item being *capable of* cognitive consciousness remains an open question.).

Unlike the standard characterization of cognitive consciousness as a subset of "what it is like something to be," NICC does not merely point some-one familiar with the English idiom in the right direction. Neither the *definiens* nor the *definiendum* of NICC refers to any actual state or act of consciousness as experienced. Instead, it offers an account of, and a means of identifying, one's cognitive conscious-ness that exploits an essential and abstractly definable feature of such consciousness – a feature that relates it in a fundamental way to what is non-conscious and that it is possible to do something with.

(As far as I can see, NICC is also a sufficient condition for a conscious cognitive relation; but it is not straightforward to eliminate the bare possibility of there being some other relation that "makes a difference because it makes no difference" but is not conscious.).

For example, the fact that such a non-invasive relation makes cognitive consciousness possible precisely because it does *not* change any of its physical (or other) *relata,* suggests an approach to the role of such conscious-ness in evolution, and, more generally, an understanding of its relation to the self-contained world described by physics. (And, incidentally, rules out at least one version of the "Copenhagen" interpretation of quant-um wave function collapse.)

IV.

Why has NICC been so long over-looked? Several possible explanations come to mind. One is the notion, possibly as old as Aristotle's' "intelligible species," that knowledge consists in having a mental (or neural) "re-presentation" of something causally reproduced in the mind or brain. The classical empiricist example is the wax-like mind "stuff" upon which objects of sense are said to impress their likeness (or the *tabula rasa* on which it is "written")

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Whatever intractable puzzles NICC may present for philosophers, cognitive scientists, and physicists (because of its implications for efficient causes in physics), neither is something we can do without. If efficiently causal relations did not change their *relata,* no-thing would happen; and if conscious cognition did not relate things without changing them, nothing would be known.