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Implications of Internet Governance Issues for the end Users

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Abstract

Many of the utility service problems for the Internet cannot be solved by technical solutions when the causes are outside of the scope of technical explanation. For example, the consequences of management policies, economic requirements, proprietary rights and Governmental intervention. The result is that end-users experience inconsistent access to the largest global information system and regular disruptions to information services. It is also debatable if many of the "technical" and "engineering" causes cited for service disruption relate to technical issues or rather unresolved abstract layer problems such as social, political, legal and ethical concerns. In this paper, we define the problem context, perform theoretical analysis, and discuss possible ways to enhance the scope of internet governance that might benefit better information system services. The research contribution is a philosophical discussion of a problem domain that influences the utility value of large information systems.

Keywords: Internet, Governance, Philosophy in IS, IS Services, Utility

1.0 Introduction

The structures for Governance of the Internet have variously evolved to manage the problem of growth and access rights. A distinction is made between Governing the Internet and the utilization of the Internet for Governance actions, such as e-Government applications. This paper is concerned with the former concept. The Internet Governance debate has been driven by lobby groups and evolving decision-making forums. At pivotal points, new structural arrangements have been implemented to facilitate growth and the ubiquity of the global Information System (IS). For example, the formation of Internet Corporation for Assigned Names and Numbers (ICANN) in 1998 and the Internet Governance Forum (IGF) in 2006 (DeNardis, 2010). The initial governance of the Internet asserted by ARPANET assured the development and implementation of technical infra-structure for communication and the first centralized control of the domain name services (DNS). The governance concern was direction for standardization of interoperability protocols and a seamless service delivery. The debates that lead to the

formation of ICANN asserted economic rationality for the commercialization of the Internet and the balancing of private with Government interests (Mueller, 2004). A key concern was power sharing and the decentralizing of control. The current debate of Internet Governance retains some of the matters from previous issues – including DNS control, commercial economics, digital rights and the division of interest – but the contemporary debate is political and concerns content access, human rights and lobby representation. For example the recent vote at the United Nations hosted WCIT-12 conference (2012) showed strong support for greater Government control of content, jurisdiction by jurisdiction, and equally strong opposition to such a move (ITU/WTPE-13 Report, 2013). The Governance of the Internet has now become an International political debate in United Nations (UN) sponsored forums that are non-technical in nature.

As we have argued elsewhere, the current processes and relational mechanisms for the Governance of the Internet are strong but that the structures are weak. The attempts to formulate Internet Governance are structurally weak and will remain so until the fundamental questions regarding the IS ontology are answered. Our analysis has been guided by Heidegger's (1962) belief that an enquiry of an entity cannot successfully proceed without first understanding its being and how that Being comes into being in relation to other things that enable it to function. The implication of the belief is that the challenge is not to find an answer to a philosophical question but to understand how the problem could arise in the first place. It is our contention that weaknesses in the Governance of the Internet have been inherited from weaknesses in the definition of aspects of the Internet. Approaches to Internet Governance have principally considered the medium as an extension of the real world and real world practices such as legality and ownership. However, debates regarding the true nature of the Internet and the potential worlds it creates across jurisdictions and in psycho and social spaces suggests that the Internet is a complex entity. The implications of complexity and contested definitions are discussed below in the attempt to understand the current Internet governance debate and to advocate ways in which solutions may be found.

The Internet is a medium in which people engage in dialogue, entertainment and participate in a myriad of activities. The user does not ask many questions until an event occurs, and the system utility in relation to purpose becomes problematic. Events may occur in the physical internet where service interruption is explained by technical capability and supply contracts. However, other events occur in the physical internet that is better explained by the complexity of the entity and its relationship to human worlds. These explanations come from abstract layers where matters of law, jurisdiction and rights influence the availability of services. For example, digital rights, privacy, public policies, proprietary interests and so on, impact upon the availability of services. The Internet medium has agreed protocols at the physical layer but lacks universally enforceable rules of conduct that are inter- jurisdictional at the non-physical level. The perceived weakness of Governance in and of the Internet, has aided the creation of a sphere of existence wherein issues such as censorship, violation of the end-to-end principle, human rights protection and so on, cannot be debated adequately due to the lack of a suitable framework (Mueller, 2010). It can be argued that Internet Governance is of an exclusively technical and economic nature but it is our purpose to explore the contemporary issue of justice for end users and to consider what structures should exist for conflict resolution of non-technical and non-economic issues.

2.0 Three Cases

The following three case studies identify incommensurable theories of a religious, economic and political nature that challenge contemporary Internet governance processes. These selected abstractions are disclosed by an information system when a utility event occurs and the best explanation requires non-technical conceptual frameworks. Access to information and the availability of particular content are contentious and contested by different stakeholders in the Information System. The different values and expectations in different jurisdictions provide different formal expectations for content and its presentation. The Internet end users expect that the technical system functions and are often unconcerned for the reified debates regarding rights and contentious issues. The technical or physical Internet has technocratic explanations of performativity and governance that explain utility and functionality for the end user and their system. However, in the bigger picture the technical systems are

systems within systems and dependant on the reconciliation of abstract beliefs and the brokerage of suitable power relationships. Harmonization in the abstract layers of an Information system is not usually visible but when utility values drop below a threshold of tolerance users search for answers. The answer to abstract problems are found in debates and unresolved discussions of complex explanations. In the remainder of the paper, these exemplary cases will be referred to as Case 1, Case 2, and Case 3.

Case 1: The publication and later proliferation of satirical cartoons of Muhammad, the prophet of Islam in the Dutch newspapers in 2010 on the Internet led governments in Pakistan and other Muslim countries to censor such websites from their citizens (Jleinman, 2010). The attempts by these governments presumed their prerogative in being able to block access to information on the Internet when deemed offensive, and justifiable through appealing to their particular religious and political belief systems. On the other hand, advocates of free speech who saw attempts at content censorship as violations of human rights decried these actions. They argued for the freedom to be able to express their thoughts and views. There existed neither adequate resolution of the matter nor evidence of capable Governance processes that would be expected of entities such as cities, countries or organizations. The event did however disclose complex and difficult impasses that affected the utility value of the information system.

Case 2: The government of New Zealand passed a law in 2011 in an attempt to curb Intellectual Rights piracy (NZ Parliament, 2011). The law called for three warnings to be awarded to an offending party once evidence of their illegal downloading content through illegal mediums such as BitTorrent or file share websites was presented to the authorities. Punishments such as fines and removal of Internet access was set for such offenders. The media companies lauded the law as an exemplary first step in a drive towards the protection of their content, while it was decried by some organizations due to perceived weaknesses in the law and the harsh punishments that could be awarded (Hughes, 2011). The use of legislation in this instance was used to protect the economic rights of intellectual property owners. An end user could expect to pay for these services or be prosecuted for not doing so. However the downstream affect was that access to much

content was blocked because service suppliers feared the ability to comply with law and to adequately provide evidence. Such auditing was too difficult on the Internet and attempts easily contested by the media companies.

Case 3: Since 1998 China has implemented public policies to block and to monitor Internet traffic (Packard, 2010). The former Golden Shield project has resulted in Information Systems controls that are euphemistically known as the 'Great Wall'. The result is that information is controlled in one instance for the maintenance of peace and public order and unavailable in the other for those who wish to use it. In this sense, the utility value of the internet is diminished for those who legitimately wish to do journalism, research and other information management related roles (deNardis, 2010). This abstract layer problem is policy driven and has political solutions.

3.0 Defining the Internet

The Internet can be regarded as the physical implementation of a network of networks that facilitates the flow of bits over the OSI layer of communication. This understanding of the Internet allows for an empirically verifiable and tangible entity that follows routing principles established through consensual compliance of all networks in the inter-network. This approach for defining the Internet through conceptualizing it as a historical and 'real' entity, with a well-established and defined boundary can be categorized as the Phenomenological (term used in the Kantian sense denoting a physical phenomenon as against a Noumenon) understanding of the Internet. The approach delivers a causality that is programmed, developed, tested, and propagated. Processes and frameworks are employed to enable the humans to interact with technology. For instance, methods for establishing TLDs (top-level domains such as .com, .eu) are documented and complied (Najjar, 2004). Furthermore, other human activities such as commerce and trade, and governance practices are carried out on the Phenomenological Internet (Rossel, Finger, 2007; Clark, Wroclawski, Sollins, Braden, 2005).

However, Strate (1999) suggests that the polysemic entity Internet remains ambiguous in its complexity. While a pure Phenomenological approach to the Internet allows for a simpler and pragmatic understanding, the inclusion of the human actor results in

conflicting world views. Latour suggests that these conflicts are raised due to a lack of understanding of relationships of humans with non-humans (Latour, 1998). There are well-defined constructs to facilitate discussions of the physical Internet (Floridi, 1999), however, utilization of the Phenomenological understanding of the Internet for Cases 1 and 2 above cannot help in leading towards an evolution of understanding for Governance of the Internet and appropriate conflict resolution processes. The problem is the mediation between the issues and the scope of the context. The scope may not include adequate treatments for incommensurable theories. For example, religious beliefs may not have adequately debate in the contextual constraints of technology systems. The lack of scaffolding hints at a missing component of the Internet and a lack of resolved ontology that is required to mediate for issues that arise due to the human involvement in technology (Latour, 1991). Latour's (1998) views on human conflict with technology require positioning in the wider philosophical debate between Realism and Positivism in order to resolve a comprehensive ontology of the Internet.

4.0 Ontological Issues

Uschold & Gruninger (1996) propose that a search and investigation of the *"set of concepts e.g. entities, attributes, processes, their definitions and their inter-relationships"* in a complex reality can be termed ontology. Due the sub-fields of Database Modeling, Artificial Intelligence, Computational Linguistics within the field of Information Systems, IS researchers have proposed a number of ontologies (Guarino, 1998; Smith, 2003; Bunker, Cole, Courtney, Haynes, Richardson, 2005). Acknowledging the construction of ontology as a philosophical pursuit, Guarino (1998) hints at the diminished presence of the philosophical method within the field of IS, where he cautions that most of the IS ontologies are not as rigorous as traditional philosophical ontologies. The implications of these claims can be taken seriously when attempts are made to find ways to adjudicate between differing views on the appropriateness of Internet content and the distribution of decision making rights for Internet access.

Some of the early research on the nature of the Internet (and its ontology) dealt with the virtual sphere of existence occupied by the human in relation to the flow of data over the data-agnostic network. The virtual space was termed the Cyberspace, by borrowing the

term invented by Gibson (1984) in his science fiction novel Necromancer, which he defined as '*consensual hallucination'* in a '*non-space'*. This consensual hallucination for Gibson took place in a form much like the term Utopia refers to an imaginary place. Deutsch suggests that in the form of Cyberspace is a fabric of reality that is created for virtual reality (Deutsch, 1997). For Mitchell (1995) the Cyberspace is profoundly anti-spatial, ambient, '*nowhere in particular but everywhere at once'*, and for Barlow (1996), Cyberspace is a world that is '*everywhere yet nowhere'* where *'no bodies lived*'. These apparently paradoxical or contradictory definitions of Cyberspace were well-meaning attempts to visualize and communicate phenomena that held consistency for empiricist beliefs. Semantic slippage between terms and lack of consensus of meaning suggested that the ontological definition was not complete. To this end, Strate (1999) suggests that the polysemic neologism Cyberspace is ill-defined and states that as "*cyberspace is everywhere, and through widening usage, threatens to become everything, the term has become increasingly more vague and drained of meaning*" (p.382).

The variances on what Cyberspace is are not limited to the semantically differing definitions. In teleological attempts at defining Cyberspace, some academics suggest that in Cyberspace, distance and space no longer matter (Cai, Hirtle, Williams, 1999; Mitchell, 1995). A dialectically opposing view utilizing the Physicalist position proposes that distance is not dead in Cyberspace but may merely appear so (Floridi, 2005). The definition of Cyberspace also appears linked to a desire to refer to the contextual space on the Internet, with the poorly defined Cyberspace acting as the primary signifier. By way of example, some academics use the term Cyberspace interchangeably either with the physical implementation of the Internet or the Internet in general. While many papers define the non-physical aspect of the Internet by acknowledging it in various guises (Cyberspace the catch-all term), there is a group of academics that questions the existence of a Cyberspace by dismissing it as paradoxical and illusionary (Bukatman, 1993; Delaney, 1988; Lee, Lui, Chen, Tang, Huang, Huang, Chang, Chang, Chen, 2002). For instance, Koepsell (2003) terms the Cyberspace a misleading term and instead prefers to use the term computer-mediated-phenomena, which is less mystical and more accurate. For those scholars who dispute the existence of a Cyberspace, Umberto Eco's term *'the*

force of the fake' can be used to describe the process in which the Cyberspace gets invented by those who claim it exists and forced to act as a signifier without a signified. Casti (1997) gives an example of such reality being created while discussing prescriptive models in which those create reality whose job it is to define it. For instance, the economic conditions of the market force are often not discovered, but invented by those who predict them.

Another group of scholars argues that the Cyberspace is purely symbolic yet fictional. To this end, Zizek (2006) defines Cyberspace as a reality deprived of substance, wherein the rules of the usual real world are changed. For instance, Zizek (2000) suggests that instead of the usual serial authorship in real world, the Cyberspace features *'procedured authorship'* in which the author is no longer in charge of writing the detailed story-line, and instead responsible for basic set of rules of engagement. The literature reviewed suggests that the Cyberspace, as a missing component of the ontology of the Internet, has either been regarded as an entity that exists as a contextual space (that may not have been defined well), or as an entity that does not exist and is purely fictional. It exists in a symbolic and syntactic dimension where the rules of the game are different than those on the real world. Koepsell (2003) suggests that the difference between Cyberspace and real world is that of degrees and proposes there to be nothing inherently and innately different about Cyberspace that might, for instance, require the suspension or significant modification of physical world laws (such as Intellectual property) in a computer-mediated-phenomena which is primarily electronics and nothing mystical. Rosen (2010) suggests that when talking of the Cyberspace, "*we are speaking of a simulation, an electronic imitation of living reality, not reality itself.*" (p.72).

On the other hand, Zizek (2000) argues for the Cyberspace to be understood as a symbolic dimension with a contrary view of being. He suggests the Cyberspace is an emergent result of the multiple-narrative ideology's intertwining with technology, against a strict linear world in which time flows one-way. He refers to it as *'another example of the well-known phenomenon of the old artistic forms pushing against their own boundaries'* (p.37). Dreyfus (2001) takes a different approach to the question of ontology

and compares the Internet (Cyberspace) to Nietzsche's Superman and uses the example of Zarathustra to imply that the Internet is a new kind that the human can use to overcome and transcend the self. He suggests that the Cyberspace allows the human to create an external scaffolding to enable thought development that would not otherwise. To Dreyfus (2001) Cyberspace is a new kind of technological invention, instead of a new instance of technological invention. He attempts to harmonize the apparent contradiction between the Platonic viewpoint that allows for a higher space of existence and Nietzsche's anti-foundationalism. The human is allowed to either evolve to a higher space of existence due to the usage of Cyberspace, or overcome his humanness by becoming a human of a better kind. These concepts provide scope for rethinking the current Internet Governance debate and addressing some of the current impasses.

It becomes obvious by studying the varying views on the ontology of Cyberspace that there is tension between the Realist and the Positivist (or Phenomenological) manners of regarding reality for the construction of ontology for the Internet in the field of IS. For instance, Koepsell's (2003) views on the Cyberspace appear to derive support from academics who argue for a neo-positivist or anti-realist understanding of science to prevail over the realist account of its practice and hold scientific phenomena to be empirical and falsifiable (Fine, 1986). On the other hand, Dreyfus's (2001) understanding of the Cyberspace discussed above shows the Realist way of regarding reality. This enables him to regard the Internet (Cyberspace) as a new kind of being, that allows for human transcendence and new legitimate worlds. A reconciliation of the views comes in the reading of Heidegger (1962) in his destruction of Cartesian places. He puts that his dasein (the being), in the act of being, engages practically and concernfully with the objects in terms of relation, instead of with geometric co-ordinates. For instance, when a dasein makes contact with another dasein on the phone separated by two thousand miles, he acts more concernfully with that dasein than another sitting a mile away. In such practical concernful dealing, the mathematically calculable spaces are annulled and space and time contract. In Koepsell's understanding of Cyberspace, it could be suggested that while Cyberspace allows for the shrinking of both space and time, and allows for a

disembodied and non-situated human experience to take place; no new spaces are created but merely the experience of the dasein or stakeholder on the Cyberspace is modified.

5.0 Internet Governance Issues

Governance, or the act of governing, is fundamentally a human experience (Jessop, 1997) and a socio-cultural object, and as such open to constant epistemological revisions. Hirst (2000) suggests two possible meanings for Governance: the manifestation of an actor's (defined as 'the state' by Hirst) adaptation to its external environment, and a theoretical, conceptual representation of social systems and the role of actors within it. Changes or revisions to the empirical adaptations by an actor implementing Governance, or to the precepts of a Governance concept results in varying understandings of Governance (both in practice and theory), which help change the experience of Governance. The understanding of Governance interlinks with the domain it is exercised in. In a complex society with self-referential bodies, a declaration regarding the externalities can be an attempt by such an operating body at establishing its frame of reference. For instance, to the World Bank, Governance is the *'exercise of authority, control, management, power of a (political) Government' (p.3)*. To this definition, The United Nations Development Programme (UNDP) adds acceptance (legitimacy) and achievement of consensus (participation) by the public as further criteria.

It can be argued that neither of the above two definitions is taken as absolute by either of the institution. However, the raison d'être of the institution changes how it perceives the abstract concept of Governance as in how the concept relates to itself and its operation. As a human endeavor, the practice and understanding of Governance continues to evolve by the means of comparative studies, dialectical exercises, or revolutionary changes. Like other human constructs, apparent epistemological agreements break apart upon further scrutiny. For example, Plato, Farabi (2003), and Averroes (1974) adopted constructs for the democratic, timocratic, oligarchic and tyrannical forms of Governance as lesser forms of Governances than the Virtuous City. These views differ from most current scholars who would disagree with the criteria for justifying such claims. Farabi's Governance of the Virtuous City was inspired by early Islamic Caliphate, with which Averroes disagreed (Najjar, 2004), and they both differed significantly from the Platonic philosopher-as-king

paradigm. The definition of governance consequently varies with context, time and the ongoing debates.

Zizek (2006) suggests that the being and mode of operation of Cyberspace is determined and built by the ideologies that it sustains. One of such ideologies for Zizek is Cyber-revolutionism, which relies on the existence of Cyberspace *"as a self-evolving "natural" organism*." Geiger (2009) adds that the Cyberspace can be subjected to two different ideologies: that it supports and integrates a powerful discourse which uses "*the unforced force of the better argument*" (Habermas, 1998) or that it fragments communities impacting the Habermasian public sphere. This is the central problem area for resolving current Internet Governance issues. On one hand the Internet represents a force for the good and the attainment of utopian goals but on the other contextual meanings are fragmented and drained of meaning. In case 1 for example, one group seeks open and equal disclosure of all artifacts whereas the other has reverence and respect for religious matters that have contextual and public value. In case 1 there is no reconciliation or adjudication for the disparate beliefs.

The notion of space in the Cyberspace has two classic competing views: for Einstein (1962), space functions more as a social construct than objective reality, whereas for Kant (1998) space is a priori. This chasm reveals two opposing vantages from which differing philosophical approaches define the ontology of Cyberspace. In the expressionist debate on whether the (collective or individual) human subjectivity can create a new space independent of topological concerns, Dreyfus (2001) suggests that a reason Cyberspace feels more unreal than real world is because it fails to surprise the human body as much as being in the real world does. By way of example, driving a car at full speed with its associated risks and driving a car in a computer simulation with lesser risks, changes how the consciousness regards the reality. However, Lovlie (2008) argues that Cyberspace does not allow for a human consciousness to experience the truly idealist hope of a disembodied existence, as the topology of Cyberspace is still determined by the human body-mind. He further adds that *"the situatedness, orientedness and rhythm of our perceptions and actions carry over from the real to the virtual world, making them one*

experiential world." *(p. 47).* In case 2 it was not difficult for the New Zealand Government to equate the Governance of the cyberspace with the experience of jurisdiction over any physical space. The economic value of intellectual properties had to be protected and the machinery of Government acted to legislate.

Dreyfus (2001) argued that if the experiences in the Cyberspace were to begin to hold uncertainty and instability of the same order as that in the real-world, as in providing surprises both on specific and general instances, then the human will more readily accept Cyberspace as more real and a new kind of space. He also suggests that when the human being enters the Cyberspace leaving behind the *'animal-shaped, emotional, vulnerable'* self, his ability to decipher and act in the new space is severely compromised. While the human remains tied to his body that has always been consigned for use, the human remains situated and bounded, the Cyberspace makes him ever-present and unbounded. Case 3 illustrates that humans expect to do and to create themselves in cyberspace regardless of the physical space constraints. The information as a source for human creativity is found in cyberspace but potential forms of creativity may not be acceptable in the physical space. For example, the initiations of flash mobs, expressions of social and political views or hate mail.

Rhodes (2006) argues that an erosion of traditional bases of power in the domains it is exercised in has necessitated the need for renewed research on Governance. Even if Koepsell's (2003) views (that derive from a Positivist view of understanding reality) are applied on the Internet, the traditionally accepted bases of power identified by Rhodes appear weaker in their ability to extend their writ on or through the Internet. Glennon (2005) says that *"excessive violation of a rule, whether embodied in custom or treaty, causes the rule to be replaced by another rule that permits unrestricted freedom of action. The theory thus gives asymmetric weight to disconfirming evidence—violation—over two types of evidence that confirms it—behavior that is consistent with the rule, and rhetoric which is functionally identical to no rule*." *(p.939).* An examination of the results of Governance attempts in the three cases shows that these attempts to enforce religious, economic and political mandates on the Internet were un-enforceable. Attempts to

exercise rights and to block physical Internet access or to impose sanctions against violators were nullified by the use of proxy servers and other ploys on behalf of the end users. Similarly, it is not possible for the Governments to block access to data when it was encrypted, routed through private proxies, or simply accessed through websites that were not monitored or blocked. As per Glennon's theory (2005) on desuetude (a rule's abandonment through non-enforcement or non-compliance), these attempts achieved the rhetorical requirements instead of achieving the objective of their rulings.

6.0 Relating Governance to Utility

The elaboration of ontological issues within philosophy and the field of Information Systems demonstrate the difficulties for overcoming seemingly irreconcilable viewpoints on phenomenon, and the requirement for doing so in order to understand complex artifacts and constructs. The involvement of the human with technology in increasingly complex manners eradicates an objective reality, leaving a space that will not be fully explored using the empiricist methodologies alone. No further debate on the issues raised in the cases ought to take place as long as the ontology of the complex artifact Internet remains undefined. The varying and contradictory understandings of the Internet raise issues for debates, and by extension the potential of the Internet as a domain suitable for Governance. The lack of scaffolding for resolution of positions is not due to the absence of governance processes and structures on the physical Internet, which are present in such discussions, but due to the omission of consideration of the space and context that is created when the human actor interacts with technology. The omission is the absence of an agreed-upon and unified abstraction of the Internet that includes the dual aspects of the Internet being the Phenomenological (the tangible implementation) and the Cyberspace. The result is an examination of the cases can only be processed at lower levels of debate and unguided by higher abstractions. The implication is that the current debates on Internet Governance will continue to diverge towards totalitarian domination and dictatorial control or utopian divergence where anything goes.

The recent (December 2012) United Nations (UN) hosted meetings through its telecommunications arm the International Telecommunications Union (ITU) has asserted rights to the Governance of the Internet. In the first instance, the ITU mandate to govern

telecommunications was argued to include the internet and then the meetings attempted to have ratified by the 178 member states a legally binding treaty for Internet Governance. In terms of the bigger debate the move signaled greater Government control over Internet content and less private influence in Internet governance. By agreeing to revisions of the International Telecommunications Regulations (ITR) the treaty sought to implement pay-per-use tolls (national telecommunications charges), heightened surveillance and greater nation state control over content. Hence, the regulatory control of Internet traffic and user access would be in what was termed multi-stakeholder or nation state Government hands. The Internet was conceived to be a network of overlapping networks each controlled by Governments and not by Telecos or private organizations such as ICANN (see ITU/WTPF-13 Report for details)..

The current debate of Internet Governance at the highest levels (eg. The UN) exhibits many of the problems discussed in the philosophical sections of this paper. The immediate reaction of 58 nation states to the ITU position on the treaty was to walk out or refuse to vote on the matter. Similarly, a number of other organizations voiced strong opposition to the values expressed by the ITU and started lobbying against them. Such assertions of force demonstrate the lack of formal scaffolding in which to mediate disparate views. The central concern in this paper is the maintenance of the end user utility of the Internet. Clearly, these high level debates where binding agreements are reached have a direct impact on end user access to content. The utility value of the Internet varies from one user to another but every user expects timely access to the information required for purpose. In case 1 the citizens of numerous nation states did not have the information on which to form an informed opinion. In case 2 intellectual property owners had the option to charge for and to oversee the use of their creativity and in case 3 many journalists, university researchers and other professional groups could not legally obtain the information required for their creativity.

The physical Internet has established Governance structures (eg. ICANN), processes (eg. RFPs), and relational mechanisms (eg.IGF) but as we have argued above the ambiguous part of the Internet generally termed the cyberspace is troublesome. The recent debates

show again that the cyberspace is open for interpretation and ready for anyone to write opinions. On one side the complex clustering of private entities is asserted to be the supporter of freedoms for creativity and self expression and the position is pitted against greater legislative control, a new cost charging model and the arrest of end users who express unwanted opinions. The ultimate utility for a medium would be to have all information available to all users in a timely fashion. However, case 2 suggests that there are higher level economic issues, case 1 consequences for end user injury, and case 3 consequences for peace and social stability. To address the problem we take recourse to the previous philosophical discussions, and assert the necessity of assembling capacity that can clarify the ontology of the Internet. The ITU/WTPF-13 Report helpfully advances the concept of multistakeholder participation in the development of and the maintenance of Global principles for the Governance and use of the Internet. It also advances the argument that the role of the nation state Government has not been allowed to evolve in the current Internet Governance arrangements.

The pivotal issue noted above shows that weak ontology leaves a referral without reference or with many; and with the consequence that the situation remains ambiguous. The ITU/WTPF-13 concept of multi stakeholder participation is structurally sound and offers a solution we find in the debate of Dreyfus's work above. However, recourse to the pivotal issue leaves the problem of ambiguity unresolved. The implication is that the multi-stakeholders may have duplicity and interests that mitigate the purpose of the proposed Governance arrangements. For example if an advocate of nation state Government control also holds a penury interest in a Telecommunications Company or profits from related private enterprises then the value of multi stakeholder representation in Governance structures is compromised. Frameworks, such as Governance cannot be applied on the Internet, so long as a philosophically coherent ontology of the Internet is not defined. Duplicity is only one class of compromise that may occur in semantic slippage and only one risk inherent in circular arguments (eg. The 'force of the fake' argument). From the literature that has been reviewed in the previous sections, we have identified some of the current issues with the research for ontology of the Internet. Lyytinen (2003) provides a warning that a search for '*ultimate foundations'*, or

ontological certainty, is hopeless. We agree with his contention while maintaining that it is still possible to construct a philosophical stance that may enable the development of frameworks for understanding. Without these discussions of Being as the first import, other vital questions of human experience on the Internet, such as protection of identity, copyright protection, censorship, and others cannot be debated adequately, nor any decisions made by a stakeholder to be universally applicable.

7.0 Conclusion

Interruptions to Internet services and utility values are caused by technical problems but also by law, jurisdictional issues and proprietary assertions. These abstract matters are grouped into a layer of issues that have the potential to impact on the Internet as a large Information System, and argued to be of a different nature than technical / physical issues. The statuses of frameworks that have potential to adjudicate abstract matters are shown to be based on ambiguous truth claims, and fall short on generalizing a solution. The matters of ontology discussed further suggest ambiguity is a commonality rather than an absence from most attempts to form a working basis for abstract concerns. The location of a desirable set of unifying principles in IS research also makes difficult the definition of suitable decision-making grounds for apparently incommensurable systems. The difficulties created by human actor interaction with technologies will not go away by excluding the phenomena from discussion and research. The exclusion of phenomena invites critique of the assumptions on which proposals are set, for example, the assumption that the Internet can be governed.

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