**Barnett, 12** – Emeritus Professor of Higher Education at the Institute of Education at the University of London (Roland, “The Coming of the Ecological Learner”, TRANSITIONS AND TRANSFORMATIONS IN LEARNING AND EDUCATION pg 15-17, Springer ebook)

One dimension of this fragility is the world’s interconnectedness. We know the linguistic signs of this interconnectedness: ‘globalisation’, ‘the network society’, the ‘virtual society’, ‘chaos theory’, the ‘global knowledge economy’ and ‘post capitalism’. John Dunne’s suggestion that ‘no man is an island’ has taken ﬁrm root in contemporary social theory. In contrast, cultural theory suggests a counter story of separateness, of many cultures ﬁnding it difﬁcult if not impossible to engage with each other. This is an explosive admixture, in which peoples are brought together and are required to intermesh with each other, but yet lack the resources for mutual comprehension. Perhaps this extraordinary juxtaposition – of simultaneous interconnectedness and separation – **has not yet been sufﬁciently explored** (though perhaps Lipovetsky’s (2005) depiction of ‘hypermodern times’ is especially helpful). It just may be that there is here the potential for a spiralling of mutual incomprehension, in which the growing interconnectedness of peoples heightens the incomprehension and mistrust. Be that as it may, there lies here in this interconnected world challenges for learning: what is to be learnt? Is it facts of the matter? Is it skills to get by? And/or is it dispositions for cooperative living? This wider landscape of learning is crucial for our story here. For students are not just embedded learners, embedded in their immediate learning spaces on and off campus, but they are **implicated in this wider global world of learning**. They are implicated directly, with many students **engaging in a large range of learning milieu**, milieu that bring them into contact with differing social classes, status groups, age groups and ethnic groups, and people in contrasting situations of dependency and powerfulness. The sheer range of learning encounters – quite apart from the absolute numbers of people – is almost bewildering. Precisely **because students are in a relatively unstructured and ﬂuid part of their lives, they are in a phase of absolute ﬂuid learning**. That is to say, the ﬂuidity is a fundament of their learning, as they move across learning spaces and often with little pattern. National borders, private and public sectors of work, self-directed and other-directed learning, individual and group ventures and projects, activities for social, sporting, leisure, cultural or economic purposes: all these dimensions in which the student experience unfolds indicate that within the compass of a very few years, students encounter and live – if only ﬂeetingly – in multiple worlds of learning. **Students** do not just prepare for transitions; they are perpetually learning amidst multiple processes of transition. They **have become learning nomads**. They are becoming-learners, to draw on and to adapt a construction from Deleuze and Guattari (2007/1980). **They are always going on learning, being challenged, putting themselves into new situations** (culturally, socially, economically). Their learning is never quiescent. Inevitably, students are embedded in the global world of learning. They are perpetually coming into contact with groups and classes and networks that are in turn linked to the wider world. And this contact is both physical and virtual. Physical travel, across the world, expands. Universities build in travel abroad as part of programmes of study; they make available modules or years out in other ‘partner’ institutions in other countries, and they work with student unions (if only because of insurance requirements and the mitigation of risk) in facilitating voluntary and charity work overseas, and students themselves venture forth by themselves, individually or in groups, to experience travel to and across other countries (for leisure or for sporting purposes). Even families are reminded that they have an emerging function as quasi travel agents in assisting such cross-national travel, even to the extent of acting as host to some of it. The Coming of the Ecological Learner We see in all of this the coming of the ecological learner. The idea of the ecological is a ‘thick concept’ (Williams, 2008/1985) having several components to it, with fact and value wrapped up in it. It speaks of **interconnectedness and of the interplay of elements of a system** for the system’s total wellbeing. It speaks of humanity’s embeddedness with systems, even of the natural environment. It speaks of the fragility of systems and of humanity’s responsibility towards and proper concern in helping to maintain the sustainability of systems. It speaks of the signiﬁcance of this entire situation – systems, their fragility and humanity’s responsibility therein. Accordingly, in the idea of the ecological, **there is both is and ought**; that the world’s systems are interconnected and that **there is a responsibility towards maintaining the wellbeing of those systems**. A concept of the ecological along these lines, we should note, is not conﬁned to the natural world. It includes the natural world but goes well beyond it. And so the ecological can be interpreted in the domains of the individual and the social (which, together with the environmental), led Guattari to speak of ‘the three ecologies’ (Guattari, 2005/1989). But the idea of the ecological can be and has been turned onto yet other domains, so that we may speak – for example – of knowledge ecologies, of digital ecologies and of human ecology. Here, I want to pursue the idea of the learner as an ecological system. The idea of the learner as an ecological system works at two levels: within the individual and between the learner and her wider environment. Within the individual, the ideas of lifewide learning and the learner as inhabiting and moving across multiple learning spaces brings in turn the idea of the self-sustaining learner. **A dual task** incumbent on the lifewide learner **is that of maintaining the learning in those various learning sites and of sustaining a more or less coherent self across those learning sites**. Is the learner able to learn practical skills, to acquire capacities for solving immediate problems, to reﬂect in an abstract way, to engage with the public realm in a spirit of philanthropy, to earn money, to live in spaces of pure freedom and to be judged and to judge others all at once? Here, the learner is a learning ecology in her, a set of learning ventures that are in relationships – harmonious or discordant – with each other. But the learner is also a learning ecology at a further level, namely, that of the interlocking of her own learning ventures with the learning of the wider world. As remarked, the learner is often **directly interconnected with those wider learning systems** of civil society, in its cultural, economic and social domains, and nationally and internationally. The fragility and complexity of those national and global learning systems have an impact on the learner’s own systems. **Being a learner is to be implicated in the fragilities of those wider systems**. Learners are embedded in the world, and their being in the world has a fragility to it, a fragility that is partly a result of the world’s interconnectedness. There are, therefore, interconnected layers of learning systems, wellbeing and sustainability, at the individual, societal and global levels. In a sense, the lifewide learner cannot help but become an ecological learner. The lifewide learner has the conjoint task of sustaining her own learning systems and her learning wellbeing and also of interconnecting with wider societal and global learning endeavours.

#### diversity, even when conflicting, should be allowed to influence our models positively

**Lewis and Dehler, 2k** (Marianne W. Lewis, PhD, associate professor of management at the University of Cincinnati, and Gordon E. Dehler, Gordon E. Dehler, PhD, Associate Professor, The College of Charleston, School of Business and Economics, Department of Management & Entrepreneurship “Learning through Paradox: A Pedagogical Strategy for Exploring Contradictions and Complexity,” Journal of Management Education 2000 24: 708, pdf)

Writing in the context of diversity, Gallos (1997) referred to the “power of paradox and contradiction,” contending that a “missing ingredient” in teaching about diversity is “paradox work,” and that effective (diversity) “teaching requires a strong pedagogy of paradox [italics added]—methods to engage the incongruities and contradictions of the work itself” (pp. 152-153). As management educators, our charge is to “teach others to embrace paradox” (p. 153). This challenge, of course, extends beyond the realm of diversity education into the broader arena of management education. For paradox is not only endemic to organizations and management, it may also provide a “lens through which we can learn” (Palmer, 1998, p. 66). This premise is certainly not new, as paradox has long been linked to learning. Philosophers from ancient Greeks to Taoists to Existentialists have viewed human existence as inherently paradoxical. Lao-tzu (Barrett, 1998), for instance, instructed his students that “all behavior consists of opposites . . . . Learn to see things backward, inside out, and upside down” (p. 18). Similarly, Kierkegaard praised paradox for providing a space for learning, inspiring his insights into the dualities of human nature—love/hate, birth/death, self/other. In his classic study of creativity, Rothenberg (1979) claimed that great scientists and artists share a capacity for paradoxical thinking, an ability to explore this space and **shift from either/or toward both/and understandings** that make sense of opposites and their interplay. For example, Mozart and Beethoven explored tensions between harmony and discord for inspiration, and Einstein forever altered perceptions of physics by envisioning a man falling off a building at rest relative to things falling beside him and moving relative to sights he passed on the way down. As “it’s a paradox” becomes the management cliché of our time (Handy, 1994), how can management educators help students develop a capacity for paradoxical thinking? How can we enable students to become comfortable with tensions, view contradictions in a newlight, and find truths and rationality in the seemingly absurd? Thinking paradoxically requires working through paradox by exploring conflicting feelings, practices, and perspectives in search of more encompassing understandings. Rarely, however, is there any elaboration of what is meant by “working through” (Smith & Berg, 1987, p. 207). Due greatly to the limitations of written language, most work on paradox resorts to mere telling about paradox. Yet, the classroom offers an opportunity to help students experience paradox and learn to recognize, transcend, and manage contradictions, expanding notions of management from prediction, planning, and control toward **more critical, reflective, and complicated understandings**. In this article, we propose learning through paradox as a pedagogical strategy for exploring contradictions and complexity. We begin by describing elements of paradox and by modeling their roles in the learning process. We then suggest three approaches aimed at helping students expand conceptual polarities, recognize their personal contradictions, and manage paradoxical predicaments. Last, we highlight that “paradoxes are paradoxical” (Cameron & Quinn, 1988, p. 13). This strategy requires educators to intentionally generate some degree of uncertainty and confusion, using paradoxical contradictions to foster creative tension while simultaneously maintaining a level of comfort and order that enables students to explore and learn.

#### We should challenge dominant structures from within – even if they seem to coopt our criticism, that sows the seeds for the breakdown of dominant paradigms.

**Triadafilopoulos 10** (Triadafilos; Assistant Professor of Political Science – University of Toronto, “Global Norms, Domestic Institutions and the Transformation of Immigration Policy in Canada and the US,” Review of International Studies, 36)

The concept of stretching speaks to the durability of governance paradigms and their propensity to channel policymaking along well worn paths.16 Existing frameworks define the broad goals behind policy, the problems to be tackled, and the instruments to be deployed, as well as mapping the respective responsibilities of the state, market and citizens in meeting societal challenges. Once institutionalised, a governance paradigm channels the thoughts and actions of a range of state and societal actors, reflecting shared policy knowledge and habitual decision-making routines. The result is broad continuity in both content and process of public policy.17 Contrary to theories of institutional change premised on models of ‘punctuated equilibrium’, changes in normative contexts did not ‘shock’ policymakers into devising and implementing radically new solutions.18 Rather, their initial response was to ‘stretch’ established policies to conceal anomalies generated by lack of fit without abandoning the fundamental premises of extant policy frameworks.19 Changes therefore tended to be cosmetic, aiming to diffuse and co-opt criticism while avoiding fundamental transformation. Nevertheless, these initial responses had unintended effects that accelerated the breakdown of established policy frameworks. Attempts to answer critics with ‘tactical concessions’ affirmed the normative validity of their claims, increasing pressure for more substantive reforms.20 Policy stretching thus gave rise to unravelling, as anomalies accumulated and an expanding constellation of critics pulled more determinedly at the most vulnerable strands of existing policy regimes – that is, those policies, practices and procedures which stood at odds with the liberal-democratic identity their state wished to craft for both internal and external audiences. The unravelling of established policy frameworks increased demands for innovative strategies, encouraging experimentation and opening space for the introduction of policies in line with the ascendant normative context. In time, new approaches to the migration-membership dilemma were developed by decision makers keen on aligning domestic immigration policies with the prevailing logic of appropriateness at the global level.The formulation and implementation of new approaches marked the transition from policy unravelling to shifting, during which new policies were institutionalised.21

#### The notion that escape or rejection must be absolute is profoundly debilitating in imagining desirable alternatives

**Day ‘5** Richard, professor in the department of global development at Queen's University “Gramsci is Dead: Anarchist Currents in the Newest Social Movements” <http://www.scribd.com/doc/19280772/Gramsci-is-Dead>

In closing this chapter, I want to make it clear that **I am *not* denying the utility of citizenship for achieving certain sorts of change within ostensibly ‘liberal’ societies. Nor am I willing to suggest that armed revolutionary struggle is inappropriate in situations where not even the rudiments of a ‘liberal’ political order exist. Nor, even, am I suggesting that those individuals who *can* ‘free’ themselves for a few hours or days should not seek to do so. Only the Oedipal subject can work within Oedipal societies, only the revolutionary subject can overthrow blatantly totalitarian regimes, and only the nomad can escape them both for a time. None of these spaces, and the subjects that inhabit them, will be disappearing anytime soon**; indeed, if Deleuze and Guattari are correct in seeing them as variants of forms that have always been with us, they can never be expected to disappear entirely. What I want to argue is that **continuing with an *exclusive* focus on hegemonic change via the state form, or on escaping it entirely, prevents us from imagining and implementing modes of social organization that are not only possible and desirable, but are becoming ever more necessary as Empire consolidates its hold on our bodies, minds, lands … on our very ability to produce ourselves and the contexts in which we encounter others**. **These modes can only be explored by *relatively* de-Oedipalized subjects who are able to act,** without necessarily having state sanction or support, in the gaps between, and on the margins of, the institutions of sedentary society; **subjects who do not love the state form, but can co-exist with it if they must, as they seek to render it increasingly redundant; subjects who seek to avoid microfascisms, who practise an ethic of care of the self, but who are also open to sharing values, resources and spaces with others, to building communities** of resistance and reconstruction that are wider and more open, yet remain non-integrative in their relation to others. The movements, groups and tactics which I discussed at the start of this book are all examples of this kind of subjectivity, of these kinds of spaces, which rely upon an amoral, postmodern ethics of shared commitments based on affinities rather than duties based on hegemonic imperatives. **These commitments are necessarily always shifting, but also always present, as no community can be sustained without them.**

#### Don’t divide people into categories – this is an impact turn to identity categories – it makes resistance against colonialism impossible – we need identities that slip through the cracks, that can’t be pinned down

**Tsianos et al. ‘8** Vassilis, teaches sociology at the University of Hamburg, Germany, Dimitris Papadopoulos teaches social theory at Cardiff University, Niamh Stephenson teaches social science at the University of New South Wales. “Escape Routes: Control and Subversion in the 21st Century” Pluto Press

**To escape policing and start doing politics necessitates dis-identi- fication - the refusal of assigned, proper places for participation in society.** As indicated earlier, **escape functions** not as a form of exile, nor as mere opposition or protest, but **as an interval which interrupts everyday policing** (Ranciere, 1998). **Political disputes - as distinct from disputes over policing - are not concerned with rights or repre­sentation or with the construction of a majoritarian position in the political arena. They are not even disputes over the terms of inclusion or the features of a minority. They occur prior to inclusion,** beyond the terms of the double-R axiom, **beyond the majority-minority duality.** They are disputes over the existence of those who have no part (and in this sense they are disputes about justice in a Benjaminian sense of the word, Benjamin, 1996a). **Politics arises from the emergence of the miscounted, the imperceptible, those who have no place within the normalising organisation of the social realm. The refusal of represen­tation is a way of introducing the part which is outside of policing, which is not a part of community, which is neither a minority nor intends to be included within the majority. Outside politics is the way to escape the controlling and repressive force of** contemporary politics (that is of **contemporary policing); or else it is a way to change our senses, our habits, our practices in order to experiment together with those who have no part, instead of attempting to include them into the current regime of control. This emergence fractures normalising, police logic. It refigures the perceptible, not so that others can finally recognise one's proper place in the social order, but to make evident the incommensurability of worlds, the incommensurability of an existing distribution of bodies and subjectivities with the principle of equality.** **Politics is a refusal of representation. Politics happens beyond, before representation.** Outside politics is the materialisation of the attempt to occupy this space outside the controlling force of becoming majoritarian through the process of representation. **If we return to our initial question of how people contest control, then we can say that when regimes of control encounter escape they instigate processes of naming and representation. They attempt to reinsert escaping subjectivities into the subject-form. Outside politics arises as people attempt to evade the imposition of control through their subsumption into the subject-form. This is not an attempt simply to move against or to negate representation.** Nor is it a matter of introducing pure potential and imagination in reaction to the constraining power of control. **Rather, escape is a constructive and creative movement - it is a literal, material, embodied movement towards something which cannot be named, towards something which is fictional.** Escape is simultaneously in the heart of social transformation and outside of it. Escape is always here because it is non-literal, witty and hopeful.

#### The 1NC focus on neo-colonial violence obscures the way in which it is the very struggle against colonialism plays into the hands of the interests of transnational capital. Resistance couched in these terms can only define itself in the negative, insinuating a reactionary melancholy that undoes the force of subversion

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**It has been argued that United States foreign policy** during the Bush administration is **serving to consolidate a new imperialism** (Harvey, 2003). However, the role of the United States in the formation of a new global system of power is the main point of divergence between those attempting to grasp the current geopolitical situation (Arrlghi, 2003; Atzert and Miiller, 2003; Hardt and Negri, 2000; Panitch and Gindin, 2003; Wallerstein, 2003). In the case for characterising the United States as a new imperialistic power, the United States is thought to reoccupy the power vacuum left after the collapse of the Soviet Union, claiming unipolar leadership. According to this position, the United States no longer performs Bill Clinton's multilateral hegemonic geopolitics, but a unilateral politics of violent dominance. But **what this account of the new imperialism fails to understand is that if unilateral power is not part of a broader global, postliberal aggregate, it then takes the form of naked power**. And naked power blocks and cancels transnationalist horizontality between global social and economic actors. **This is something which nobody can afford today**. **The United States - more than anyone else - needs a viable transnational, horizontal, hegemonic system that frees capital flows and access to both resources and to technological innovation. A neo-imperialist strategy could possibly impose domination in order to restore superiority when a rupture in the actual balance of power occurs, but the productivity of such an imposition is bound to be limited. A neo-imperialist strategy signifies the opposite of what the United States is actually striving for today: globalised markets,** circulating culture, **travelling technoscience**. **The United States** is not striving for neo-imperialist dominance but for a system of postliberal sovereignty. It **functions**, **not as a nation trying to represent its own interests, but as an administration which seeks to change how politics operates. The United States tries to effect this shift by working to consolidate a series of postliberal vertical aggregates on a global scale, which contest and effectively compete with other emerging vertical aggregates in the Euro-Asian, east Asian or Southern geopolitical space.** Only by continuing to promote a transnational field criss-crossed by permeable, horizontal connections, is it possible to instate fluid, global vertical aggregates which incorporate different social actors in common hegemonic formations. **These actors can vary immensely and can rarely be reduced to nation states.** They are much more polymorphic, fragmented, energetic, and diversified than a massive bloc of a series of nation states. **The United States is not undertaking nationalist- based geopolitics; rather it attempts to create a strong formation of alliances with many different actors (not primarily nation states) using existing transnational multi-centred networks of power.** The United States does not dominate globalisation; it attempts to hegemonise the already hegemonic structure of globalisation. And the United States is striving more than ever before to build up such a postliberal vertical aggregate, not because it wants to consolidate or expand its power; rather, it tries to do this because it is losing power as other new postliberal aggregates emerge and contest the power of the United States on a global scale. **This necessitates a very different form of subversion from either a simplistic anti-imperialist approach or the traditional left position** which we described earlier in the case of European politics. **The main problem with reductionist** anti-Americanism, **formulaic anti- imperialism or left conservatism is that they define themselves in the negative. They fail to connect with the productivity of power and they condemn resistance and subversion to melancholy (Brown, 1995). Subversion then becomes the constitutive outside of what it tries to negate.**

**Melancholy negates the will to act – it makes us slaves of the powerful and makes our fears of death absurd – vote negative to reject the salvation morality**

**Deleuze and Parnet ‘87**

famous philosopher, Professor of Philosophy at the Sorbonne, Dialogues II, European Perspectives, with Claire Parnet, freelance journalist, translated by Hugh Tomlinson and Barbara Habberjam, 2002 pgs.61-62

When Spinoza says 'The surprising thing is the body ... we do not yet know what a body is capable of ... ', he does not want to make the body a model, and the soul simply de­pendent on the body. He has a subtler task. He wants to demolish the pseudo-superiority of the soul over the body. There is the soul and the body and both express one and the same thing: an attribute of the body is also an expressed of the soul (for example, speed). **Just as you do not know what a body is capable of, just as there are many things in the body that you do not know, so there are in the soul many things which go beyond your consciousness.** This is the question: what is a body capable of? what affects are you capable of? Experiment, but you need a lot of prudence to experiment. **We live in a world which is generally disagreeable, where not only people but the established powers have a stake in transmitting sad affects to us. Sadness, sad affects, are all those which reduce our power to act. The established powers need our sadness to make us slaves. The tyrant, the priest, the captors of souls need to persuade us that life is hard and a burden.** **The powers that be need to repress us no less than to make us anxious or**, as Virilio says, **to administer and organize our intimate little fears. The long, universal moan about life: the lack-to-be which is life ... In vain someone says, 'Let's dance'; we are not really very happy. In vain someone says, ‘What misfortune death is'; for one would need to have lived to have something to lose. Those who are sick, in soul as in body, will not let go of us, the vampires, until they have transmitted to us their neurosis and their anxiety, their beloved castration, the resentment against life, filthy contagion.** It is all a matter of blood. **It is not easy to be a free man, to flee the plague, organize encounters, increase the power to act, to be moved by joy, to multiply the affects which express or encompass a maximum of affirmation. To make the body a power which is not reducible to the organism, to make thought a power which is not reducible to consciousness.** Spinoza’s famous first principle (a single substance for all attributes) depends on this assemblage and not vice versa. There is a Spinoza-assemblage: soul and body, relationships and encounters, power to be affected, affects which realize this power, sadness and joy which qualify these affects. Here philosophy becomes the art of a functioning, of an assemblage. Spinoza, the man of encounters and becoming, the philosopher with the tick, Spinoza the imperceptible, always in the middle, always in flight although he does not shift much, a flight from the Jewish community, a flight from Powers, a flight from the sick and the malignant. He may be ill, he may himself die; he knows that **death is neither the goal nor the end, but that, on the contrary, it is a case of passing his life to someone else.** What Lawrence says about Whitman’s continuous life is well suited to Spinoza: the Soul and the Body, **the soul is neither above nor inside, it is ‘with’, it is on the road, exposed to all contacts, encounters, in the company of those who follow the same way, ‘feel with them, seize the vibration of their soul and their body as they pass’, the opposite of a morality of salvation, teaching to soul its life, not to save it.**

#### What is material? The affirmative disagrees with their representation of economics as a monocausal explanation for how power functions – the world is a collection of differences and attempting to impose a singular model of knowing on it paradoxically makes analysis impossible

**Manuel DeLanda, 1997**, Adjunct Associate Professor – Graduate School of Architecture, Planning and Preservation – Columbia University, A Thousand Years of Nonlinear History, p. 46-8

Even in this age of huge multinational corporations, the command element in the commercial mixture is far from 100 percent. The economist John Kenneth Galbraith, who sharply differentiates between spontaneous economic activity (markets) and planned economic processes (big business), calculates that today roughly half of the Western economy has been taken over by capitalist hierarchies. The other half comprises the low-profit regions, which those hierarchies willingly abandon to the market. According to Galbraith, what gives capitalism this freedom of motion is economy of scale, which is why since the Middle Ages commercial capitalism has been associated with wholesale and not retail. A large firm is better able to absorb shocks and fluctuations and create the plans and strategies that may win it a degree of independence from market forces, indeed the ability to control and manipulate those forces to a certain degree. Such considerations led Braudel to the startling conclusion that "we should not be too quick to assume that capitalism embraces the whole of western society, that it accounts for every stitch in the social fabric...that our societies are organized from top to bottom in a 'capitalist system.' On the contrary...there is a dialectic still very much alive between capitalism on one hand, and its antithesis, the 'non-capitalism' of the lower level on the other."56 And he adds that, indeed, capitalism was carried upward and onward on the shoulders of small shops and "the enormous creative powers of the market, of the lower story of exchange.... [This] lowest level, not being paralysed by the size of its plant or organization, is the one readiest to adapt; it is the seedbed of inspiration, improvisation and even innovation, although its most brilliant discoveries sooner or later fall into the hands of the holders of capital. It was not the capitalists who brought about the fast cotton revolution; all the new ideas came from enterprising small businesses."57 There is a misconception, widely shared by economists and philosophers on either side of the political spectrum, that capitalism developed in several stages, being at first competitive and subservient to market forces and only later, in the twentieth century, becoming monopolistic. However, starting in the thirteenth century, capitalists engaged in various noncompetitive practices, in order to create the large accumulations of money that have always characterized the upper levels of the trade pyramid. As we discussed, the early medieval fairs, the meeting points of rich merchants from all over Europe, were veritable hierarchies of meshworks, in which the luxury and money markets dominated the upper echelons. Neither in the long-distance trade of prestige goods nor in the worlds of precious metals and credit did supply and demand reign supreme. On the contrary, most fortunes in these areas were made by the manipulation of these market forces through a variety of noncompetitive practices. There was, of course, intense competition among rich merchants and families, much as today large corporations compote with one another, but these rivalries among oligopolies are fundamentally different from the kind of "anonymous competition" in which small producers and traders engage.58 From the Middle Ages to the nineteenth century, not only did individual businesses engage in monopolistic practices, entire cities did too, even groups of cities. By means of noncompetitive practices, a town could greatly aid its merchants and financiers, protecting them from foreign rivals, and stimulating the accumulation of money within its walls. The medieval cities that controlled the Mediterranean and the Baltic and North Seas financed much of their growth from manipulation of markets and by acquiring exclusive control of certain flows, such as spices and silks from the Levant in the case of Venice, or salt in the case of Lübeck. With a monopoly on luxury goods, won and maintained by military force, fourteenth-century Venice dominated the cities around it, not only the small towns constituting its supply regions but other giant towns, such as Florence and Milan. In the north, between the thirteenth and fifteenth centuries, cities like Lübeck and Bruges formed a meshwork of cities known as the Hanseatic League, which was capable of collective action without a centralized organization behind it. The league also engaged in monopolistic practices to trap the towns within its zone of economic influence in a web of supervision and dependence.59 We will return shortly to other forms of market manipulation which, according to Braudel, have always characterized certain commercial institutions since the Middle Ages. This will make clear how wrong it is to assume (as many economists to the right and center of the political spectrum tend to do) that market power is something that may be dismissed or that needs to be studied only in relation to some aberrant institutional forms such as overt monopolies. But certain conceptions from the left (particularly the Marxist left) also need to be corrected, in particular, a teleological conception of economic history in terms of a linear progression of modes of production. In this Braudel explicitly agrees with Gilles Deleuze and Felix Guattari: capitalism could have arisen anywhere and long before it did in Europe.60 Its emergence must be pictured as a bifurcation, a phase transition that might have taken place somewhere else had the conditions been right (for instance, in the huge camel caravans along the Salk Road in the thirteenth century).61 Moreover, the institutions that emerged after this bifurcation must be viewed not as replacing previous institutions (i.e., markets) but as fully coexisting with them without forming a societywide "system." It is true that prices across Europe were pulsating to the same rhythm from medieval times and this gave the entire continent a certain economic coherence (sometimes referred to as a "world-economy"), but it would be a mistake to confuse world-economies with the "capitalist system," since India, China, and Islam also formed coherent economic areas (as powerful as those of Europe) without giving rise to capitalism.62 The conceptual confusion engendered by all the different uses of the word "capitalism" (as "free enterprise" or as "industrial mode of production" or, more recently, as "world-economy") is so entrenched that it makes an objective analysis of economic power almost impossible. One could, of course, simply redefine the term "capitalism" to include "power to manipulate markets" as a constitutive part of its meaning and to rid it of some of its teleological connotations. But as philosophers of science know well, when a theory begins redefining its terms in an ad hoc way to fit the latest round of negative evidence, it shows by this very act that it has reached the limits of its usefulness. In view of this, it would seem that the only solution is to replace this tired word with a neologism, perhaps the one Braudel suggested, "antimarkets," and to use it exclusively to refer to a certain segment of the population of commercial and industrial institutions.63

#### Ethical judgments about capitalism in the abstract should be avoided – its complete abandonment is neither possible nor desirable – an insistence on meshwork alternatives will result in worse forms of oppression

**Manuel DeLanda, 1997**, Adjunct Associate Professor – Graduate School of Architecture, Planning and Preservation – Columbia University, A Thousand Years of Nonlinear History, p. 66-70

Thus, much as sedimentary rocks, biological species, and social hierarchies are all stratified systems (that is, they are each the historical product of a process of double articulation), so igneous rocks, ecosystems, and markets are self-consistent aggregates, the result of the coming together and interlocking of heterogeneous elements. And just as the diagram defining the “stratifying abstract machine” may turn out to require more complexity than our basic diagram of a double articulation, so we may one day discover (empirically or through theorizing and computer simulations) that the diagram for the meshwork-producing process involves more than the three elements outlined above. Moreover, in reality we will always find mixtures of markets and hierarchies, of strata and self-consistent aggregates. As Simon says, it may seem prima facie correct to say that whereas markets figure most prominently in coordinating economic activities in capitalist countries, hierarchic organizations play the largest role in socialist countries. But that is too simple a formula to describe the realities which always exhibit a blend of all the mechanisms of coordination. The economic units in capitalist societies are mostly business firms, which are themselves hierarchic organizations, some of enormous size, that make only a modest use of markets in their internal functioning. Conversely socialist states use market prices to a growing extent to supplement hierarchic control in achieving inter-industry coordinatnon.99 There is one final aspect of meshwork dynamics I must examine before returning to our exploration of the “geological” history of human societies. We may wonder why, given the ubiquity of self-consistent aggregates, it seems so hard to think about the structures that populate the world in any but hierarchical terms. One possible answer is that stratified structures involve the simplest form of causal relations, simple arrows going from cause to effect.100 According to Magoroh Maruyana, a pioneer in the study of feedback, Western thought has been dominated by notions of linear (nonreciprocal) causality for twenty-five hundred years. It was not until World War II that the work of Norman Wiener (and engineers involved in developing radar systems) gave rise to the study of negative feedback and with it the beginning of nonlinear thinking. The classic example of negative feedback is the thermostat. A thermostat consists of at least two elements: a sensor, which detects charges in ambient temperature, and, an effector, a device capable of changing the ambient temperature. The two elements are coupled in such a way that whenever the sensor detects a change beyond a certain threshold it causes the effector to modify the surrounding temperature in the opposite direction. The cause-and-effect relation, however, is not linear (from sensor to effector) since the moment the effector causes a change in the surrounding temperature it thereby affects the subsequent behavior of the sensor. In short, the causal relation does not form a straight arrow but folds back on itself, forming a closed loop. The overall result of this circular causality is that ambient temperature is maintained at a given level. Maruyana opposes negative feedback with "positive feedback" (a form of nonlinear causality that we have already encountered in the form of autocatalysis). While the first type of reciprocal causality was incorporated into Western thought in the 1950s, the second type had to wait another decade for researchers like Stanislav Ulam, Heinz Von Foerster, and Maruyana himself to formalize and develop the concept.101 The turbulent dynamics behind an explosion are the clearest example of a system governed by positive feedback. In this case the causal loop is established between the explosive substance and its temperature. The velocity of an explosion is often determined by the intensity of its temperature (the hotter the faster), but because the explosion itself generates heat, the process is self-accelerating. Unlike the thermostat, where the arrangement helps to keep temperature under control, here positive feedback forces temperature to go out of control. Perhaps because positive feedback is seen as a destabilizing force many observers have tended to undervalue it relative to negative feedback. (In the so-called Gaia hypothesis, for instance, where stabilizing negative feedback is postulated to exist between living creatures and their environment, positive feedback is sometimes referred to pejoratively as "anti-Gaian.")102 Maruyana sees the question in different terms. For him the principal characteristic of negative feedback as its homogenizing effect: any deviation from the temperature threshold at which the thermostat is set is eliminated by the loop. Negative feedback is "deviation-counteracting." Positive feedback, on the other hand, tends to increase heterogeneity by being "deviation-amplifying": two explosions set off under slightly different conditions will arrive at very different end states, as the small original differences are amplified by the loop into large discrepancies.103 We have already observed the many roles that positive feedback has played in the turbulent history of Western towns. However, it is important to distinguish between simple autocatalytic dynamics and complex autocatalytic loops, which involve not only self-stimulation but self-maintenance (that is, positive feedback and closure). Another way of stating this distinction is to say that the increase in diversity that mutually stimulating loops bring about will be short-lived unless the heterogeneous elements are interwoven together, that is, unless they come to form a meshwork. As Maruyana writes, "There are two ways that heterogeneity may proceed: through localization and through interweaving. In localization the heterogeneity between localities increases, while each locality may remain or become homogenous. In interweaving, heterogeneity in each locality increases, while the difference between localities decreases."104 In other words, the danger with positive feedback is that the mere production of heterogeneity may result in isolationism (a high diversity of small cliques, each internally homogeneous). Hence the need for intercalary elements to aid in articulating this diversity without homogenization (what Maruyana calls "symbiotizatson of cultural heterogeneity"). Negative feedback, as a system of control and reduction of deviation, may be applied to human hierarchies. Decision making in stratified social structures does not always proceed via goal- directed analytic planning but often incorporates automatic mechanisms of control similar to a thermostat (or any other device capable of generating homeostasis).105 On the other hand, social meshworks (such as the symbiotic nets of producers whom Jacobs describes as engaged in volatile trade) may be modeled on positive-feedback loops as long in our model also incorporates a means for the resulting heterogeneity to be interwoven. Moreover, specific institutions will likely be mixtures of both types of reciprocal causality, and the mixtures will change over time, allowing negative or positive feedback to dominate at a given moment.106 The question of mixtures should be also kept in mind when we judge the relative ethical value of these two types of structure. If this book displays a clear bias against large, centralized hierarchies, it is only because the last three hundred years have witnessed an excessive accumulation of stratified systems at the expense of meshworks. The degree of homogeneity in the world has greatly increased, while heterogeneity has come to be seen as almost pathological, or at least as a problem that must be eliminated. Under the circumstances, a call for a more decentralized way of organizing human societies seems to recommend itself. However, it is crucial to avoid the facile conclusion that meshworks are intrinsically better than hierarchies (in some transcendental sense). It is true that some of the characteristics of meshworks (particularly their resilience and adaptability) make them desirable, but that is equally true of certain characteristics of hierarchies (for example, their goal-directedness). Therefore, it is crucial to avoid the temptation of cooking up a narrative of human history in which meshworks appear as heroes and hierarchies as villains. Not only do meshworks have dynamical properties that do not necessarily benefit humanity (for example, they grow and develop by drift, and that drift need not follow a direction consistent with a society's values), but they may contain heterogeneous components that are themselves inconsistent with a society's values (for example, certain meshworks of hierarchies). Assuming that humanity could one day agree on a set of values (or rather on a way of meshing a heterogeneous collection of partially divergent values), further ethical judgments could be made about specific mixtures of centralized and decentralized components in specific contexts, but never about the two pure cases in isolation. The combinatorial possibilities—the number of possible hybrids of meshworks and hierarchies—are immense (in a precise technical sense),107 and so an experimental and empirical attitude toward the problem would seem to be called for. It is surely impossible to determine purely theoretically the relative merits of these diverse combinations. Rather, in our search for viable hybrids we must look for inspiration in as many domains as possible. Here, we have looked to a realm that would normally seem out of bounds: the mineral world. But in a nonlinear world in which the same basic processes of self-organization take place in the mineral, organic, and cultural spheres, perhaps rocks hold some of the keys to understanding sedimentary humanity, igneous humanity, and all their mixtures.

#### Our alternative is to reject their representation of homogenous capitalist system in which we are all cogs – Our discursive rejection is key to a new hope in transforming economic institutions

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When we think that the majority of equations used in science are linear and that a linear conception of causality dominated Western thought for over two millennia, we may be inclined to think that our lack of familiarity with questions of self-organized heterogeneity and our tendency to think about complexity in terms of homogeneous hierarchies derive from the way we represent the world to ourselves. No doubt, the entrenchment in the academic and scientific worlds of certain discursive practices informed by linear thinking and linear representation is indeed part of our problem. But to try to reduce a complex situation to a question of representations is, in turn, a homogenizing force very much alive today among social critics. Here we have argued that both the world of objective referents and the world of labels and concepts have undergone processes of uniformation and standardization, so that both discursive and nondiscursive practices need to be taken into account when tracing the history of our homogenization. In short, as our industrial, medical, and educational systems became routinized, as they grew and began to profit from economies of scale, linear equations accumulated in the physical sciences and equilibrium theories flourished in the social sciences.14 In a sense, even though the world is inherently nonlinear and far from equilibrium, its homogenization meant that those areas that had been made uniform began behaving objectively as linear equilibrium structures, with predictable and controllable properties. In other words, Western societies transformed the objective world (or some areas of it) into the type of structure that would "correspond" to their theories, so that the latter became, in a sense, self-fulfilling prophecies. Today, our theories are beginning to incorporate nonlinear elements, and we are starting to think of heterogeneity as something valuable, not in an obstacle to unification. Negative and positive feedback have been added to older linear notions of causality, enriching our conceptual reservoir. Even some materials (such as fiberglass and other composites) have increased our awareness of the limitations imposed by uniformity and our awareness of the great advantages of meshworks in industrial design.15 In short, our theories are shedding some of their homogeneity. Although this is a welcome development we still have to deal with the world of referents, with the thousands of routinized organizations that have accumulated over the years, with the spread of standardized languages, and with the homogenized gene pools of our domestic plants and animals, to mention only the examples discussed in this book. Changing our way of thinking about the world is a necessary first step, but it is by no means sufficient: we will need to de-stratify reality itself, and we must do so without the guarantee of a golden age ahead, knowing full well the dangers and possible restratifications we may face. It is important, however, not to confuse the need for caution in our exploration of the nonlinear possibilities of (economic, linguistic, biological) reality, and the concomitant abandonment of utopian euphoria, with despair, resentment, or nihilism. There is, indeed, a new kind of hope implicit in these new views. After all, many of the most beautiful and inspiring things on our planet may have been created through destratification, A good example of this may be the emergence of birdsongs: the mouth became destratified when it ceased to be a strictly alimentary organ, caught up in the day-to-day eating of flesh, and began to generate other flows (nerves) and structures (songs) where the meshwork element dominated the hierarchical.16 The emergence of organic life itself, while not representing a more perfect stage of development than rocks, did involve a greater capacity to generate self-consistent aggregates, a surplus of consistency.17 The human hand may also have involved a destrafication, a complete detachment from locomotive functions and a new coupling with the external environment, itself further destratified when the hand began converting pieces of it (rocks, bones, branches) into tools.18 Thus, despite all the cautionary tales about simplistic calls for anarchic liberation, there is in these new theories a positive, even joyful conception of reality. And while these views do indeed invoke the "death of man," it is only the death of the "man" of the old "manifest destinies," not the death of humanity and its potential for destratifications.19