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## The Internet, Epistemology and Ontology

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## The Internet, Epistemology and Ontology

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# The Internet, Epistemology and Ontology

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This essay considers the significance of the Internet on philosophy as an academic discipline. It focuses not on ethical, or axiological (the study of values) issues related to the Internet, but on epistemological (the study of knowledge) and ontological issues (the study of reality) particularly connected with the notions of knowledge and information.

**.01 Introduction** ([return to index](#))

What is the significance of the Internet to the discipline of philosophy? As any other academic discipline, philosophy can be considered primarily as content (i.e., there are topics that philosophers investigate) or as process (i.e., there are methods that philosophers use to investigate those topics) or even as ethos (i.e., there are attitudes or values inherent in investigating those topics and in applying those methods). These are the What? the How? and the Why? that any discipline asks. And, as with any other discipline, there are scores of sub-fields within philosophical concern. A convenient overarching rubric of philosophical concerns, however,

is the triad of axiology, epistemology, and metaphysics/ontology.

Most of the work by philosophers with respect to the Internet has been in terms of axiology. Numerous books and articles have appeared over the past several decades about “information technology ethics.” (See References below for a small sample.) These axiological issues have included such concerns as the Internet and privacy, the Internet and free speech, the Internet and property, the Internet and social responsibility, etc. However, there has been far less written on the connections between the Internet and the other two major emphases within philosophy: epistemology and ontology. It is these latter topics I want to speak to here. For the purposes of this short essay, I will focus on two topics, one epistemological and one ontological. The epistemological topic is: What does the nature of the Internet say about the nature of knowledge and of knowers? The ontological topic is: What does the nature of the Internet say about the nature of fundamental categories of what is real? I will speak to these two topics in particular because, while they are long-standing and perennial (what is knowledge and what is real?), the advent of the Internet has forced a re-examination of them in specific and important ways.

## .02 **The Internet and epistemology** ([return to index](#))

There are, of course, axiological issues that connect to epistemological ones, including how they relate to the Internet. For instance, questions about education, especially pedagogy, involve multiple dimensions of both axiology and epistemology. As just one example, if teaching (and learning) is taken in what John Dewey called “the spectator view of knowledge,” then teaching (and learning) is appropriately concerned with successful transmission of information. If the transmission of information is the immediate goal, with the longer-range goal of empowering the student (“knowledge is power”), then certain kinds of pedagogical techniques and parameters are valued. The focus here, however, is not directly on pedagogy, but on the epistemological issue of how the Internet speaks to the nature of the knower.

In particular, I want to suggest that the nature of the Internet is such that it challenges recent emphases on what some philosophers call “embodied agency.” Such thinkers who advocate this ineliminable “bodily presence” or “situatedness” include Hubert Dreyfus and George Lakoff & Mark Johnson (see References). In his critique of the Internet, Dreyfus remarks that “what gives us our sense of being in direct touch with reality is that we can control events in the world and get perceptual feedback concerning what we have done.” While it is certainly true that each of us, as knowers, is situated in the world and we learn by bumping into the world, what constitutes knowledge is not reducible to any of us or to our bodily presences, any more than what constitutes the English language depends upon the use of English by any speaker of the language or what constitutes mathematical truths depends upon any person’s calculations. Rather, the Internet (like any library), as a “storehouse” of information, is a reminder that “there is more in heaven and earth than is dreamed of in your philosophy.” But, in addition, the Internet, as a means of processing knowledge and not merely of storing it, rebuts the implied subjective nature of knowledge found in Dreyfus’s remarks. (See Steven Burt citation below in References.)

### .03 **The Internet and Ontology** ([return to index](#))

Not only do axiological issues connected to epistemological ones relate the Internet to a rethinking of philosophical concerns, but also axiological issues connected to ontological ones do likewise. Again, within the realm of education and pedagogy, the question of what is taught or learned (i.e., what is the nature of “The Taught” or “The Learned”) has been a long-standing focus for philosophers of education. This is not simply the issue of teaching/learning, say, facts vs. skills, but the deeper question of what constitutes a fact or a skill. The axiological aspect of this, of course, has to do with which of these (or the ways in which these) matter to us. We want students to learn how to think, but that requires something for them to think about (i.e., we exercise our skills on something). While ontological issues such as the nature of facts or of skills are interesting and important, and while there are other important ontological issues related to the Internet (such as the concept of place or the concept of identity), I want to speak to the ontological topic of information, a topic that has become especially pronounced with the presence of the Internet.

A traditional ontological concern for philosophers has been the question of what, if anything, is real and yet non-material or non-physical. This has taken the form of the standard “mind-body” question. That is, while humans exhibit behaviors that we deem “mental” (e.g., we think, dream, imagine), is this ability completely explainable in material/physical terms? Is the mind reducible to the brain, however complex that reduction might be? Is there an ontological duality of physical and mental (or some other non-physical thing) or is reality monistic, purely physical, although incredibly complex? This traditional issue of monism vs. dualism has been complicated by the nascence of a third fundamental ontological category: information. The notion of information is neither new to nor unique to the Internet. Biologists have used the notion for much of the past fifty years, especially in connection with heritability and genomics. It is now commonplace to talk about the information encoded in genes. What passes on from parent organisms to offspring is the information so encoded. (See Susan Oyama’s works, noted below in the References.)

Outside of biology, information is the conceptual building block of information technology. From the early technical formulation of the concept of information by Claude Shannon (see References), a fundamental ontological distinction between hardware and software, between the physical components of electronic switching circuits and the informational content of programs, has been established. Yet information, while being manifested in physical systems, is not reducible to those physical systems. At the same time, information is not reducible to some non-material mental substance or quality. The information contained in a simple written message – “Dinner at Eight. Don’t be late.” – is neither merely physical marks on a page nor merely a person’s interpretation of those marks. It seems to be a third basic ontological kind, and the Internet is the realm of information par excellence.

### .04 **Conclusion** ([return to index](#))

The point of this brief essay has been to suggest that the Internet is such that its very nature

speaks to some basic philosophical issues and that it connects with the discipline of philosophy not just “passively” by providing fodder for philosophical reflection, but “actively” by challenging some fundamental aspects of philosophy. In particular, this paper has focused on how the Internet actively demands re-thinking not only about axiological issues (as noted above, much has been said and will continue to be said about this) but also about epistemological issues and ontological issues.

## References [\(return to index\)](#)

Burt, Steven. “Manufacturing Understanding: Brain-Based Learning and the Internet in the High School Classroom” *The Journal of Education, Community, and Values: Interface on the Internet* November 2001 [www.bcis.pacificu.edu](http://www.bcis.pacificu.edu)

Dretske, Fred. *Knowledge and the Flow of Information*. Cambridge: MIT Press, 1981.

Dreyfus, Hubert. *On the Internet*. London: Routledge, 2001.

Graham, Gordon. *The Internet: A Philosophical Inquiry*. London: Routledge, 1999.

Johnson, D. G. *Computer Ethics*. Englewood Cliffs: Prentice-Hall, 1994.

Lakoff, George and Mark Johnson. *Philosophy in the Flesh*. New York: Basic Books, 1999.

Oyama, Susan. *The Ontogeny of Information*, 2nd ed. Durham: Duke University Press, 2000.

Regan, P. *Legislating Privacy: Technology, Social Values and Public Policy*. Chapel Hill: University of North Carolina Press, 1995.

Shannon, Claude. *The Mathematical Theory of Communication*. Urbana: University of Illinois Press, 1949.

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21 THOUGHTS ON “THE INTERNET, EPISTEMOLOGY AND ONTOLOGY”

**naija social network**

on **January 30, 2014 at 11:33 AM** said:

Thanks significantly for providing men and women with such a remarkable opportunity to read critical reviews from here. It’s often so superb plus packed having a good deal of fun for me personally and my office peers to visit your internet site minimum Three times

each week to discover the new points you have. And indeed, I'm also actually satisfied with your astonishing tips served by you. Some Two details in this posting are completely the simplest we've ever had.

**naija**

on **January 30, 2014 at 1:56 PM** said:

I utilized so that you can discover beneficial details through the content.

**Classie Castongvay**

on **January 30, 2014 at 5:42 PM** said:

My brother suggested I would possibly like this web site. He used to be entirely right. This put up truly made my day. You can't imagine simply how so much time I had spent for this information! Thank you!

**best tankless water heater**

on **January 31, 2014 at 8:09 AM** said:

excellent points altogether, you simply received a new reader.

What would you recommend about your post that you made some days in the past?

Any certain?

**plotka**

on **February 1, 2014 at 1:49 AM** said:

Thanks to your advice! I am going to read it to understand far more about Holy Cross.

**prawo**

on **February 1, 2014 at 2:15 AM** said:

My husband and i ended up being fulfilled once Chris could conclude his research from your ideas he was given within your site. It's now and once again perplexing to just most likely be handing out secrets and techniques that several some other men and women might were selling. So we recognize we have got the writer to appreciate as a result of that. Those people illustrations you have made, the straightforward web site menu, the friendships you will assist to generate it's everything about this content is amusing, that is certainly undoubtedly particularly essential. Thanks for ones whole thing!

**best waffle maker**

on **February 3, 2014 at 3:16 AM** said:

Hi, i think that i saw you visited my blog so i came to "return the favor".I am attempting to find things to enhance my website!! suppose its ok to use some of your ideas!!

**infrared grill reviews**

on **February 3, 2014 at 7:33 PM** said:

I every time spent my half an hour to read this weblog's posts everyday along with a cup of coffee.

**best home gym**

on **February 3, 2014 at 8:07 PM** said:

I got this website from my friend who informed me regarding this site and now this time I am browsing this web page and reading very informative posts at this place.

**clothes steamer reviews**

on **February 3, 2014 at 9:05 PM** said:

Hola! I've been reading your web site for a long time now and finally got the courage to go ahead and give you a shout out from Porter Texas! Just wanted to say keep up the great work!

**jig saw reviews**

on **February 3, 2014 at 9:21 PM** said:

Thankfulness to my father who shared with me about this weblog, this weblog is genuinely amazing.

**best recumbent exercise bike**

on **February 3, 2014 at 9:38 PM** said:

It's actually a cool and useful piece of information.  
I'm satisfied that you shared this helpful information with us.  
Please keep us up to date like this. Thanks for sharing.

**folding bike reviews**

on **February 3, 2014 at 9:54 PM** said:

Its not my first time to pay a quick visit this web site, i am visiting this web site dailly and take pleasant facts from here everyday.

**best vacuum sealer**

on **February 3, 2014 at 10:28 PM** said:

Good article. I will be experiencing some of these issues as well..

**humidifier reviews**

on **February 4, 2014 at 12:42 AM** said:

My spouse and I absolutely love your blog and find almost all of your post's to be just what I'm looking for.

Would you offer guest writers to write content for you?

I wouldn't mind producing a post or elaborating on a lot of the subjects you write related to here.

Again, awesome blog!

**espresso machine reviews**

on **February 4, 2014 at 12:57 AM** said:

This paragraph is genuinely a pleasant one it helps new internet viewers, who are wishing for blogging.

**band saw reviews**

on **February 4, 2014 at 1:23 AM** said:

I have read so many articles or reviews concerning the blogger lovers however this article is genuinely a fastidious paragraph, keep it up.

**table saw reviews**

on **February 4, 2014 at 2:08 AM** said:

Howdy very cool website!! Guy .. Beautiful .. Amazing .. I'll bookmark your site and take the feeds also? I'm glad to find so many helpful information here within the put  
up, we want develop more strategies in this regard,

thank you for sharing. . . . .

**best rifle scope**

on **February 4, 2014 at 3:40 AM** said:

Hi! This post could not be written any better!  
Reading this post reminds me of my good old room  
mate! He always kept talking about this.  
I will forward this post to him. Pretty sure he will have a good read.  
Many thanks for sharing!

**best electric tea kettle**

on **February 4, 2014 at 4:18 AM** said:

Spot on with this write-up, I honestly feel this web site needs a great deal more  
attention.  
I'll probably be returning to read through more, thanks for the info!

**best induction cooktop**

on **February 4, 2014 at 4:24 AM** said:

You actually make it seem really easy along with your presentation  
but I to find this topic to be really something which I feel I would never understand.  
It kind of feels too complex and extremely wide for me.  
I'm looking forward to your next publish, I'll attempt  
to get the hold of it!