The Internet –
Proposing an Infrastructure for the Philosophy of Virtualness

Katrina Burt
Associate Executive Director of Information and Communication, Epsilon Pi Tau,
Co-Editor of t*he Journal of Technology Studies*

Abstract
This paper proposes a preliminary infrastructure for future philosophical discourse on the virtual, interactive, visual, top layer of the Internet. The paper begins by introducing thoughts on such words as real, virtual, reality, knowledge, and truth. Next, news summaries are provided illustrating some effects from the "real world" on the virtual part of the Internet, and vice versa. Subsequently, nine major categories of Internet variables are identified. Finally, over one hundred questions about the philosophical nature of the virtual part of the Internet are listed and are organized into fourteen categories.

Keywords: Internet, Philosophy, Technology, Virtual, Infrastructure

On Purpose and Method

As I see it, philosophy is a tool whose purpose is to assist thinkers in thinking through the techniques of analysis, synthesis, and evaluation of questions, problems, and unknowns, in search of logical explanations for those things that occupy our minds.

I confess: I am attempting to contribute to the knowledge base of the philosophy of technology by posing more questions, more problems, and more unknowns. This, in itself, is a contribution, according to Nozick (1974), who claims the need for and the goodness in what he terms "less complete work, containing open questions and problems ..." In addition, Russell (1997, p. 161) sees the value of philosophy "not for the sake of any definite answers to its questions" but in the questions themselves, for "these questions enlarge our conception of what is possible, [and] enrich our intellectual imagination …"

In my quest for logical explanations about the philosophical nature of the visual interactive top layer of the Internet, herein referred to as the Philosophy of Virtualness, I have been able to brainstorm, identify, and categorize some philosophical areas of interest for future discourse. Russell (1997, p. 7) confirms "it is natural to begin with our present experiences" as we search for certainty. I have constructed these areas of interest primarily as an empiricist using observations, experiences, and introspection (Grayling, 1998) by first exploring definitions on such subjects as reality, knowledge, and truth. Next, I provided some news articles that examined the effects of the interactive part of the Internet on our real societies as well as the effects of our real societies on the interactive part of the Internet. Finally, I synthesized, evaluated, and used introspection of this data to identify some variables of the Internet and to create a list of over one hundred questions related to the interactive layer of the Internet. Refer to page 63 for the list of questions. Brey (2005) confirms the need for a more systematic evaluation of the Internet.

On Definitions

From my experience, when people speak of the Internet, they typically mean the interactive, visual top layer in which they interface with others, as opposed to the physical, infrastructure bottom layer. Due to its fascinating characteristics, this interactive top layer deserves a closer philosophical inspection. Is this interactive top layer just another communications technology or is it something more? Note that in this paper, the physical infrastructure bottom layer of the Internet will be ignored. Thus, for the remainder of the paper, the word "Internet" will refer primarily to the visual interactive top layer where users interface with other users.

We might define technology as something that extends to our human capabilities. We can ask if the Internet meets this definition. I imagine we could easily agree the answer is "yes," and so conclude that the Internet is a technology under the given definition. But, should we ask if it is something more than a technology? Could we consider it to be like a mall, a library, a school, a park, a museum, a theater, a community center, a telephone, a billboard, a workplace, a bank, a post office, a television, a radio, a public journal, a newspaper, a spy device, or something more? Does it meet any of the criteria for a community, a village, a society, a country, a world, a galaxy, or is it something different? Is it networked, digital, artificial, and / or virtual? Should it be called *The Internet Galaxy* (Castells, 2001), *The Network Society* (Dijk, 1999), *The Virtual Community* (Rheingold, 2000), or the *Internet Society* (Bakardjieva, 2005)? When people are on the Internet, do they interact, have relationships, share common purposes and interests, organize into groups, and provide assistance to each other, among many other tasks? Do these characteristics provide help to further define the nature of the Internet?

According to the DK Illustrated Oxford Dictionary (1998), a computing definition for "virtual" is "not physically existing as such but made by software to appear to do so." The Internet's interactive visual top layer is primarily made by software to appear to exist; it would not exist without software. Thus, I propose that the word virtual would apply to the top layer of the Internet. Therefore, I will refer to the interactive top layer of the Internet as something virtual which is not physically existing but made primarily by software to appear to do so. Since I have associated the word virtual with the interactive top layer of the Internet, I must distinguish it from things that are not made by software to exist which I will refer to as our "real world." From our real world we enter the virtual part of the Internet. Note that the physical bottom layer of the Internet is not virtual and we wil exclude it from our discussions in this paper.

Others also believe that the Internet is something more than a technology. Benson (2007, p. 13) refers to blogs as "… a community with occasional celebrations." Brey (2005) refers to the Internet as having "virtual communities" and distinguishes them from "physical communities." He also describes "online social relationships" in contrast to "offline social relationships" stating that the Internet makes possible the creation of individuals in communities with "shared interests and concerns." Brey further states that Dyson argues that the Internet allows for the creation of communities of individuals with similar minds.

On Real and Virtual

We should compare the words "real" and "virtual." In my "real world" I am able to hear, see, smell, feel, or taste things. In comparison, when I am on the Internet, I can hear and see things easily. According to Dorsey (2007), researchers at Worcester Polytechnic Institute are developing technologies for touch, taste, and smell for use in "artificial worlds." But, even if the Internet is able to match the real world in these five senses, would there still be something different about Internet? We might begin by exploring the qualities of the word real. Real has continuous time as a characteristic. For the Internet, what meaning does time have and is it continuous? Maybe

"change" is another characteristic of real? If no one from any real world accessed the Internet for a month, then will have anything changed in the Internet? We could also ask questions like, "Are Websites real?" When no one is accessing them, do they still exist? They are stored as bits. Are bits real? Another distinguishing characteristic of real may be things that are living and growing. Would we consider anything as living or growing in the Internet? Additionally, my real world appears to three-dimensional in space. What dimension is the Internet? Also, in the real world, we can measure the distance between objects. How do we define the distance between objects in the Internet? What does proximity mean in the Internet? In addition, in the real world, there is real property. What kind of property exists in the Internet? Are Websites or domain names property of some sort? And if so, whose property are they? Is virtual property real? Furthermore, in my real world, because no two people can occupy the same physical space, they must not have exactly the same view of a thing. In the Internet, can two people have the identical view of a Website, thus seeing exactly the same thing? Thus, what are the differences between the real world and the virtual part of the Internet? Could the Internet ever have the same qualities as the real world or could the Internet have even better qualities?

On Reality

Russell (1997, p. 9) indicates that "one of the distinctions that cause most trouble in philosophy … [is] the distinction between 'appearance' and 'reality,' between what things seem to be and what they are." We can only wonder what Russell would have thought about the Internet. Would his definition for appearance and virtual be similar? Russell (1997, p. 11) also questions reality: He asks, "Is there a real table at all?" Perhaps if he had viewed Websites, he might ask, "Is there a real Website at all?" Russell follows his first question with a second question: "If so, what sort of object can it be?" This same question can be asked about Websites today: "what sort of object is a Website?" Russell (1997, p. 13) continues his investigation of reality by defining matter. He considers matter as having several properties, one of which is "occupying space." This allows us to ask, "Does a Website occupy space?" in order to determine if it meets one of the criteria for matter. Cass (2007) estimates that the Internet weighs 0.2 millionths of an ounce which includes all Webpages. Therefore, a single Webpage does appear to have some weight, albeit minuscule, and so does it occupy some space? Russell (1997, p. 17) continues investigating matter: "Is there a table which has a certain intrinsic nature, and continues to exist when I am not looking …?" Naturally, we can pose a similar question: "Is there a Website which has a certain intrinsic nature and continues to exist when I am not looking?" Brey (2005) lists bewilderment about the difference between reality and representation as a perceived harm of the Internet.

On Knowledge and Truth

People searching the Internet for information will encounter an abundance of data and are subject to the burden of distinguishing the truthful data from the false data. Brey (2005) concludes that it is often "impossible" to determine the "correctness" of Internet information because of the complexity in assessing sources. Russell (1997, p. 121) states that the "truth consists in some form of correspondence between belief and fact." He contends the more important question is, "How we can know what is true and what is false?" Similarly, in the age of access to endless information on the Internet, how can we know what is true and what is false? To discuss this issue, Russell (1997, p. 140) introduces the concept of "probable opinion" and states "… the greater part of what would commonly pass as knowledge is more or less probable opinion." Thus, I wonder what Russell would think about Wikipedia. Popkin and Stroll (1993, p. 187) assert that "many skeptics have claimed that people's 'knowledge' only expresses opinions that may or may not be true." What kind of "knowledge" is on the Internet? Let us use blogs as an example. Are

blogs knowledge? According to Popkin and Stroll (1993), Mill believes that opinions should not be suppressed (even if the majority does not approve) for several reasons: (1) because they might be true, (2) that in the process of reviewing the arguments against a certain opinion one might understand his/her opinion better, and (3) that there may be elements of the opinion that are true. Would Mills be pleased with blogs and Wikipedia? Even Leibniz had a "vision of a great synthesis of knowledge, [a] universal encyclopedia that would be accessible through catalogues, abstracts and indices to the international community of scholars …" (Collinson and Plant, 2006, p. 109). Would Leibniz think of Wikipedia or the Internet as an implementation of his vision?

On Assumptions

The Internet has many intriguing qualities. Its function, or rather the function to which the Internet has evolved, appears to possibly be to connect the inhabitants of the Earth together. Borgmann (1999, p. 4) argues that "the Internet particularly has given many people the liberty to escape the constraints of their age, gender, and race, of their shyness, plumpness, or homeliness, and to set their glamorous inner selves free and adrift on a World Wide Web." Brey (2005) describes one perceived Internet benefit as being a "tool for freedom." Brey (2005) contends that a harmful effect of the Internet is the obscurity in sustaining distinct "boundaries between public and private spaces." In addition, probably one of the most unique aspects of the Internet is to allow instant n-way communication. By n-way, I mean x-number of senders connected to y-number of receivers where {x} and {y} are each the set of whole numbers. Similarly, Brey (2005) lists a benefit of the Internet as allowing "many-to-many communication." Also, Benson (2007, p. 13) concurs that the Internet, and specifically blogs, "… can be a way of creating a geographically distributed, even global, conversation and interaction." Additionally, the Internet, along with advances in the transportation systems provides for the development and existence of globalization – a topic of grave importance which is beyond the scope of this paper. Globalization is potentially a catalyst to the latest economic consequences we are experiencing. Due to the tight integration of the Internet, the real world, and globalization, any changes occurring in the real world are experienced rapidly on a global scale. This factor contributes to the assumption that the Internet is most likely more than just a communications technology.

On Systems

The real world as well as the Internet can be divided into systems. A system is a set of things that are related. From experience and observation, I note that the Internet influences the real world and the real world influences the Internet. These influences can be categorized by system type and might include broad systems such as cultural, economic, educational, employment, entertainment, legal, military, political, religious, societal, and spiritual.

On Empirical Knowledge of A Posteriori Beliefs

I have been analyzing news articles that illustrate the effects transferred between the real world and the Internet. This activity I consider to be a form of observation from which I introspect, synthesize and evaluate. To aid in the formation of the infrastructure for the Philosophy of Virtualness, I will attempt to recreate the observations that have led to my views and ultimately to the set of questions at the end of this paper. Thus, I am providing summaries from selected news articles, in the sections that follow, showing the effects transferred between the real world and the Internet. Additionally, I have been personally involved with the Internet and its interactions, as an end-user as well as a computer scientist, systems scientist, technology educator, and business employee (in both the profit and nonprofit sectors).

On Effects

Ozmon and Craver (2003, p. 135) claim that Peirce believed that "Our idea of anything is our idea of its sensible effects." Ozmon and Craver summarize Peirce's beliefs that "… ideas or concepts cannot be separated from human conduct, for to have an idea is to be aware of its effects … in the arena of human affairs." We can apply Peirce's belief to our own discussion. We should look at the effects the real world is having on the Internet because these effects will shape the interactive virtual part of the Internet. These effects are entering from the global population, thereby rendering the virtual part of the Internet as an entity comprised of global influences. Equally as captivating are the effects from the virtual part of the Internet on the real world. These effects are flowing to the global, real world, shaping it with new ideas. Brey (2005) lists a variety of benefits and harms of the Internet to the culture and society and concludes a need for understanding both better.

On Effects from the Virtual Part of the Internet on the Real World

In this section, I provide summaries of selected news articles from which I have observed the effects from the virtual part of the Internet on the real world. I also list the systems impacted as well as my thoughts. The articles are listed in chronological order.

Terrorists of Internet Generation Act On Their Own (2007)	
System	Cultural, Political, Social
Effect	Article states that third generation terrorists (those who are planning, funding, and attacking on their own) are learning their tactics from the Internet. "Its only connections to al-Qaeda are Web sites and a shared anti-West philosophy. Its practitioners go on-line to find inspiration as well as practical advice …"
Thoughts	Is the Internet good or bad for a society?

Mideast Bloggers Chip Away at Governments' Media Control (2007)	
System	Political, Cultural, Social
Effect	"Bloggers are chipping away, writing about everything from human rights to the region's rulers to the most taboo topic – Islam." "Blogs started taking off in the Mideast a few years ago as access to the Internet grew…" Blogs "strive to tackle political and social issues." "Governments defend their Web regulations, saying they are protecting citizens from 'immoral' and 'defamatory' content. But rights groups and bloggers say officials are really trying to retain their media control."
Thoughts	Can the Internet be used to change the real world society?

Students Use IM-Lingo in Essays (2007)	
System	Culture, Educational
Effect	Article states that students are using instant messaging lingo in their essays and other written assignments in high school and middle school. Some teachers think that it is good that students invented a new language that is used in communicating in our high-tech world.
Thoughts	Is the Internet changing the real world languages?

Amateur Hour for Political Ads (2007)	
System	Political, Cultural
Effect	"Do-it-yourself political advertisements made by amateurs are now flooding the Internet thanks to cheap digital video production equipment and free video sharing

	sites like YouTube." "But while the homemade ads are good for laughs, campaign professionals are wondering whether they could actually influence election results." "In such a wired world, the distinction between professional and amateur ads and incriminating video snippets is increasingly becoming irrelevant." "People don't distinguish between campaign-made ads on YouTube or homemade ads or a blogger following a candidate with a camera." The Federal Election Commission regulates formal political advertisements but does not regulate amateur ads.
Thoughts	Does the Internet encourage more people to become involved in the real world society? Can professional be distinguished from amateurs on the Internet?

Army's Newest Recruiting Tool: YouTube (2007)	
System	Military
Effect	The U.S. Army is using YouTube and the Internet to recruit young people by showing videos. The Army has a special channel on YouTube so that soldiers can upload real video clips once approved.
Thoughts	Is there a distinction between the real world wargames and the Internet virtual wargames?

Virtual Vines Grow On World Wine Web (2007)	
System	Economic, Social
Effect	Article states that there is "a winery where the grapes are real but the experience is as virtual as members want it to be with e-mail updates, live chat, and Web cams." This costs $5000-$10,000 per year. Web cams show the crush, complete with live chat so viewers can question the workers. There is even an on-line tasting where people are sent samples ahead of time.
Thoughts	What are the differences between the real world and the Internet?

Site Warns US to End Search For Soldiers (2007)	
System	Military, Political
Effect	An Islamic extremist Website warned that searching for American troops will put them in greater danger.
Thoughts	The n-way communication of the Internet provides for immediate and widespread communication.

MySpace Agrees to Provide the Names of Sex Offenders (2007)	
System	Social, Legal
Effect	MySpace has agreed to provide information to several states it has on sex offenders who have a profile on MySpace. They removed 7,000 profiles as part of the investigation. Many of these sex offenders have violated parole or probation by contacting children on MySpace. A MySpace attorney stated, "This is no different than an offline community." Before MySpace could legally release the information, it had to receive subpoenas and other legal actions under the Federal Electronic Communications Privacy Act.
Thoughts	Does the Internet mirror real world societies? Should the Internet have the same legal regulations as the real world and whose legal regulations should it have?

Internet Moms: Getting the Best of Both Worlds (2007)	
System	Cultural, Economic, Employment
Effect	"While many of the people [she] met online don't live close to her geographically, she says the Internet can offer an enormous sense of community and support." A

Thoughts	supervisor states, "… home workers can bring companies great benefits… [employees] get the flexibility to run their home lives and their work lives at the same time and the company gets employees who are more committed to a company…" Article also states that because of the Internet's international and "24/7" nature, it is beneficial for workers to work from home at various hours. It also states that having the ability to select from a worldwide population is advantageous. Does proximity affect Internet relationships? Does the Internet make the real world better?

Drink Mai Tai, Check Email (2007)	
System Effect	Cultural
	Article concludes that more people are working while on vacation and specifically those that are younger. Twenty-five percent of people under forty took their laptop on vacation, while only fifteen percent of people aged fifty to sixty-four took their laptop on vacation, and less than fifteen percent of people over the age of sixty-four took their laptop on vacation.
Thoughts	Are work and pleasure time becoming indistinguishable?

Internet Porn's Storyline May be a Riches-to-Rags Tale (2007)	
System Effect	Economic, Cultural, Entertainment
	Sales of X-rated DVDs are low due to Internet's free/low-cost photos and videos created by amateurs that are uploaded and available for free on the Web. In 2006, rental and sales of X-rated DVDs decreased more than fifteen percent from 4.28 billion in 2005 to 3.2 billion in 2006. The $13 billion sex-related entertainment market is at risk.
Thoughts	Is the Internet redefining some industries?

Nation Warming to Porn (2007)	
System Effect	Cultural
	In April 2007, more than one third of US Internet users visited online adult sites. Article concludes that porn is part of our everyday life now as opposed to the past because it has become more pervasive. Article states that employers and teachers are noticing females wearing more revealing clothes and assumes this is due to the prevalence of porn online.
Thoughts	Is the Internet changing the real world societies for the better?

It's 'A Real University' Online, Bowles Says (2007)	
System Effect	Educational
	The University of North Carolina System of 16 Universities is offering 130 on-line degree certificate and licensure programs to compete with University of Phoenix. UNC President Erskine Bowles asks the question, "…would you rather get [a master's degree] from a real university like the University of North Carolina, or would you rather get it from some virtual university?" UNC expects 80,000 additional students to enroll by the end of the next decade. Bowles implies there's a distinction between a "real university" online and a virtual university.
Thoughts	What is the difference between a real university online and a virtual university? What is the best method for education?

Conservative Bloggers In Full Revolt Over Immigration (2007)	
System Effect	Political
	One blogger stated he received 800-900 emails a day from readers. "Blogs and anti-immigration organizations used the Web to tap into the growing discontentment over

	the immigration bill, using the Internet to organize phone and fax campaigns to urge senators to vote against the bill. It was a plugged-in show of force that would have been beyond comprehension a decade ago."
Thoughts	How powerful is the Internet's effect on the real world societies?

On Effects from the Real World on the Virtual Part of the Internet

In this section, I provide summaries of selected news articles from which I have observed the effects from the real world on the virtual part of the Internet. I also list the systems impacted and some thoughts. The articles are listed in chronological order.

Egyptian Blogger Sentenced (2007)	
System	Political, Religion, Cultural, Social, Legal
Effect	An antigovernment Internet blogger was sentenced to four years in prison by an Egyptian court. This was the first person prosecuted. He was charged with contempt of religion and for defamation of the President Mubarak. Another blogger states, "… this means that the state cannot tolerate anyone voicing his opinion ..." This sparked debate among bloggers over the limits of religious and political expression in Egypt. "Within minutes of the judge handing down the sentence, word of the verdict spread to Cairo and other cities via text messages, email and blogs."
Thoughts	Has the Internet created a new set of consequences for actions?

It's Not A Game (2007)	
System	Social, Economic
Effect	IBM is spending $10 million to "help build out the '3-D' Internet, according to its CEO. The article states "it offers endless social possibilities with people around the globe …" "This virtual world – don't call it a game – has become a phenomenon." It has "huge opportunities to sell products and services." "Metaverse … is gaining currency as the generic name for virtual worlds." Linden Lab made $11 million in 2006 revenues from Second Life, primarily from the sales of virtual land. Customers are buying land which is really renting space on the 1750 servers that store the digital representation of Second Life. There are nightclubs, jewelry makers, landscapers, pet manufacturers, golf courses, beaches, bars, ski areas, and more. The CEO hopes other virtual worlds will interoperate with Second Life, so that Linden Labs can control the standards of virtual worlds. IBM's VP for technical strategy states "today virtual worlds are where video and VCRs were in the early 1980s, or where the Web was in 1993."
Thoughts	Will the Internet become a mirror of the real world and whose real world? Will the Internet change the economies of the world for the better?

Defining Truth in a Wiki-World (2007)	
System	Social, Cultural
Effect	Articles states Middlebury College does not allow the use of Wikipedia as references. It questions, "What qualifies as intellectual authority in an age of information overload, when society relies increasingly on the Internet?" Author states that some are "troubled by what they regard as a tendency on the Web to value anonymous, collective thought over individual intellect." "Globalization and technology are creating other socio-cultural changes that challenge old notions of expertise." "The Internet's ability to empower individuals with an illusion of infinite knowledge challenges even notions of reality." "Is information on the site absolute fact or simply a matter of group consensus?" Article recommends the "need to carefully sift any information over the Internet."
Thoughts	

What are knowledge and truth on the Internet?

Students Accused of Cyberstalking (2007)

System	Social, Legal
Effect	Two high school students were charged with cyberstalking by creating false profiles of their assistant principals on MySpace. "The Internet and social sites such as MySpace have vaulted youthful pranks onto a worldwide stage that can carry serious consequences." Students in several states have been criminally charged after posting fake profiles. In Texas in 2006, a principal sued students after students posted a fake profile indicating that she was a lesbian. Forty-five states have laws against cyberstalking. A parent of the student states "If we are going to start arresting children over this kind of stuff, we've gone terribly wrong as a country." The law in North Carolina includes any electronic communication making a false statement concerning death, injury, illness, disfigurement, indecent conduct, or criminal
Thoughts	conduct with the intent to abuse, annoy, threaten, terrify, harass, or embarrass. What kinds of laws are needed for the Internet? What are the rights of free speech on the Internet?

Virtual Feds Visit Second Life Casinos (2007)

System	Legal, Entertainment, Economics
Effect	Article states that Second Life is under investigation by FBI for its Internet casinos, but that the US Government cannot decide on the legality of virtual gambling. Although the Second Life agreement prohibits illegal activity, Linden Lab, creator of Second Life has no way to monitor or prevent gambling. Linden Lab could face criminal charges under the 1970 Illegal Gambling Business Act or the Unlawful
Thoughts	Internet Gambling Enforcement Act. What does illegal activity mean in a virtual society?

Turkey to Block 'Insulting' Web Sites (2007)

System	Political, Cultural
Effect	Turkey is blocking Websites that are insulting to the founder of modern Turkey. Turkey temporarily blocked access to YouTube. In Turkey it is illegal to "talk of breaking up the state or to insult Ataturk."
Thoughts	How much should a real society attempt to control the Internet?

As Blogs Spit Bile, A Bid to Make Nice (2007)

System	Legal, Cultural, Social
Effect	"The conversational free-for-all on the Internet known as the blogosphere can be a prickly and unpleasant place." Article states that people are trying to create a code of conduct by banning anonymous comments and having ability to delete threatening or libelous comments. "But since the Web offers the option of anonymity with no accountability, online conversations are often more prone to decay into ugliness than those in other media." These guidelines will be policed by the community and will be
Thoughts	voluntary. Does the nature of the Internet change the behavior of people in the real world?

China Aims to Further Tame Web (2007)	
System	Political, Cultural
Effect	Chinese President intends to rid the country of "unhealthy" Internet content by placing it under propaganda control. "Development and administration of Internet culture must stick to the direction of socialist advanced culture." China's Internet users grew by 26 million and is now 137 million people. China already uses filters and censorship systems that block the majority of users from sites offering
Thoughts	uncensored opinions and news.
	Is the real society attempting to replicate itself on the Internet?

'Entropia Universe' Opens Virtual Pawnshops (2007)	
System	Economic
Effect	An Internet game titled "Entropia Universe" has sold five licenses for virtual pawnshops for $404,000 that make loans to people who turn in virtual items such as
Thoughts	laser rifles.
	Is the Internet the new global economy?

Banned TV Channel Turns to YouTube (2007)	
System	Political
Effect	President Hugo Chavez restricted a TV channel from broadcasting. Now it is broadcasting on YouTube. It was the most subscribed feed for the week.
Thoughts	Does the Internet provide alternative methods for the real world?

WCVB, YouTube Reach Content Deal (2007)	
System	Entertainment, Cultural
Effect	WCVB-TV and four other TV stations owned by Hearst-Argyle Television Inc. will post news, weather, entertainment videos, and local programming on YouTube as part of their digital strategy of distributing content on the TV, the PC, and the mobile
Thoughts	phone.
	Is the Internet important to the real world?

'Amateur' Charge Infuriates Blogosphere (2007)	
System	Cultural
Effect	Andrew Keen, founder of Audiocafe, argues the following in his book: "Internet culture is actually a jungle peopled by intellectual yahoos and digital thieves." "The basic notions of expertise are under assault amid a cultural shift in favor of amateurism of blogs [etc.]." "Millions and millions of exuberant monkeys…[are] creating an endless digital forest of mediocrity." The bloggers are a "pajama army of mostly anonymous writers who spread gossip and scandal, intellectual kleptomaniacs who search Google to copy others' work and digital thieves of media content." The title of his polemic is "The Cult of the Amateur: How Today's Internet is Killing Our Culture." The article states that Keen's work is "shocking for its unforgiving view of
Thoughts	Silicon Valley's utopian aspirations."
	The Internet is referenced as killing our culture and referenced as utopia.

Luring Clients with Second Life (2007)	
System	Social, Cultural, Economic
Effect	"IBM is looking to extract real-world benefits from the virtual world that's called Second Life." Article states that IBM is experimenting now before it becomes

Thoughts	essential to be present in Second Life. IBM Michael Rowe believes "this is the next evolution of the Internet." Second Life allows people to create a virtual life for themselves. In this virtual life, people can buy or lease real estate, open businesses, buy things, meet friends, go to concerts, perform concerts, buy islands, and hold business meetings. It also has its own currency. Users communicate through instant text messaging. Islands cost $1,675 plus $275 per month maintenance fee. IBM owns more than 30 islands. The American Cancer Society had a walkathon and raised $41,000 in real money with 1200 walkers. Cisco Systems created a place to get remote medical diagnosis. There are 7.2 million residents up from 1 million in the fall 2006. 1.6 million people have logged on in the past sixty days. Land costs $9.95 a month to be a premium member otherwise it is free. Do all real companies want to be in the virtual world? Is Second Life a virtual society? What is a virtual society?

AT&T Anti-Piracy Effort Raises Privacy Concerns (2007)	
System	Legal, Entertainment, Economic
Effect	AT&T intends to create technology that identifies customers who use its network to upload illegal copies of movies and music.
Thoughts	Will AT&T be the Internet police?

Paranoia Grows Over Google's Power (2007)	
System	Economic, Culture, Political, Legal
Effect	Article states that people are concerned over the power of Google. Google's attorney states, "We are seeing breakthrough technologies emerging in the space of months. Social norms have a hard time keeping pace." Google has asked for a "comprehensive legislation to harmonize laws of various governments, all of which want their say over the World Wide Web. Self-regulation by the Internet industry has not worked." "New rules are needed to fend off governments which might try to force companies to divulge customer data." "Every major privacy panic since then has occurred against a similar backdrop of rapid technology change, and the psychological dislocations that inevitably follow until a new period of social adaptation and understanding evolves."
Thoughts	What are the rights of people when on the Internet? Who determines who is going to control the people when on the Internet?

Web Cam Exam Proctors are Latest Cheating Deterrent (2007)	
System	Educational
Effect	Article states that on-line educational institutions typically do not give exams because of the problems associated with securing the testing environment. Software Secure has created software that locks down a computer during testing, has fingerprint authentication, and has a Web camera and microphone. There are 3.2 million students taking on-line classes. "Will it be seen as too invasive?" A Dean at Worcester Polytechnic Institute stated it "would be probably pushing the boundary of our comfort level." "The military is asking questions about testing to make sure students are earning credible degrees."
Thoughts	Is online education good or bad, credible or not? Should it be controlled and who should control?

On Change

After examining the empirical evidence to date of the effects between the real world and the Internet (as provided in the news article summary section above), I speculate that the real world

societies and cultures are changing as a direct result of the effects from the Internet. I wonder if the change will be a permanent change to our real world. Kotter (1996) states change is only permanent if the culture is changed. Culture, according to Kotter (1996, p. 148) "refers to norms of behavior and shared values among a group of people. *Norms of behavior* are common or pervasive ways of acting that are found in a group and that persist because group members tend to behave in ways that teach these practices to new members … *Shared values* are important concerns and goals shared by most people in a group that tend to shape group behavior and that often persist over time, even when group membership changes." In this situation, the Internet appears to have been shaped and is being shaped by the people and for the people with the values, beliefs, and behaviors the people desire. However, not all people who are on the Internet have the same beliefs or value the same behavior, thus resulting in conflicts between those who want strict controls and those who want little or no controls. The Internet, because of its complexity, vastness, and its ability to allow for adaptations, is able to rapidly create new alternatives for many of the people desiring to circumvent strict controls.

Additionally, it appears that the systems on the Internet are all intermingling and their distinctness seems to be diminishing into overlapping systems. For example, Sim (2007, p. 42) believes that "… religious systems are becoming politically far more active across the globe. The close links between religious belief and politics call for analysis …"

On Controls and Laws

I have observed the real world attempting to influence the virtual part of the Internet through real world controls and laws. Popkin and Stroll (1993, p. 89) discuss Marx's ethical views as he "maintains that industry and technological discoveries develop much more rapidly than do the techniques for controlling them." This, I believe is apparent with the Internet. Popkin and Stroll (1993, p. 60) stress that "one of the most difficult and perplexing questions in political philosophy" in regards to society is "who should rule?" Some of the effects being noted in the news (as I summarized them previously) are concerned with the question of who should rule what aspects of the virtual part of the Internet. I ponder that if the real world is successful in controlling the virtual part of the Internet, then will the Internet be reduced to nothing more than a replica of a real world and whose real world will it be like? In contrast, it appears that the Internet is also affecting the real world's societies. We might ask, "Does it really matter if one affects the other? Why would it matter?" There are reasons why we should be concerned. One reason leads me to discuss Nozick's (1974) work on Utopia.

On Utopia

Nozick (1974) defines a "Utopia Model" (projected onto our world) as having the following characteristics:
>   1. possibility for a wide and diverse range of communities
>   2. ability for people to enter these communities if they are admitted
>   3. ability for people to leave these communities if they wish
>   4. ability for people to shape these communities to their wishes
>   5. possibility for utopian experimentation to be tried
>   6. possibility for different styles of life to be lived
>   7. possibility for alternative visions of good to be individually or jointly pursued.

Introspection leads me to wonder what Nozick would think of the virtual part of the Internet. Would he consider it some form of utopia projected onto our world? If the Internet could be a

utopia of some sort, and if the real world eliminates any of these seven characteristics identified by Nozick, then will we have lost hope of utopia forever on the Internet? If the virtual part of the Internet is something of a utopia or a subset of a utopia, should we attempt to preserve it before it is "de-utopianized?" This is just one reason we should be concerned about the consequences of the effects from the real world on the Internet.

On Measuring Effect

Can we measure the rate of effect from the virtual part of the Internet to the real world and vice versa by measuring something in the virtual part of the Internet? If the rate of effect is greater from the real world to the virtual part of the Internet than from the virtual part of the Internet to the real world, then should we prepare for obsolescence of today's virtual part of the Internet? Conversely, if the rate of effect is greater from the virtual part of the Internet to the real world than from the real world to the virtual part of the Internet, then should we prepare for global changes to our real world? To determine the rate of effectual change on such systems as the Internet, we could begin by determining its variables.

On Variables

Variables, by definition, are factors that change. By identifying the variables associated with the virtual part of the Internet, we can theoretically monitor them, track their rate of change, determine their direction of change, and thus form an opinion on trends. A trend, by definition is a direction of movement. However, it would be an enormous task, if not an impossible one, to monitor and track the variables. Alternatively, we can, at a minimum, be more cognizant of the variables, which might result in focused observations. Then, when we philosophize about the topics of interest in the Philosophy of Virtualness, we could insure that the applicable variables are considered in the discussion using these variables as a template for completeness. Relationships between variables also provide valuable information about the Internet, and it would be advantageous to record any noticed observations on these interactions.

On Internet Variables

There are a substantial number of variables for the virtual part of the Internet. Through observation, introspection, and synthesis, I can delineate the following categories of variables:

Variables	
People Variables	▪ Who is on the Internet? ▪ How many people are at a specific location on the Internet?
Property Variables	▪ Types of data on the Internet (Information, News, Encyclopedia, Videos, Pictures, Personal, Opinion, Mail, Instant Communication, Discussions, Government, Goods, Books, Commerce, Museum, Entertainment, Games, other)
Location Variables	▪ Physical location connection to the Internet (where on Earth) ▪ Type Location (car, home, airplane, hotspot, work) ▪ Virtual location (what Website(s) are connected)

Task Variables	▪ What are people doing while in the Internet?
	  – Helping others (financial, spiritual, medical, technical, emotional)
	  – Receiving help from others (financial, spiritual, medical, technical,

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emotional)
- Education (formal, informal)
- Companionship
- Communication (telephone, video, email, blog, chat, listserve)
- Religious / Spiritual
- Political
- Entertainment
- Employment (work, search)
- Economic (shopping, banking, selling, trading, financial)
- Devious (spying, hacking, stealing)

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- Concurrent Tasks (how many different tasks concurrently)

Infrastructure Variables	▪ Routing ▪ Addressing Servers Linking
Restriction Variables	▪ What is restricted? ▪ What is restricting? (Government, military, country, employer, parent, per Website via access rights / passwords) ▪ Why restricted?
Time Variables	▪ What time are people on specific Websites? ▪ How long of time are people on specific Websites? ▪ When is property updated?
Technology Variables	▪ What are people using to connect to the Internet? (cell phone, desktop, laptop, PDA, game console, other)
Cultural/Social/Ethical Variables	▪ Identity of Person (true identity, false identity) ▪ Location of Person (true location, false location) ▪ Biographical information of Person (true biography, false biography) ▪ Intentions of Person (good intentions, bad intentions) ▪ Culture of Person (Norms of Behavior and Values)

On Areas of Philosophical Interest

It is my belief that the virtual part of the Internet is distinct from the real world and merits its own philosophical category. Thus, I will attempt to synthesize a set of questions that might become a subset of the "infrastructure" of the Philosophy of Virtualness. Some of these questions have already been addressed, but for the sake of completeness, I will list them nevertheless. Note that the term "Internet" primarily refers to the interactive, visual, top layer.

General Virtual Issues	▪ What is the Internet? ▪ What is the purpose of the Internet? ▪ What is the nature of the Internet? ▪ What are the relationships between the real world and the Internet?
Virtual Metaphysics Issues	▪ Does the Internet have meaning? ▪ Is the Internet real? ▪ What is real in the Internet? ▪ What is virtual in a real world?

Virtual
Ethical
Issues

- Who should be allowed to access the Internet?
- Who should not be allowed to access the Internet?
- What should people be allowed to do in the Internet?
- What should people not be allowed to do in the Internet?
- Who should decide who has access and to what?
- Who should decide what people can/cannot do on the Internet?
- How should people behave in the Internet?
- Is the Internet good or bad?
- Is the Internet good or bad for our real world?
- Is the Internet a utopia?
- Should certain people be restricted to certain information in the Internet?
- Who should decide who can access certain information in the Internet?
- What value is the Internet?
- Is it good or bad to have global information on the Internet?
- Should a person on the Internet do something because they can?
- Who can people trust in the Internet?
- How do you know who can be trusted in the Internet?

Virtual
Deontological
Issues

- What should be the moral conduct in the Internet?
- Should the Internet have moral standards?
- Who should create the moral standards for the Internet?
- Who should enforce the moral standards for the Internet?
- How should moral standards be enforced for the Internet?

- What rights should a person have on the Internet?
- What rights should the states have to control people on the Internet?
- What should be right and wrong on the Internet?

Virtual
Social
Issues

- Blogs and other similar communication vehicles:
  - What is the purpose?
  - Should it be controlled?
  - Who should / should not be allowed?
  - Who should control?
  - Are these good or bad?
  - Should people be held responsible for their communications?
  - How can the expertise of a communicator be determined?
  - Who determines if a communicator is an expert?
  - Should communicators replace experts?
- Are experts needed in the Internet?
- Does the Internet enable bad people to be bad?
- Does the Internet foster bad behavior in good people?
- Are people being corrupted on the Internet?
- Does the Internet encourage bad behavior in bad people?
- Does anonymity on the Internet allow for people to be more truthful?
- Is having the ability to be anonymous in the Internet good or bad?
- Is the Internet good or bad for individuals?
- Is the Internet good or bad for the real world?
- Are good people still good in the Internet given the lack of rules?
- Are people different in the Internet than in their real world?
- Is the Internet changing the values and beliefs of the real world?

Virtual Political / Legal Issues	▪ What is the nature of politics on the Internet? ▪ Should the Internet be controlled? ▪ Who should control the Internet? ▪ Should real world's legal rights extend to the Internet? ▪ Should real world's laws extend to the Internet? ▪ Is the Internet good or bad for real world's politics? ▪ What is the nature of rules on the Internet? ▪ What is the nature of the government on the Internet? ▪ What is the nature of boundaries on the Internet? ▪ Are Websites properties in the Internet? ▪ What rights do Website possess? ▪ Are domain names property? ▪ What rights do domain names possess? ▪ Should a person be responsible in a real world for their actions in the Internet? ▪ What is the nature of property in the Internet?
Virtual Epistemology Issues	▪ How can we ensure truth in the Internet? ▪ What does truth mean in the Internet? ▪ How do we know if information in the Internet is truth? ▪ What does knowledge mean in the Internet? ▪ What purpose does Wikipedia serve? ▪ Is Wikipedia good or bad? ▪ Should Wikipedia information be controlled? ▪ Who should be allowed to place information in Wikipedia? ▪ Who should not be allowed to place information in Wikipedia? ▪ Should it matter if the Internet contains truth or not? ▪ What information should or should not be in the Internet? ▪ Who should decide who is most knowledgeable to populate Wikipedia? ▪ What effect does the majority have in determining truth in the Internet?
Virtual Economic Issues	▪ Is the Internet good or bad for real world economics? ▪ What is the nature of economics on the Internet? ▪ Is the Internet changing real world economics?
Virtual Technology/Science/ Matter Issues	▪ Is the Internet composed of matter? ▪ Is the Internet a physical object? ▪ Does the Internet occupy space?
Virtual Ontology Issues	▪ Do Websites exist when no one is accessing them? ▪ Are Websites real? ▪ What kind of time exists in the Internet? ▪ Does the Internet still exist when the computer is off?
Virtual Education Issues	▪ What is the nature of education in the Internet? ▪ What purpose does Internet education serve? ▪ What kind of education is necessary in the Internet? ▪ Is the education received in the Internet good? ▪ Is the education received in the Internet real? ▪ What credentials should educators in the Internet have? ▪ What is the nature of a good Internet class? ▪ Who should be allowed access to education in the Internet? ▪ What is the value of learning in the Internet?

	▪	How should education be delivered in the Internet?
	▪	How should education be evaluated in the Internet?
	▪	How do people learn in the Internet?
	▪	What is the nature of teaching methods for Internet classes?
	▪	What should students expect in Internet classes?
	▪	What should teachers expect in Internet classes?
	▪	What rights do students have in Internet classes?
	▪	What rights do teachers have in Internet classes?
	▪	How should students behave in Internet classes?
	▪	Is Internet education good?
	▪	What is the difference between a real university online and a virtual university?
Virtual	▪	Is the Internet good or bad for real world's religion?
Religious/Spiritual	▪	What is the nature of religion in the Internet?
Issues	▪	What is the purpose of religion in the Internet?
	▪	Is the Internet changing real world religions?
Virtual	▪	Is the Internet a form of art?
Aesthetic	▪	What constitutes art in the Internet?
Issues	▪	What is the purpose of art in the Internet?
	▪	What is the purpose of pictures/videos in the Internet?
	▪	Is YouTube or MySpace an art form?
	▪	Is the Internet beautiful?
Other	▪	Should the Internet ever have the same properties as the real world?
	▪	Could the Internet be a framework for utopia?
	▪	Is the Internet of philosophical interest?

On Conclusions

In summary, my quest for logical explanations about the Philosophy of Virtualness has led to more questions, problems, and unknowns rather than to answers, resolutions, and knowns. I have attempted to identify variables for future observation and organize philosophical areas of interest to create a foundation for the discourse on the Philosophy of Virtualness. I have also provided some basic thoughts on terms such as real, virtual, reality, knowledge, truth, change, control, and law, along with some assumptions. I have not attempted to provide any answers. It was also my intent to not exclude any questions from the list of philosophical areas of interest. My definition of philosophy is broad and is focused on all possible areas where philosophical questioning could assist thinkers in thinking.

My search for understanding the reality of the virtual part of the Internet remains incomplete, and grows in complexity as I attempt to describe philosophical attributes. Russell (1997, p. 16) concludes that "Philosophy, if it cannot *answe*r so many questions as we could wish, has at least the power of *asking* questions which increase the interest of the world, and show the strangeness and wonder lying just below the surface even in the commonest things of daily life."

The virtual part of the Internet is full of strangeness and wonder. Have you concluded that the virtual part of the Internet is nothing more than just another communications technology, or will you take the challenge, enter into a discourse on the Philosophy of Virtualness, and contemplate

the definitions, assumptions, variables, and questions that make the virtual part of the Internet such a fascinating philosophical entity?

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