TOWARDS A VITALIST HOLISM: DELEUZE'S THEORY OF ASSEMBLAGE

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ABSTRACT

In this paper, we propose and evaluate an epistemology of systems thinking in relation to the vitalism of social systems and to develop systems approach for understanding the vitalist holism by construing the emergence and reproduction of social and organizational systems of the 'civilizing process' as non-linear and rhizomic events. We present and appreciate Deleuze's theory of an assemblage in order to explore social and organizational complexities as researchers rethink the value of 'systems thinking' through the unfolding process of problematization in terms of virtualities and actualities. It allows participants to be 'critical thinkers' on the given situations. To be critical thinkers, what is important for the process of action research and learning is not so on what is true of 'scientific knowledge' being appreciated, but it is on our thought and learning to what the 'practical and discursive knowledge' produces in particular, contingent contexts. In this sense, we reappreciate the value of Deleuze theory of assemblage theory towards understanding of the 'vitalism' of social systems, which are evolved from the continuity and transformation of the relationships between life and (non) living bodies.

Key words: Vitalist holism, systems thinking, Deleuze's theory of an assemblage.

INTRODUCTION

The development of systems thinking is linked with the emergence of the whole and its functioning within an environment. When von Bertalanffy (1968) proposed General Systems Theory (GST), he envisaged a system concept and systems thinking which can be useful for understanding the relationship between the complex whole and its parts within the natural, biological and social contexts. Later practitioners in systems science abandoned the search for GST that can universally be applicable in the understanding the 'organised complexity' of the world. Instead they embarked on a variety of developments on the systems concepts and systems thinking. For instance, in the 1970s and 1980s, Stafford Beer (1979, 1981) and Peter Checkland (1981, 1985) developed the advanced forms of a cybernetic systems concepts and soft systems thinking that would be applicable to organizational, social, cultural and political contexts or problematizing fields, respectively. From 1980s to 2000s, Ulrich (1983, 1987), Flood (1990), Jackson (1991), Mingers (1995), and Midgley (2000) and many other critical systems thinkers and practitioners developed a critical and postmodern inquiry of systems thinking that are mainly influenced by Kant, Habermas, Foucault, Maturana and Varela, and other poststructuralists and postmodern social scientists.

The paper is based on poststructuralist's thoughts, theoretically based account of a vitalist holism. In order to exploring a vitalist holism from science and technology studies and poststructuralist's works in general, Foucault and Deleuze's works in particular. On the one hand, our systems research is valid where the systemic *practice* becomes the issues within

Foucault's critical project which is not a transcendental one in the search for formal structures of how social systems are evolved during the process of specific historical events, which he calls 'practical systems' (Tsouvalis, 1995: 223). What Foucault is looking for these historical events, is what people do and the way they do it. The history of his thought, that is the study of problematization, in relation to the study of practices in which "the place where what is said and what is done, rules imposed and reason given, the planned and the taken for granted meet and interconnect" (Foucault, 1981: 5). In this sense, the manner of his investigation is neither Marxists nor phenomenological. This social practice refers to what Foucault calls the 'history of truth' (Tsouvalis, 1995: 223). On the other hand, our research is based on Deleuze's theory of assemblage, which investigates the unfolding process of how social systems can be possible to be assemblages through the process of differentiation, where the vitalism becomes the issue within systems thinking that requires development from understanding of how open, nonlinear and rhizomatic networks or 'meshworks' operate and evolve within practice (Deleuze and Guattari, 1987; DeLanda, 2006; Colebrook, 2010). In this paper, we explore how to make assemblage theory through the appreciation of the dynamic nature of networks or 'meshworks' rather than understand social systems from phenomenological perspectives. This is our strategy as we investigate the recent phenomena of social networks for more mechanism based explanation in the social science (Burt, 2000; Latour, 2005: DeLanda, 2006). We ground the concept of mechanisms for assemblage and social complexity in modern metaphysics derived from postrsturalists' work and recent work in the realist social ontology (Deleuze and Guattari, 1987; DeLanda, 2006). We fist understand how heterogeneous network works from Actor Network Theory's perspective and assemblage becomes the mechanism of control within territories. We than develop the mechanism of assemblages how it operates within territory from social ontological perspectives. We propose that the 'minoritairan ethics' in order to making sense of the assemblage theory that appreciates the "critical ontology of ourselves" in practice. Finally, we conclude with the usefulness of the assemblage theory for understand the mode of vitalist holism in terms of a new thought for understanding social complexity which is developed from relations of people and material world, and derive implications for further research.

UNDERSTANDING HOW HETEROGENEOUS NETWORK WORKS AND ASSEMBLAGE BECOME THE MECHANISM OF CONTROL

Early attempts to investigate the structure and formation of networks originated in the Gestalt approach to human psychology, which recognized that in order to understand human (individual) behavior, it was necessary to study the 'whole' context, including interactions with others in the social landscape. Social network analysis was concerned with the array of informal relationships as a means of understanding the organization or community as a whole (Burt, 2000; Cook *et al.* 2001; Lin, 2001). From social network approach, Gilchrist (2009: 11, 49) highlights that "network structure are the key to understand social capital" and networks operate on the basis of informal human relationships rather than formal roles, and membership tends to be voluntary and participative. This networking approach has limit to understand to apply social entities that are products of historical processes, that one uses the term 'historical' to include not only human history but also evolutionary history, which traces the trail of 'associations' between heterogeneous elements (Latour, 2005; DeLanda, 2006). Actor-Network Theory (ANT), which is influenced by the sociology of science and technology during 1980s and 1990s, has developed in order to uncover the 'mechanics' of organizations, power and social relations as network effects (Latour, 1985, 1997; Callon,

1986; Law, 1992). From ANT's perspective, we explore the nature of heterogeneous network to understanding the dynamic nature and properties of heterogeneous networks. The term network ('reseau' in French) was used from the beginning by Diderot to describe the relations of matters and bodies in order to avoid the Cartesian divide between matter and mind or spirit (Latour, 1997: 2). In this sense, the meaning of network has come from a strong ontological components that is espoused by objective "realistically" influenced sociologists (the so-called 'the realist social ontology'), instead of referring to social entities that is made (or constructed) by the so-called 'social constructivists' (DeLanda, 2006: 3). More recently, assemblage theory is developed to trail the formation of social entities and the process of social evolution, which cuts across the nature-culture divide. This fact is evidence of the realist credentials for justifying a theory of assemblages (DeLanda, 2006: 3). Before we discuss the assemblage theory in detail, we will first start to explore the ontological stance of social systems as networks by explaining the properties common to all heterogeneous networks as follows.

COMMON PROPERTIES OF SOCIAL SYSTEMS AS HETEROGENEOUS NETWORKS

Based on ANT, one is to think society or social systems not in terms of levels, layers, categories, structure or systems, but in terms of nodes that have as many as dimensions as they have connections. More precise it is a change of metaphors to describe essences. For instance, ANT uses the 'rhizome' metaphor as ANT claims that modern societies cannot be described without recognizing them as having a "fibrous, thread-like, wiry, ropy, capillary character" that made from the effects generated in patterned networks of diverse materials and heterogeneous elements (Latour, 1997: 2). Heterogeneous networks are effected through emergent relations, such that the 'associations' are developed as the progressive constitution of a network in which both human and non-human actors are defined during the negotiations between representatives of human and non-human actant¹ (Law, 1992; Latour 1987). The most important of these negotiations is "translation," a multifaceted interaction in which actors construct common definitions and meanings of 'associations' between heterogeneous elements, and a plurality or multiplicity of diverse actors and actants within the network (Callon, 1986; Latour, 2005). According to Callon (1986), translation is happening through the four phases of problematization, interessement, enrolment and mobilization. In the actornetwork theory, both actors and actants share the scene in the reconstruction of the network of interactions leading to the stabilization of the system. But the crucial difference between them is that only actors are able to appreciate actants in the process of translation that happens within the network system (Callon, 1986; Thierry, 2012). Actor-network theory comprises of human players and non-human pieces (sometimes functions as actants). Nonhuman pieces are played within the network. And depending on how these pieces are played will determined the strengths and weaknesses of the players within the network. Human players and non-human pieces are always interacting with each other within a constant evolving structure that is consistently changing forms (Thierry, 2011). Actors' identities and qualities are defined during negotiations between representatives of human and non-human actants. Actor-networks authors argued that "knowledge" may be seen as a product or an

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¹ In ANT, an "actor" is a semiotic definition, an actant, that is something that acts or to which activity is granted by others (Latour, 1997: 5)

effect of a network of heterogeneous materials. In other words, knowledge is embodied in a variety of material forms in which "bits and pieces from the social, the technical, the conceptual, and the textual are fitted together" and "translated" into a set of equally heterogeneous scientific products (Law, 1992: 381). In this sense, 'social' (system) refer to making temporal connection between thing that are not themselves social as all those "heterogeneous elements might be assembled anew in some given state of affairs" (Latour, 2005: 5). As Law (1992: 380) argues, ANT is concerned with the 'mechanics' of power, ANT searches for the origins of power through a distinct material-semiotic approach. In ANT, material approach explores the relations of heterogeneous elements in terms of all effects generated in patterned networks of diverse materials (Law, 1992: 380). Semiotic approach classifies signs or sign system in relation to the way they are transmitted through the networks. This process of carrying meaning depends on the use of codes that may be the individuals sounds or texts that human use to form words, the body movement they make to show attitude or emotion, or even something as general as the clothes they wear. In short, ANT uses the metaphor of heterogeneous network to explore the mechanics of power. Through heterogeneous network, power and domination are produced so asymmetries exist within a society (Latour, 2005: 63-70).

UNDERSTANDING HOW MULTIPLICITIES BECOME THE MECHANISM OF ASSEMBLAGES

Heterogeneous elements and networks (or 'meshworks') become assemblages when the associations of human actors, materials and other heterogeneous elements transform into becoming-haecceity and multiplicity through the process of differentiation (Deleuze and Guattari, 1987: 7-10; DeLanda, 2006: 17). In Deleuze (1994)'s thought, that is based on the assumption of 'univocal being' or ontological univocity, the "ontology of becoming" proceeds "from differentiation to identities" or from differentiation to differences, because the systems of difference is also system of identities. Becoming has ontological primacy. Deleuze's notion of the assemblage is introduced in characteristics and principles of the rhizome, the radical system that is "subtract the unique from the multiplicity to be constituted; write at n-1 dimensions" (Boundas, 1993: 29). An assemblage refers to the increase in the dimensions of a multiplicity that necessarily changes in nature as it develop its connection with other assemblage (Deleuze and Guattari, 1987: 8). Give an example, in Nature, wasp and orchid, as heterogeneous elements, form a rhizome or multiplicity ((Deleuze and Guattari, 1987: 10). Deleuze place 'becoming' in the concept and 'becoming' refers to the intensive concept which comprehends it, as it traces the processes of 'becoming-multiplicity'. Nevertheless, the aim of Deleuze's ontology of becoming is to produce a movement in life, and not merely in the concept (Goodchild, 1993: 163, 167). In this sense, a multiplicity designates the set of relations which produces the mechanism of life, the assemblage, and the pure form of concept which comprehends the assembling of the assemblage. Dealing with control and power relation that are virtual, unstable, non-stratified potentialities, the multiplicity is concerned with the internal (and qualitative) multiplicity that is defined by virtuality of other becomings (Lazzarato, 2006: 173-175). The term virtuality refers to something that is engaged with a process of actualization following the 'plane of immanence' that gives it its particular reality (Deleuze, 2005: 31). Deleuze give us to some idea of how the multiplicity of singularities and their power of creation traverse the entire of history of modernity. For instance, individual and collective (action) turn into the multiplicity of living

labour that moves towards its transformation into the societies of control in order to make revolutions or changes in the Western society (Vähämäki and Virtanen, 2006).

For Deleuze and Guattari (1987), 'becoming' particularly refers to an event², and Deleuze's theory of the assemblage is all about the discovery of an event, in which the ontology of becoming can be realized through Deleuze's sense of it. Deleuze's sense of becoming is the occurrences of events, serialization of events, and events that usually indicate the movements of territorialisation or deterritorialization. This movement is regarded as a process or becoming, being 'minoritarian', which is a mode of individuation very different from that of a person, subject, thing or substance. It is "becoming-haecceity"; it can be only possible through the making of a new assemblage and multiplicity of bodies on the plane of immanence (or consistency) (Deleuze and Guattari, 1987: 262-264, 291-293). The assemblage, which is an open system, is inseparable from coefficients of territorialization and deterritorialization, which are increasing its degree of internal homogeneity and changing or even transforming it into a different assemblage. At the same time, a territorial assemblage turns into which some elements "reterritorialize" when it connects itself with another assemblage. Give an example, "a becoming-wasp of the orchid and a becoming-orchid of the wasp". In this example, each of these becomings brings about the deterritorialization of one term and the reterritorialization of the other (Deleuze and Guattari, 1987: 10; 333-334; Yu and Lee, 2008: 255). In the processes of deterritorialisation and reterritorialisation, the assemblage becomes intimately connected to and informed by the vitalist movement, construction and expansion of the whole rhizomatic system itself. Ontologically, assemblage is (im)material and insubstantial being or becoming, beyond the grasp of classical physics. Epistemologically, this movement or becoming considers as pre-linguistic and unnameable, beyond grasp of human consciousness. Taken together, assemblage is unthinkable and even unpredictable abyss of void. Chaotic behaviours of assemblage as a living phenomenon or system in complex process of deterritorialisation and reterritorialisation have life, energy, movements, and nonhuman 'communication' processes that make 'sense' of a wilder vitalism that considers life beyond the borders of living organism as the 'sense' that makes the potentiality for relations that transcends any living meaning (Colebrook, 2010: 3). In short, heterogeneous elements or multiplicities become assemblage when the 'translation' of heterogeneous elements or networks proceeds to make 'sense' that can take up a relation to life, and processes that form assemblage as a living system.

UNDERSTAND HOW ASSEMBLAGES OPERATE WITHIN THE TERRITORIES

For Deleuze and Guattari (1987), the concepts of map and mapping are integral to their thought that is highlighted by the rhizome, which is mobile and nonhierarchical, and

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² Deleuze (1990a) introduces the notion of an event. Deleuze's notion of an event is to create a 'sense' for concepts; sense appears on the 'plane of immanence' or 'metaphysical surface' of propositions within language. The event must engender out of the multiple dimensions of the proposition such as 'denotation' (an indication of the state of affairs), 'manifestation' (a representation from the subject), and 'signification' (the symbolic transformation being generated (Deleuze, 1990a: 23-25; 95-96).

"assemblage" that is a rhizomatic thought which would make connections between different systems of knowledge-formation (Kaufman and Heller, 1998: 5). To understand Deleuze theory of assemblage, it would be better to consider the Borgesian cartographer who draws a map as it contains both the real-life scale of the actual and the possibility of the virtual. Such a cartographer of living is not constituted by human agents or individual subjects. Rather, it refers to a depersonalized cartography of the body (or a body without organs) to the concept of "haecceity" as it means the discovery of a singular entity which can be brought into existence during the process of becoming or differentiation in relation to the movement and rest between molecules particles, and capacities to affect and be affected (Kaufman and Heller, 1998: 3; Deleuze and Guattari, 1987: 260-261). Through becoming-haecceity, Deleuze (1990a) was able to extend his metaphysics so that it enters into relations with nature, history of 'creative evolution', with the pure form of inorganic life where 'event' takes place, and the intensities which come to pass upon it (Pearson, 1999). In A Thousand Plateaus, Deleuze and Guattari developed the notion of the assemblages where the pure form of desire produces within it. Deleuze's notion of an assemblage refers to an 'ontological' temporary system that consists of two kinds of assemblages: 'machine' or machinic assemblage and collective assemblages of enunciation (what we call it as the enunciative assemblages) (Deleuze and Guattari, 1987: 7, 333-334). For Deleuze and Guattari (1983), everything is a machine and everywhere there is production in which 'machine', that is a fragmented aggregate, whose part do not constitute a unified whole, operates in the world. A machine is like the living being so that 'desiring-machine' operates with desire that constantly coupled continuous flows and partial objects that are by nature fragmentary and fragmented (Deleuze and Guattari, 1983: 5-6). The concept of machine or machinic assemblage is a way of approaching reality from a new way of looking at the world (Marks, 1998: 98-99). A machne or machinic assemblage is controlled by the enunciative assemblage that connects a language to the semantic and pragmatic contents of a set of statements that develops from the social interactions between machine and the 'abstract machine' which refers to the 'diagrams' (Deleuze and Guattari, 1987: 7). According to Yu and Lee (1998), events generate from the dynamic process of an interaction between the machinic and enunciative assemblages as events are effects that correspond to the "states of affairs" and actions are determined by the machinic assemblage (Figure 1).

Assemblages are linked not to some intrinsic relation to one's own perception but to the processes of the discovery of the actual mechanisms operating at a given spatial scale as well as defining or appreciating the diagram or abstract machine of an assemblage that is virtual and mechanism-independent, capable of being realized in a variety of actual mechanisms within the territories (DeLanda, 2006: 31). Territories here may be understood as surfaces (or social fields) of the combinations of machinic and enunciative assemblages turn into particular assemblages that bear upon them singularities or events. In a more general context, a machinic or corporeal assemblage refers to the real entities of a social meshwork (e.g. the group of people, buildings, machinery, and other material resources) (DeLanda, 2006). But

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³ Deleuze expands upon Foucault's construct of the diagram. Deleuze (1988: 34) writes that "the *diagram* is no longer an auditory or visual archive but a map. a cartography that is coextensive with the whole social field" For Deleuze, the 'diagram' is a possibility of fact - it is not the fact itself. For example, in painting, the diagram is the operative set of brushstrokes and daubs of color, lines and areas (Boundas, 1993: 195, 199-200)

the enunciative assemblage refers to the 'statements' (énoncés), which constitute an (in)visible dimension of a set of statements (e.g. the languages of people, the rules of a corporation, the law system of a nation and so on) within the social fields. In Foucauldian terms, the corporeal part of an assemblage is the 'non-discursive practices' while the enunciative part of an assemblage is the 'discursive practices' (Foucault, 1972). As Foucault (1972) indicated the complicated relations between the non-discursive and discursive practices, Deleuze and Guattari (1987: 142) showed how the 'diagram' or 'abstract machine' of assemblages is formed and transformed in order to construct a new type of reality. Dealing with this reality that comes from the social entities that are products of historical processes, thus, we need apparently to have a new sort of metaphysical concept of the assemblage (DeLanda, 2006). Methodologically, the assemblage treats as a trans-human concept that coming from viroid life, in which suspicious of 'we' create in a virtual world. 'We' should include natural and trans-cultural contexts. On the other hand the assemblage is 'real' that means independently exists from the human consciousness (DeLanda, 2006: 3). The assemblage has life which consists in formless and dynamic flux, natural, and events streams. In a theory of assemblage, there is an unthought, prior to thought, nature or chaos prior to consciousness, which along a nomadic and 'rhizomatic' path of becomings and encounters, adding new and strange relations as it proceeds. The account of studying the nature of assemblage shows that assemblage reproduces and changes its patterns and the flux of 'natural drift' through space and time. In the presence of the assemblage, the 'active matters' 'communicate' one another in which nonhuman time exists within the mechanism of evolution that produces chaotic or unpredictable behaviours.

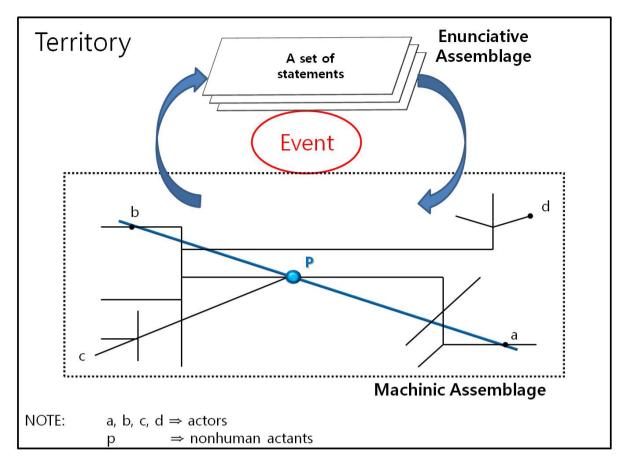


Figure 1. The mechanism of assemblages, which operates within the territory

The mechanic locomotion of assemblages seems to have the mechanism of life which contains the duality of the actuality and virtuality that enable to produce an events or a series of events within the whole social field. On the one hand, analysis in the machinic assemblage is concerned with the discovery of the actual mechanism of the machinic assemblage in reality, operating a given spatial scale. On the other hand, the diagram of an assemblage is virtual and mechanism-independent, capable of being realized in a variety of actual mechanisms. (DeLanda, 2006: 31).

MAKING SENSE OF THE ASSEMBLAGE THEORY: PROPOSING THE MINORITARIAN ETHICS

Michel Foucault attempts to interpret the contemporary society as a disciplinary society where power is exerted through networks of control. For instance, the modern (capitalist) society follow the disciplinary control and panoptic rules in which the panopticon automatizes and functions as the mechanism of power and control of bodies, groups and knowledge through spatial ordering under the regime of the capitalist discipline. Following Foucault's definition of disciplinary regimes that it is historical; and after disciplinary societies, Deleuze (1990b: 230-231) describes the society we are living in today as the "control societies" that entered the scene of a postcivil society. The movement from the

natural to the civil and postcivil was the historical and theoretical movement of human civilization. When Foucault argues that power comes from everywhere and relations of power are immanent to the process of economic productions, knowledge relationships and sexual relations, the lines of power extend throughout social space in the channels created by the institutions of civil society. Foucault insisted that the institutions are not as the sources of power relations, but as assemblage of strategies of power. What underlies the various institutions is the 'diagram', that is the anonymous or abstract strategic machine, the unformed mechanism of power relations. Foucault's famous example to understand the diagram of disciplinary society is his analysis of the panopticon. Foucault saw this disciplinary diagrammatics (panopticon) functioned in terms of positions and identities. In the society of control, the diagram of control is oriented towards mobility and anonymity. Dealing with power and panoptic rule, Foucault (1984a: 46-47) offers some ideas on how we can appreciate humanism based on the "critical ontology ourselves" that regards as value judgments on "what we are doing, thinking and saying". In order to create a platform of change, Foucault explains that the "critical ontology of ourselves" must be carried out through the genealogical analysis of particular historical contexts defined within three axes of truth, power and ethics. In Foucault (1984b: 351)'s own terms,

Three domains of genealogy are possible. First, a historical ontology of ourselves in relation to truth through which we can constitute ourselves as subjects of knowledge; second, a historical ontology of ourselves in relation to a field of power through which we constitute ourselves as subjects acting on others; third, a historical ontology in relation to ethics through which we constitute ourselves as moral agents.

Within the new control societies, the diagram functions on the basis of the flexible and temporary performance of contingent identities, thus, its assemblage or the (mobile) institutions are elaborated through the production of the machinic assemblage in the territories. Social and political changes that resulted in the accumulation of power with the development of the mechanism of power have had to open their gates for continuous education, communication in which new forms of control operates on the assemblages of social beings, the bare conditions of action, and penetrate into the entire of process of life. It seeks legitimacy from public opinion and ethical right (Vähämäki and Virtanen, 2006: 215-218). Dealing with control, which is power that permeates society and makes its relations with knowledge and economic process, which always in some form spreading like a virus, the composition of a new assemblage has to be designed and supported by the 'minoritarian ethics' or ethics for marginalized group (Yu and Lee, 2008). Minoritarian ethics is concerned with the "minorities" or marginalized group who will create new social relations where active minorities enter into a nomadic space with a collective action which leads to transforming virtual events into actual events within the territories (Deleuze, 1969: 18-19). We propose that the minoritarian ethics functions as a mode of resistance that questions and challenges the morality and a mode of existence, which are rooted in present system or the actual assemblage that is intrinsically linked to its power of acting. Based upon Deleuze's theory of assemblage, the minoritarian ethics focuses upon the making the sense of the collective action through the appreciation of Deleuze's notion of an event, which creates condition for "critical ontology of ourselves" that generates critical discourse on what we are and a collective action for making a process of the recreation of ourselves (Foucault, 1984a, b). There are ways of knowing and acting should be adaptive, responsive and open to the territories that is not only represented objectively but felt through the sense. Further what is retained of vitalist action, even while there is longer a vital force distinct from matter, is a vitalist ethics, what we call

the minoritarian ethics. The minoritain ethics is established on the basis of the emergent relations of assemblages that regard as the living and open systems within social field.

THE CREATION OF THE MEANING ('SENSE') OF LIFE THROUGH THE PROCESS OF PROBLEMATIZATION

We are using Deleuze's notions of becoming-haecceity and Foucault's notions of problematization in order to apply the minoritarian ethics into a process of the transformation of 'problems', Through the process of problematization, "minorities" questions the 'solution' or actual assemblage within territories and identify 'problem' or virtual assemblage based on the consideration of possibilities of virtual events that generates within wider contexts. According to Foucault (1984c), the notion of problematization refers to the 'history of thought' in which a transformative process takes place within a domain of practices, acts and thoughts with a plurality of 'questions' and 'problems' posed to produce the diverse possibilities and new 'solutions' in a specific context. Through transformative processes of problematization, when one enters into the process of making the assemblage of haecceities, a new thought proceeds as the ethical question that occurs in a form of the 'ethological ethics', which refers to the ethics of events, rather than moral and ethical perspectives of 'man' taking place in the actual process of decision-making within the organization (Pearson, 1999). Deleuze concerns about ethics of liberating 'desire', and 'liberation' that means 'something new', are perceived as the mode of 'creative involution' in terms of 'becoming-haecceity' that takes place within the plane of immanence (Pearson, 1999: 3). In order to create or appreciate new and possible solutions or assemblages in reality, a non-hierarchical ethical form of reasoning is needed to function as the 'judgement systems', which evolves from a collective that can be made through the process of problematization (Figure 2). Hence, the minoritarian ethics reflects the position of 'the others' or 'minorities' through the process of problematization in which participants should search for "all chances and possibilities" and create critical discourse which will produce a multiplicity of alternatives through openness to the 'question' and the determination of a 'problem'. Above all, the minoritarian ethics is concerned with a question of the political struggle today and have to be used to turn all of life into ethical and moral life in order to create a platform of change, through the application of critical action research and learning in practice (Yu and Lee, 1998).

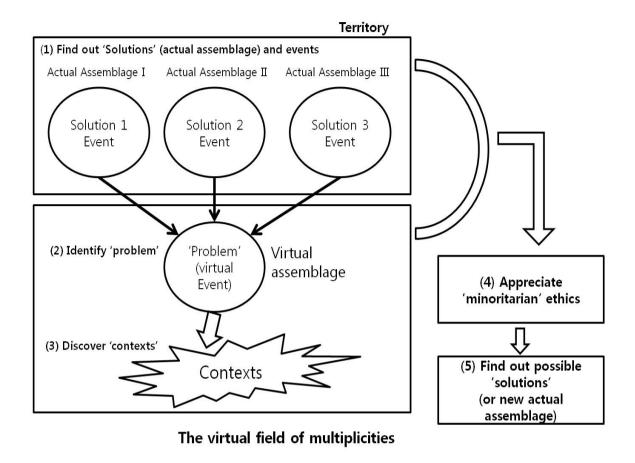


Figure 2. The process of problematization

CONCLUSIONS

Today's systems paradigm is in many ways both an answer to the vitalist imperative and its improbabilities. On the one hand, current works on the Actor Network Theory has served to open up the thinking of heterogeneous network from the mechanics of power that operates on the (non)living beings, which maintain ongoing relations with their milieu. On the other hand, current researches on assemblage theory contribute to develop a potentiality for entering new relations in terms of assemblage from which something like living beings are generated and opens up for a new possibility of the thought of 'deterritorialisation'. An inquiry into the systems approach of ANT and assemblage theory provides further insights into the "critical ontology of ourselves" as it treads on a set of ontological, epistemological and ethical toes in systems thinking tradition. Exploring social beings in terms of assemblages and becomingminoritarians what we proposed, how do we move forward in systems science? Our contention is that Deleuze's concept of the assemblage and rhizomatic 'meshworks' help us to understand a vitalist holism and the meaning of life to explore unpredictable natures of social complexity. It can be grasped by the mechanism of control that makes the continuous process of "creative involution" and innovation to proceed within the territories. To do so, our proposed theory of assemblage based on the minoritarian ethics must be carried out through the process of prooblematization in order to create new and

possible assemblage in social field as nonhuman 'communication' goes on within chaotic and unpredictable conditions.

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