

MOVING THE THEORY OF LOCAL ECONOMIC DEVELOPMENT BEYOND METAPHORS¹

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ABSTRACT: The importance of metaphors and stories in economic development, geography and urban planning has been previously noted in the literature. Metaphors and stories are essential ingredients in the promotional literature and daily rhetoric of the economic development profession. The literature also indicates that if economic developers want to be more effective in translating knowledge to action then practitioners should pay more attention to the craft of story telling and learn to use metaphors more effectively. Metaphorical analogies and stories can generate ideas which can provide leaps in understanding that in turn leads to theorising. This writer asserts that the economic development profession may benefit by embracing Deleuzian metaphors because they resonate with the practice and assists practitioners to visualise economic events that help one to understand the practice of local economic development.

1. INTRODUCTION

The purpose of this article is to argue for using Deleuzian metaphors as an aid to understanding local economic development. The significant role of metaphors² and stories in economic development strategies, advertising and promotion material has been noted in the literature. The pathway toward developing a theory via metaphorical analysis has been clearly delineated (Mier & Bingham, 1993, pp. 301-302). This research note also encourages practitioners and academics to open their minds by 'thinking outside the square' to expand their bag of tools to include alternative philosophical viewpoints to bridge the gap between practice and theory.

Despite the lack of specific a theory for economic development³ (most of the theories have been borrowed from economics, geography or planning), this writer asserts that economic development requires a theoretical base of its own (Rowe, 2006). Theory has always been about how it should be done and less about what one does (Beauregard, 2005, p. 203) consequently, it is inevitable that the rhetoric of economic development often returns to storytelling, communicative action and facilitation. Sandercock stated that "stories can often provide a far richer understanding of the human condition, and thus of [economic development] ..., than traditional social science, and for that reason alone, deserve more attention" (Sandercock, 2003, p. 12). Storytelling and

¹ This paper was presented at the 32nd ANZRSI Conference held in Adelaide from 30th Nov – 3rd Dec 2008.

² Metaphors are the main mechanism through which we comprehend abstract concepts (Lakoff, 1992, p. 39).

³ Blakely and Bradshaw (2002, p. 55) supports my position by stating that "At this stage, no theory or set of theories adequately explains regional or local economic development".

communicative action can best be articulated with metaphors. Deleuze argues that the very idea of metaphor or representation has underpinned thinking and philosophy. We act as though there were a literal world that then needs to be conveyed by the metaphors or representations generated by minds. Although some may disagree⁴, philosophers see themselves as using metaphors to describe an objective world (Colebrook, 2002, p. 68).

The consequences for the practice of economic development can best be understood in terms of storytelling; of abandoning what Harding calls “the longing for ‘one true story’ that has been the psychic motor for western science” (Harding, 1986, p. 193).

Recognising the fundamental limitations of science and scientific methods ... [one] suggests that it perhaps makes more sense to treat scientific communication as storytelling. Instead of trying to find objective truth, perhaps it is more meaningful to check the narrative coherence of scientific research by asking two questions: Does the story hang together? Does the story ring true? (Sui, 2000, p. 328).

Metaphors have been identified as the most appropriate tool to approach the development of a theory for economic development (Bingham & Mier, 1993; Cresswell, 1997, p. 330; Ortony, 1993). Bingham and Mier (1993, p. xvi) have suggested that:

Alternative visions require a new social construction of reality – new patterns of perception embedded in narrative habits and patterns of seeing. So inspirational story telling, we believe, takes priority in economic development policy and strategy formulation. Metaphors provide the inspirational spine to the stories and thus a framework for incorporating diverse theories of development into practical application.

because metaphors are known as vehicles for the transfer of concepts, ideas and notions from one domain to another (Chettiparamb, 2006, p. 75; Martin, 1999, p. 224).

Metaphors enable people to understand the incomprehensible by substituting a ‘common-sense’ fact for the incomprehensible (Cresswell, 1997, p. 332). The problem, however, with metaphors is that they lead us to believe that ‘we’ think by likening one thing to another, as though thought were simply a form of recognition and comparison added on to an already objective reality (Colebrook, 2002, p. 70). Deleuze contends that there is no difference between images, things, and motion (Deleuze, 1995, p. 42). Therefore, metaphors can take on the heterogeneity of the multiple. Because of one’s desire to succeed, especially in the context of daily practice in a globalised economy, an economic development practitioner often creates his or her own reality with metaphors when promoting the virtues of their particular patch.

Economic development practitioners often devote their energies to marketing their areas to potential investors. They do this by telling “stories and search for

⁴ Some writer’s claim that metaphors are the enemy of the objective world (Black, 1962).

‘generative metaphors’⁵ that will capture the imaginations of investors, elected officials and the public” (Aay & Van Langevelde, 2005; Buss, 1999; Mier & Fitzgerald, 1991). These “metaphors are not necessarily based on empirical analyses but become essential rhetorical strategies. Hence, knowledge is politically vacuous until it is situated in a framework of meanings that motivate investors to act” (Beauregard, 1994, p. 276). The marketing material produced by most economic development agencies describe possibilities that are not necessarily based on facts. In a similar vain, in order to overcome the absence of a strong theoretical framework, Amin and others have effectively used metaphors to describe the urban environment in numerous publications (Amin, 2004; Amin & Thrift, 2002).

Metaphors have been creatively deployed to understand everything from urban form to the globalisation process in New Zealand (Amin & Thrift, 2002; Pawson & Le Heron, 2005). Metaphors have also been used to influence public debate, policy, and theory. Wyatt argues that metaphors have more than a descriptive function and that they also carry normative connotations (Wyatt, 2004). The writings of Deleuze and Guattari seem to provide theoretical metaphors which describe many things including the non-commercial aspects of the Net. For instance, the rhizome⁶ metaphor captures how cyberspace is organised as an open-ended, spontaneous and horizontal network. Their Body-without-Organs phrase can even be used to romanticise cyber-sex (Barbrook, 2003).

An often used metaphor in economic development describes the process as building a growth machine (Holupka & Shlay, 1993, pp. 179-180). A growth machine is a coalition of local government, some unions, and place bound business interests like utilities, newspapers, real estate developers, and retail establishments pursuing their agenda of urban renewal or regional development and the creation of safe middle-income enclaves. The growth machine is an interconnected web of interests that is largely taken for granted by practitioners at least partially because they are often a part of it. Deleuze’s post-structuralist concepts of ‘rhizomes’ and ‘body without organs’ fits nicely with this analogy (Deleuze & Guattari, 1987).

2. RHIZOMES, PLATEAUS AND FOLDS

The rhizome is often used as a concept exemplified by metaphors (Gregoriou, 2004, p. 242). Rhizome is a figurative term used by Guattari and Deleuze (1987) to describe non-hierarchical networks of all kinds. The concept of rhizome (a

⁵ A metaphor is an expression which means or describes one thing or idea using words usually used for something else with very similar qualities. Generative refers to the power to produce or generate.

⁶ Rhizome is a figurative term used by Guattari and Deleuze (1987) to describe non-hierarchical networks of all kinds. The concept of rhizome (a subterranean network of meandering roots in connection with various hypertextual possibilities) can be developed into a theoretical framework that may be applied to local and regional economic development.

subterranean network of meandering roots in connection with various hypertextual possibilities) can be developed into a theoretical framework that may be applied to local and regional economic development. Deleuze and Guattari stated that:

A rhizome as a subterranean stem is absolutely different from roots and radicles. Bulbs and tubers are rhizomes. Plants with roots or radicles may be rhizomorphic in other respects altogether. Burrows are too, in all their functions of shelter, supply, movement, evasion, and breakout. The rhizome itself assumes very diverse forms, from ramified surface extension in all directions to concretion into bulbs and tubers ... The rhizome includes the best and the worst: potato and couchgrass, or the weed (Deleuze & Guattari, 1987, pp. 6-7).

The rhizome (see Figure 1) concept is useful for rethinking the notion that knowledge can be traced back to one logical or central source, able to be plotted carefully on the tree structure, or organised within various hierarchies (Deleuze & Guattari, 1981).

A “rhizome does not represent, but only maps our ways, paths and movements. The presentation in the mode of mapping does not assume this map’s representing the proverbial territory as given in a strict sense. Deleuze used tracer (in French) to indicate the subtlety of what it means to draw a map. The verb to draw means – rather than to copy – to create because what is drawn ... does not pre-exist the act of drawing” (Semetsky, 2007, p. 200).

The rhizome is also often used as a concept exemplified by metaphors (Gregoriou, 2004, p. 242). Jacobs (2007, p. 268, emphasis in the original) emphasised this point by stating that:

The multifarious activities that constitute [economic development] can be seen ... as links between ... ensembles of activity or patchworks are through what Deleuze and Guattari term the rhizome, a metaphor that they use to map the connections between agents, material objects and the local.

Tree logic⁷ operates within a defined space or territory, enclosed by chronological and hierarchical boundaries (Deleuze & Guattari, 1987). Rhizomic thought continually needs more space to spread out. Instead of fixing contributions to knowledge onto appropriate branches on a tree (where they can be indexed, catalogued and referred to later), rhizomic thought is analogous to the transferral of information via the internet. It is similar to a flow that moves haphazardly and usually ephemerally across a network. A rhizomatic tangle is a system of relays of potential enquiries. Rhizomatic styles of thinking have no fixed centres or order and can be visualised as a multiplicity of expanding and overlapping connections (Deleuze & Guattari, 1987, pp. 3-26).

⁷ Tree logic is an alternative to the rhizome model. Deleuze and Guattari describe this model in terms of 'root' or 'tree logic'.



Source: Gough, 2005, p. 4.

Figure 1. A Tangle of Rhizomes.

The development of economic development policy from a Deleuzian poststructuralist perspective can be likened to a series of plateaus.

In geology [as in societal practices, such as economic development] Deleuze show[ed] how life and time become in a multiplicity of layers: genetic, chemical, geological and cultural events all produce different strata or plateaus of life ... The idea of a ... [framework for understanding economic development] suggests that there is a distribution, a drawing of lines, a plane of differences, a number of planes or plateaus which constitute ...[practice], and that this number of plateaus cannot be located within the unity of a subject (Colebrook, 2002a, pl 58).

The elevation of the various plateaus become increasingly higher as new policies and key concepts are folded into the mix. The implications from the resulting assemblage of policies, programmes and initiatives will be examined from a Deleuzian perspective as well as the occasional Foucaultian insight.

The economic development landscape can be visualised as a series of plateaus or plateaux as originally conceptualised by Bateson (1973) in the early 1970s (Deleuze & Guattari, 1987, pp. 21-22 and p. 158; Massumi, 1992, p. 7). The concept has been subsequently refined by Deleuze and Guattari (1987). Deleuze and Guattari developed the concept as a way of describing the distinction between arborescent and rhizomatic thinking. The philosophers called a plateau “any multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome” (Deleuze & Guattari, 1987, p. 22). In geology or physical geography a plateau refers to elevated regions of nearly horizontal underlying layers of rock strata. In this section, plateaus are metaphorically conceptualised as levels of understanding of basic concepts such as competitive advantage.

In this paper, a plateau has been formulated as a descriptor in order to enhance the understanding of the local area’s context. The context should be understood as an essential component of a conceptual framework for visualising how different actants (Central Government policy makers, local politicians, the forces of globalisation, etc.) at different scales converge across the ebbs and flows of daily practice. According to Massumi (1992, p. 7):

... a plateau is reached when circumstances combine to bring an activity to a pitch of intensity that is not automatically dissipated in a climax leading to a state of rest. The heightening of energies is sustained long enough to leave a kind of afterimage of its dynamism that can be reactivated or injected into other activities, creating a fabric of intensive states between which may number of connecting routes could exist.

Deleuze’s concepts of the ‘fold’, or ‘desire’, for example, “helps us to think about the very difference or power of life; the concept is an event of life and difference that confronts, thinks or gives consistency to difference” (Colebrook, 2002, p. 85). The fold is a metaphor which has been developed and used by Foucault in his various writings. It has been further developed and given its due weight by Deleuze. The practice of economic development can also be regarded as a performance of folding (there is no predetermined style of folding, un-or-refolding). Practitioners may choose (if they wish) to participate in a Deleuzian voyage of discovery by “play[ing] along the folds and ... become swept up by the variable consistency of a certain context” (Doel, 2000, p. 131) which opens up potentialities of becoming.⁸ The issue is not one of relation, but of ‘fold-in’ or of ‘fold according to fold’. Folds are in this sense everywhere without the fold being a universal (Deleuze, 1993b, p. 135). It’s a ‘differentiation’, a ‘differential’ (Deleuze, 1995, p. 156) and the “unit of matter, the smallest

⁸ The Deleuzoguattarian concept of becoming implies the pathways along which an entity or concept may be transformed whilst retaining some resemblance to its former self. Becoming is linked rather to the unpredictable, indeterminate, never accomplished actualisation of virtualities” (Hillier, 2005, pp. 280-281).

element of the labyrinth, is the fold” (Deleuze, 1992, p. 6). A fold is also a term that has been borrowed from geology which can be defined as a bend, flexure, or wrinkle in rock produced when the rock was in a plastic state (Leet et al, 1978, p. 468).

It is in this sense that a fold, as the minimal element, is a transformer and a dissimulator because one is always amongst countless others who perpetually pull it out of shape (Doel, 2001, p. 564). This means that understanding can be enhanced by visualising key concepts such as competitive advantage and the forces of globalisation being folded into the complex mix that constitutes the practice of economic development. Visualising concepts such as competitive advantage and the forces of globalisation as plateaus can be enabling and emergent via differential relations of folding. As Deleuze (1992, p. 93) concludes, “I am forever unfolding between two folds and if to perceive means to unfold, than I am forever perceiving within the folds”. Practitioners with new insights can better navigate through the muddled transdisciplinary field called local economic development.

Another often used metaphor is ‘think outside the square’ (Rowe, 2005, p. 230). Immediately out the square would be another square. If inside the square is the status quo, outside the square is ‘not the status quo’. If your new square becomes popular, then everyone will want to jump on the bandwagon.⁹ Because good squares (best practice) last only for a short time some observers and practitioners are greeting new ideas as “merely another fad in a field sharply influenced by fads” (Bosworth & Rosenfeld, 1993, p. 44). An economic development practitioner must become adept at identifying ‘best practice’ that is applicable to the context of his or her local community or region. This will allow the practitioner to spot good opportunities (squares) before the crowd (Blane Canada Limited, 2005).

Small business incubators¹⁰, a current fad in economic development, would be another useful example of the rhizobian concept of immanence. Business incubators are designed to support young entrepreneurial firms and are seen as a viable way of creating jobs because nurturing and developing local entrepreneurial companies is seen as being more effective than chasing footloose industries (Foust, 1975). Establishing business incubators is considered ‘best practice’ and has become essential components to most economic development strategies (everyone has jumped on this bandwagon). In New Zealand, Central Government is promoting the proliferation of incubators. In 2001, there were just two incubators in New Zealand. There are presently 12 incubators being funded through the Incubator Support Programme with four more slated to open in 2006.¹¹ Over that four-year period a total of 19 incubators (5 have opened and

⁹ Most economic development strategies now promote clusters as ‘best practice’ and numerous communities such as Wellington have adopted strategies based on Florida’s research (Ffowcs-Williams, 2005; Florida, 2002, 2005; Wellington City Council, 2003).

¹⁰ Small business entrepreneurial incubators are designed to germinate new viable businesses.

¹¹ It is anticipated that new incubators will be opened in Tauranga, Rotorua, Taupo and Nelson in 2006. In recent years, 19 different incubators were funded through NZTE.

later closed operations) have received government assistance (little rhizomes popping up and later disappearing on the landscape).

The potential of metaphors as a tool to develop new ways of thinking has been delineated in the geography literature (Barnes, 1991, 1996; Buttimer, 1982, 1993; Graham, 1982; Livingstone, 1981; Tuan, 1978). Cresswell stated that:

[Economic development] engagements with metaphor have been restricted to its use in language and text, within the discipline ... a more liberal view of metaphor as thought and action will enable [economic development practitioners] to develop a fuller appreciation of human action in space. The significance of metaphor to [economic development] extends, in other words, well beyond the use of metaphors... The [economic development] interpretation of metaphors as they are thought and acted out in the realms of politics and ideology can do much to delineate the praxis of everyday life. Indeed, by critiquing and transforming established metaphors or by suggesting new ones, [economic development practitioners] might provide alternative and more provocative way of thinking and acting (Cresswell, 1997, p. 343).

Metaphorical analogies thus generate ideas which provide leaps in understanding that in turn leads to theorising (ibid., p. 332). This writer asserts that these stories and metaphorical analogies (see Figure 2) can lead to a theory that offers a framework for understanding the practice of economic development by viewing them through a Deleuzian lens (Rowe, 2009).

This writer suggests that these metaphorical tools can enhance one's understanding by helping the practitioner to visualise novel approaches to local challenges and as a consequence, open new possibilities that lead "to new understandings and the appearance of new meanings" (Semetsky, 2003 as cited by Hillier, 2007, p. 269). For example, Ireland, in the late 1980's and early 1990's, was very successful in luring a continuous flow of footloose industries to establish an assemblage of new facilities. Over time, the Irish economy and wage structure improved and as a result many of these same businesses are now relocating to Eastern Europe. These nomadic firms's lines of flight are always targeted at the lowest cost centre. As a consequence of rhizomatic thinking, the Irish government has invested in raising the educational standards and levels thus enabling the nation to transition from a low-cost production base to a knowledge economy. The major challenge is to convince practitioners to think rhizomatically and to embrace change and difference.

Table 1. Key Deleuzian Metaphorical Tools for Understanding Local Economic Development

Deleuzian Terminology	Concise Definition	Example of Application
Arborescence	Refers to structured and hierarchical thinking.	This term used here to describe traditional structured patterns of thinking that inhibit innovative thought.
Assemblage	A grouping or collection of anything.	A network of branch manufacturing plants can be considered an assemblage.
Flow	A movement of ideas, concepts or people.	Florida (2006) used the term to describe the movement of knowledge workers to cities that have Bohemian lifestyles.
Line of Flight	Refers to the direction of a movement, marketing programme or one's personal ambitions. The key question is "towards what destination" (Deleuze and Parnet, 1987, p. 120)	For instance, if one wants to become a professional, he or she will have to channel their line of flight (career path) by entering and completing the appropriate university programme.
Multiplicity	Based on Bergson's philosophy, Deleuze defined it as both extensive numerical combinations and continuous intensive changing nature of a subject.	Bogue (2005, p. 9) used the term to described a nomadic multiplicity as "an unlimited and undivided space or a metamorphic flux and also as a qualitative multiplicity with an identity that is irreducibly plural".
Nomad	A nomadic thinker wanders about a topic just as a nomadic herdsman moves from one oasis to another.	Jeanes (2006) used the nomadic metaphor to show how such thinking opens new connections, experiences and thus, produces innovative thought processes.
Plateau	It's an elevated natural feature of the landscape and metaphorically it can be a goal, a new level of understanding or an objective that one strives to achieve.	This term used here to describe a series of concepts such as globalisation that a practitioner has to understand in order to develop an effective strategy.
Re-territorialisation	Amin (2004) uses the term to describe the changes in governance brought about by the reconfiguration of regions as a result of devolution	A good analogy would be the changed boundaries after a local government amalgamation.
De-territorialisation	Deterritorialisation is movement that produces change.	O'Neill and McGuirk (2005) used the analogy of deterritorialisation to describe the changing economy and institutions in the Sydney basin.
Rhizome	A rhizome can be likened to the interconnections of the internet.	Rhizomes are used here to visualise new business parks, warehouses or shopping centers popping up on the landscape like flowers in the spring.
Smooth Space	Refers to an easy flow between ideas or concepts. It is also the non-structured nomadic space between points	A good analogy is to imagine the smooth space of the globalised economy as chaotic or a complex web of divisions and confluences.
Striated Space	Refers to structured or rough space. It can also be considered space structured to channel actants via lines in the achievement of one or more given end states	Striating space can be visualised as attempts to inscribe some form of fixity into flux, to draw lines & situate the <i>local</i> by delineating aspirations, goals & actions in the form of new initiatives.

4. CONCLUSION

The importance of metaphors and stories in economic development, geography and urban planning has been previously noted in the literature (Bingham & Mier, 1993; Cresswell, 1997; Eckstein & Throgmorton, 2003; Robinson, 1982; Sandercock, 2003; Sui, 2000). Sandercock (2003, p. 20) indicates that if economic developers want to be more effective in translating knowledge to action then practitioners should pay more attention to the craft of story telling and learn to use metaphors more effectively. Metaphors and stories are useful tools for the economic development practitioner; however, in my opinion, theorists within the discipline have failed to expand metaphorical analysis into theory. I encourage the economic development fraternity to consider expanding its bag a tools by 'thinking outside the square' to include Deleuzian philosophy in order to enhance the discipline. Academics and practitioners should open their minds to alternative viewpoints and embrace the challenge to develop a theoretical framework for understanding the practice of economic development.

This is essential because "we inhabit a world where the actual is always haunted by possibility, by the virtualities folded within its emergence" (Massumi as quoted by Latham and Conradson, 2003, p. 1902). This means that one must be flexible and adaptable in order to be able to respond to the many challenges facing the practitioner on a daily basis. In order to be successful regardless of geographic location, practitioners need to be proactive and not be reactive by trying to make things happen (Deleuze, 2005, pp. 71-2). In this writer's opinion, muddling through, uncritically adopting best practice initiatives and being seen to be doing something is a recipe for failure (Lindblom, 1959). This means that local economic development practitioners should strive to create a culture where becoming-proactive is the norm because "being innovates; being is differentiated, [and] because being differentiates" (Hallward, 2006, p. 13).

As a result of this research, it is concluded that an economic development agency or the actions of a practitioner should be judged on its or their ability to deal with chaos. Stakeholders should ask if the organisation is stirring things up by taking risks and creating possibilities for success because an economic development practitioner should be "someone who creates their own impossibilities and thereby creates possibilities" (Deleuze, 1995, p. 133). This means that a practitioner should be a mediator who addresses the challenges of achieving the impossible "because without a set of impossibilities, you won't have the line of flight, the exit that is creation, the power of falsity that is the truth" (Deleuze, 1995, p. 133, my emphasis). Thus, this writer argues that the practice of economic development can be conceptualised and understood by viewing the discipline through a Deleuzian lens because metaphors introduces new ways of thinking and forming connections which resonates with practice.

REFERENCES

- Aay, H. and Van Langevelde, A. B. (2005) A Dooyeweerd-based approach to regional economic development. *Tijdschrift voor Economische en Sociale Geografie*, 96(2), pp. 184-198.
- Amin, A. (2004) Regions unbound: towards a new politics of place. *Geografiska Annaler*, 86B(1), pp. 33-44.
- Amin, A. and Thrift, N. (2002) *Cities Reimagining the Urban*. Polity Press: Cambridge.
- Barbrook, R. (2003) *Deleuzoguattarians - The Holy Fools*. Retrieved 15 February 2006 from <http://libcom.org/library/deleuzoguattarians-barbrook>
- Barnes, T. J. (1991). Metaphors and conversations in economic geography: Richard Rorty and the gravity model. *Geografiska Annaler*, 73B(2), 111-120.
- Barnes, T. J. (1996) *Logics of Dislocation: Models, Metaphors, and Meanings of Economic Space*. The Guilford Press: New York.
- Bateson, G. (1973) *Steps to an Ecology of Mind*. Paladin: London.
- Beauregard, R. A. (1994) Constituting economic development. In R. D. Bingham and R. Mier (Eds.) *Theories of Local Economic Development* Sage Publications: Newbury Park, CA.
- Beauregard, R. A. (2005) Introduction: institutional transformations. *Planning Theory*, 4(3), pp. 203-207.
- Bingham, R. D. and Mier, R. (Eds.) (1993) *Theories of Local Economic Development: Perspectives from Across the Disciplines*. Sage Publications: Newbury Park, CA.
- Black, M. (1962) *Models and Metaphors: Studies in Language and Philosophy*. Cornell University Press: Ithaca, NY.
- Blakely, E., & Bradshaw, T. (2002). *Planning Local Economic Development, Theory and Practice* (3rd ed.). Thousand Oaks, CA: Sage.
- Blane Canada Limited (2005) *Economic development marketing letter*. Retrieved 19 January 2006 from http://www.synchronist.com/newsletters/NL_2005/V004/NL_2005_04.htm
- Bogue, R. (2005) Nomadic flows: Globalism and the local absolute. *Concentric: Literary and Cultural Studies*, 31(1), pp. 7-25.
- Bosworth, B. and Rosenfeld, S. (1993) *Significant Others: Exploring the Potential of Manufacturing Networks*. Regional Technology Strategies: Chapel Hill, NC.
- Buss, T. F. (1999) The case against targeted industry strategies. *Economic Development Quarterly*, 13(4), pp. 339-356.
- Buttimer, A. (1982) Musing on Helicon: Root Metaphors and Geography. *Geografiska Annaler*, 64(2), pp. 89-96.
- Buttimer, A. (1993) *Geography and the Human Spirit*. John Hopkins University Press: Baltimore, MD.

- Chettiparamb, A. (2006) Metaphors in complexity theory and planning. *Planning Theory*, 5(1), pp. 71-91.
- Colebrook, C. (2002a) *Gilles Deleuze*. Routledge: London.
- Colebrook, C. (2002b) *Understanding Deleuze*. Allen & Unwin: Crows Nest, NSW.
- Cresswell, T. (1997) Weeds, plagues, and bodily secretions: a geographical interpretation of metaphors of displacement. *Annals of the Association of American Geographers*, 87(2), pp. 330-345.
- Deleuze, G. (1992) Postscript to the societies of control. *October*, 59, pp. 3-7
- Deleuze, G. (1993) *The Fold: Leibniz and the Baroque* (T. Conley, Trans.). University of Minnesota Press: Minneapolis.
- Deleuze, G. (1995) *Negotiations, 1972-1990* (M. Joughin, Trans.). Columbia University Press: New York.
- Deleuze, G. (2005) *Pure Immanence* (A. Boyman, Trans.). Zone Books: New York.
- Deleuze, G. (2006) *Foucault* (S. Hand, Trans. 7th ed.). University of Minnesota Press: Minneapolis.
- Deleuze, G. and Guattari, F. (1981) Rhizome. *Ideology and Consciousness*, 6, pp. 49-71.
- Deleuze, G. and Guattari, F. (1987) *Thousand Plateaus: Capitalism and Schizophrenia* (B. Massumi, Trans.). Continuum: London.
- Deleuze, G. and Guattari, F. (1994) *What is Philosophy?* (H. Tomlinson & G. Burchell, Trans.) Columbia University Press.: New York.
- Deleuze, G. and Parnet, C. (1987). *Dialogues*. Columbia University Press: New York.
- Doel, M. A. (1996) A hundred thousand lines of flight: a machinic introduction to the nomad thought and scrumpled geography of Gilles Deleuze and Felix Guattari. *Environment and Planning D: Society and Space*, 14, pp. 421-439.
- Doel, M. A. (2000) Un-glunking geography: spatial science after Dr. Seuss and Gilles Deleuze. In M. Crang and N. Thrift (Eds.), *Thinking Space*. Routledge: London.
- Doel, M. A. (2001) 1a. Qualified quantified geography. *Environment and Planning D: Society and Space*, 19, pp. 555-572.
- Eckstein, B. and Throgmorton, J. (Eds.) (2003) *Story and Sustainability: Planning, Practice and Possibility for American Cities*. MIT Press: Cambridge MA.
- Ffowcs-Williams, I. (2005) Cluster based economic development. In J. E. Rowe (Ed.), *Economic Development in New Zealand*. Ashgate: Aldershot UK.
- Florida, R. (2002) *The Rise of the Creative Class: and how it's Transforming Leisure, Community, and Everyday Life*. New York: Basic Books.
- Florida, R. (2005). *Cities and the Creative Class*. Routledge: New York.
- Florida, R. (2006) *What really drives economic development?* Retrieved 28 February 2007 from http://creativeclass.typepad.com/thecreativityexchange/2006/11/what_really_dri.html

- Foust, J. B. (1975) Ubiquitous Manufacturing. *Annals of the Association of American Geographers*, 65, pp. 13-17.
- Friedmann, J. (2003) Why do planning theory? *Planning Theory*, 2(1), pp. 7-10.
- Gough, N. (2005) *Geophilosophy and methodology: Science education research in a rhizomatic space*. Retrieved 17 July 2006 from http://www.bath.ac.uk/cree/resources/noelg_SAARMSTE_ch.pdf
- Graham, E. (1982) Maps, metaphors and muddles. *The Professional Geographer*, 34(3), pp. 251-260.
- Gregoriou, Z. (2004) Commencing the Rhizome: towards a minor philosophy of education. *Educational Philosophy and Theory*, 36(3), pp. 233-251.
- Harding, S. (1986) *The Science Question in Feminism*. Cornell University Press: Ithaca, NY.
- Hallward, P. (2006) *Out of this World: Deleuze and the Philosophy of Creation*. Verso: London.
- Hillier, J. (2007) *Stretching Beyond the Horizon: a Multiplanar Theory of Spatial Planning and Governance*. Ashgate: Aldershot UK.
- Holupka, C. S. and Shlay, A. (1993) Political economy and urban development. In R. D. Bingham and R. Mier (Eds.), *Theories of Local Economic Development*. Sage Publications: Newbury Park, CA.
- Jacobs, K. (2007) Territorial modes of governance and the discourses of community reaction in the State of Tasmania. *Space and Polity*, 11 (3), pp. 263-277.
- Jeanes, E. L. (2006) 'Resisting creativity, creating the new'. A Deleuzian perspective on creativity. *Creativity and Innovation Management*, 15(2), pp. 127-134.
- Lakoff, G. (1992). *The contemporary theory of metaphor*. Retrieved 5 November 2006 from <http://www.cardiff.ac.uk/encap/clcr/gordon/lakoff.pdf>
- Latham, A. and Conradson, D. (2003) The possibilities of performance. *Environment and Planning A*, 35, pp. 1901-1906.
- Leet, L., Judson, S. and Kauffman, M. (1978) *Physical Geology*. Prentice-Hall Inc.: Englewood Cliffs, NJ.
- Lindblom, C. E. (1959) The science of 'muddling through'. *Public Administration Review*, 19, pp. 79-88.
- Livingstone, D. N. (1981) Meaning through metaphor: analogy as epistemology. *Annals of the Association of American Geographers*, 71(1), pp. 95-107.
- Martin, J.-C. (1999) Deleuze's philosophy of the concrete. In I. Buchanan (Ed.), *A Deleuzian Century?* Duke University Press; Durham, NC.
- Massumi, B. (1992) *A User's Guide to 'Capitalism and Schizophrenia': Deviations from Deleuze and Guattari*. MIT Press: Cambridge MA.
- Mier, R. and Bingham, R. D. (1993) Metaphors of economic development. In R. D. Bingham and R. Mier (Eds.) *Theories of Local Economic Development: Perspectives from Across the Disciplines*. Sage Publications: Newbury Park, CA.
- Mier, R. and Fitzgerald, J. (1991) Managing economic development. *Economic Development Quarterly*, 5, pp. 268-279.

- O'Neill, P. and McGuirk, P. M. (2005) Reterritorialisation of economies and institutions: The rise of the Sydney basin economy. *Space and Polity*, 9(3), pp. 283-305.
- Ortony, A. (1993) *Metaphor and Thought* (2nd ed.). Cambridge University Press: Cambridge.
- Pawson, E. and Le Heron, R. (2005) Making contemporary economic landscapes. In J. E. Rowe (Ed.), *Economic Development in New Zealand* Ashgate: Aldershot.
- Robinson, B. S. (1982) On 'meaning through metaphor'. *Annals of the Association of American Geographers*, 72(2), pp. 272-274.
- Rowe, J. E. (2005) Lessons learned and future directions. In J. E. Rowe (Ed.), *Economic Development in New Zealand*. Ashgate: Aldershot.
- Rowe, J. E. (2006). *What economic development practitioners actually do and why?* Paper presented at the International Geographical Union, Brisbane, July.
- Rowe, J. E. (2009) Towards an alternative theoretical framework for understanding local economic development. In J. E. Rowe (ed.), *Theories of Local Economic Development: Linking Theory to Practice*, Ashgate Publications Limited: Surry, UK.
- Sandercock, L. (2003) Out of the closet: The importance of stories and storytelling in planning practice. *Planning Theory and Practice*, 4(1), pp. 11-28.
- Semetsky, I. (2007) Towards a semiotic theory of learning: Deleuze's philosophy and educational experience. *Semiotica*, 164(1/4), pp. 197-214.
- Shaffer, R., Deller, S. and Marcouiller, D. (2006) Rethinking community economic development. *Economic Development Quarterly*, 20(1), pp. 59-74.
- Sui, D. (2000) Visuality, aurality, and shifting metaphors of geographical thought in the last twentieth century. *Annals of the Association of American Geographers*, 90(2), pp. 322-343.
- Tuan, Y.-F. (1978) Sign and metaphor. *Annals of the Association of American Geographers*, 68, pp. 363-372.
- Tullett, A., and Tether, C. (2004) *Incubator Support Programme: Review of Efficiency and Effectiveness*. Ministry of Economic Development: Wellington.
- Wellington City Council. (2003) *US study tour: report back*. Report to the Economic and Arts Committee: Wellington.
- Wyatt, S. (2004) Danger! Metaphors at work in economics, geophysiology, and the internet. *Science, Technology & Human Values*, 29(2), pp. 242-261.