COMPARING TWO INFORMATION SYSTEMS
PHILOSOPHICAL METHODS: PHENOMENOLOGY AND ACTOR-NETWORK THEORY

Ársæll Valfells

Ársæll Valfells, Assistant professor
Faculty of Economics and Business Administration
University of Iceland
Oddi by Sturlugata, 101 Reykjavík
Tel.: +354 525 5259
E-mail: av@hi.is

Institute of Business Research
University of Iceland
Faculty of Economics and Business Administration
Oddi by Sturlugötu, 101 Reykjavík
Iceland
www.ibr.hi.is
ABSTRACT

This paper explores the underlying philosophical assumptions of two methods recently developed within the field of Information Systems. One is the phenomenological method; the second is known as Actor-Network Theory. By using the philosophy of Friedrich Nietzsche a connection can be established between the philosophers Martin Heidegger and Gilles Deleuze. A philosophical debate arises from the different interpretations that Heidegger and Deleuze give of Nietzsche’s notion of the will-to-power. The debate revolves around whether Nietzsche’s will-to-power gives rise to Heidegger’s single conception of Being or Deleuze’s notion of Being as multiplicity. The phenomenological method has its roots in the philosophy of Heidegger whereas Actor-Network Theory draws on the philosophy of Deleuze. The underlying philosophical debate between Heidegger and Deleuze is crystallized in the choice that Information Systems theorists have, in using either of the two distinct methods. The phenomenological method can be said to be a closed system of investigation, and Actor-Network Theory can be said to be an open-ended system of investigation. This exploration is to provide an understanding that is not about applying the methods but about the assumptions that come with applying them.
1 INTRODUCTION

Within Information Systems research two distinctive methods of theorising have been recently developed as alternatives to traditional rational-economic management models. The former is the phenomenological method and the latter is known as Actor Network Theory (ANT). Phenomenology has explicit philosophical origins in the work of Martin Heidegger and Edmund Husserl. Origins of ANT have been attributed to three theorists within the sociology of science: Bruno Latour (Latour 1987; Latour 1999), Michel Callon (Callon 1986; Callon 1998) and John Law (Law and Rip 1986). ANT has not been attributed to any specific philosophy but is seen to be grounded in ideas from French post-structural philosophy, where Deleuze is one of the most influential philosophers.

This paper seeks a deeper understanding of these two distinct methodologies. It entails exploring their philosophical origins and the underlying debate between three influential thinkers: Nietzsche, Heidegger and Deleuze. The debate revolves around how we understand the world and how we can create descriptions of the world. Thus, we hope to bring forward the assumptions that come with applying these methods, rather than discuss how to apply them.

Nietzsche’s philosophy is a good point of departure as it provides a connection between the foundations of phenomenological and post-structuralist philosophy. The linkage is to be found in Nietzsche’s notion of ‘the will-to-power’. The concept of the will-to-power is connected to phenomenological philosophy in that it represents the consummation of the tradition of metaphysics. The end of metaphysics is what then paves the way for Heidegger to seek a new understanding of the essence of ‘Being’. The will-to-power is also linked to the foundations of post-structural philosophy in the way Deleuze disagrees with Heidegger’s understanding of Nietzsche. Deleuze finds the Nietzschean will-to-power to provide an understanding of the world as a ‘web’ of
contrasting forces. The phenomenological and post-structural philosophies thus produce two different interpretations of Nietzsche’s will-to-power. They lead to two different prescriptions about firstly how we understand the world and secondly how we are to describe the world.

2 NIETZSCHE’S PHILOSOPHICAL ORIGINS

2.1 METAPHYSICS AND MONISM IN WESTERN THINKING

Nietzsche attacked the Western tradition of metaphysics by tearing down what he thought had become a tradition of grounding our ways of understanding the world upon ‘Idols’. This tradition, for Nietzsche, has its roots in the philosophy of Plato where the Idols are based on Plato’s theory of the eternal Forms. The theory of eternal Forms assumes that beyond the world of physical things there is a higher, transcendental realm of Forms or Idols. In Plato’s realm of Forms there is a hierarchical order, the highest level being that of the form of Beauty. The physical world, perceived with our senses, is in constant flux and knowledge derived from it restricted and variable. However, the realm of Forms is only apprehensible by the mind and is eternal and changeless. There are Forms of man, stone, shape, colour, etc. Yet the things of this world are only imperfect copies of these perfect Forms.

Nietzsche saw the notion of eternal Forms as having created a tradition in which philosophers merely expanded on what the Forms are. For early Christian philosophers, such as Thomas Aquinas, it is God who represented the eternal Form of Truth and Beauty and it is from Him which all knowledge is derived. Kant shifted the emphasis away from the eternal God and argued that it is human Reason that constitutes the world. Whereas Hegel claimed that man is a mere crystallization of a transcendental Zeitgeist, an external collective social Reality from which all our notions originate.

2.2 MONISM AND TECHNOLOGY

Within this monist Western tradition, all ways of representing the world must take account of the Idol upon which the philosophy
is based. For example, within the Thomist system of explaining the world, any understanding of technology cannot be separated from our knowledge of the fundamental constituent of reality: God. So, when developing new technologies we would have to ask ourselves, whether they are compatible with what we think is the will of God. Under the Hegelian understanding we would see technology as a system that develops progressively through history. The individual man may come and go, but the development or innovation in technology is the crystallisation of the progressive development of the Zeitgeist.

For Nietzsche, founding philosophical systems on external Forms is flawed. With his statement “God is dead!” Nietzsche (Nietzsche 1974, 125) announces its consummation. With no appeal to Forms possible, whether it is God, Reason or Beauty, the question of how we get direction in gaining any understanding of our world becomes central. Nietzsche’s response is to shift the philosophical project away from the quest for external Forms into the realm of human reality and experience.

2.3 NIETZSCHE: NO TRUTHS JUST PERSPECTIVES

Nietzsche constructs a radically different investigative methodology which avoids the assumption that there exists an ultimate external reality. Any exploration of our existence is merely a ‘perspective’ among a multiplicity of ‘perspectives’. Each perspective is incomplete and no perspective can hold any privileged position with regards to other perspectives. There are four separate claims that are generally taken to be underlying Nietzsche’s perspectivism (Magnus and Higgins 1996):

- No accurate representation of the world as it is in itself is possible;
- There is nothing to which our theories stand in a consistent relation to, that enables us to say that they are true or false;
- No method of understanding our world - sciences, logic or moral theory - enjoys a privileged epistemic status;
- Human needs constitute the world for us.
Human reality and context, for Nietzsche, differ from person to person in addition to being dynamic and ever changing. Thus all philosophical systems based on static or universal notions must become obsolete. Nietzsche’s perspectivism advocates a “kind of philosophy that... is open-ended in character, experimentally employing models and metaphors from various domains and eager to draw upon the diversity of human experience” (Magnus and Higgins 1996, 12).

Nietzsche’s perspectivism has been criticised by many in different ways (Derrida 1979; Habermas 1989). Generally it is accused of being in itself a universal theory of knowledge, and therefore falling into a problem of self-reference. This criticism has been counteracted by arguing that the notion of perspectivism is not a theory of anything and certainly not a theory of knowledge, but rather that: “To say that there are only interpretations (or perspectives) is to rename all the old facts ‘interpretation’. The point of renaming is to help us set aside the vocabulary of accurate representation which still holds us in its Platonic thrall“ (Magnus and Higgins 1996, 5).

2.4 NIHILISM AND THE WILL-TO-POWER

Nietzsche’s attack on previous methods of philosophical investigation consists of scrutinising their implicit assumptions. He claims that: “[W]e stand in need of a critique of moral values, the value of these values itself should first of all be called into question”(Nietzsche 1996, 8). He sees that the value of the values themselves corresponds to elements in a war between forces of power and domination. The universal notions of ‘truth’ and ‘false’, ‘good’ and ‘right’ are connected to the word ‘ought’ and so the structure of our thinking is by itself a political aspect in battles of domination. All these values are the results of certain views of ‘use’, established for the purpose of maintaining and increasing the dominion of certain communities of interest. By questioning the ‘value’ of all values we deprive them of their original ‘value’. The result is that the values cannot be applied to the world. With the understanding that the value of all fundamental values is non-existent (God is dead!) Nietzsche sees man as entering a stage of nihilism.
Idols are exposed as groundless and it becomes clear that "the fundamental truth about human will, is its horror vacui: it must have a goal - and it would even will nothingness rather than not will at all" (Nietzsche 1996, 77). Nihilism exposes what for Nietzsche is the fundamental force of existence or 'the-will-to-power'. The fallacy of Western philosophy since Plato has been to focus on finding foundations and the project of philosophy must shift to the exploration of the will instead. The will-to-power is to be seen as the force that drives creation or change. The force of creation has no inherent value or meaning. All values and meanings are the creation of the will-to-power.

With his claim that underlying everything is a notion of a force or a will-to-power, our focus is drawn away from substances, objects and subjects, and is instead directed towards the relations between the forces that create these entities. Thus Nietzsche’s understanding of the essence of what it means for us to ‘be’ is for ‘being’ to exert strength. The essence of ‘being’, for Nietzsche, is always as a process of ‘becoming’. In the process of ‘becoming’ there are at play elements of domination and submission and so our concepts and explanations of human reality will be elements in the battle between different communities of interest for domination or control. Appeals to what is ‘true’, ‘good’ and ‘evil’ are strategies in domination.

Nietzsche uses what he calls ‘genealogy’ to analyse the interaction of forces. It is a non-linear historical investigation of interaction between forces. The Nietzschean investigation of force relations is not a mere excavation of history, a search for origins, but a kind of unmasking or stripping away pretensions of universality and self-serving claims to what constitutes reality. It is an attempt to see underneath what appears and explore the relationships of the various forces that are responsible for what appears.

2.5 NIETZSCHE AND TECHNOLOGY

On a physical level what Nietzschean philosophy means is that we need to rethink what appears to us as things and objects and not view them as ‘things-in-themselves’. A thing is always connected to other things; what we call a ‘thing’ is a nexus of
various other things; by stopping to view them as mere physical objects we see that ‘things’ are manifested in reality as events or as families of events. Applied within IS, for example the understanding of what constitutes a desktop computer would not be as a physical object but would be viewed as a ‘nexus’ of different forces. The forces that constitute the desktop computer are many, such as human needs, cultural needs and fashions, the biological and geophysical forces that make the oil and minerals that then make plastic and silicon chips, and the countless other forces that are involved. These forces then join together into a particular structure that exists in a particular space and time that we call on a day-to-day basis a desktop computer.

3 HEIDEGGER AND ‘BEING-IN-THE-WORLD’

3.1 FROM NIETZSCHE TO DASEIN AND PHENOMENOLOGY

Following Nietzsche’s critique of metaphysics, Heidegger also works towards a new understanding of the world. In “Being and Time” (Heidegger 1962) he begins by asking the question posed by traditional ontology: What is the being of entities? Heidegger notes first that traditional ontology fails to inquire into the meaning of being. To do so Heidegger turns to history to retrieve “those primordial experiences in which we achieved our first ways of determining the nature of being” (Heidegger 1962, 44). His argument is that, since the first beginning has predefined all subsequent ways of experiencing things, it follows that the historically shifting interpretations of being in our culture have all been permutations on the understanding that took shape at the dawn of our civilization. Thus, he claims, the early Greek understanding of being as physis is definitive of who we are as participants in Western history. This metaphysical tradition, which began with the early Greek thinkers and comes to a close with Nietzsche’s announcement of the death of God, is in Heidegger’s view nothing more than a progressive concealing of what was revealed in our primordial experience. The question of Being is reformulated as a question about the conditions for the accessibility and intelligibility of things and Heidegger starts from an existential point of day-to-day practices.
Heidegger also accuses Nietzsche of failing to bring to end the metaphysical tradition. Nietzsche’s failure lies within his conception of human essence as a process of Becoming. In Heidegger’s opinion, this does not move beyond metaphysics: it rests upon a notion of the will-to-power as the essence of all things thus rendering it another metaphysical theory. Therefore, Nietzsche’s philosophy is “not an overcoming of nihilism” but the “ultimate entanglement in nihilism“ (Heidegger 1961).

Heidegger sees the Greek concept of physis as the point of departure for exploring our existence, and he calls it Dasein, or ‘being-in-the-world’. It is ‘situated in the world’ thus rendering any attempt to disassociate or take a reflective standpoint outside the human impossible. Dasein is the sense that we have of our own existence, an existence within a world inhabited by other beings. Because Dasein is viewed existentially as being already in the world, it must already know the world; and so when we act, it is based upon that knowledge. This becomes a key element in the phenomenological methodology, where traditional concepts about man, such as ‘rationality’, are discarded and a new investigative methodology developed where phenomena and their relationships with Dasein are investigated.

“[Phenomenology’s] object is the way in which phenomena are treated, such a way that everything about them which is up for discussion must be treated by exhibiting it directly and demonstrating it directly. (...) This directness is reached by the phenomenological method, which addresses the phenomenon as it is in itself for itself - in terms of its ‘thinghood’...” (Heidegger 1962, 59).

For instance, an appeal to Reason in the explanation of human action is too shallow, for a rational explanation does not reach to the deeper level of what the Dasein actually is. Dasein is not reflected in the shallow hindsight of reason, but rather in the intangible complexity of human emotion.

3.2 HEIDEGGER AND TECHNOLOGICAL NIHILISM

In his essay “The Question Concerning Technology” (Heidegger 1977) Heidegger sees many aspects of contemporary life, such as art, sciences and religion, as exhibiting clear marks of
the ruling essence of technology. He indicates to us that the extreme influence of technology has invaded the dominion of man as a self-conscious subject. The ‘world picture’, or the cultural know-how in which we imagine our world, is being affected by the technology in how it pushes man to conceive of things and objects from its perspective. Heidegger sees technology as not only being an objective tool or a means to an end, but as a process of ‘ordering-revealing’. The revealing is in how modern technology views nature as a supply of energy that can be extracted and stored. In this technological way of seeing, natural elements such as air become viewed as mere supply of its constituents, e.g. oxygen, carbon, nitrogen etc. As it reveals, it also orders everything to ‘stand by’, or to be immediately at hand, so that it may be on call for further ordering. The role of man in the process is that he drives technology forward. But the danger is that in technology as a process of ordering and revealing of resources, man itself becomes viewed as another resource to be tapped into and utilized. The process of ordering-revealing takes over, and as a consequence it rules out any other ways of ‘seeing the world’. This predestines man to a technological understanding of the essence of Being, and in turn affects the essence of man to fit the process.

“But [technology] does not simply endanger man in his relationship to himself and to everything that is. As a destining, it banishes man into that kind of revealing which is an ordering. (...) [The] threat to man does not come in the first instance from the potentially lethal machines and apparatus of technology. The actual threat has already affected man in his essence. (...) [It] could be denied to him to enter into a more original revealing and hence to experience the call of a more primal truth” (Heidegger 1977, 28).

The triumph of the technological process is a triumph that brings Being to the ultimate stage of technological nihilism: ordering for the sake of order itself. And the danger with the technological way of seeing things is that it makes us lose sight of ourselves as beings.

Heidegger’s conclusions have been widely criticised by contemporary philosophers. Much of that criticism has been focused upon his claim that there is a proper way to see Being. The
critique provided by Gilles Deleuze is aimed at Heidegger’s reading of Nietzsche and Heidegger’s claim that the proper way of seeing Being has emerged from Nietzsche’s notion of the will-to-power.

4 DELEUZE AND THE WILL-TO-POWER

4.1 DELEUZE AND HEIDEGGER

In his work “Nietzsche and Philosophy” (Deleuze 1983), Deleuze gives a response to the Heideggerian interpretation of the will-to-power:

“Heidegger gives an interpretation of Nietzschean philosophy closer to his own thought than to Nietzsche’s… This interpretation neglects all that Nietzsche fought against. Nietzsche is opposed to every conception of affirmation which would find its foundation in Being, and its determination in the being of man” (Deleuze 1983, 220).

Deleuze sees Heidegger’s understanding of Nietzsche’s notion of Becoming, and his use of Nietzsche to pave the way for an ancient Greek notion of physis, as misguided. Heidegger’s reading (of the will-to-power as a metaphysical theory) results in a conclusion, which is opposite to Nietzsche’s thought. Further, Deleuze sees Heidegger’s philosophy of Being resulting in the revival of a philosophical system similar to that of Hegel. In Hegel what guides Being is the movement toward the unifying synthesis of the Zeitgeist. Similarly to Hegel, Deleuze argues, Heidegger sees what guides Being as the unifying synthesis of ‘Being-in-the-world’. By contrast, Deleuze understands Nietzsche as providing a “differential logic of polyvocal-monism of affirmation and negation, not a movement towards some unifying synthesis“ (Deleuze 1983, 54); and the application of the will-to-power as meaning “(...) the principle of the synthesis of force. The synthesis is one of forces, of their difference and their reproduction“ (Deleuze 1983, 50).

Where Heidegger sees Nietzsche’s notion of the will-to-power as unable to move away from nihilism, Deleuze contrastingly
sees the will-to-power to provide the basis for a new understanding of the world from the basis of ‘force relations’. The will-to-power is seen as a force that is not a singularity, but can be exploded into a multiplicity of forces, a theme that Deleuze takes forward in his own philosophy. Deleuze argues that a distinction must be drawn between the notion of Will and the notion of Power. Nietzsche’s will-to-power and its extended concepts such as the Foucauldian ‘will-to-knowledge’, are among a multiplicity of manifestations of the notion of an innate Will (see note 2). For that matter the whole world can be viewed as mere manifestations of different types of energy forces, whether psychological or physical. Power on the other hand is the appearance of force and emerges in the interaction of different forces. “Force arrives from outside to break constraints and open new vistas. Power builds walls… Power is the domestication of force“ (Deleuze and Guattari 1988, xiii).

4.2 DELEUZE AND GUATTARI AND WEBSES OF FORCES

Deleuze and Guattari attempt to move away from the tradition of a singular unifying philosophical thesis with a new ‘arborescent model of thought’ that:

“[Does] not lodge itself in the edifice of an ordered interiority; it moves freely in an element of exteriority. It does not repose on identity; it rides difference. It does not respect the artificial division between the three domains of representation, subject, concept and being; it replaces restrictive analogy with a conductivity that knows no bounds. The concepts it creates do not merely reflect the eternal form of a legislating subject, but are defined by a communicable force in relation to which their subject… is only secondary. Rather than reflecting the world, they are immersed in a changing state of things” (Massumi 1992, 5).

Their work “A Thousand Plateaus: Capitalism and Schizophrenia” (Deleuze and Guattari 1988) is an effort to construct what they call ‘a smooth space of thought’. Smooth space is “a space of contact (...) rather than a visual space like Euclid’s striated space” (Deleuze and Guattari 1988, 371). They call their kind of philosophy pragmatics because: “its goal is the invention of concepts that do not add up to a system of belief or an architecture of propositions that you either enter or your don’t, but instead pack
a potential in the way a crowbar in a willing hand envelopes an energy of prying” (Massumi 1992, 5). Their philosophy is a collection or a repertory to pick and choose from, that enables one to recombine and refashion in the hopes that it may be found to be useful in understanding the process of structuration, i.e. the integration of separate elements into more or less regular stratified formations from a basis of change. This is radically contrary to the Heideggerian agenda where Heidegger constructs a holistic and universal philosophy of Being that Deleuze and Guattari criticise as being an attempt to resurrect a biblical genesis.

Deleuze and Guattari’s philosophy sees everything as interplay between different manifestations of forces. So the ‘life world’, ‘matter world’, ‘psychological world’ or for that matter any ‘world’- all things become viewed as different paths of channelled forces. However, the multiplicity of forces that exist can be collected under a single monistic notion of a Will. But this notion of a singular Will can then be exploded into a multiplicity of wills; this is best described as a picture of a Mandel fractal, where its pattern can be viewed as an optic whole from a particular cut-off point, but can then broken down endlessly onto upper or deeper levels.

Whereas Heidegger sees the notion of a monistic physis emerging from Nietzsche’s will-to-power, Deleuze and Guattari contrastingly see the emergence of random multiplicity of forces. Being as a multiplicity, for Deleuze and Guattari, can be compared to a fractal that is endlessly dividing and infinitely riddled with proliferating fissures. Even though “it looks like and can function like a unified figure if we adopt a certain ontological posture toward it: monism as produced meaning, an optical effect… [But it is] a network of bifurcation… a web of proliferating fissures in infinite regress towards the void“ (Massumi 1992, 21-22). Being is a multiplicity with inherent randomness where chance variations are thrown in. Being proliferates with chance variations. Being is not static and singular, but dynamic, random, fluid and exists in multiple states at various speeds in various spaces at various times.

Heidegger and the phenomenological method of investigation attempt to excavate the essence of phenomena by stripping away
their ‘appearances’, and then explore how a phenomenon is in relation to our Being. Deleuze and Guattari argue that a monistic notion of Being cannot form the grounding of any analysis. A phenomenon under the Deleuzeian approach does not possess an essence; it is “not an appearance, or even an apparition, but a sign, a symptom which finds its meaning in an existing force“ (Deleuze 1985, 148). Thus a phenomenon or a thing can have many meanings, as many as there are forces capable of seizing it. Meaning is relational and is constituted from a meeting between forces rather than simply being a force that is behind a sign.

4.3 TECHNOLOGY AS A STRATUM

When we think of a phenomenon or an object, for example a laptop computer, it can be seen as a manifestation of multiple forces, such as matter forces and social forces. As a laptop computer is constructed, human expression is channelled into physical content. The physical content of a laptop computer has a complex biological, genetic, territorial, mineralogical and even on a much wider scale cosmological, history. Similarly, the expression (or the function) of the laptop has a complex sociological, cultural and psychological history. The laptop is a ‘nexus’ of social and matter forces. As we describe objects it is we who make the distinction between what is the content and expression. Thus when the ‘nexus’ of content and expression is studied the distinction between content and expression is relative and reversible. However that does not mean that is merely subjective, that we can have it any way we like it, but rather:

“[The] ‘perspective’ according to which one becomes the other is not fundamentally the point of view of an outside observer. It is the angle of application of an actual force. A power relation determines which is which. Since each power relation is in turn a complex of power relations, since each thing is taken up in a web of forces, the distinction may seem untenable… [But] The strands of the web can be unwound. We can follow the trajectory of a force across its entanglements with other forces, and we can follow the trajectory of a thing as it passes from one knot of forces to the next” (Massumi 1992, 12-13).
The universe is then viewed and described as a network of forces that are intertwined and mingled together. Descriptive tools seek to create maps, which are a perspective within a multiplicity of perspectives, and we are free to amalgamate various perspectives into a single narrative. History, physics, economics, biology and culture can all be relevant within a perspective and we must not let institutionalised notions of authority over discourse interfere with our mapping.

The tools that Deleuze and Guattari use are ‘homemade’ as well as borrowed from various fields ranging from Chaos Theory to Franz Kafka. The most fundamental tool they use to describe the universe is the notion they term strata or stratification, a concept that they borrowed from Chaos Theory. Stratification is a process that is seen as inherent to the structure of the universe; it is the process of chaotic matter suddenly being subject to a structure or a form by the means of self-organisation, i.e. the emergence of order out of chaos. For Deleuze and Guattari there are “three major strata: physicochemical, organic, and anthropomorphic“(Deleuze and Guattari 1988, 502). Examples of physicochemical strata would be complex inorganic molecular structures, proteins, organic crystal structures and galaxies; organic strata would be the self-organisation of plankton in riverbeds, herds of animals, nomadic societies and human social structures. It is within the third grouping of strata that we find Deleuze’s notion of technology. This stratum is:

“[Defined] less by a human essence than… by a new distribution of content and expression. Form of content becomes ‘alloplastic‘ rather than ‘homoplastic‘; in other words, it brings about modifications in the external world. Form of expression becomes linguistic rather than genetic; in other words, it operates with symbols that are comprehensible, transmittable, and modifiable from outside. What some call the properties of human beings - technology and language, tool and symbol, free hand and supple larynx… are in fact properties of this new distribution” (Deleuze and Guattari 1988, 60-61)

Technology is not a human creation, but is a ‘homoplastic’ self-organising process interacting with other self-organising
processes. This view sees the emergence of ‘technological’ methods with living organisms, from bird nest building, ape and human technology as a whole and there is no radical distinction possible between the emergence of technology with humans and other animals. Each stratum consists of coded boundaries and formed substances, but these forms, substances and boundaries are not fully distinct. The strata are mobile and one stratum is always capable of serving as the substratum of another and they can collide and be combined.

4.4 DISCUSSION AND CONCLUSION

Nietzsche attacks any understanding of the world that is built upon foundations external to man. Once this is realised we enter the stage of nihilism, a state in which a being has the need to call itself continually into question. Nihilism exposes the underlying force to all things, the will-to-power, a force of creation and change. The will-to-power explains what it means to be as a process of Becoming. Since no understanding of the world can rest upon complete foundations, then understanding is nothing more than a perspective among a multiplicity of perspectives. The constitution of an information system is as a ‘nexus’ of different forces, which can be understood from multiple perspectives.

For Heidegger, the will-to-power is just another metaphysical theory and Nietzsche’s philosophy is the ultimate entanglement of nihilism. Heidegger restructures the question of the meaning of Being by going back to the ancient notion of physis, where he finds what he claims is the proper understanding of the essence of Being as Dasein. From this understanding of the world then the phenomenological method of investigation explores how phenomena are in relation to Dasein. Technology is a way of ordering which excludes more original, ‘primal’, revealings.

Deleuze interprets Nietzsche’s will-to-power as a notion of multiple wills by making a distinction between the will and the power. The will can be exploded into a multiplicity of wills or forces. Power is the domestication of a force. The approach to describe the fragmented human context from within is an open-ended way to seek understanding by the use of various descriptive tools. Tools describe a context from which a unified picture cannot
be created. They are descriptive tools that seek to map out the network or 'web' of forces, a process termed Rhizomatics. Nomadic thought seeks to transgress across the imaginary boundaries put up by authoritative academic discourse.

Phenomenology within IS research, as illustrated by Ciborra (Ciborra and Hanseth 1998) and Introna (Introna 1997) has its explicit philosophical groundings in the philosophy of Heidegger. Implicit links exist between ANT and the philosophy of Deleuze. First, is the assumption that the world is a web or network of forces. Second, phenomena within ANT are seen as a nexus of force relations, and the notion of the actor as a nexus is central to the anti-essentialist agenda of ANT:

“[It] is a theory that says that by following circulations we can get more than by defining entities, essence or provinces. In that sense, ANT is merely one of the many anti-essentialist movements” (Latour 1999, 20-21).

Thirdly, one of the most important features that ANT shares with the philosophy of Deleuze is that it aims at being an open-ended system of thought, or 'nomadic' thought. ANT adopts a similar method as Deleuze’s ‘smooth space of thought’, and avoids taking the outside standpoint as Euclid’s striated space (see Section 4.2). Following Nietzsche’s perspectivism and Deleuze’s Rhizomatics, ANT does not make a distinction between what is natural and what is social in its description. A distinction between natural and social would indicate a reality that exists ‘outside’ human context. Finally, the last link that ANT shares with Deleuze is the view that individual components of technology (which Latour terms ‘black boxes’ (Latour 1987) and Deleuze calls assemblage) are ‘translated’ through a rhizomatic network of forces. The black box is an assemblage that is diffused through a network of power relationships by strategies of domination. The difference is in ANT’s focus upon science and technology whereas Deleuze uses the notion of the assemblage in a more generic way.

The biggest threat to ANT, in the opinion of John Law (Law 1999, 8), is its own success. ANT’s success has meant that the more and more it becomes adopted, including in IS research (Walsham 1997; Monteiro 2000; Mitev 2001), the more its concepts become
The difference in the way phenomenology and ANT understand the world is seen in their different perception of what technology is. That has consequences for the way in which technological issues are studied and described. What this philosophical exploration exposes is that with the application of either phenomenology or ANT within IS there follows a deeper understanding of the world. With the use of phenomenology comes a way to see the world from Heidegger’s proper understanding of Being. The consequence for IS theorists is that this worldview can be said to be a closed system of understanding. In a given and a fixed context of study all those who adopt phenomenology would have to agree upon a single proper understanding of the studied phenomena if it has been correctly investigated. What follows with ANT is a Deleuzeian understanding that can be said to be an open understanding, for when exploring a given and a fixed context it could not claim to have an exhaustive understanding of phenomena. Those applying ANT cannot claim that the tools they use can fully grasp the fragmented and dynamic context that they are in. So the word Theory that is attached to Actor-Network does not do ANT justice. Perhaps it would more suitable to call it a continuous search for understanding. This is what IS theorists must have in mind when they choose either phenomenology or ANT approach in the study of technological issues.
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