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Creativity in Lifelong Learning: Events and Ethics

by

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Abstract

This thesis proposes a critical enquiry into the issue of creativity, focussing on teacher education in the English Lifelong Learning (LLL) sector. I examine the role of creativity in this context and link sector research and practice to an alternative, immanent, form of ethics.

My thesis has three parts, the first of which identifies and contests current approaches to creativity and redefines it from the perspective of teacher education in LLL. To tackle this complex problem, I draw on recent literature in the field in conjunction with the work of philosopher Gilles Deleuze (1925-1995). I recast the notion of lifelong learning as an event in order to explicitly relate practice, creativity and ethics.

Drawing on this analysis, the second part of my argument describes an alternative, “operative” model of creativity and provides examples of its implication in practice. The films and creative practices of acclaimed director Michelangelo Antonioni (1912-2007) are used to exemplify the sort of “shock to thought” which Deleuze equates with certain types of cinema, and which, I suggest, can contribute to creative teaching and learning practices. I bring together Deleuze’s ideas about how creative “stutters” and “interstices” function, providing a set of interlinked parameters with which to think about creative teacher education practices in LLL. Improvisation, chance and error are investigated from the viewpoint of the ethical practices immanent to them.

These parameters structure the third part of my thesis, which critically examines the extent to which research and practice in LLL might actually achieve the ambitious goals this implies. Drawing on Deleuze’s positions on moral and ethical behaviour, I develop an ambitious re-statement of ethical practice which aims to better relate to practices of teacher education in LLL and their creative potential.

Chapter 1.0 Introduction: why creativity?

A focus on young people's creativity is common in education research literature (e.g. Craft 2001; Craft, 2006; Spencer et al, 2012 *inter alia*). At the same time, children's creative development is often seen as a stage on the road to employment after school (McClellan et al, 2012), and a related interest in creativity is also recognised in adult learning (e.g. Stouffer et al, 2004). Formal initial training has been compulsory for teachers in the LLL sector since 2007 (DIUS, 2007) ¹ and although this is currently under review, such training is believed to enhance creative practice in key areas such as assessment (BIS, 2012c, p.57). New teacher education qualifications introduced in 2013 require a greater focus on "investigating pedagogical principles and innovative and creative approaches" (LSIS, 2013, p.14).

Teacher educators in the sector are therefore expected to both promote and develop creative practice. Yet, although creativity is explicitly linked with their professionalism (e.g. LSRC, 2002; BIS, 2011), and the Office for Standards in Education (Ofsted) (2010), which clearly promotes "creative approaches" in schools, offers grading criteria for inspection for the FE and skills sector which make no reference to creativity or its synonyms (Ofsted, 2012). ² At the same time, education as a whole is deemed "a crucial factor in ensuring economic productivity and competitiveness in the context of 'informational capitalism'" (Ball, 2008, p.1),³ and LLL policy echoes this by explicitly linking economic prosperity to increased creativity in teaching and learning. Creative education is seen as central to the development of attitudes and skills required by the flexible, adaptable employees and consumers in a

¹ The move was broadly welcomed (e.g. by FE teaching union NATFHE (2000)), albeit with questions about the resources to be made available for the significant shifts in practice and conditions required.

² Ofsted (2012, p. 6) state that "Inspectors will make a judgement on the quality of teaching, learning and assessment by evaluating the extent to which:

- learners benefit from high expectations, engagement, care, support and motivation from staff
- staff use their skills and expertise to plan and deliver teaching, learning and support to meet each learner's needs
- staff initially assess learners' starting points and monitor their progress, set challenging tasks, and build on and extend learning for all learners
- learners understand how to improve as a result of frequent, detailed and accurate feedback from staff following assessment of their learning
- teaching and learning develop English, mathematics and functional skills, and support the achievement of learning goals and career aims
- appropriate and timely information, advice and guidance support learning effectively
- equality and diversity are promoted through teaching and learning."

³ See for example, the forward to *The Learning Age: A new renaissance for a New Britain* (DFEE, 1998), according to which "learning throughout life will build human capital by encouraging the acquisition of knowledge and skills and emphasising creativity and imagination."

knowledge economy (Simmons and Thompson, 2010), blurring notions such as productivity, innovation, adaptation and change. The centrality of teacher education in developing this network of issues is beyond doubt for Petty (in IfL, 2013, p. 27), for whom “[o]ur economy is irrigated by a well of knowledge and skills, and it is teacher trainers who have their hand on the pump”

Questions exist therefore in the ways in which creativity is promoted and conceptualised in, by and for the sector’s educators. For some a conflict exists between the promotion of creativity and an agenda of performativity and compliance (Simmons and Thompson, 2010); a culture of surveillance and a lack of trust (Schuller and Watson, 2009; Plowright and Barr, 2012; Avis et al, 2012); or simply a preference for expedience over creative practice (Orr and Simmons, 2011). Significantly, Fenwick (2012b) suggests that few professionals feel prepared by initial training for the unpredictability of these complex roles. She also suggests that our understanding of transitions within and between these roles requires further examination (Fenwick, 2013).

Discourses of creativity in the sector are therefore linked to a form of professionalism which is not just ambiguous in terms of its knowledge base (Hoyle, in MacMath, 2009, p.138), but may itself be inimical to creativity. This apparent paradox raises several questions, including the exact nature of the “creativity” promoted by the sector, how likely it is to enhance practice, and what deeper problems and ethical issues this raises for practitioners.

Because of their potential impact on practice, I want to formally address some of these general issues in order to inform teacher education in LLL, identifying three specific questions:

1. What is creativity in the LLL context, and why is it so important?
2. What gaps can be identified in current conceptions of creativity, and can they be complemented?
3. How might examples of creative activity inform and enhance teacher education research and practice in LLL?

Asking these questions aims to have impact in three areas of practice. The first of these areas is personal and professional. It supports my development as a teacher responsible for delivery and design of teacher education in LLL in a very challenging context. The second area of impact is as a critical contribution to the development of more effective creativity in teacher education practice. Their third purpose is to contribute to wider and deeper reflection in the area as a whole by linking creativity to ethical practice. Ultimately, my overarching aim

is to offer an ethic of teacher education practice which enhances current ways of working. To do so, I respond to Gilles Deleuze's bold assertion that "[i]t is from 'learning', not from knowledge, that the transcendental conditions of thought must be drawn" (Deleuze, 2004a, p. 206),⁴ attempting to draw viable conclusions from this position. However, before examining what Deleuze has to say about learning, how this fits into his broader philosophy and how this might contribute to a creative ethics for LLL, my first step is to contextualise the problem of creativity in the field of LLL itself as an event with particular characteristics.

1.1 Lifelong Learning

Lifelong learning is not a simple concept. Two unavoidable issues facing the study of any part of lifelong learning are size and its "supercomplexity"⁵ (Fisher and Webb, 2006, p.347). In terms of size, total annual expenditure on adult learning provision in the UK reached around £55 billion per year in 2009, equal to 3.9 per cent of Gross Domestic Product (GDP) (Schuller and Watson, 2009, p.4). NIACE (2013) more recently identified a drop to only 1.3 per cent of GDP, accompanied by falling participation, but the sector currently caters for at least four million (formally recognised) learners (Vinson, in IfL, 2013, p.11) and employs up to 1.2 million people (UKCES, 2010, p.3).

The sector's complexity is implicit in the ways the sector itself is defined.⁶ UKCES (ibid) for example defines it in terms of five very broad key constituency groups:

- "Community learning and development (CLD) - covering adult and community learning/community based adult learning; community development,
- community education, development education, youth work, family learning and work with parents
- Further education (FE) - embracing FE colleges, specialist institutions, sixth form colleges in England and post-16 learning provision in Wales
- Higher education (HE) - including universities and colleges of HE
- Libraries, archives and information services (LAIS)

⁴ All translations, unless otherwise indicated, are my own.

⁵ Complexity is often used rather vaguely in this way to signify any complicated situation, and indeed covers a very wide range of beliefs and assertions about the nature of experience (cf. Alhadeff-Jones, 2008; Mason, 2008). Following Olkowski, who defines it as "the tendency towards order" (2011, p.121), my enquiry focuses on emergence and its implications as a key aspect of complex, open systems.

⁶ See annexe 1 below, where issues around definition are further examined.

- Work based learning (WBL) - both publicly-funded and private sector training organisations concerned with the delivery of applied (vocational) training, which is primarily work based.”

Alternative definitions exist (see below), and it is often argued that the sector suffers a double identity crisis: when it is not seen as lacking a clear identity, it is understood as the education system’s “neglected ‘middle child’” (Wallace, 2007, p.216), with Further Education (FE) as a “Cinderella sector” within it (Baker, 1989 in Wallace, 2013, cf. also Randle and Brady, 1997). Professional status is a further indicator of this issue, since LLL practitioners lack the societal affirmation needed to attract “appropriate individuals” to the role (Misra, 2011, p.31). In response, calls to raise the status of the sector are common (e.g. BIS, 2011; IfL, 2012a; BIS, 2012d; LSIS, 2013). However, as Hoppe (2010, p.50) asserts, those involved in policy-making in LLL all come from “different positions in space-time”, meaning that their perspectives on the purpose and identity of the sector differ radically. For example, it has been argued that our current system of lifelong learning has “failed to respond to the major demographic challenge of an ageing society” (Schuller and Watson, 2009, p.3), placing the focus of LLL on responding to societal rather than strictly economic trends.

These differences are nonetheless increasingly indissociable from the pressures of international competition in the increasingly globalised education market. High skill-levels are equated with competitive advantage, and the demand for knowledge workers increases “exponentially in the knowledge economy” (TLRP, 2009, p.19). Educators are used to the view that education is “is not a commodity like food” (Peters, 1970, p.126), but more recently the post-industrial emphasis has shifted towards a knowledge economy which considers learning precisely “as a commodity that can be sold or exchanged for goods” (Holme, 2004, p.11).

However, this is an economy no longer based in goods or services but on the more ephemeral media of money and language, education and affect for Lash (2007, p.19). In this context, the mutual benefits predicted from the assumed convergence of abstract knowledge and physical economy may be illusory and even counterproductive.⁷ Creative action in such a complex context may only be recognised if LLL’s different stakeholders can find common

⁷ Reviews of LLL such as Raggatt et al (1996), Edwards (1997), Ranson (1998), and Field (2006) contribute to that the idea of a learning society is amorphous. However, many would question Hughes and Tight’s (1995) view that it is a “myth”, situating it instead as an important (postmodern) phenomenon (e.g. Alheit, 2005).

or shared understandings of why they cooperate at all, implying what Hoppe calls a “joint construction of problems as a condition for joint responses” (ibid.).

1.2 Role

Such joint responses might prove difficult to coordinate, given the opacity of the sector’s role. One reason for this is that, although often expected to guarantee success or promote quality in the knowledge economy, LLL actually exists to compensate for a double problem (Ecclestone, 2002). On one hand political rhetoric expects the sector to palliate a perceived lack of human capital in the shape of highly skilled labour able to enhance national competitiveness and supranational political objectives (TLRP, 2009, pp. 32-33). On the other hand, it operates as a form of “welfare” in reducing the undesirable effects of economic change. Ecclestone’s fear is that, rather than being transformative and motivating, a lifelong participation in formal learning might end up as a series of “instrumental, individualistic and self-regulating experiences” (Ecclestone, 2002, p.12).

On this view, the rationale of LLL is “primarily utilitarian” and its education and training “largely instrumental” (Taylor, 2007, p.85). However, the advantages of instrumental learning remain seductive, even for would-be critics. Vinson (in IfL, 2013, p.11) for example states that teachers who spent “thousands of pounds” last year on PGCE training for FE have discovered that “their investment is basically worthless”. Although Vinson begins by arguing against the current round of deregulation in teacher education provision, he promotes subsidised teacher training in the interests of job success, professionalism and return on investment. He literally disqualifies any quality enhancement accrued by training which, on this view, is only worthwhile as a financial speculation. Deprived of market value, he states, training has basically no value at all.⁸

⁸ Williams’ (2013) discussion of different conceptions of the event in Lyotard and Deleuze and Guattari helps highlight the ethical portent of Vinson’s remark. In times of economic crisis, the increasingly intense circulation of money (hyperinflation) implies an acceleration of time itself, forcing a physical response from bodies which run ever faster to allay the collapse of financial value and livelihood. The wider ethical question raised by Williams concerns the alternative between what this means about our possibilities of action. For Lyotard, the event of acceleration leads headlong into a labyrinth with no exit point (*fuite en avant*) and, ultimately, death. For Deleuze, on the other hand, lines of flight (*lignes de fuite*) constitute events genetically. They multiply exit points synthetically in an open system which “cracks” or “unhinges” time, introducing new series. LLL practitioners too are “running ever faster” for Coffield (2006), and so determining events and what creativity is possible within them is the key ethical question facing the sector. For further analysis, see Annexe A 1.3 below.

1.3 (De) regulation

Vinson's view indicates the way practitioners in LLL embrace the notion of active professionalism as an aspect of a deregulated market in training.⁹ Taking full (financial) responsibility for their own development is a speculative gesture which substantiates the view that "neo-liberalism" requires such a subject endowed with a power of choice and occasions in which to exercise it. For Massumi (1992, p.40) such "self-interest" is suspect because it conforms so closely to the demands of the basic capitalist expression of the common good. Massumi suggests that it is a significant adversary to change, since all becoming–other undermines the goal of perpetuating the self over time in this way. Yet LLL stands in a central position regarding the issue of professionalisation as a wider social concern, and places teacher educators and their identity at its core.

John Gray (2002) argues that this neo-liberal discourse is no more than a short lived expedient, but for David Harvey (2010, p.286), neo-liberalism is a more serious phenomenon and involves the mobilisation of "latent populations". Here, populations previously closed to incorporation are assumed to be virtual sources of wealth which are then mobilised by techniques which transform them into active citizens. Tied to the accelerating pace of change is the need for continued innovation, and under these conditions the idea of creativity has acquired the role of fuel for the economy. This fuel is of course produced by the actors in a system such as LLL, where teacher educators in particular foster creativity by cascading it down in practice.

Paradoxically, however, some critics within LLL link this deregulatory discourse with a disempowerment of teacher education professionals. Bailey and Browne (2009, p.62) say that a contradiction lies in the sector's use of regulation to develop active professionalism, since clearly professional autonomy and regulation sit uneasily together. If teaching is "a noble profession" which "develops our very human being", it is also a profession which "teaches standards, lives by standards, and requires standards" (Crowther, in IfL 2013, p.14). Such standards are set and policed in FE by the Education and Training Foundation (ETF), officially registered in August 2013 (Gravells and Wallace, 2013, p.55). However, if standardisation implies the "retooling" of teachers with a standards-based model (cf. DFES, 2004), this belittles the profession by denying its complexity (Sachs, 2007, p.14). Thus for deregulators, policy, unstable funding and an excessive managerial focus on measured outcomes are all damaging learning in FE (TLRP, 2009, p.14).

⁹ The background to this is provided in Annexe A 1.5 below.

The issue however is not the simple question of whether standards should be used, but rather of identifying exactly which standards, how they should be deployed, and by whom. Hence, rather than provide pragmatic guidance for new teachers, the standards espoused by such policy imply more than a simple performance target, demanding that professionals show they are “in good standing” (Bailey and Browne, 2009:55). Standardisation shifts from the practical to the ethical field, and on the way becomes an idealisation which claims to “stand outside and above” professional performance to measure its value (Stanley and Stronach, 2011, p.3).

Thus, although de-regulation works in many ways, it may be in the field of ethics that its impact is most interesting. As Plowright and Barr (2012) argue, there has been a real shift in the professional agenda for teacher education in LLL, in particular regarding the codification of their professional conduct. The authors argue that since the creation of a professional body for the sector in 2002, LLL has moved steadily towards the promotion of unthinking managerial, micro-controlled behaviour. Plowright and Barr discern in such a trend a highly artificial and even morally dubious code of “ethics” promoted by the IfL’s “Code of Professional Practice” (2008). This “code” is an overt attempt to systematically control “behaviours” such as “disclosure” through processes of technological surveillance which, in different times, may well have seemed unethical in themselves.¹⁰

Thus what John Field has evocatively called the “new order” of lifelong learning (2006) seems very different to the benign “learning society” promoted by the liberal humanists of the 1970s. In this shifting landscape, professionals are often merely “firefighting” (Scales, 2011/2012, p.4) as the need to adapt to change discourages risk-taking, innovation or creativity, and perhaps increases cynicism about learners’ motivation and autonomy by presupposing their incompetence and dependence on guidance (Ecclestone, 2002, p.27). Despite an official promotion of creativity as part of the re-professionalisation of the sector, some feel that teachers in LLL still need more “freedom to innovate” as well as “room to take risks that encourage creativity” (Nash et al, 2008, p.5). This seems particularly true when the technical language and assumptions adopted by fields such as education fail to take account of the economy’s own “predictable” unpredictability (Stronach and Clark, 2011, p.5).

Such trends invite comparison with the Orwellian language and overtones of much recent education policy (Nuffield, 2009), and some teacher educators in LLL complain of deontological conflict and a lack of professional autonomy as a result (Lawy and Armstrong,

¹⁰ See Annexe A1.4 below.

2009). In a recent change, Ofsted have declared that “[f]rom September 2013, sector subject area 13 (education and training) will be covered as part of inspections of sixth form and further education colleges (Ofsted, 2013, p.16). Teacher education providers, who are already subject to the panoptic gaze of the constant threat of inspection, will now be expected to perform each time a partner is inspected too, effectively never off the hook. This “inspection creep” points to the problem of a commonly-held cultural, even philosophical, perspective which promotes forms of disciplinary neo-managerialism as normal and necessitated by the sector itself.

It’s possible, in fact, that although the state’s basic logic is de-regulatory and anti-state, the forms of deregulation that it espouses simply mean an increasingly omnipresent form of control. Here, freedom and control actually depend on each other in a double movement: freedom becomes the liberty to control oneself and one’s productivity just as deregulation provides the discursive and ideological vehicle for self-regulation. On this view, libertarianism and hedonism are fully compatible with a Foucaultian dispositive or web of regulations and mechanisms (cf. Foucault, 1976; Deleuze, 2003, p.316-325; Agamben, 2007). Deregulation, in these conditions, is a sign of the state gathering strength (Žižek, 2009, p.145). This “biopolitical” mass-management can seem just as invasive of learner and teacher professional autonomy as it is of their judgement, and an examination of precisely how this network of ideas and practices operates in the context of LLL teacher education would be useful.¹¹

1.4 Event

This appraisal of LLL’s role highlights the need for a practical and theoretical perspective adequate to its differences and complexity. Burbules and Berk (1999) argue that there is “something” about the preservation of such differences that yields new insights, and that this “something” is lost when the tension between differences is erased by a single perspective.

This “something” does not have to be vague or undecidable, but can be analysed and deployed to better explain what LLL does, and can be defined as the “event” of LLL. Event here is used to highlight the importance of ontological variance in the complex education world. Here, diversity is not just the result of multiple perspectives, but rather an indication

¹¹ For example, it is worth first of all asking if creativity must necessarily be a challenger to what West (1996, p.206) for example calls “the hegemonic ideology of economic rationality”, rather than, for instance, its prime constitutor. On the contrary, identifying the exact relation between creativity and the mechanisms which seem to repress it might contribute to an understanding of exactly what LLL is becoming and even the art of governance itself, which is precisely this understanding (Maurizio Lazzarato in Olma and Koukouzelis, 2007, p.8).

that that we participate in multiple worlds which “coexist and overlap, patched together in the same material spaces” (Fenwick and Edwards, 2011, p.710). The structure of events, or “the contingent encounter of affects and percepts” (Olkowski, 2011, p.127) describes this participation well, drawing attention away from the limitations of seeing the sector either as an object to be manipulated, or a purely discursive phenomenon to be discussed, or even as an administrative metaphor to be dismissed. I discuss in more detail what this implies later, but an event in this context can be defined as an emergent structure whose complex relations indicate a definite internal dynamism which is essential to it.¹² It is perhaps unhelpful to state that events are only significant if they have meaning or sense for us, but even this sense can and often does have an “infra-sensible” aspect (Zarifian, 2001, p.92), that is to say “deeper than the question of the emergence of meaning”. Because of this infra-sensible depth, an event embodies dynamic change which relates events to what they are becoming rather than what they are. It is the event’s relation with its own outside, not its unity, which is particularly interesting.

So events are, provisionally at least, choosing to have more choices (Lawlor, 2008) and denying the exclusion of options implicit in any choice. They insist that change is not teleological but creative and emergent, and that change is “evasive to mechanical explanations” (Olma and Koukouzelis, 2007, p.7) and therefore to anticipation (Roth and Lee, 2007, p.202). This reminds us of the constant, pragmatic need for more choices, not fewer¹³ and for ways of actually dealing with change.

This could be described as an impossible aim. Certainly, education generally is increasingly described not as simply diverse, as Lingfield claims for LLL (BIS, 2012b, pp. 2 and 10), but as properly complex, implying the need to recognise the role of self-organisation and the

¹² Marcus and Saka (2006, p.101) argue that a focus on ephemeral and emergent phenomena has resulted from influential tendencies on theory since the late eighties. Contributing to this trend in concrete ways, involves recognising what they call the “always-emergent conditions of the present”. But if there is, for “no reason for us to talk of ‘being’ any more” (Debaise, 2012, p.44), are educators equipped to deal with a realisation which deprives them of a subject?

¹³ The “Baker’s transformation” is perhaps the most commonly used example of the way in which phenomena complexify over time by successive foldings. This complication produces situations whose point of departure cannot be identified from current conditions and whose end point cannot be anticipated without generalising. According to this principle, the initial conditions of a piece of dough, kneaded many times, cannot be determined by examining its current state. Any properly complex system, by implication, is not just open to change over time but unpredictable as a result. Laplace’s demon, who could predict the ends of any action given sufficient data about initial conditions, is deprived of precisely this data and this cannot therefore predict outcomes from it. The rejection of such determinism forms a cornerstone of Bergson’s philosophy of duration as an attempt to render the essential movement beneath mechanical explanations (Bergson, 2013, p.8 & 20). However innate, our tendency to mechanise is based on a fundamentally false appraisal of the objects of perception.

dynamism this requires (cf. Radford, 2007; Mason, 2008; Fenwick, 2012). A recent report into vocational teaching and learning was keen to stress that a “2-way street” heralds good practice and that “[i]t is about relationships not structures, joint responsibility not just vertical accountability” (CAVTL, 2013, p.4). If we are to take this logic of complex relations on a plane seriously, however, our analyses of dynamic phenomena need to situate this dynamism at the heart of a system like LLL, rather than simply attributing it to a given idea. This is because forces in open systems do not work on static objects, but rather accelerate, decelerate or inflect bodies already in movement. This implies that a virtual dynamism exists beyond these forces of change which bodies impose on each other. It also correlates with the properties of complex open systems, where actual relations of power are the realisations of virtual properties (Roberts, 2012, p.37). For example, interesting relations obtain between concrete “things” and the “spectral effects”, which Roberts describes in these systems. Echoing Lash’s description of an increasingly immaterial economy, things such as brands and product images do not just supplant the more concrete aspects of products in real ways, but also play an important, even defining, role in our interaction with them. As contemporary LLL is increasingly influenced by the abstract operations of capital (the flows of investment, student numbers and certification progression which exist to manage latent pools of labour for instance),¹⁴ these “spectral effects” become increasingly important as the actualisations of capital’s ideal operation.

Applying this logic of relations to the sector as whole locates LLL as just such an open system. It also implies that emergent LLL organisations actually embody problems which demand greater creativity. This is because (by definition) the emergent attributes of a complex series of factors cannot be extrapolated from past performance. Moreover, if LLL is to be defined in this way, implications can already be drawn about the ways these impossibilities can help us better understand and develop creative practices in the sector. A research methodology capable of unravelling these strands is necessary, and I now turn to the ways in which an appropriate approach to both the question and its implications can be developed.

¹⁴ On Deleuze and Guattari’s analysis (1972, pp.274-275), capital as such only exists once this step into abstraction has been taken. Capitalism, they assert, only comes into being when the flows of money in exchange for greater quantities of concrete commodities is supplanted by the differential operation of flows of money in exchange for greater quantities of abstract currency. The confusion of the two is, they claim, a major source of misunderstanding.

Chapter 2.0 Methodology

If the philosophical, strategic and instrumental strands of a research methodology are necessarily connected, it is because they should all reflect the most important element of research design, namely the research questions (Blaikie, 2010, p.17). The purpose of this chapter is therefore to demonstrate how my chosen methodology responds to the challenge of investigating the three questions I pose, i.e.:

- What is creativity in the LLL context, and why is it so important?
- What gaps can be identified in current conceptions of creativity, and can they be complemented?
- How might examples of creative activity inform and enhance teacher education research and practice in LLL?

2.1 Hypothesis

I tackle these questions by adopting a broadly interpretivist strategy for reasons outlined below. An in-depth critical analysis of the phenomenon of creativity in the sector precedes an examination of the hypothesis that creativity can be usefully understood as a form of material affectivity. This hypothesis is informed by specific examples from cinema which exemplify how an “affective moment” forms part of the creative process. This process demands a displacement of what is known onto the unknown as a form of alterity. In effect, it is this encounter with alterity which allows us to claim that something new has indeed been created.

I argue therefore that this encounter is a fundamentally affective and ethical experience whose characteristics are very different to those commonly associated with creativity in LLL. The work of Gilles Deleuze on creativity and ethics contributes to the development of what I believe is a singular and insightful research strategy and set of conclusions. The importance of artistic practices for a research methodology rooted in cinema is worth stressing as a creative response to the problems identified by my analysis. But before doing so, what are the reasons for drawing on Deleuze in the first place?

2.1.1 Theory

If philosophical questions are understood as an investigation of “the bounds of sense” and “the limits of what can coherently be thought and said” (Bennet and Hacker, 2003, in Howard-Jones, 2011, p.25), Deleuze’s work seems singularly appropriate as methodological

base or research philosophy. But an ethico-critical study of this kind might well refer to a wide range of theorists with comparable approaches to openness, creativity and discourse. For example, the implications of Jacques Derrida's consideration of academic institutions and practices (e.g. Derrida, 2000) have attracted significant attention (e.g. Biesta and Egea-Kuehne, 2001; Trifonas, 2002). Derrida's deconstructive analyses however can encourage a focus on concepts as *terms* in a purely verbal scheme (Ramond, 2001, p.3) or as part of oppositions (rather than creative intersections) between frontiers (Parker, 2009, p.30). This can be counterproductive, particularly where the intention is to uncover a single overarching narrative (Honan and Sellars, 2008, p.126). Ethically speaking, it is less clear where, between an "inescapable summons to responsibility" (Trifonas, 1998, p.194) on one hand and an "hyperbolic doubt" (Lambert, 2002, p.15) on the other, Derrida's ideas leave pedagogy. For Smith (2007, p.68) such doubt is "nothing other than the concept of impotence raised to infinity".

Other thinkers' influential texts might also be referred to in this connection. Michel Foucault's genealogies (cf. Foucault 1975;1976a;1976b;1984a;1984b;2003c) certainly provide useful tools for a critical appraisal of some of the mechanisms of LLL (e.g. Middleton, 1998; Fejes and Nicoll, 2008; Beighton, 2013). Alternatively, Alain Badiou's (1993) demand that ethics surpass certain limitations and his analyses of the political implications of different conceptions of time (Badiou, 2010a) also raise important questions for the sector. From a different perspective, Jacques Rancière (Rancière, 2004a; 2004b) also critiques organised education by situating the latter firmly within a system of state policing. In effect, Rancière's analysis risks making any hope of creative learning in such a system seem naive. On this view, education's greatest conceit is its progressivism, or its mistaken belief that there is some institutional means by which to improve education in order to emancipate students (Bingham and Biesta, 2010, p.24). There is a risk of drawing similar conclusions from both Foucault and Badiou's criticisms of state power.

2.1.2 Options

If, on the other hand, we want to change our relationship to the world and understand how it is possible to change, we can turn to Deleuze and Guattari according to Lawlor (2008). While many thinkers are keen to interrogate the *possibility* of thinking differently, Deleuze (both alone and with his collaborators) begins with the assertion that creation is *actually* paramount and develops from this a joyful system in thought. Because Deleuze treats truth as a figure developing through time (Deleuze, 2007, p.108) this inclusion of the inevitability

of change is “more amenable” to ideas of agency than thinkers who, like Foucault, position our relation to the outside in more deterministic ways (Norris, 1993, p.34). Hence, while much research in education draws on work like Foucault’s to point to the ways in which learning is structurally constrained by more or less hidden structures, agendas or ideologies, Deleuze’s work complexifies such popularised conceptions as panopticism (Leach and Boler, 1998, p.162). For example, because of his commitment to radical difference, Deleuze is uninterested in “revealing” ideological hegemony because he believes that freedom results not from such revelations but from the new connections which practice makes possible. For Bogue (2008, p.15n2) this distinguishes Deleuze from the structuralism of thinkers such as Foucault and Althusser, simultaneously developing and challenging their ideas (cf. Deleuze, 1986/2004; Deleuze, 1990/2003, p.227-247; Althusser, 2000; Watson, 2013).

Further reasons for choosing Deleuze from among some of these contemporaries can also be found in work which suggests his ideas are particularly apposite in the current LLL climate. Broadly speaking, Langlois (2012, p.19) distances Deleuze from thinkers such as Badiou on the grounds that Deleuze is less concerned with establishing the privileges of philosophy over other disciplines. Similarly, Martin (2012) for example contends that Deleuze’s work is explicitly anti-positivistic insofar as it rebels against certain tendencies of the human sciences prevalent in the 1960s and the inertia which accompanied them via structuralist thought. On the contrary, Deleuze’s thought is explicitly focused on on-going and creative processes (Van Wezemael, 2008, p.177), and has profound implications for knowledge when the latter can no longer be attributed to a knower participating in processes of becoming (Phillips, 2006, p.109). If Deleuze’s innovation concerns how to live and create as much as any strictly philosophical originality, it develops a philosophical method which deliberately blurs the distinction between research and practice by making practice into an experimental research activity (Williams, 2003, pp. 1-3).

It is perhaps because of this complexity however that Deleuze’s work is less well known to educators than many of the thinkers mentioned above, despite its new directions for epistemologies, metaphysics and ethics (Leach and Boler, 1998, p.150). But Semetsky (2008c, p. vii-viii) argues that an investigation of Deleuze’s “legacy” for education is “imperative” and “paramount”, responding to this need through its creative potential. Following Deleuze, it is pedagogy, she argues, that must educate us, “in becoming able to feel, to know, and to conceive: that is to create concepts” (ibid.). Similarly, the central advantage of Deleuze’s ideas is that it provides a means of making the familiar unfamiliar and countering received notions in creative ways:

Deleuze and Guattari do not offer a philosophy of fixing, categorising, or ordering things, no recipe for how to think about things, but a philosophy that encourages readers to apply a style of thought to new areas. When the toolbox is in action, it creates machines that can open up conventional ways of thinking

(Kuppers, 2009, p.223)¹⁵

These “tools” can therefore only be criticised on their own terms, namely whether they can be used to build something else (Goodchild, 1996, p.46), which in this case means practices based in a different conceptualisation of creativity for LLL. This change is crucial for those who, like Gregoriou (2008, p.102), draw on Deleuze’s views to argue that, for all its creativity, LLL risks being subsumed by the demands of a dehumanising market model. “The rhizomatic structure of lifelong training” she claims “is actually reterritorialising itself around the forces of market economy” and the “post-utopian need of employability” which is its necessary supplement.

More specifically, Deleuze’s work is directly concerned with any creative process (Le Colombat, 1999, p.845) and his focus on creativity as a feature of ontological difference is suggestive if we agree with Stronach and Clark (2011) that the ability to repeat is useless in today’s complex educational world of rapid change. Certainly, for Deleuze, the variation which marks the living characteristics of experience implies not just need for creativity but the ethical stance which accompanies it. For Deleuze, the belief that fixed forms reproduce transcendent systems in thought is simply unethical because it can never produce a better world. On the contrary:

[t]he best of all possible worlds is not the one that reproduces the eternal, but the one in which new creations are produced, the one with a capacity for innovation and creativity

(Deleuze, 1993, p.89)¹⁶

¹⁵ Critics, notably Alain Badiou (1997) have questioned the radicality of Deleuze’s work and argued that its motivation is deeply conservative. Succinct accounts of the controversy raised by Badiou’s assertions can be found in Dosse (2007) and Lemieux (2007). Williams (2011b, p. 178) comments that some attempts to criticise Deleuze’s work are “lopsided” because they fail to register his constant insistence on the role of practical experimentation and condemnation of abstraction.

¹⁶ Translation modified.

The extent to which Deleuze can actually renew these aspects of philosophical thought by treating its concepts explicitly as living phenomena, like narrative or literary characters, rather than historical or canonical objects, deserves investigation. But rather than impose philosophy on LLL, such an investigation could start with Deleuze's insistence, mentioned above, that other disciplines do not need philosophers to tell them how to think. This is suggestive and encouraging, and three aspects to these claims can be underlined here because they inform my enquiry's methodological stance.

Firstly, Deleuze's views on the necessity of thinking differently and creatively are particularly explicit. He overtly uses critical analyses which might be compared with Foucault's only as a stage on the way to a consideration of dynamic thought as a much more significant concern. Similarly, Deleuze is keen to point out the dynamism in the ideas of other thinkers, notably Foucault (Deleuze, 1990, p.240), whose analysis concerns structures which have already declined and which were in any case short-lived. The point of Foucault's elusive genealogy is therefore not to provide fixed frames of reference with which to analyse phenomena, but to point out their working so that we might think differently in future: not to tell us who we are, but to describe what we are no longer, or rather what we are in the process of becoming (Smith, 1998, p.265). As Foucault himself pointed out, however, Deleuze and Guattari were less interested in the genealogical questions of *why* than in the ethical matter of *how* to proceed (Foucault, in Deleuze and Guattari (2004, p. xiv). From the point of view of teacher educators, this shift of emphasis may reflect the dynamic nature of LLL as event and its ethical implications.

Secondly, Deleuze's claim to appraise and provide examples of creative thought and activity in this way are interwoven with pedagogical concerns which often play a key part. Texts such as *Difference and Repetition* (Deleuze, 2004a) are therefore worth examining for their specifically educational potential.

Thirdly, Deleuze is particular in his insistent claim that the concepts he develops are both original and for practical use. Deleuze himself refuses to see ideas in teleological or even chronological terms, making his work contemporary for Martin (2012). This point is perhaps the most significant and invites an analysis of the extent to which these concepts do actually meet this twin goal. Koppers (2009, p.223) argues that this "toolbox" enables us to pry open thoughts and dissociate familiar things by bringing them into contact with the unfamiliar, making them well suited to the central claim of qualitative enquiry adopted by this study.

Accordingly, the deployment of a Deleuzian “toolkit” in order to examine the affective aspects of creativity in LLL is a further originality of this thesis. If we take the definitions of *bricolage* mentioned below literally, Deleuze’s conceptual devices, from improvised juxtapositions, war machines, tool boxes, to patchworks, zigzag lines and folds, seem tailor-made for this qualitative methodology.¹⁷

However, although apparently apposite, these three aspects of Deleuze’s thought acquire special significance in the context of his claim that they are part of an ethical practice. Deleuze claims to be able to draw ethical conclusions from his philosophy of events (Deleuze, 1969; 1988 and *passim*) which, although overtly based in his readings of Spinoza and Nietzsche, single out his thought as particularly ambitious. The ambition to provide an ethics of practice through what he terms “counter-actualisation”, working through a transformation of ethics into ethology, is a bold and controversial move which merits critical examination. In order to carry out this examination in the context of LLL, I have made two strategic choices.

2.1.3 Choices

Firstly, I have decided to encompass the full range of Deleuze’s texts rather than restrict analysis to the better-known work. It is true that some texts, for instance his work on Proust (Deleuze, 1964), Bacon (1981/2004b) or on cinema (1983/2005a; 1985/2005b; 2003, pp. 263-271/291-302; etc.), are more explicitly concerned with creativity in artistic practices than others. However, his work as a whole repeatedly raises the question of creativity and consequently many treat Deleuze’s work as a development of a single set of arguments (e.g. Hughes, 2008). On this view, early ideas are developed in later books (Rodowick, 1997, p.195), contributing to an *oeuvre* whose internal cohesion is “always striking” (Williams, 2000, p.219).¹⁸ Williams (2011b) is nonetheless sceptical about the value of some of the

¹⁷ *A Thousand Plateaus* (Deleuze and Guattari, 2004b) is perhaps the most obvious source of these ideas, containing substantial chapters on such themes.

¹⁸ There has been much debate about the extent to which Deleuze’s extensive corpus can be divided into periods or indeed whether it is useful to do so (cf. Beaulieu, 2005). For Gracieuse (2012, p.120), a surprising continuity exists between earlier and later texts. Arguably the most comprehensive treatment of creativity can be found in his earlier work, *Difference and Repetition* (1968/2004a), and Deleuze himself claims that everything written since is connected to it (Deleuze, 2004a, p. xiii). However, as Antonioli (1999, p.7) points out, even the early monographs on other thinkers and writers – especially Bergson, Nietzsche and Spinoza, but also including Proust and Sacher-Masoch - are essential to understanding Deleuze’s thought. The earliest published work is quick to focus on themes (such as the immanence of causes for relations, the ability of imagination to make links with the wider world) which Deleuze will pursue to his final publication. “[N]othing is transcendent” (Deleuze, 1953, p.5) - and “[a] life is everywhere, in every moment which any living subject passes through (...)

approaches in the cinema books, where the consistent treatment of time found in earlier work suffers from ambiguities resulting from a dependence on representations, notably images, in discussing cinema. Montebello, however (2008, p.109) situates this emphasis on the image as a necessary tactic in Deleuze's development of Bergson's philosophy and his own philosophical project.

Secondly, and for similar reasons, I have also chosen to treat Deleuze's joint work, for example with Guattari, as a continuation of these initial texts. There has been much debate about the precise contribution of the two authors in this joint work (e.g. Žižek, 2004), encouraged by frequent comments by the authors themselves.¹⁹ However, for the purposes of this enquiry such issues seem to me of less importance than the ideas which they develop.

2.1.4 Art

A key stage of my thesis is therefore critical and hypothetical. Its originality stems from the way it examines the claim that creative practices from cinema can inform education practice in ethical ways: how might examples of creative activity inform and enhance teacher education research and practice in LLL?

This third research question is itself tackled in a creative way by deploying the thought processes within art itself to develop an ethical perspective on practice. Certainly, for Deleuze and Guattari (1994, p.6) artists have never waited for philosophers before reflecting on their work, or for their sanction before thinking about and particularly through their medium. Rather than subsume other disciplines into philosophy, Deleuze highlights what he understands as the autopoietic forces and rhythms present in works of art and the relationship between this self-organisation and the different materials used by artists from paint and stone, and especially to sound. This respect for that which is proper to art is, for Deleuze, a fundamentally ethical question of how to live our daily lives:

For there is no other aesthetic problem than that of the insertion of art into everyday life. The more our daily life appears standardised, stereotyped and subject to an accelerated reproduction of objects of consumption, the

immanent life carrying with it the events or singularities which are only actualised in subjects and objects" (Deleuze, 2003, p.361).

¹⁹ *A Thousand Plateaus* begins with an explicit discussion of precisely this issue (Deleuze and Guattari, 2004b) See also Deleuze and Parnet (1996, pp.23-24); Deleuze (2003, p.357-359); Hughes (2008); Beighton (2012a).

more art must be injected into it in order to extract from it that little difference which plays simultaneously between other levels of repetition.

(Deleuze, 2004a, p.365)

Deleuze is keen to analyse socio-economic reproduction from the point of view of an integrated metaphysics of difference and repetition, tackling the complex relations between social phenomena at many levels. Current economic and political circumstances make this especially relevant because classical capitalism, based in the physical world of space and production, is increasingly rendered irrelevant by a metaphysical counterpart concerned with time and the process of self-realisation instead. Fuelled by the inequivalence and disequilibrium of “processual heterogeneous life” (Lash, 2007, p.12; cf. Fenwick, 2013) rather than the equivalence and equilibrium of concrete matter, capital can occupy processes such as professionalization rather than their products. This echoes criticisms above of the way deregulation empowers the state by occupying and standardising previously personal spaces and practices, but also demands tools for thinking this evolution.

Deleuze and Guattari’s attraction to hybridity and interdisciplinarity attempts to provide such tools, and their view of artistic creativity reflects this: art is not an object to be “used” but a machine to be plugged into to create new worlds. Rather than repetitive mimesis, aesthetics for Deleuze is about effects (Crowley, 2013). It comes as no surprise therefore to see that cinema’s novel incorporation of image and sound plays a key part in Deleuze’s later work, where he argues that cinema’s “movement” and “time” images have so much to say to and about creative thought, notably through their effects. Indeed, we can, with these practices, think material creativity in ways which make subjectivist points of view seem mystical and vacuous. This is why creativity is presented as a sober, artisan practice rather than as God-like creation *ex nihilo*:

To be an artisan and no longer an artist, creator or founder, is the only way to become cosmic, to leave the milieus and the earth behind. The invocation of the cosmos does not at all operate as a metaphor; on the contrary, the operation is an effective one, from the moment the artist connects a material with forces of consistency or consolidation

(Deleuze and Guattari, 2004b, p.380)

2.1.5 Cinema

Teachers have been well-provided with aids to exploiting film since the advent of video at least,²⁰ and I believe that research can do more than repeat the content of such manuals. Given its contemporary importance, cinema should constitute a valuable and particularly relevant a source of data about creative processes. For Bergson, (1907/207) perception itself is basically cinematographic, suggesting that enquiry might be informed by a closer association between research and film than has traditionally been the case.²¹ For example, if meaning is to be found in expressions of context which transcend traditional verbal communication (Hamera, 2011), film provides a useful source of multisensory data about experience (Fulford, 2012). It might also avoid the problems evoked by Maclure, below, of the powerlessness of linguistic analysis. By exploring the extent to which cinema has a special ability to address specific problems in the LLL world beyond classroom walls, cinema provides a concrete way for educators to enquire into situations without falling back into representations of already existing ways of doing things (Wallin, 2012). Wallin argues that creative thought about problems such as curriculum can be constrained if we stick to linguistic tools of analysis. In effect, these presuppose a given set of (ideological) data to which our texts then necessarily conform. The problem, for Wallin, is not what we have tried to think, but rather “the medium through which we have tried to think it” (op.cit, p. 328). For Deleuze, cinema does not just expose complex relationships between things, but also alters our knowledge of notions of time and space (Colman, 2007).

One reason for this is that film provides a non-linguistic means of describing situations and thus a more creative way of thinking. Cinematographic images do not need to obey the rules of syntax and morphology, and can potentially enter into an infinite number of unexpected relations. Unlike the words and phrases which form the lexical stock of linguistic discourse, for cinema “[t]here is no pigeonholed image, ready to be used” (Pasolini, in Verstraten, 2012, p.119). On the contrary, the equivalent of syntax, editing, may even provide a way of disrupting the progress of linear time according to Orr (in Verstraten, 2012, p.120):

²⁰ See, for example Lonergan, 1984 and Marcus, 2010 *inter alia*.

²¹ Deleuze (2003, p.10) highlights the implications of Bergson’s view, according to which the mind places snapshots of experience along an abstract continuum called time, missing both the fundamental movement of matter and the concrete duration or experience of time itself. Bergson’s view is quintessentially modern, since “[t]he nature of time can no longer be confused with its measure” (Smith, 2013b). Deleuze’s work, however, goes beyond Bergsonism in insisting that creation is only possible because of it is overwhelmed by powerful, non-organic life. The intemporality of time which accompanies this movement from virtual to actual is the condition for a creative life, (Montebello, 2008, p. 134). This shifts the practice of research from registering to creating the world

[T]he present is transformed into the past by the very feature of editing, yet the past still appears as present in filmic projection for the audience by virtue of the immediacy of the image.²²

It is true that the equation of language with code is a questionable one which underplays language's own propensity to be undermined from within (Roy, 2008, p.168). Language and discourse, clearly, are more than a verbal repetition of a given state of affairs, particularly in literary texts with a creative goal. Literary texts, however, for all their advantages, can provide what Chatman (1985, p.67) calls "easy access" to the minds of characters because their thoughts and feelings can be described explicitly and verbally.

By contrast, cinematic texts rely to a greater extent on visual clues and the viewer's ability to identify signs before they can be interpreted. This suggests that the impact of cinematic images might provide access to greater creativity and that in a given filmic situation it is the events, both "physical and minute" that solicit our empathy, not some pre-decided attribute of nature (Mullarkey, 2007, p.62). Hence, cinema's specific ability to provide a mix of multi-sensorial effects supports Wallin's views, as well as those of Maclure et al (2010), Denzin and Lincoln (2011), and Zahn (2011). Tacking this issue also offers a chance of addressing the limitations, identified by Colman (2009, p.12), of analyses of film as a purely cognitive phenomenon,²³ inviting instead a critical analysis of the creative features of cinematic texts as they complement existing analyses for LLL.

Beyond this ability, though, it is possible that cinema can take us beyond epistemological questions about what can be said and into more profound ontological issues of our relationship with matter. So much has been said about this relationship that, for some, it has been lost in a chaos of clichés (Lambert, 2002, p.131). On this view, cinema's task is to create new visual and aural images that might "give back" the body's relationship to the world. I hope to show how Michelangelo Antonioni's films, described by Melzer (2010) as "enunciations of the intricacies of the Modern", may be best placed to articulate this creative practice by inspiring a new belief in the world, escaping the reduction of experience to discourse. Ultimately, for Gandy (2003, p.227), Antonioni's cinema explores a metaphysical void through a "phenomenological exploration of the limits of human creativity and

²² Despite its apparent importance as common-sense way of evaluating experience, "naturalised machine-time" does not reflect the non-linearity of experience or contemporary science and communication (Adam, 2006, p.119; cf. Williams 2011b). Its disruption is therefore of great importance to creativity and offers a key tool for thinking differently.

²³ See Annexe 3, below.

perception". An engagement between modern cinema and the visual arts is developed via "ways of expression that are absolutely free, as free as painting that has reached abstraction" (Antonioni in Arrowsmith 1995, p.2). Such freedom seems, in principle at least, to offer a means of creative enquiry into an intriguing relationship with the effects it creates.

These views are bold and raise many questions. However, a critical analysis can first identify the extent to which different conceptualisations offer critical purchase on creative activity. This can provide evidence of the validity or otherwise of views such as Wallin's. Secondly, it can examine the ways in which they actually initiate creative processes, examining the extent of claims such as Maclure's. These perspectives on the question imply that it can be restated as two distinct questions. The first concerns the extent to which cinematographic texts shed critical light on current conceptions of creativity, and the second the way(s) an encounter with such texts itself might enhance creativity in research and practice in LLL teacher education.

2.2 Approaches

Before addressing these issues, however, it is worth reiterating the rationale for my methodological choices in this context. To avoid seeming arbitrary, the nature and purpose of the research should be as well-defined as the methods used to test them. However, the key issues of nature and purpose in LLL research remain controversial and even confused (Morris, 2003 in Hillier and Thomson, 2005, p.2), partly as a result of a long-running debate over what education research should do. Influential critics have claimed that some education research is irrelevant (e.g. Hargreaves, 1996; Hillage et al, 1998; Hyland, 2002, p.2) and "serious doubts" about the "quality and relevance" of educational research have been raised because of its perceived basis in opinion rather than cumulative evidence (Biesta, 2007, p.1). On this view it fails to perform the "technical" function of building a knowledge base of "what works" and it can seem "pointless" (O'Sullivan et al, 2001, p.200) if it fails to meet its basic objective, namely the testing of hypotheses (cf. Taylor, 2005).

These criticisms imply that education research should be restricted to more positivistic or technical research techniques. Such approaches endeavour to separate facts from values, disengage the researcher from the researched, and posit a "value-free, neutral approach to social issues, education and politics" (Benade, 2012:338-339).²⁴ They can lead, Benade

²⁴ A more detailed discussion of the role of positivistic approaches in research can be found in Annexe 2, below.

argues, to a superficial focus on engineering student attainment at or above the national norm enforced by techniques of surveillance. Rather than develop autonomy, teachers become secretive and professionalism is “privatised”. For some, therefore, a “technical” view is too restrictive and symptomatic of a wider “centralised agenda-setting” (Biesta, 2007, p.2), leading to “educationalising” (Fendler, 2008), by rationalising education along technical lines. This can lead to a commodification of knowledge and rationalistic approaches which seek to transform education into an efficient machine through best practice underpinned by an input-output production mentality (Roy, 2008, p.160).

Given this view, some feel that a greater range of research methods is needed to reflect the complexity of a “post-positivist” education world (e.g. Lather, 2006). Similarly, Oancea (2005) argues that research has been identified with the “critical activity” of public intellectuals rather than the search for knowledge as such. Such activity has a number of features which do not coincide with the more rationalistic approaches mentioned above. These include a systematic and consciously self-critical approach which is aware of its own limitations and perspectives (Stenhouse, 1981, p.103). It also means it can claim to be “radical” (Hunt and West, 2007, p.1; Hamera, 2011, p.321) and promote social justice through a mix of qualitative strategies (Denzin and Lincoln, 2011, p.1). This stance seems appropriate in a field such as education, which can scarcely avoid ethical issues such as these.

It is for these reasons that research and practice are often treated as a nexus. Traceable to the late 1980s (Cochran-Smith, and Lytle, 2011), the view that pedagogical practice is essentially a form of enquiry is a common one with practitioner research widely promoted (e.g. Hendricks, 2002; Hillier and Jameson, 2005; Kendall and Herrington, 2009; McGee and Lawrence, 2009). Jenkins et al are also convinced that a focus on the teaching-research nexus can enhance many aspects of HE, from students’ learning to staff morale and overall effectiveness (2007, p.76). As the wider LLL sector adopts similar views (cf. Macniff and Whitehead, 2005; Petty, 2006; Eraut, 2008; Thurston, 2009; Wilson and Wilson, 2011 *inter alia*) stronger relationships between practice and research are developing, including in teacher education. This link between teaching and evidence-informed practice, for Avis (2002, p.23) is reconfiguring what it means to be an education professional.

A number of issues are attendant on the concept of teacher-as-researcher, however. This is particularly true in some parts of LLL, where the lack of practitioner research in parts of the sector is widely-acknowledged (e.g. Scaife, 2004; Goodrham, 2006) particularly from a theoretical point of view (Smith, 2005; McKeon and Harrison, 2010). In particular, teacher

educators' professional identity is often split between the very different expectations of their FE and HE roles, where the former's teaching focus is incompatible with the latter's concern for research (cf. Harwood and Harwood, 2004; Bathmaker and Avis, 2005; Bathmaker, 2006; McGee and Lawrence, 2009; Swennen et al, 2010; Feather, 2010 & 2011; Orr and Simmons, 2011).

Nonetheless, the principle of the practitioner as creatively engaged in the learning process is well founded. Davies (2009) for example agrees that the task of education provides "processes where research and teaching are contiguous". But she also asserts that this contiguity should enable "creative engagement with ideas" and "the crossing of boundaries". It should serve to "skill people up with philosophy, arts and sciences" in ways that "fertilise imagination and movement". Her goal is to foster reflexive, analytic and ethical awareness of ways in which education professionals can "critique, resist and survive" the problematic conditions of their professional lives under capitalism (Davies, 2009, p.629).

Davies' view, that critical and ethical research involves an expanded methodology or at least a wider range of more flexible research methods is commonly held in certain strands of education research (e.g. Stinson, 2009; Edwards, 2010). Here, researchers choose from a flexible set of paradigms such as "grounded theory" to adapt research methods flexibly to data and context (cf. Glaser and Strauss in Stephens, 2009, p.8). But such a choice also presents problems. For Hyland (2002), the availability of many options does not mean that researchers are necessarily free to choose. Hyland argues that if a study wishes to have an impact, its research method should be dictated by the practices which it claims to change. Rather than limit research method, he asserts, these constraints can provide focus and a sense of purpose. My thesis draws both from a clear link between its methods and its goals, identifying its philosophy, strategy, and its instruments. I propose to examine each of these in turn, considering the way(s) in which they "fit" the goals and questions of the study.

2.2.1 Interpretivist philosophy

A research philosophy such as interpretivism is at bottom a set of beliefs about the ways in which data should be identified, gathered and analysed. It describes how we believe the world is organised (Newby, 2010, p.33) and concerns the epistemological issue of what can be known about the "real".

Several approaches have been proposed for tackling this issue in education research. Cohen et al (2007, p.21) and Sharp (2009, p.46) distinguish between "normative" and "interpretive" methodology. Lincoln and Guba (1985) contrast the "rationalist" belief that data

should be collected in “scientific” ways with its “naturalist” counterpart. These positions can be summarised as ranging from “positivistic” to “interpretivist”, although this apparent opposition is open to question, as is the frequent conflation of terms such as positivism and science (Kolakowski, 1993; Jupp, 2006). All such distinctions risk falsifying a more complex picture where positivistic/interpretivist approaches overlap (Reichardt and Cook, 1979; Huberman and Miles, 1982; Sharp, 2009). Moreover, this opposition may mask the benefits of a constructive dialogue between “evidence-based” and more “critical” research (Denzin and Lincoln, 2012). Following the arguments above, I am concerned to deploy a research strategy which recognises features such as emergence and complexity in my object. Because these are closely tied to an understanding of contingency (Pottage, 1998, p.2), an interpretivist approach is best suited to my research questions.

In education research interpretivism can perhaps best be understood as a part of a wider “qualitative” approach. If quantitative methods are defined as “empirical research where the data are in the form of numbers” (Punch, 1998, p.4), qualitative research is “empirical research where the data are not in the form of numbers” (ibid). Punch’s distinction here is of course rather schematic, but it is argued that quantitative research philosophy takes meaning for granted and then studies its distribution. Qualitative researchers on the other hand claim to study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. This claim joins others, outlined by Yin (2011, p.7): the goal of studying meanings in real world conditions; representing the views and perspectives of the participants; covering the contextual conditions of the participants; contributing insights which attempt to explain phenomena; and using multiple sources of evidence.

It is perhaps best to see Yin’s five features as interlinked. However, because the contextualised investigation of meaning is so central, interpretation is arguably the single most important feature of qualitative approaches. Interpretivist research holds that reality cannot simply be described, and this implies that human interaction is necessarily productive. Reflecting the shifting processes of change described by Thomas Kuhn (1970), education situations are understood as “fluid” rather than stable (Cohen et al, 2007, p.20). A dynamic set of “social and mental structures” constantly “flow around each other”, forming, reforming and influencing each other (Stephens, 2009, p.23).

Qualitative research in education focuses on meanings in context (Vrasidas, 2001, p.82), implying their interpretation. But it also means making the familiar strange (Stouffer et al, 2004; Jeanes and De Cock, 2005) and, as Vrasidas (op.cit) argues, making it interesting

again. This approach offers features which make it well-suited to this study, because the complex issue of creativity is familiar enough in the literature to risk seeming uninteresting, and yet so hard to grasp because of its multi-faceted nature.

Ways of using an interpretive approach include ethnography, case study and fieldwork. Such techniques welcome diversity in research design (Morgan and Drury, 2003) and although systematic and situated (e.g. Brewer, 2000, p.10), such approaches have inspired a complex set of practices (Denzin and Lincoln, 2011, p.6). For interpretivists, the boundaries between approaches are “fuzzy” (Hammersley and Atkinson, 2007, p.1), and research itself is seen as a “messy and “pedagogical” performance (Denzin, 2006b, p.422). Denzin asserts that its texts produce reality in this performative sense, and so distinctions between fact and fiction are deliberately obscured as enquiry becomes a situated text or narrative. Although debates exist about exactly what such “narrative” is,²⁵ agency, action and experience are all felt to be mediated by it (Rankin, 2002). Its function, for some, is to maintain a sense of individuality in a fragmented world (Giddens, 1991 in Krejsler, 2007, p.478), thus bringing important concerns together:

What matters in narratives is not simply whether they correspond to reality or not, but how they function, both for narrators themselves and in relation to the social settings in which lives are narrated

(Goodson et al, 2010, p.12)

Another important characteristic of interpretivist research is its claim that research objects cannot be isolated from their environment by “context stripping” (Vrasidas, 2001; Morgan and Drury, 2003). Instead, educational research should legitimate knowledge generation *in situ* (Stephens, 2009, p.131) which, for Yin (op.cit.) implies techniques such as case studies, action research and interviews. This allows research to identify perceptions and explore possible insights among the research subjects, and in principle, all participants in the process gain a clearer understanding of a given situation. Such approaches may reflect the vision of empowerment of a “learning society” (Thorley, 2004, p.133), where individuals are empowered by acquiring “representation” or a “voice” rather than being “silenced” and

²⁵ A great deal of debate continues about the nature and relevance of “narrative” research. Particularly controversial is its extension to non-literary areas such as education where, some have claimed, narrative and life are essentially interchangeable (cf. Horsdal, 2007; Richardson, 2000; Strawson, 2004; Phelan, 2005; Tammi, 2006; Hyvärinen, 2008; Matz, 2011).

“excluded” (e.g. Adair, 2006). Such empowerment can help to challenge the silencing of one’s “own knowledge” (Hunt, 2001, p.361), and indeed the stifling of creativity (Hunt and West, 2007).

To describe enquiry into such sources of evidence, interpretivist researchers often claim to deploy a “patchwork” of different perspectives. One aim of this “bricolage”²⁶ is to examine interactions which produce a bigger picture (Denzin and Lincoln, 2011, p.4). This means that any action which results from the research is not driven by simple principles of hypothesis and evidence accumulation (Latour, 2005) but by the production of something new. Another aim is to reflect the view that research under these conditions no longer embodies an objective, disinterested gaze. Indeed, for Stake (1981) inquiry should actually rely on subjective information: data is provided by personal experience, while method is furnished by participant observation and introspection. Relevance is obtained by focusing more on participant perspectives than on measurement.

This focus implies a “phenomenological” position according to which the objects of research are phenomena for the researchers rather than objects in themselves. Investigating these phenomena can involve lengthy, wide-ranging or repeated interviews (Hollway and Jefferson (1997). Following Stanley (1992), West (2004) finds that interview techniques drawn from psychoanalysis are well-suited to education research. The aim is to investigate psychosocial phenomena such as selfhood, including the researcher’s. Dominice (2000 and 2007), Alheit and Dausien (2002 and 2007) and Merrill and West (2009) also argue that this can also be done through “biographical” approaches, for instance. Exponents claim that these biographical accounts can provide an opportunity to reflect meaningfully both on personal experience and wider social issues (e.g. Dominice, 2000 and 2007; Cooper, 2004; Bron et al, 2005; Biesta and Tedder, 2008). Biographical interview transcriptions, they claim, can be jointly checked and developed to make the process more productive, inclusive and reflexive. As a result, they are arguably less a means of data collection than one of data construction (West et al, 2007). It is a “creative” exploration of selfhood (Hunt and West, 2007) which exemplifies the development of the patchwork mentioned above. While proponents of the

²⁶ The use of the term is interesting in this connection. Etymologically, *une bricole* can be traced to 14th century French, and describes a type of military catapult (“*une machine de guerre*”) and by extension the zigzag action of its belts and levers (Robert, 1979). Since the 19th century, *bricolage* has implied hasty repair and “amateurish, careless work”. Anthropology now uses the term to refer to work which is “improvised, adapted to the materials and circumstances to hand” (Robert, 1993). The relevance of Deleuze’s thought to this approach to research is striking (cf. Deleuze, 1983, p. 76; 1988b, pp.20-24).

approach see this as a strength, critics see the diversity this welcomes as one of several weaknesses.

2.2.2 Diversity

For critics of interpretivist research, a central drawback lies in this pluralism and its implications. This diversity can seem to invite messiness, confusion and a lack of methodological rigour. Although this messiness is attractive to some (e.g. Denzin, 2006b, p.422; Edwards, 2010, p.1) positivists criticise qualitative approaches generally as opaque, soft, exploratory and subjective. They lack rigour, it is argued, and their bias represents “an assault on the scientific method” (Morgan, 2003, p.2).

Furthermore, for St Pierre (in Masny, 2009, p.16), much qualitative research still relies on “received notions” about data. One such notion might be the need to “interpret” it at all. For St Pierre, such research assumes for example that we need to represent and disseminate it in (written) texts. This can only be done by categorising experience in conventional ways, reducing its critical impact or radical potential. Nicoll and Edwards (2012, p. 238) also challenge conventional research choices as a “gerrymandering” of experience. They argue that such circumscriptions are actually illegitimate because the way they distribute reality reflects rhetorical or political purposes rather than genuine critical enquiry. Because of this perceived illegitimacy, critics are able to question interpretivism’s claims to relevance, its accuracy and its pretention to interrogate subjectivity, three important challenges which cannot be dismissed.

2.2.3 Relevance

If the deliberate foregrounding of subjectivity provides purely anecdotal evidence, it struggles to offer any relevance outside the research setting. Ethnographic study, for example, may be unable to contribute to practice for this reason (Hammersley, 1999, p.2), since its findings are situated and therefore unique to the setting. This insistence on the individual nature of experience can also seem to deny or downplay the political or collective nature of education (Pring, 2000, p.60; Biesta and Lawy, 2006; Ecclestone and Hayes, 2009), effectively playing into the hands of individualistic social trends.

Criticism also points to the dangers of “narrative” or “autoethnographic” approaches which appear to lack the critical awareness they promote. To some, such approaches seem “unctuous” (Sheerin, 2009), and for others they betray a simplistic understanding of the concept of “story” (Hodgson and Standish, 2009). Polkinghorne for example (in MacMath,

2009, p.143) unambiguously asserts that the purpose of narrative analysis is to provide a “story” which configures the elements of narrative, unifies them, and grants them “meaning”. Failing to unpick these issues correctly, it is implied, is a common failing of research carried out under the aegis of this philosophical position.

2.2.4 Accuracy

Interpretivist approaches can also get things “horribly wrong” (Newby, 2010, p.54). This can happen for example when research assumes that accounts of interviewees or other participants in the research process have particular authority:

[T]o treat participants’ accounts as giving us direct knowledge of causal processes is to assume that participants themselves have privileged awareness of the factors that motivate them and also of the wider social conditions and historical developments that generate those motivations. In my view that assumption is quite plainly false.

(Hammersley, 1989, p.211)

Researchers may also follow the wrong evidence, or accept the research process itself without question, occluding the presence and awareness of the interlocutor (Adair, 2006). Adair’s work is a case in point, because her interlocutor is well aware of the risk of the interview resembling an exercise of academic power and self-justification. This reflects concerns about the authenticity of “empowerment” discourses in research mentioned above which can risk seeming naive. “Power” is not handed over, but rather omnipresent in academic situations (Tett and Maclachlan, 2006), and Seidman (in Dominice, 2000, p.86) argues that, despite its claims to empower, an exploitative relation is unavoidable in research. Arthur et al (2012) note that focus groups, for example, can also be subject to “coercion”, indicating the wider issue of a discourse of critical empowerment which, although popular in teacher education, tends to be presented in prescriptive and unempowering ways for Moon (1999, p.59). On the other hand, it may also indicate an illegitimate conflation of the researcher’s academic or institutional goals and those of the researched. For example, Miller (in Maclure, 2010, p.3) criticises “the panoptic immunity” of the researcher who feels entitled to interrogate the lives of others from within the safety of “an integrated, autonomous and ‘secret’ self”. Knowledge produced by academics can, in some situations, serve to marginalise (Huckaby, 2011) and research in education needs to clearly differentiate these objectives if its findings are to be a helpful depiction of the research subject.

To achieve this separation, many instruments are proposed for data collection from a qualitative or interpretivist viewpoint. These range from case studies, interviews, focus groups, questionnaires (Yin, 2011, p.17) and increasingly narrative (e.g. Goodson et al, 2010) as we have seen. Each has its uses, but various types of questionnaire are a favoured method of qualitative data collection because qualitative data are always “mediated through the human instrument” (Creswell, 1994, p.145). Questionnaires can be used in many ways, but usually record responses to (written) question(s). However, the “notoriously low response rate” of questionnaires (Kumar, 2005, p.130) can impair their usefulness. This problem may be amplified when the research specifically targets busy staff in institutions which may not support the research process itself (cf. Ward, 2005).

Interviews, sometimes in conjunction with questionnaires, might respond to this issue. Often effective in revealing unexpected ideas, exploring deeper issues and making suggestions for practice, they can be structured or semi-structured, formal or informal, recorded or not, depending on research goals. Standardising the interview format can present problems, however, undermining flexibility and “probing” for deeper information (Berry, 1999). Another risk of special relevance to this enquiry is the possibility that interviewees might replicate dominant discourses. McGuire (1997, p.20) argues that research on popular topics tends to be “channelled into ruts worn by constant use of a few familiar manipulations” which often reflect “conventional researcher-chosen dimensions”. Conceptions, Skareus notes, are elusive phenomena, and the links between subjects and practice can be hard to formulate (Skareus, 2009, p.181). Fulford (2012, p.77) also finds that in some “professional conversations”, the interviewee might tell the researcher what they think they want to hear, or hide unflattering information about themselves. It therefore seems likely that the restrictive environment which has often been noted within some LLL organisations (e.g. Lucas and Unwin, in BIS, 2012, p.33) will impact on the methods of collection and evaluation of data from such contexts. This is a potentially a significant problem in itself, but it may also exemplify the culture of surveillance and lack of trust which some identify with LLL teacher education (e.g. Lawy and Tedder, 2009; Simmons and Thompson, 2010; Ryan and Bourke, 2013, p. 421).

2.2.5 Pretensions

These debates only concern a small part of interpretivist research, but they serve to highlight the deep problems around its claim to interrogate subjectivity. Perhaps the most basic of these problems is that subjectivity is potentially inaccessible (Hollway and Jefferson, 2000) because of the near-inevitability of confusing subject and object as categories of enquiry. Put

simply, we cannot enquire into our subjective selves without turning ourselves into objects, in effect contradicting the *raison d'être* of a subjectivist position. If the examination of subjectivity shifts the focus onto the self as object rather than subject, we end up confusing the thing we are researching with the person doing the research.

This issue of subjectivity in qualitative research has of course been much debated. For instance, instead of research, policy or institutional discourse, teachers' lives are more likely to be influenced by "a complex web of formative memories and experiences" which can "last a lifetime" for Brookfield (1995, pp. 49-50). However, while it may be legitimate to recognise the impact of such (auto)biography on a given situation, interpretivist aspirations to critical reflexivity cannot be taken for granted. Brookfield recognises that these approaches cannot completely avoid the risks of "denial and distortion" and "cooking the data"; he nonetheless feels able to assert that the process "has to start somewhere" and that autobiography is an "obvious point of departure" (op.cit, p.33).

The necessity of such a "starting point" and the obviousness of autobiography as an example are of course open to question. While the researcher is a participant in the process, it is debatable whether a study can be grounded on the assumption that knowledge of our own experience is in some way empirically superior to any other. For Gannon (2006), the idea that research subjects can speak for themselves is problematic if "poststructuralist" theories of selfhood are taken into account. The assumption of this "presence" to ourselves as an obvious starting point relays a common "myth of the given" or "the idea that sensibility by itself could make things available for the sort of cognition that draws on the subject's rational powers" (MacDowell, in Hanna, 2011, p.324). According to this idea, information about the world is available to us in unmediated form prior to other experiences. This "myth" grants autobiography a certain primacy and authenticity which, by implication, casts suspicion on data which does not derive from it. This logic also informs research whose interpretations aim to have "therapeutic" benefits for oneself and for others. Although some welcome such parallels between learning and health (e.g. Lilley et al, 2005), others argue that there is a risk of the self-reflexive becoming self-obsessed (Schauwer et al, 2011). When research focuses on the problems assumed to frame transitional change, it essentially limits the purview of such studies to its own pathologising assumptions and their simplistic linear narratives of anxiety and conflict resolution (Fenwick, 2013). For example McLellan et al (2012) state unambiguously that wellbeing is "the key" to the development of flexible thinking, resilience, skills, knowledge and mobility in complex contexts. Therapeutic research may thus be "dangerous" if it positions its subject as essentially deficient or vulnerable as

part of a pervasive, risk-averse culture of infantilisation (Furedi, 2004; Ecclestone et al, 2005; Ecclestone, 2009 and *passim*).

2.3 Strategy

What is needed instead is a much more sophisticated philosophical position which can account for the dynamic relation between agents without reducing, essentialising or opposing them, thus supporting an ethical position which respects difference rather than trying to neutralise it. Developing a strategy in line with this, however, is challenging given that many of the claims of different (e.g. positivistic and interpretivist) philosophical positions seem incompatible with one another, with one school unable to accept to fundamental principles of the other. These “paradigm wars” between opposing schools of thought which claim to negate each other are well documented (Denzin and Lincoln 2011, p. ix). However, it may be that these arguments between positivistic and interpretivist methodologies simply reflect “arbitrary boundaries” (Cupchik, 2001) and encourage unhelpful criticism rather than meaningful research. In this vein, Crowther (2005, p.179) favours a rejection of both “positivistic” and “interpretivist” research approaches. While the former are manipulative, he claims, the latter sacrifice scientific rigour to theoretical sophistication and subjectivity: “critical realism” should, he argues replace a tired opposition.

On the other hand, rather than replace one paradigm by another, some researchers have tried to increase the range of choices available (Patton, 1980 in Stephens, 2009). On this view, research must above all treat philosophical categories flexibly, because what is at stake is not the relevance of a particular research philosophy, but the diversity of the research world itself, according to Lather (2006). Lather rejects the view that different philosophies are incompatible, and she proposes a pluralism involving multiple coexisting approaches instead. She believes that a wider range of research methods should develop so that education research can avoid simply applying existing paradigms:

Across the paradigms, students so trained in the philosophical, ethical and political values that undergird knowledge production will be able to negotiate the constantly changing landscape of educational research far beyond the application of technical methods and procedures.

(Lather, op cit. 53)

This approach seems to at least recognise the complexity of the LLL context. On this view, education researchers should spurn simple binaries in favour of new creative skills (Oberg, 2008) and new tools (Fenwick and Edwards, 2011). In principle, this is a strategic eclecticism (Stinson, 2009) which can inform us about a complex education environment. However, such eclecticism risks contributing to confusion in research methods (Van Manen, 2002, p.102), some of which has been mentioned above. To avoid more confusion, these “other” approaches deserve careful examination. Such alternatives, like all research strategies, need to inform enquiry without neglecting the methodological problems they raise and without exaggerating their results (Hammersley and Atkinson, 2007, p. xi).

Arguably the best way of doing this is to develop a methodological strategy which at least recognises these problems. For Stephens (2009, p.13) research should consider the relation between the *purposes* of the research enquiry and the choice of methodology while keeping “a watchful eye on the various pitfalls”. Finding a “workable solution” in this choice or mix of methods (Burke Johnson and Onwuegbuzie, 2004, p.16) implies the need for a well-defined strategy.

This strategy should provide a logic or set of procedures for a project (Blaikie, 2010, p.18), reflecting the demands of the research question(s) as well as those of the audience (Frank, 2005, p.34). Lather’s four-strand model (2006) claims to do this while also troubling the “tidy binaries” suggested by the convenient labels which are frequently used. Lather’s labels are summarised in the table below, linking philosophical positions to their strategic role and their drawbacks:

Philosophical position	Strategic role	Drawback
positivist	predict	makes assumptions about the researcher’s ability to understand and control situations
interpretivist	understand	assumes that the subjective response of the researcher is the overriding concern.
poststructural-postmodern	deconstruct	Can trivialise research by treating it as a discursive game.
critical	emancipate	May impose a political agenda with its own

		assumptions.
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As Lather accepts, these labels of convenience all appear to make contestable strategic claims about what they can do. The strategic activities of “prediction” or “understanding” for example are themselves highly contestable. Nonetheless, in an attempt to match the position to a particular research strategy in the contexts of creativity in LLL, Lather’s third “deconstructive” strategy seems appropriate. A research approach based in an appreciation of the need for a critical awareness of discourse (for example), might provide insights into the area and respect the need for diverse perspectives on it.

However, in addition to the criticism of this strategy in the table above, a “deconstructive” focus on the details of what is assumed, stated or meant in the discourse of creativity may not itself extend the researcher’s ability to explore new avenues for practice. If creativity, rather than an object or a process of value, is seen as merely a discourse to be undermined with its own paradoxical presuppositions, there seems little likelihood of such analysis creating anything or enhancing practice.

This may explain why “poststructuralist” approaches aligned with such strategies have simply failed to make a difference (Maclure, 2011). Talking back, queer and drag theory, pastiche and so on as educational writing approaches are subject to the same risks of cultural reification as any other (Gregoriou, 2008, p.105). Neo-liberalism is known to live parasitically off “the novelty of poststructuralism’s proliferation of ‘subject positions’” (Wallin, 2012, p.383n6), and the sort of deconstructive approach which militates in favour of different perspectives lends itself rather too conveniently to the questionable demands of an economy in educational research. Research, Wallin implies, is an economic activity which operates according to the accumulative and expansive principles of capital rather than of enquiry, feeding off itself.

On this view, the knowledge economy is all too willing to colonise new approaches in order to promote, distribute and perpetuate itself rather than encourage novelty and innovation. Instead, some argue that a “dialogue” should exist between the elements of a research situation (Shacklock and Smyth, 1998; Oberg, 2008). Lather’s fourth “critical” research might reflect this creative dialogue by deconstructing *and* reconstructing in order to escape such reification.

2.3.1 Categories

In order to do this, three further strategic categories can be identified: empirical, non-empirical and a mix of the two. Whereas empirical data is gathered from observation and experience, non-empirical data includes sources such as text and commentary. However, it is not self-evident that text and commentary cannot themselves provide observation and experience as “social artefacts” (see below), and the need for a stark contrast between the two is not universally accepted, especially by those who espouse “mixed method” research strategies. Here, a combination of research methodologies drawn from both qualitative and quantitative perspectives is used (Creswell and Clark, 2011, p.4). This mix allows “multiple ways of seeing” (ibid) which can in principle add breadth and depth to a study. However, the success of a mixed method approach depends on exactly what strategy is used to define the mix (Mason, 2006, p.12), implying the need for a clear theoretical lens (Creswell and Clark, op.cit, p.10).

2.3.2 Alignment

To meet this aim, my strategic choices reflect this study’s three research questions by aligning strategy to each goal from a clear theoretical perspective:

Question	Strategy
1. What is creativity in the LLL context, and why is it so important?	Non-empirical data are examined in the form of an extensive critical literature review of what has been said about creativity in the field. This will be the main strategy in investigating questions 1 and 2. Theoretical perspectives from Deleuze will be explained and deployed as critical tools in this examination.
2. What gaps can be identified in current conceptions of creativity, and can they be complemented?	Further non-empirical data will be used to inform question 3 in the form of examples of creativity from cinema and philosophical texts. These will be discussed in the light of earlier analyses to develop ethical proposals for practice.

This strategy works within a set of tensions which will be examined below between qualitative and quantitative approaches; inductive, deductive and retroductive reasoning; and subjective and objective perspectives, to which I now turn.

2.3.3 Quality

A broadly qualitative approach is taken here with a view to developing an understanding of what creativity might mean in the sector. A qualitative stance operates by interrogating from an explicitly ethical perspective (Cohen et al, 2007, p.27), and my strategy has the originality of being philosophical and analytic in so far as it critically discusses a series of ethical issues by using a Deleuzian “toolkit” of concepts. These bring philosophical analysis to bear on aesthetic and ethical issues in LLL, allowing us to look at a familiar area in a novel way. Rather than attempt to quantify its impact, I am more interested in contributing to new conceptions of a phenomenon which might provide a more coherent ethical perspective on practice.

2.3.4 Reason

This approach implies however that care be taken about exactly how data are analysed and which type of reasoning is used. Three types of reasoning can be considered in this context: inductive, deductive and retroductive.

Most qualitative research involves induction, some claim (MacMath, 2009, p.139). Such reasoning works “bottom up” to describe a phenomenon. It often uses observations or examples to build a picture or an abstraction of practice, and can have a critical function (Ennis, 1987). Inductive research makes systematic observations, identifies themes and then develops generalisations based on them.

Deductive reasoning works “top down” and tries to explain “why” a phenomenon exists (Blaikie, 2010, p.19). It tries to do this by establishing a hypothesis which is then tested by data collection (Lodico et al, 2010). In deduction, knowledge progresses by trial and error.

Inductive and deductive approaches work effectively when dealing with new phenomena. However, the concept of creativity at the centre of this study is far from new. This study therefore adopts a retroductive research strategy which starts with an observed regularity but offers a different type of explanation (Blaikie, 2010, p.21). This is another originality of this study. In retroduction, analysis works by introducing new factors to a well-known problem. Neither top-down nor bottom-up, it displaces these points of entry by re-analysing

basic principles in original ways. In this way, neglected underlying structures or mechanisms are identified in order that we can “work back” from data towards an explanation. Jeanes and De Cock (2005) for example carry out this process by examining creativity in an organisational context. By reconsidering the parameters of the way creativity is understood and promoted in this context, they are able to offer a different perspective which in turn sheds further light on the practices in question. Their aim is to influence organisational creative practices in this way.

Retroduction is a useful analytical tool, but remains open to criticism when it results in implausible, overly complex or untestable conclusions. However, it can also produce new explanatory systems (Chaney, 1973/2009) and thereby respond to this study’s questions by effectively challenging existing ways of understanding a familiar phenomenon. It also reflects the epistemological position taken by attempting to reflect the unavoidable and welcome complexity of the event of LLL.

2.3.5 Perspectives

Hence, given the interpretivist approach adopted, this study makes no claim for objectivity. Its strategy will therefore be largely non-empirical, qualitative, retroductive and subjective. To reflect this, the study addresses the three questions above in three stages.

Firstly I undertake critical analysis of discourses of creativity in the sector. I use a traditional method of discourse analysis to look closely at how creativity is described in order to identify common strands or shared assumptions. As part of this critical appraisal I look, secondly, at a less well-known discussion of creativity in the work of Gilles Deleuze. This will allow a contrastive approach to help assess these different ways of discussing the issue and identify alternatives.

In a third stage, I use the conclusions of this analysis to carry out a further examination of creativity from an artistic perspective. Lather’s “critical” paradigm is deployed in a constructive way with relevant discussions of creativity and challenging philosophical concepts of “the new”. These are supported by examples of artistic practice which ultimately achieve two goals. On one hand, I investigate the extent to which these practices are in themselves useful examples of creativity. On the other hand, Deleuze’s bold claim that some examples of creativity can “force” us to think in creative ways is examined. The goal is to enhance practice in LLL by redefining creativity in ways which shed light on practices and introduce a powerful onto-ethical perspective on them.

2.4 Instruments

The first stage of my enquiry establishes familiarity with central issues, a key component of qualitative enquiry (Yin, 2011, p.28). This stage is analytical and tackles the first research question: what is creativity in the LLL context, and why is it so important?

There are many possible instruments for answering the connected parts of this question. For example, data on the range of views held could be collected. Gibson (2005) for instance subdivides the area of creativity into “discourses” in order to highlight their features analytically. Banerji et al (2006) also successfully adopt this approach in their literature review. Compton (2010) looks critically at the range and impact of existing conceptualisations of creativity in policy and usage. Memmert’s (2011) approach is to undertake a cross-sectional observation of divergent practices in learning. Here, practices are evaluated in terms of their quantified impact on behaviour, allowing him to offer conclusions and recommendations about their development. Kilianska-Przybylo (2012) bases her study on a form of action research by developing awareness of creativity among trainee teachers and evaluating the changes.

A key feature of such approaches is the need to maintain critical distance, which can be provided by treating such data as “social artefacts” rather than, for example, expressions of one’s own subjectivity. Social artefacts are the objects that people leave behind them and therefore form a source of data (Blaikie, 2010, p.22). Analysis of such artefacts can seek common features of the way(s) creativity is understood and discussed. Reasons for discussing things in particular ways can also be identified, and their meanings and purposes can be explored as complex networks, a key analytic category. For Colman and McCrae (2005, p.1) networks are not simple objects because they form social relations between “gestural beings”, connecting both their dissatisfaction with broken relations and their hopes for the renewal of these links. Such networks of relations can be unpicked with a view to identifying their effects and lacunae not just as disciplinary “dispositives” but also as more creative “assemblages” of practice on the other (cf. Phillips, 2006; Delanda, 2006; Gough, 2008; Beighton, 2012b). In this way, I follow Bernstein’s warning (1974 in Cohen et al, 2007, p.25) that interpretive studies which use a critical strategy may neglect the fundamental question of how they construct their method of interpretation, avoiding the pitfalls of more conventional approaches to research.

2.4.1 Convention

“Conventional” research methods, rather than reveal “deeper” phenomena, may actually mask deeper issues in this way, simply reproducing our assumptions (West, 1995, p.34). This is a significant threat to the potential creativity of research, and demands that accepted approaches be questioned, especially when their claims seem self-evident. For example, West’s own reference to “conventional” approaches raises many questions itself.

One of these is precisely which approaches are being labelled as “conventional”. There have of course been many attempts to renovate qualitative research in education with “unconventional” methods such as literary theory, deconstruction and experimental ethnography. As Maclure (2010) reminds us, studies have been written up in many genres from play-scripts, poems and novellas to fairy-tales and confessions. Formal experimentation has produced split pages, multiple fonts and footnotes with the aim of registering dissonant voices or disrupting authority. This sort of genre-play has produced reflexive and messy texts in research which claim to better represent the complex interactions and narratives found in qualitative research (e.g. Semijn et al, 2008). Unconvinced by the empirical/non-empirical split mentioned above, some researchers in education have turned to fiction in various forms (Krieger and Van Maanen in Hammersley, 1999, p.3; Gough, 2008; Done and Knowler, 2011; Wyatt and Gale, 2011; Tedlock, 2011), often in an explicit search for creativity.²⁷ Gough (2008, p.80) for example suggests that research can use “fabulation” to “bring the unthinkable into representation”. He asserts that much fiction is “more faithful” to the aims of education than the dogma and conceit of many contemporary education texts. He believes that fictional exploration (e.g. comic strips) is able to perform dynamic education situations (“make a rhizome”) without becoming tied down to traditional forms and structures (Gough, 2008, p.82).

2.4.2 Aesthetics

However, for Maclure (2010), linguistic experimentation is not enough when it fails to provide viable examples of the different practices sought. So different conclusions about research and practice have been sought from an “aesthetic” turn which tries to develop instruments from non-linguistic “artistic” practices. For example, if practice is indeed more artistic than technical, as Hyland (2002) claims, then the role of research may be descriptive and critical

²⁷ As we will see, a parallel exists here between the issues raised in education research and in cinema keen to interrogate its relation with the “real”.

rather than technical, and speculation and hunches might be the best way of grasping and decoding phenomena (Van Maanen, 2002, p.101). Gonick et al argue that “imaginative strategies” can approach distant events in time “as though they were being re-experienced”. In turn, this reveals how social life is constrained by common sense and fixity.

In such conditions, the methodological question is not whether truth is found but rather the multiplicity of truths that are produced and through what technologies.

(Gonick et al, 2011, p.742)

Moreover, if fiction and ethnography are indeed not discrete discourses (Hamera, 2011) they might be able to actually combine in “creative non-fiction” (Tedlock, 2011, p.336). For example, for Dawson (2001), the tropes used in some poetry can provide useful critical perspectives on LLL. Cole (2008) refers to cyberpunk novels and Gough (2008, p.77) conducts a “narrative experiment” with photographs to extend the semantic range of his own analysis. Gannon (2011) borrows the novelistic practice of third person narration to explore pedagogical dialogues, and Fulford (2012) presents her data in the form of “scenarios” inspired and doubled by cinematic dialogue. Thus, as Hamera (op.cit, p.320) claims, if all research approaches operate under aesthetic conventions, the nature of research changes, and strategic choices are broadened to include artistic practices.

It is possible that these approaches constitute more than a simple alternative to existing methods, however. “Very often” Deleuze claims “the writer goes farther than the clinician and even the patient” in their analysis (Deleuze, 2004c, p.133), because their symptomology can be less hasty and more creative. Deleuze’s reasoning owes a debt to Bergson, for whom (creative) fiction or fabulation is a biologically-determined activity of appraisal of the world. It constitutes a “disturbance, shock or accident” or “trauma reaction” which does not just relate us to the world (and our own finitude) but makes events literally come alive. Filmed fiction in particular does this by bringing movement to images (Mullarkey, 2007, p.55-57). Whereas Bergson remains ambivalent about the value of such fabulation,²⁸ for Deleuze the falsifying

²⁸ Bergson hesitates between the representational (i.e. false) character of such fabulations and the possibility that this falsehood might actually indicate its own material truth: the faculty which de-animates the world needs only “a shock of certain traumatic processes” to carve out or perceive parts of the world as events (Mullarkey, 2007, p.57). Hence, in an earlier text (Bergson, 1939/2010, p.28) Bergson is keen to establish the material fact of mobility in perception and the ontological implications of a pure perception shorn of memory and subjectivity, and whose essence is material vibration. Not only, he says, is our immediate reaction to sense data haptic, but it resembles a “simple contact”. In fact, the whole process of perception and reaction is hardly distinguishable from a mechanical

of representation introduces the deeper truth of the profound mobility of matter. This inaugurates his own “overturning” of Platonism (Deleuze, 1969) and an undermining of representation and similitude and, ultimately, an ethical stance on creativity and difference.

2.4.3 Impact

This traumatic conception of the way in which reality is linked to the mind by movement should be distinguished from the narrative approaches criticised above for their simplifications and teleological assumptions. As Polkinghorne, above, states, these often see narrative perception as a unification of the disparate in thought, essentially reducing creative processes to repetition. Impact here is minimised since the new is reduced to well-known linear narratives of, for example, conflict/resolution and travel/destination. Such quotidian and common utterances are no more than clichés which fail to inform research because they often “imprison what is seen and heard in a fog of nothingness” (Lambert, 2002, p.146).

Rather than import literary techniques, therefore, some look to the impact of an aesthetic encounter on the researcher as an instrument for enquiry. Pearce and Maclure (2009) for example examine ways which a sense of “wonder” is produced by odd objects and sequences from film. It is possible that creativity is linked to these “moments” of wonder. Such “gaps” are part of the process of a qualitative research which assembles disparate elements for Denzin and Lincoln (2011). This assembling of known ideas, they claim, produces new ones, and the process is similar to the technique of “montage” used in cinema editing, making it a potentially research instrument.

2.4.4 Montage

Cinematic montage (often associated with Russian director and film theorist Sergei Eisenstein) juxtaposes two different shots to produce a third, often highly emotive “in-

impulse followed by “a necessary movement”: perception, he asserts, disposes of space just as action disposes of time (op. cit, p. 29). Bergson goes on to qualify this position in regards to the way in which memory necessarily complements this haptic contact by “contracting a multiplicity of moments” (op.cit.31) but only to criticise the idea that memory can be located in individual minds. Of fundamental importance is Bergson’s deduction of a difference between mechanical existence as a dream and conscious automatism of habit (op.cit, p.172-173). If the first is hindered by its perception of singular moments of memory, each of which differs from the other (“the memory of differences”), the second is rendered mechanical by its repetition of previous experience (“the perception of resemblances”). Deleuze will identify this conscious reliance on lived experience with cliché, and seek ways in which the “dream” of difference can be actualised by shock beyond the purely contemplative states with which it is identified by Bergson.

between” image.²⁹ It is a deliberate attempt to evoke ideas, or “the manipulation of definite representations to produce images in the mind of the spectator” (MacCabe, [1974] 1993, p.60). These new ideas can be analysed in different ways, but the third image which results from montage is not just distinct from those which accompany it. In principle, it also undercuts our expectations precisely because it is distinct from them. On this view, filmic montage offers a process for understanding how practice can bring together existing elements of a context to produce a challenging new idea. Rather than a metaphor, it can be understood as a description of the way in which research brings together disparate elements in creative ways.

Recent examples of research which reflect this approach include Maclure et al (2010), who turn to film in their empirical research into classroom observations. Fulford’s (2012) scenario mirrors a dialogue from a George Cukor film (*Adam’s Rib*) to illustrate power-play and silences in trainee-trainer dialogue. In theory, scripted dialogue here has a triple impact, because it is used to illustrate a point, provide a model for writing and engage the reader in new ways. Such research therefore becomes a variety of ethnography which is both an inscription and a performance (Hamera, 2011). Accordingly, for Fulford, such performances are essentially a way of developing dialogue which is also inscribed and performed. But they also demand changes in social research skills by including imagination, perception and interpretation as well as the artistic skill of producing new forms of expression promoted by Oberg (2008, p.3).

2.4.5 Stutter

On another level, the pedagogical implications of a filmic approach as research instrument include its ability to challenge basic assumptions in some research, including that of a sentient subject at its heart. According to Zahn (2011), the viewer cannot be said to control either the film text or their reaction to it. This implies a need to rethink issues of subjectivity and transcendence, and such a rethink might inform creativity for Maclure (2011). Referring to a concept frequently used by Deleuze (cf. Deleuze, 1993, p.135-143), she claims that this loss of control makes a subject stutter as their representational schemata break down. Like in montage, new ideas come “in between” existing notions, often in a hesitant way. This

²⁹ When, for example, a desperate character’s face in close up is followed by a long shot of an icy lake, we are invited to “insert” the image of the character jumping into it. This third image can be more or less dissonant with our expectations at a given moment in the narrative, and, thus have more or less (affective) impact.

undermining involves being a “stammerer of language itself” rather than a stammerer *in* language (Deleuze and Parnet, 1987, p.4).

There are good reasons why this might be helpful from a methodological perspective. Uncertainty, far from preventing enquiry, may actually help qualitative research to meet its complex goals (Stephens, 2009, p.8) because these goals are themselves emergent. Similarly, for Burbules and Berk (1999), it is often through paradox and aporia that the process of radically new thinking begins. Woodhouse (2012, p.140) for example describes the kind of gut-wrenching physiological response which can take place when confronted with new ideas, stressing that this type of “crisis” is simultaneously awe-inspiring, rousing and inspiring. In following up this claim, my thesis looks closely at the hypothesis that such a stuttering might form part of an operative process which enhances our creative potential as practitioners.

2.5 Limitations

This study’s limitations can be related to each of its three stages. Each of them is linked to the risk of abstraction in the study and its choice of methods.

Firstly, the research literature on creativity in education is already substantial, with many conflicting views, analyses and results. Any attempt to survey this range of work will always be incomplete, and a danger lies in attempts to simplify its diversity. Significant reviews also exist (e.g. Craft, 2001; Treffinger et al, 2002; Bleakley, 2004; Banerji et al, 2006; Jones, 2009; McLellan, 2012; Spencer et al 2012) and a further appraisal of it must justify itself rather than add more of the same.

On the other hand, no research project can honestly claim more than a partial examination. Such an examination can nonetheless help to identify similarities beneath apparently very different views. A meta-level analysis can provide a superordinate under which to classify and better understand trends in the field: a review of the reviews can be useful in this way. Rather than simply add to this extensive bank of knowledge, the first stage surveys it in ways which clarify rather than confuse. Secondly, by examining the problem from points of view of influenced by Deleuze’s work, a novel perspective on the problem is developed retroductively. In this way, the study considers the ways in which creativity can be understood as more than just a discursive phenomenon, providing theoretical depth. It also extends ways of thinking about it in line with the recent developments in cinema and education research mentioned above.

A related limitation of this kind of study is the temptation to discuss concrete phenomena in an overly abstract way. A first example of this risk of abstraction lies in working with “Deleuzoguattarian thought”, which, critics suggest, is “far removed from everyday life” (Kuppers and Overboe, 2011, p.217) or too romantic to be ethically forceful (Reynolds, 2006). If, as May and Semetsky claim (2008, p.155), “[f]or Deleuze life itself is educative”, there is a serious risk of losing focus on what is specific to education and LLL in particular if we are not clear about what is meant here by “life”.

Furthermore Deleuze’s work is extensive, complex and based on contestable claims about, for example, the ways in which art and artists work. Dealing with his work also implies at least a recognition of the basically metaphysical nature of his thought. Accounting for this runs the risk of leading the study into speculative arguments which may also distance the study from its goals.³⁰

The decision to use film is also a triply controversial one. One reason for this is that interviewing “real” subjects seems a natural choice with many advantages. Some of these are identified above, but some of the drawbacks have also been outlined, as have their potential to impair the ability of interviews to pursue the research questions. On the other hand, using film in itself is not just a means of exemplifying a particular type of creative practice. It also provides critical distance and challenges the false assumption that live interviews necessarily offer deep or genuine insights (Hammersley, 1989, p.211).

This is partly because film, as an artistic practice, has no particular contract with truth, so cannot be considered a form of empirical data in a traditional sense. In fact, it makes no claim to reproduce or even represent truth of any kind, and rather “puts movement in the mind” (Deleuze, 2003, p.264). On the other hand, it can ask, enquire and wonder (Wagstaff, 2000), while its directors can be anthropologists (Bernardi, 2000). Some argue that the kind of “sparse” cinema attributed to Michelangelo Antonioni is particularly well suited to this kind of enquiry as a form of “investigative reporting” (Moore, 1995, P.25). It’s clear, however, that cinema cannot function as a repetition or a metaphor of the real for the benefit of a researcher’s gaze and must be tackled accordingly. Its perspective on the world is, moreover, both unique and ubiquitous, making its potential to complement more traditional approaches considerable, grafting artistic processes onto more traditionally educational ones in a productive way.

³⁰ Although for Lash (2007) the time has come for a post-critical metaphysics with its own purchase on complex and abstract forms of modern capitalism.

This leads to the second element of this controversial decision, namely my choice to avoid analysis of the genre of school-based narrative in this study. Even though the school-films genre has interested many educators (e.g. Keroes, 1999; Gale and Densmore, 2001; Trier, 2003; Bousted and Ozturk, 2004), there is a genuine risk that films about schools and teaching reproduces commonplaces in form and content. This can be the case when their aim is to entertain rather than enquire or innovate, and especially if they serve as vehicles for the many stereotypes commonly held about teaching roles. On the other hand, other types of cinema explicitly attempt to innovate in terms of both form and content, explicitly positioning themselves as enquiry. The films of Michelangelo Antonioni have been chosen precisely because they are paradigmatic in this respect. Their goal is not to describe or promote a vision of what education should be, but rather move the spectator in creative and interesting ways.

The third controversial aspect of this decision is therefore that it might reflect a certain aestheticism, elitism or self-indulgence. Indeed, despite the attractions of this second group of films, a danger lies in becoming absorbed in the concerns of “art cinema” to the detriment of enquiry in to LLL. A limitation of the study might therefore be that its theoretical bias is simply an example of “distinction” (Bourdieu, 1979). On this view, the focus would reflect my own background and values rather than those of practitioners, who would be excluded by this choice’s restricted assumptions. More traditional empirical work with interviews, case studies or focus groups seems a more natural choice for this reason.

This is however a common criticism levelled at much investigation in the field, where theory is not just equated with elitism but even seen as a “disease” to be “eradicated and replaced by professional judgement” (Pring, 2000, p.76). Indeed, for Crowther (2005), FE research in particular suffers from being under-theorised and reliant on descriptive statistics because of a basic lack of what he calls “endogenous reflexivity” (i.e. the ability to critically appraise its own assumptions). As Hodgson and Standish (2009) point out, a frequent error in the deployment of “post-structuralist” thinkers in education concerns the way their concepts are taken as given on one hand, and the effect this has on the other. Educators, they argue, are too quick to adopt ideas³¹ whose literal references to education should act as warnings. Embarking on “taken-for-granted procedures” simply because they “feel largely intuitive” (Flyvbjerg, 2011, p.308) can be counterproductive, and scholarship has a duty to question divisions such as those between body and mind, and *a fortiori*, “theory” and “practice” (Newby, 2010).

³¹ And often use them ornamentally, rather than engage with their substance for Fejes (2008).

There exists, moreover, a certain elitism in the assumption that practice cannot understand theory or engage in complex argument. In fact, artistic practices have been encouraged in policy documents which have at times recognised the tangible benefits of a “chance to explore art, music and literature” (DfEE 1999, p.55). The current emphasis on creativity in sector discourse (BIS 2011; BIS 2012 *inter alia*) implies that the issue of creativity is far from an abstract or elitist concern. Just as whimsical research should be avoided (Yin, 2011, p.20), serious aesthetic choices can be informed by careful criticism, responding to a real need to inform LLL.

Although they are welcome, these official texts nonetheless often speak of creativity as if it were a simple concept. This is perhaps necessary in some formats, but concepts and distinctions need to be critically established if they are to inform academic debate. For example, this study theorises a distinction between the products of creativity and the processes which constitute them. This analytical work could inform empirical study, but the success and applicability of such empirical work will be strengthened by a clear theoretical base.

However, this does not answer the potential limitation of the applicability of this study's findings. Based in a particular set of artistic practices, it may struggle to provide generalisable results. Whether generalisability actually is a problem for qualitative research in principle is debatable, but this limitation seems relevant because the study focuses on a very particular selection of artistic practices. This would limit the study to its own small group of examples if they were used as recommendations. But they do not form a closed group of practices, and so my analysis looks to them for perspectives on creativity which have been neglected in LLL more widely. Rather than restrict the enquiry, the examples contribute to the opening-up of conceptual avenues, offering a degree of creativity on this conceptual level in line with those who see critique as inseparable from a creative gesture:

The critic is not just the one who debunks but who assembles. The critic is not the one who lifts the rug from under the feet of the naïve believers, but the one who offers the participants arenas in which to gather...the one for whom, if something is constructed, then it means it is fragile and thus in need of great care and attention.

(Latour, 2004, in Hunt, 2006, p.55)

The retroductive approach which I am using as a response to this problem demands now that I examine the ways in which creativity has been conceptualised. The following survey of the question from various existing points of view informs an alternative which will frame later stages of the thesis and its ethical claims.

Chapter 3.0 Creativity

If today's knowledge economy thrives on "innovation, adaptability and creativity" (Cronin, 2008, p.295), the ability to work creatively is a global priority (Robinson, 2001 in Cumming, 2011). Innovation is consequently a significant feature of recent international and national government policies (Hillier and Figgis, 2011), and a recent OECD report reflects this by stating that global changes in learning patterns are conducive to creativity (Carlile and Jordan, 2012, p.2). However, creativity is also an indispensable part of everyday life, irreducible to policy and the discourses of professionalisation at the behest of global competition:

Reading books, listening to music, appreciating art and film is not a form of entertainment to be indulged in after we have done our serious work. These creative activities stimulate the imagination and thereby transform the frameworks we apply when apprehending the world

(Cilliers, 2005, p.264).

Nonetheless, the first, and perhaps the most significant, reason for a focus on creativity in LLL is undoubtedly linked to economic issues. According to Lines (2008, p.130-139), the relatively recent turn to creativity has far-reaching implications for "life-long education" because it underlines the way in which the latter is saturated by the terms, the thinking and the practices of business and commercial production. Lines' analysis points to a conflict between a view of creativity as an abstract and ephemeral phenomenon and another, more concrete use to enhance economic effectiveness.

This indicates an interesting problem in the way creativity is often conceived. While some areas of the sector could claim that their essential function is the engendering of creativity through traditionally and recognisably creative activities - art classes and other forms of "liberal education" for instance - others might frame the need for creativity within the delivery of training whose goals are limited by their largely functional role in, for instance, the identification, codification and reproduction of skills in and for the workplace.³²

³² "What we have consistently found is that the best provision is collaborative in nature, what we are calling the two-way street between providers and employers, and has a clear line of sight to work" (CAVTL, 2013, p.4).

This functionality can be related to the need to ensure that learning is related to economic demand by ensuring it obeys the same logic of exchange. However, it is worth reconsidering the assumption that education and the economy, however entwined, necessarily obey the same logic. Indeed, the dynamism of the sector and its practitioners indicates that change rather than exchange might be at the heart of the matter if, as Deleuze and Guattari assert, a social field, is defined “less by its conflicts and contradictions than by [creative] lines of flight running through it” (Deleuze and Guattari, 2004b, p.100). Lines of flight are “potential pathways of mutation” in social or individual fabric (Patton, 2007, p.5), and are singular and therefore incommensurable. This definition questions the extent to which a logic of exchange without such affectivity can describe the changing relations between learning and the wider economy. But it also helps us to focus more positively on the question of where a given concept is going rather than on whatever contradictions it throws up. This in turn draws our attention to the fundamental role of creativity at work within it.

The second reason for an interest in creativity concerns the way learning and creativity themselves are directly linked. As a teacher educator in LLL, learning requires creativity because a limitation of what we *can* know to what we currently *do* know leaves no space for professional or personal development. Learning involves more than the acquisition of quanta of information, and is not, therefore, directly amenable to systems of exchange based on the transfer of these quanta as products of a “knowledge economy”. It cannot adequately be described as the accumulation of knowledge packaged in the form of terms.

If learning involves change at the level of relations instead, it is the virtual properties of series of events which make them interesting, not their terms.³³ This helps us develop several helpful distinctions (between learning and acquisition, or “really useful” and “merely useful” knowledge for example) and is rather an act of becoming which makes a difference by changing us and our world as we enter new series through encounters with new relations. So, if, like Pope we define creativity as the capacity to “make, do or become something fresh

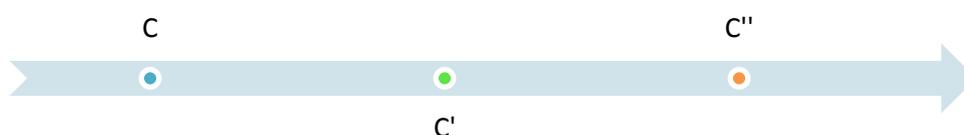
³³ Cognitive learning theorist Robert Gagné makes a similar move by establishing a distinction between learning and development. For Gagné (1968), learning (acquisition in the short term) and memory (capacity to learn over the longer term) are linked insofar as behavioural development is a result of the cumulative effects of learning. This development can only take place if the learner has a stock of rules available, and so it is the operation of a higher-order rule in the recombination of several given items of knowledge which signals the new capability of advanced cognitive capacity (Gagné, 1985). It is this “higher order rule” which drives recombination and introduces novelty into a series of givens by changing their relations. Whether or not this “rule” exists as an attribute of a knowing subject is debatable, but it links, in my view, the voluntary and involuntary aspects of both learning and creativity in a helpful and non-reductive way.

and valuable” (in Carlile and Jordan, 2012, p.8), learning and creativity implicate each other. I will discuss later the implications of this view, but if both creativity and learning operate at the level of these relations, an event such as LLL can admit transformation and difference rather than repetition.

The pragmatism of this apparently abstract perspective is worth stressing. The point here, implied by the existence of pseudo- and quasi- creativity below, is that being different is not enough. Difference must make a difference, because the proliferation of the different in itself risks being a tedious process of variation within the same framework as long as the different refers to changes in terms rather than relations. This nuance is revealed in the distinction between *differential* with *different*. Ansell-Pearson (1997a) refers to difference in the terms of engineering: a differential gear establishes a new axis along which forces travel, often, but not necessarily, at ninety degrees. Deleuze himself uses quasi-technical sketches to describe the way in which difference bends, reorients or folds movement which at first sight can seem unilinear (1988b, p.22-23). A given trajectory is never *actually* stable because it is always inflected by differential change as line becomes curve becomes ogive and so on. Things can change, but still maintain the same relations, reducing any differences they might present to repetitions of the same.

An illustrative example might be the creation of new products for mass consumption. Different products may vary in shape, size, and colour, but the relation between consumer and product often remains the same. The analogy includes consumption patterns which themselves may develop towards greater abstraction, as suggested above. Consumers themselves may contribute to the product, for example through customisation or personalisation of products such as knowledge or learning. Consumers may even internalise the consumption process, treating themselves as products to be displayed, enhanced and marketed, for example by making a spectacle of their own conformity to the demands of the jobs market (cf. Bauman, 2007; Krejsler, 2007). These differences, however, do not constitute creativity because they do not change the relations which obtain between subject and object; they merely reposition the terms of a relation which remains the same.

It is possible to show this diagrammatically as points simply adding up along a straight chronological line (C>C’>C’’):



The central difficulty, as O'Sullivan (2008) points out, is that productivism risks reducing creativity to the horizontal "piling up" of indistinguishable difference. Creativity is more than this simple addition of disparate parts, firstly because the fact of addition exceeds the parts added together, and secondly, not everything new is interesting, remarkable or important. Points may be added to the process, but the linear relationship is unchanged by this addition and is even perpetuated by it. The singular, for Deleuze, is opposed to the ordinal for this reason (1969, p. 67).

Accordingly, much work on creativity looks closely at the processes of creativity and would not accept the idea that creativity is simply a matter of reproduction which can be described in this linear way. But when these processes are subordinated to their terms as useful, novel products, the shift from the capacity of creativity to produce change to the capacity of its products to fulfil a purpose implies a utilitarian discourse which itself also goes unexamined. In many contexts this shift may be of less importance, but the continuing criticisms of LLL as an instrument of socio-economic control suggest that, for professionals in LLL, this shift underpins a highly conflictual view of the creative professional. Moreover, as we will see, recent policy texts fall foul of this conflict because they fail to differentiate creativity from repetitive proliferation. Pragmatically speaking, for example, this leads to training which provides a plethora of possible strategies to trainees but does not provide the tools for choosing between them, implying that ultimately difference between them is a matter of chance or personal preference. Petty (in IfL, 2013, p.30) feels that the ability to make such distinctions in an informed way should be "the central core of any teacher training course", and if creativity is indeed confused with production in this way, a number of implications can be drawn about links between creativity and learning in a teacher education context.

Firstly, as we have seen, this productivist view lacks coherence because it relies on the view that creative events develop in a linear way. If creativity is reduced to production, it becomes an accumulation of individual moments, where the conditions of possibility of each moment are established before events happen. But this does not help us to understand the way in which creative events change the way we see the past, create their own conditions of possibility and allow aberrant, unpredictable or previously impossible things to happen. Because it lacks this synthetic ability, it also fails to show the way in which a given creative event might influence a wide variety of apparently unconnected events, for example by remaining dormant until a chance connection can be made with something seemingly very different. Creative learning should at least try to take account of this synthesis if only to provide a more exciting picture of the engaging and stimulating openness of the learning experience.

Secondly, if we discuss creativity in relation to the way different things appear over time, it is important to be clear about how we believe time is actually working. The linear picture assumed by the need to produce and exchange postulates time as essentially homogeneous. It sees time as an invisible, unchanging non-presence with three important but implausible characteristics: it is reversible; it has no effect on events; and it can only be deduced from them because it has no being in itself. Alternatively, if we reverse this explanation, we imply that it is time which constitutes events, not vice versa. Time becomes non-homogenous and events become singular, which is to say different and therefore not amenable to exchange because they disrupt precisely this sense of linearity. A linear view of time's sequential representation by events must be replaced by a description of time as a synthetic operator, akin to a "chemical fusion" (Williams, 2011a, p.62) if the sensible characteristics of creation are to be accounted for.

So for Deleuze, the former description is not justified by experience on one hand, and cannot explain creative change on the other. Reworking the Kantian position (which situates time as a fundamental factor rather than an incidental deduction only signalled by our experience of movement) Deleuze asserts that time not only exists in itself as an "indivisible and complex manifold of times" (Williams, 2011, p.64), but also creates movement, not the other way round. It is because of time that subjects, too, are multiple, fractured and always already becoming Other, and it is therefore time, or duration (the non-homogeneous experience of time passing), which accounts for creative change.³⁴ Fractured "meanwhiles" or "dead times" between successive moments must exist for actual change to take place (Deleuze and Guattari, 1994, p.158).

Following this view, a very different picture of creativity emerges. Creative events become multiplicities, growing from within rather than single points in space succeeding each other. There is no line of time here, since each event is different, creating in its own time. We must

³⁴ The Copernican and Kantian revolutions literally modernised the way we understand time, which was only perceived via movement for Aristotle (Montebello, 2008, p. 35n1). So just as astronomy undermines the Classical use of the earth or the sun as cosmic reference point, philosophy displaced mechanical movement as synonymous with time, (re)discovering its primal importance in events (Smith, 2013b). Deleuze's own overturning of the classical view of time is explicitly Bergsonian in its inspiration, and reflects Bergson's cultural context and the growth of cinema (Totaro, 1999). This underpins his development of a system built on the immanence of movement to all things in the system (cf. Ishii-Gonzales, 2012), and Deleuze's development of an alternative temporal schema for events is one of his most characteristic theoretical moves (cf. Deleuze 1983; 1985). In particular it establishes time as multiplicity (Williams, 2011, p. 63) and thereby ties questions of time and movement to ethical issues of how best to live in conditions where linear sequence and causality break down – as in cinema for example.

therefore imagine a time where individual moments do not succeed each other regularly, and which allows aberrant movement in all dimensions of what we traditionally see as time. The present moments implied by linear succession become empty points and creative events enter the past by working “backwards” (reconfiguring what was possible) and indeed forwards (constantly shifting what will be possible in the future). This is why some, like Gale (2010) and Woodhouse (2012) advocate the exploratory and sometimes disorientating implications of pedagogic creativity for classroom ethics. At bottom, it is as the differential processes of concrete social fields and particular moments in time that we must seek ethical movements towards new ways of being for Deleuze (Deleuze and Parnet, 1996, p.163). This search, in the context of LLL teacher education, is the concern of the next part of my enquiry and involves tackling Deleuze’s question: “[n]ot how to reach the eternal, but in which conditions does the objective world allow a subjective production of the new, that is to say, a creation?” (Deleuze, 1993, p.89) ³⁵

Deleuze is clearly making a challenging claim here, and asking that we consider issues of time, subjectivity and novelty as profound questions. In order to justify and pursue this argument and its implications for practice, I’d like to examine some of the ways in which creativity has been understood within and without the sector. In line with my attempt to analyse the issue retroductively, from the outset I want to problematise the discourse of creativity in a variety of ways, including the difficulty in defining it. Initially, the notion’s background is considered from a general or cultural point of view as a form of conservation, then from an educational perspective as a vehicle for progress and resistance. I then briefly consider combinatory views of creativity as a neurological phenomenon before turning to the link between creativity, productivity and value in education generally. I then look more closely at LLL, and in response to the gaps, problems and tensions which are identified here, I develop an “operative” view of creativity seen as an essential component of the LLL event. My conclusion shows how this conceptual shift might have positive benefits for practices which are examined in the next chapter.

3.1 Background

Interest in creativity itself is of course far from new, and can be traced to the classical period. Initially seen as an artistic or purely human activity according to Cropley (2001, p.5), for Williams (1976) the term is traceable to Augustinian concepts of divine Creation and our

³⁵ Translation modified

status as Creatures of God. The creature cannot create (*creatura non potest creare*) simply because to do so would be to arrogate divine power itself: creation is uncreaturely. This Neo-Platonic religious censoriousness *vis-à-vis* creation echoes through myths which continue to underscore an enduringly ambiguous relationship between the idea of creativity as a cultural (and educational) phenomenon and questions of power. This is one reason for Nietzsche's contradiction of a religious view:

In man, creature and creator are united: in man there is matter, fragment, excess, clay, mud madness, chaos; but in man there is also creator, sculptor, the hardness of the hammer, the divine spectator and the seventh day

(Nietzsche, 1990, p.155)

Nietzsche's terse and epigrammatic style introduces a view of creativity which radically undermines the view of the creature as subject to transcendent creative powers. His linking of creativity and material forces, and the assertion that the creature is not separate from creation will be taken up later, but connecting creativity with revolt and freedom in this way is a leitmotiv of the western philosophical tradition. While Aristotle felt that all great minds are close to insanity, and for Schopenhauer creative genius was marked by its inability to tackle worldly affairs, for Kierkegaard, rebellious genius creates because/when it challenges the norm.³⁶ Runco (2007) however is keen to point out that clichés about creativity (e.g. the mad genius) need to be distanced from discussions of creativity insofar as they indicate neither the intention to create nor a useful model of creative activity. Notions of genius are, moreover "elitist and old fashioned" (Carlile and Jordan, 2012, p.12), and *in fine* creativity needs to be treated carefully if it is to do more than simply describe a phenomenon which we assume to be given.

Moving away from religious and philosophical concerns, the mid-20th century saw an upsurge in interest in creativity among educators (Sternberg, 2003, p.3). This growth can be linked to other post-war socio-cultural trends in mass production, mass consumption and a related homogenisation in lifestyles, indicating that the popularity of the concept and the ways it is described and promoted owe something to this trend. An implicit relation between creativity and the quality of such production may help explain why, since J. P. Guilford's influential 1950 address to the American Psychological Association expressed the need for

³⁶ Cf. Shapsay (2012)

research into creativity (Cropley, 2001, p.1), interest in creative education has grown.³⁷ With growth came variety: contemporary thinkers included E. Paul Torrance, sometimes referred to as “the father of creativity” (Gruber, 2000, p. viii), who defined creativity as “the process of sensing problems or gaps in information, forming ideas of hypotheses, testing, and modifying these hypotheses, and communicating the results” (Stouffer et al, 2004, p.1). On this view, the creative process may lead to both concrete and abstract products, but also involves communication through, for example, works of art, inventions, and medical discoveries. For Torrance himself, creativity’s future lay in the hands of “prophets” and “frontier thinkers” rather than critics (Torrance, 1995, p.5).

More recent definitions reflect this equation of creativity with thought and result, albeit on widely differing scales. In the specific domain of LLL teacher education, creativity has been taken to be basically inseparable from introspection (James, 1998). Cropley (2001, pp.2-6) describes it as “production of novelty” which is both “effective” and “ethical”. Takeuchi et al (2011) give the concept a broad historical *telos*, asserting that creativity has been essential to the development of human civilisation and thus the whole range of collective human endeavour. Despite these different accounts, both Takeuchi et al and James imply an ethical dimension to creativity which must fulfil a more or less conscious goal of improvement. This view is reflected in Sternberg’s influential definition of creativity as “the ability to produce work that is both novel (i.e. original, unexpected) and appropriate (i.e. useful, adaptive concerning task constraints)” (Sternberg, 2003, p.3). For Sternberg, the unexpected nature of creativity is placed in tension with its appropriateness, often gauged according to “the task in hand” rather than the development of new ideas or practices (Pereira, 1999 in Stouffer et al, op.cit; see also Memmert, 2011).

Within these views, it is often recognised that creativity is a complex, multifaceted phenomenon which involves “a constellation of factors such as personality traits, cognitive abilities, cognitive styles, and motivation” (Sánchez-Ruiz et al, 2011, p.1).³⁸ This allows its

³⁷ Cropley (2001, p.5) argues that the term is thus anchored in a political context (i.e. the cold war) and the competitively instrumental goals of the space race. This, he argues, has fuelled the “human capital approach” to creativity, despite the “inherently paradoxical” nature of such a managerial view.

³⁸ Runco (2007) stresses the same point about the concept’s necessary eclecticism, but this common argument accompanies a degree of sameness in the marked tendency to define creativity in terms of four constituent parts. James (1999, p.12-13) for example cites Kneller’s influential 1965 study and its four categories (person, process, circumstances and outcome) and “up to five” stages. Craft (2001) also identifies four traditions within which creativity has been studied empirically, as do Treffinger et al (2002). Banaji et al (2006) organise their report under four key questions, echoing similar four-way divisions in the other work cited, including Compton’s four-level pyramid (2010).

application across many social phenomena, for example the areas of scientific discovery, technological invention and social innovation as well as artistic imagination (Thagard and Stewart, 2011, p.1). It also includes the very different area of marketing, where creativity is seen by some as the central feature of the concept generation process. Used by designer “superstars” able to skilfully manipulate symbolic material, creativity demands that they “combine bits of knowledge coming from different contexts” for multiple ends (Dell’Era et al, 2011, p.46). Clearly, while economically and culturally significant, the advantages of creating not products but ephemera with short life-spans and instant obsolescence are moot (Craft, 2006). It is perhaps in recognition of this ³⁹ that another of the ends of creativity in such contexts is communication with managers and the buying public. As Roberts, above, suggests, this situates creativity in the realm of “spectral” rather than concrete production, reflecting Torrance’s earlier views of creativity as closely concerned with communication.

A major question in any study of creativity therefore is exactly how to relate the many different assertions made about it to each other. Clearly, poor definitions are as unhelpful as perceptions among educators, learners or parents that creative learning involves pointless “messaging about” (Compton, 2010, p.35). However, as the interest in creativity grows and expands into new areas, so the phenomenon and the term become more elusive, and attempts to critically define creativity in specifically educational contexts proliferate. Batey et al (2010) for example argue that a regard for particular character traits is more relevant than single individual agents; Bleakley (2004) also criticises the attempt to reify creativity into a “singular” concept and Banaji et al (2006, p.3) name “at least nine” definitions; Bleakley himself accounts for 10 different types, and Treffinger et al (2002) claim to identify literally hundreds.

This wide range of views may exist because creativity has often been seen as a concern only for primary education (James, 1999, p.8); because it is relatively understudied as a phenomenon generally (Sternberg, 2003; Batey et al, 2010); or perhaps because it consists only as a subset of discourse as “a series of rhetorics” (Banaji et al, 2006, p.4) and hence “merely” a verbal construct to be instrumentalised and, perhaps, embroidered upon. Banaji et al’s assertion reflects the idea that the concept of creativity has been treated very differently in different contexts, and even in education appears to constitute its own shifting discourse.

³⁹ The firm distinction between concrete and abstract production is obviously a difficult one to maintain if we agree with a Marxian analysis of fetishistic production, where neither exists independently (cf. Harvey, 2010, p.38-47).

One way of tackling this problem has been to develop a typology which attempts to confer substance to what may otherwise pass for a vague idea. Typologies can describe qualitative differences, reflecting the idea that types of creativity may themselves be domain-specific. This view sees creativity as a culturally specific phenomenon, and warns us against generalisations about creativity based on a myopic, western, liberal – even Anglo-Saxon - account. For example, a typological view might situate different types of creativity in a continuum of “layers” suggesting that differences of degree separate the various instances rather than differences in kind.⁴⁰ I’d like to turn briefly to some of these typological attempts now in order to provide a backdrop to my own reconceptualisation of the term. I will first describe five different types of creativity before turning to a form of “operative” creativity which aims to meet the issues which they raise.

3.1.1 Conservation

Powerful stakeholders influence what is meant by creativity (Cumming, 2011). These views include conservative understandings of creativity characterised by a belief in a supra-individual notion of cultural or creative value. Creativity, where it exists, must correspond to accepted norms and serve an existing whole. Roger Scruton (in Banaji et al, 2006, p.8) for example opposes notions of individual creative potential as long as they claim to escape a larger societal paradigm. He defines creativity as art within a perspective which relies on a certain relation between practices situated in time: the artist sees their work as belonging to a pattern under which self-expression and personal interest are not valued because they fail to recognise previous successes. “Real” creativity here is assumed to operate on the terms of continuity, integration into a hierarchy, and attachment to a transcendent idea of greater society. Minority cultural interests must therefore remain minoritarian within this framework, since once they integrate the whole they can no longer claim minoritarian status, since minority is defined as the variety of ways in which individuals and groups *fail* to conform to standards (Patton, 2007, p.11).

3.1.2 Progress

Both of these views are challenged by those, who, like Williams (1976), argue that a temporal perspective must respect creativity in terms of its definition of (and relationship

⁴⁰ The similarity between the form and content of Compton’s pyramid and hierarchical models of motivation and learning by Bloom and Maslow is both striking and suggestive given their perennial currency in teacher education (e.g. Neary, 2002; Machin et al, 2013; Gravells and Wallace, 2013). Whether this is simply the result of attempts to simplify complex processes in commonly understood areas is unclear.

with) the future. This approach reflects a form of progressivism familiar to many educators. More in line with this “open system” view, educators in this progressive tradition have challenged the idea that creativity must reproduce the values of a hegemonic model. This was apparent in renaissance views of creativity which stressed the human potential to create for the future. A salient aspect of this otherwise optimistic view is that the myth of creative genius tends to be applied to men (Ellis, 1992, p.192). For example, a brief analysis of genius in cinematic creativity for example implies that it concerns more than the ability to produce striking new works of art. Ellis reminds us that being accepted as a genius demands the ability to claim genius, and therefore a set of self-promotion skills. Creativity can thus be related to a certain view of (male) power and the desire to conserve it, and a “progressive” educational tradition challenges its conservative counterpart by valuing individual creativity over the demands of society.

However, these two approaches can be seen to rely on a familiar relationship to time. For Marshall (1963, p.10 in Jones 2009, p.18) educational creativity lies in the relationship with works of art which should be “tapped” because they are seen to represent “the inexhaustible well of past human experience”. Conservatives and progressives seem to share a belief that the value of creative art lies in its ability to represent a past or present which transcends the individual while maintaining a focus on the temporal. This dependence on the notion of creativity as the (re) production of *past* conditions is a constraint if we see creativity as necessarily oriented towards the future.

As this similarity over the question of time implies, a problem may lie with conventional views which are discernible even in apparently conflicting positions. This consensus helps explain the ubiquity of creative discourses in widely differing domains, notably advertising, which can seem to trivialise it, as Williams notes:

The difficulty [with creativity] arises when a word once intended, and often still intended, to embody a high and serious claim, becomes so conventional, as a description of certain general kinds of activity, that it is applied to practices for which, in the absence of the convention, nobody would think of making such claims.

(Williams, 1976, p.84)

The proliferation of views already identified supports this claim and the view that, despite superficial variations, a similar logic drives a certain consensus in LLL. Williams’ etymology

may indicate that the issue of creativity is inseparable from complex questions of time on one hand and the risk of ubiquity and trivialisation on the other.

The implications of this for a philosophy of events, grounded in a temporal scheme in which equivalence by definition can only exist when we subtract difference, are important and will be explored later. But these implications also have a direct bearing on the role of creativity in defining values such as cultural diversity. The latter, as a defining feature of creativity, came to be associated with a third view of creativity as “resistance” in the 1970s (Jones, 2009, p.30), to which I’ll now turn.

3.1.3 Resistance

The “right” to creativity has been proclaimed as resistance to the forces of capitalism and mass production. On this view, cultural diversity opposes the political, cultural and economic homogenisation implicit in forms of schooling which deny (“minority”) identity, originality, authenticity and difference.

Such views of creative resistance as a way of exposing hegemonic social forces imply that, without this awareness, “genuine” society as a whole remains the instrument or dupe of mass production, particularly of the media (cf. Meinhof, 1994; Kress, 2003; Giroux, 2009 and *passim*). Assuming such a one-way relationship however can seem naïve if we agree that consumption of media products requires the participation of a subject who cannot be assumed to be simply passive. It could be argued that mass production is actually used, especially by the young, to define new ways of being which challenge high culture and homogenising forces. But the capacity for “minorities” to create is also exploited as the “cutting edge” of voracious capital able to transform producer and consumer into its own instruments. As Harvey (op. cit.) suggests above, latent consumers become active producers, and active consumers actually constitute an ever-ready, ever changing workforce which must now be capable of lifelong adaptability, echoing the analyses of flexible professionalism whose compliance with wider economic activity is downplayed. At bottom, an idealisation of the cultural capacity to create misses the central issue of differentiating cultural production (difference) and cultural consumption (repetition) and merely invites educators to consume and be consumed.⁴¹ In this totalising system of knowledge, it becomes impossible to conceive of practices that might escape the reaches of “the vampiric topography of this continuous marketplace” (Colman, 2006a, p.3).

⁴¹ See also hooks (1992) and Bauman (2007).

In this light, LLL ultimately concerns the production of particular types of creativity in complicity with a “spectacular” social order. The ambivalence to and of this rhetoric lies in the fact that creativity is demanded by a teaching profession which does not actually foster it, preferring normalisation (Craft, 1997 in Durrant and Holden, 2006, p.141). For some, this is a “tightening of an already established stranglehold” by policy (Kendall and Herrington, 2009, p.47). Productivity and (exchange) value, considered central to functional creativity, are subjected to a judgemental gaze which identifies creativity with this “purpose”. If responses to change in education are reduced to individual practices of contesting, coping and complying with stringent performativity, they are unlikely to enhance teaching and learning (Simmons and Thompson, 2008, p. 614). Indeed, if on the wider social stage international organisation implies heterogeneity of social formations and creates its own “Third world” (Deleuze and Guattari, 2004b, p. 482), “creativity” on these terms serves the demand for cheap, unskilled labour (Deleuze and Guattari, 2004b, p.406) by providing a technology for adaptation of latent manpower to the demands of the market.

3.1.4 Combination

To recap, one advantage of typological mapping is that differences can be established, allowing a choice between different forms of creativity. For example, Schmidt (2010) associates a first form, “Big C” (BC) or “exploratory” creativity with “genius” level or societal change. This corresponds to the forms of innovation which produce genuinely new concepts and introduce a discontinuity into a system, for example in the form of a paradigm shift. However, the “myth” of individual genius has been debunked (Stouffer et al, 2004:2), and Schmidt describes a second type, “Little C” (LC) or “combinatory” creativity, which refers to the ways in which new ideas result from the recombination of existing objects. LC is evolutionary rather than revolutionary, implying that it builds on the given rather than disrupting it.

Some theorists of learning avoid neuroscience on the grounds that its findings are too specialised for general theoretical work.⁴² But neuroscience has tried to explain the nature of such a “higher order” combinatory rule, for example in terms of neural representations (Thagard and Stewart, 2011). While any attempt to provide a computational analysis may seem to neglect social or psychological perspectives, it introduces an aspect to creativity which is of some importance. The combinations of previously unconnected mental representations, constituted by patterns of neural activity, are themselves (re-) combined in

⁴² Illeris (2009, p.4) for example does so “not because I do not find such contributions interesting or important (...) but because I think that they are still too specialised to have the status of general understandings of learning”.

the brain. This “binding” process is clearly differential because its recombination enhances the capacity for further recombination. As a result creative thinking becomes a case of combining such neural patterns into ones that are only then open to judgement. Interestingly, the currently favoured way of understanding such binding is as mechanical processes of *convolution* rather than synchronisation. In other words, rather than the synchronic convergence of items to a homogeneous place in space-time (as a single neural connection or information gate for example), creativity from a neurological perspective involves a dynamic enfolding (convolution) of connections as a multiplicity which is neither fully localisable nor reducible to a single point or moment.

What matters is the process of dynamic growth from within, not the product of this dynamism at the edges – organic properties which Deleuze and Guattari associate with rhizomes, as we will see. It also advances the debate about the supposed differences between artificial “digital” operation and organic “analogue” thought by explaining the way synaptic communication is able to express two things at once rather than as a simple “yes/no” gate (cf. Shores, 2009). For educators interested in creativity, it provides both a biological analogy of the operation of thought as an event and evidence of the importance of forms of convolution and becoming and not restricted to a synchronic binary in thought.

This distinction between convolution and synchronisation is therefore very important. If we are to link creativity with divergent thinking, as do both Batey et al (2010) and Takeuchi (2011), then synchrony must in theory become suspect because by definition it cannot explain divergence in ways which diachronic convolution, for example, might. This kind of convolution does not require that difference be reduced to a single or other transcendent term with which it can be identical. On the contrary, it demonstrates how existing terms can be recombined in novel ways with a focus on the differential relations between them.

3.1.5 Production

Despite the complexities implied by combinatory forms of creativity, the idea of creativity generally has met with a sort of cyclical consensus in education: “Everyone likes it”, one researcher drily remarks, “[h]urrah for creativity” (Gibson, 2005, p. 1). Such irony underpins a sincere concern for the disparate and recuperative ways in which creativity is used, not least in educational contexts (Compton, 2010). Compton himself (2010, p. 29) constructs a “pyramid” of four types of creative activity ranging from “noticing behaviour” to “grand innovation” at the pinnacle.

Compton's breakdown seems simple, concrete and accessible, and yet it raises questions. The top level involves the allusive but tautological "making something new and valuable" and "working at the pinnacle", crowning the bottom level's inquisitive / explorative activity of "creating, making". The value judgement of utility here is explicit, and any individual activity of production is subsumed under the greater value of social demand for output. Accepting that creativity plays this role means that it becomes part of the globalised, networked market framework (Craft, 2006) and, from this perspective, an adjunct of a drive for productivity. Indeed, for Carlile and Jordan (2012, p. 27) creativity has replaced material production as economic driver through the rise of service and entertainment industries. This has fuelled a "practical approach" to creativity in education which foregrounds its economic importance, they assert.

On this view, it may be no coincidence that expansive times bring belief in the benefits of creativity, whereas recessionary periods herald a retrenchment. Minds become sceptical as to the relevance of values which, visibly, fail to fulfil promises of prosperity and well-being. Education policy in turn swings cyclically between the advocacy of creativity (expansion) and its antithesis (retrenchment and "back to basics"). Despite claims to the contrary, this movement may have more to do with politico-economic cycles than factors such as educational need, research or theory. This can be seen in the way that creativity has become a standard term in UK LLL political rhetoric, as the successors of the 1998 Green Paper *The Learning Age: A new renaissance for a New Britain*, shows:

We will succeed by transforming inventions into new wealth, just as we did a hundred years ago. But unlike then, everyone must have the opportunity to innovate and gain rewards - not just in research laboratories.

(DfEE, 1998, pp. 9-10)

From the perspective of education policy, the purpose of creativity is to produce "outcomes" that are both "original" and "of value" (NACCCE, 1999, p. 30) to wider society. Closer to the roots of LLL, influential adult educator Raymond Williams (1976, p. 82) also identifies creativity's general sense of originality and innovation. Williams' use of the terms is also inseparable from the notion of production and while this connection, as we have seen, is not without its tensions, it situates creativity as part of both the process and goal of education understood as a progressive project. This has been expanded to a mission to create an "Innovation nation" (DIUS, 2008), and today's department of Business, Innovation and Skills (BIS) repeatedly proclaims a special interest in the "creative industries" and "creative skills"

necessary for economic growth. The production of knowledge in LLL is a good example. Indeed, with the increased importance of the “marketisation agenda” in the sector, and the alignment of the latter with the demands of the former (Newman and Jahdi, 2009), the relevance of such views to LLL may be increasing, as Lines (2008) contends. Publications such as Heppell (2007), Skills Commission (2009), BIS (2012a) and Vinson (in IfL 2013) actively promote such alignment. The importance of achieving it means that reconfiguring the (FE) sector as “subservient to the perceived needs of the economy” is a key policy goal (Simmons and Thompson, 2008, p. 609).

“Newness” may be “stitched into the fabric” of industries based on knowledge (Cronin, 2008, p. 300), but not all forms of creativity are welcome in a business context keen to maximise short-term profits by avoiding the sorts of disorientation involved in genuine change. Moreover, while it is true that discussion in education tends to focus on the role of human agents (and their skills, abilities and motives) in these creative processes, for Munday (2012) this focus on human agency is still associated with productivity in education. Creativity, he argues, has become a question of performativity and human capital management as part of a productivist ethos which demands the development of organisational systems and structures where new ideas can be generated and managed. Human capital theory does not just misrecognise the complexity of economic development and the wide range of actors in economic growth (Fuller et al, 2004, p. 1), but repeats the “mantra of skills” criticised by Coffield (2008, p. 5) and is therefore subservient to normative economic interests and its dehumanising need to develop human capital (Lines, 2008, p. 132).

This recuperation of creativity by the economic mechanisms of reproduction is why critics of this trend argue that instrumental creativity is “increasingly obtuse and over-commodified” (Salehi, 2008, p. 159). On these terms, Salehi argues, creativity is little more than another instrument of consumption. Venues for consumption are manufactured and creativity itself becomes “a consumable package” (Salehi, 2008, p. ii). The claim here approaches what Zepke (2007) identifies as “the old avant-gardist ambition of merging art and life”. As Zepke argues, the problem in this view is not just (or even really) that the ambition is old, but that it is nowadays more and more achieved by manufacturing and consuming “commodified affects and subjectivities” in what he calls “cognitive-capitalism”, or the marketisation of subjectivity for institutional profit.

Following this institutional and affective trend, which reconceptualises what is relevant and useful, technical descriptions of creativity are not always openly individualistic. For example, from the point of view of a business model, networked systems can foster more efficient

forms of creativity. This has obvious advantages, including that of providing a framework in which creativity itself can be controlled, for example through the economies of scale which can be achieved when large numbers of employees work on the same thing. This implies the development, exploitation and redistribution of virtual space(s) for such forms of productivity afforded by communications technology. This itself provides a double gain, since the outputs of this form of activity can be easily managed by the same ICT tools that serve to interconnect their parts. In addition, the product of such creativity is itself highly cost-effective, requiring little or no material infrastructure, and no investment in or transformation of expensive raw materials, at least in theory. Many would agree with Tan et al (2007, p. 554), who “emphatically propose” that future research in creativity should be of the “*use inspired basic type*”, referring explicitly to one of their own (four) categories of creative work (original emphasis).

As Cropley (2001, p. 8) reminds us, though, this interest in the products of creativity can be an arbitrary measure of their importance: a given social context may or may not recognise their value or originality. Both of these aspects of creativity discourse in education (“economy” and “utility”) channel a set of ethically-charged values whose contingency may be obscured by terminological and taxonomic wrangling. “Pseudo- and Quasi- creativity” have been proposed as ways to describe the common confusion of both the repetitious variability of production (pseudo-creativity) and the tenuous hold on reality of abstract thought (e.g. daydreams as quasi-creativity) with the production of genuine novelty (Cropley, 2001, pp. 14-15). For Runco (2007, p. 397) simply being uninhibited, lucky or different for the sake of it do not really constitute creative activity: the latter must in some way result from intent on this view, and is, in essence, another form of human capital (Runco, op.cit, p. ix).

This returns us to the perspective of LLL, where an increased emphasis on change, innovation and increased productivity has been linked to the raising of professional standards in this human capital model. It is arguably on this terrain that such notions of creativity become most contestable from the point of view of LLL: an economic rationale may justify some of the changes described above, but does it sustain the more effective training which today’s critics of LLL practices often demand? Can practices in the sector be creative while simultaneously promoting a discourse of (individual) productivity, and to what extent has a desire for the latter eclipsed the former? This is the question I’d now like to turn to, with a specific focus on LLL and the ways creativity is promoted for professional development.

3.2 Creativity in Lifelong Learning

If “imagination, insight and ingenuity” are responsible for progress (Thomas, 2009, p. 21), it is unsurprising that creativity should play an important part in LLL. However, creative teaching guru Ken Robinson (2006; 2010) frequently articulates two key issues around the link between creativity and learning. On one hand, our ideas about social organisation must reflect the fact that predicting the future is increasingly difficult. Moreover, if aging populations face more risk, more diversity, more relocation and more change over longer periods of time, educators have a professional and personal responsibility to mediate a 21st century crisis which is only now beginning (Stronach and Clark, 2011). On the other hand, Robinson argues, our current systems of education appear to be ill-suited, if not actually detrimental, to the development of the kinds of creative skills which this situation would appear to demand. Above all, Robinson regrets the focus on mass production over processes of individual creativity. This reintroduces a key tension in LLL, which, for Lines (2008, p. 13) is valued above all as a “training ground” for the “production, reproduction and transmission of knowledge” in the modern economy.

An important question therefore concerns not the duty of educators to develop creativity in LLL, but it also concerns the efficacy of the consensual equation of creativity (use value) with a particular function (production) by a sector’s leading organisations. Here, creativity is promoted are revealing of a set of assumptions which are worth examining in detail because of their implications for the sector, not least from an ethical viewpoint.

One of these is articulated by leading researcher Ann Hodgson:

While changes in educational policy can make it difficult to learn from how you did things last time, they can also inject a stimulus that forces you out of a groove and back into creativity. Good continuing professional development (CPD) can do that too.

(Hodgson, 2011, p. 5)

Although we can get “out of a groove”, for Hodgson, professionals in LLL are naturally creative. She expresses a view which links a form of naturally-thriving professionalism to “creative new ideas” (BIS, 2012d, p. 34). On this view, professionals should be “creative developers of curriculum and innovative pedagogues” (Sachs, 2007, p. 15), and creativity is seen as not just possible and desirable but actually a natural and essential attribute of professional conduct.

The notion is clearly important in LLL, therefore, and indeed it has been argued for example (James, 1999) that a specific form of professional creativity exists for the sector. This, it is claimed, involves a synthesising activity exemplified by critical or reflective practice. The latter may provide a way of identifying distinctions between the productivity of the genuinely new and that of mere variability and reproduction, but the frontier is hard to identify given the repetitive nature of some of this reflection (Done and Knowler, 2011).

Critics of reflective practice give several reasons for this. At the level of individual practice, developments in practice are unlikely to result from reflection if the skills required for the future cannot be derived from present practices (Lucas in Fisher and Webb, 2006, p. 343). At a more global level, for Benade (2012, p. 337) the alignment of reflective practice with economic goals offers little hope of change, since critical reflectivity has been domesticated by a techno-instrumentalist stance on education with “no intention of altering itself or its practitioners as a result of critical reflection.” Indeed, creativity may not be amenable to development through simple or semi-autonomous (re) cycling of cognition as some models of reflective practice seem to imply. Like Ruddock (1991), who considers them limited by their introspective nature, Hoyle and Humes (in Wilson and Wilson, 2011) demand that reflective practices extend beyond the private sphere via collaboration with an outside. Like any event, a capacity to change depends on an encounter with disruptive forces and the actualisation of an internal capacity to differentiate. Reflecting on professional practice in a formulaic way is unlikely to do this if, as Fraser (1995, p. 19) in particular warns, reflection relies on the false assumption that the reflective process is essentially rational or purely cognitive. Indeed Tara Fenwick (2008, p. 1), focusing on the problematic assumptions behind the desirability of self-assessment as a form of CPD, contests the view that it is possible and even desirable to predetermine or regulate what knowledge is worthwhile for a professional to learn. For Hart (2010, p. 45) democratic learning is non-linear and involves a more tentative testing of insights in “daily practices and encounters”, creating “a new loop” in an ever-growing and widening spiral.

Ann Hodgson’s recent assertions about creativity can be scrutinised in this light. On this view, creativity in the professional practice of LLL suggests learning from the past, and it is therefore both helped and hindered by policy. Professionals, it is claimed, can be forced out of their (bad) habits by activities such as “good” CPD towards a form of professionalism which might “thrive naturally” as a result of deregulation (BIS, 2012d, p. 34). This seems a common-sense view, but it is surely no coincidence that the recent turn to a discourse of deregulation should accompany wider political and economic changes. To what extent can these views be considered statements on the creative professionalism of a sector, and how

far are they expressions of an unrelated economic imperative which conflates creation with production?

It is quite possible that views such as Hodgson's, although significant for the sector, are empty insofar as they raise more questions than they answer and contingent insofar as they contain assumptions about how we assess and value the new. Moreover, examples of the lack of creativity of the sector can be discerned in such statements, signalling in essence a non-thought which fails to fracture received ideas. In order to justify this view, I would like to propose an analysis of Hodgson's three central claims in the light of the wider LLL context. This will show how we can begin to formulate the central paradox for creative educators assumed, as in so many things, to be deficient: is creative professionalism so natural that we simply need to be jogged back into it, and is the focus required by literature and policy up to the job?

3.2.1 Past

The first of Hodgson's claims concerns learning from the past, and seems straightforward. What can we learn from, if not the past? Even if we were able to abstract ourselves from past experiences, assuming we should wish to do so, it's unlikely that creativity would benefit from such an amputation of experience. The emphasis on the past has been questioned in policy, however, which has criticised FE's tendency to operate from an "historical perspective" rather than a "futuristic" one (DFES, 2002, p. 5). If what is meant here by "the past" is simply time anterior to our present experience, we might well ask two questions. Why, on one hand, should the past be privileged in such a way when, it could be argued, it has relinquished its hold on the present as a result of chronic change? More radically, can we not demand that such references to the past make more explicit their terms of reference when these turn out to constitute a purely subjectivist perspective? *Which* past is being evoked here, why, and for whom? What ethical position, and what way of life is implied by these choices?

3.2.2 Policy

The second question raised by Hodgson's assertion concerns policy, and once again relates to its common-sense appeal. What purpose would policy serve if not to develop creativity? The alternative would be a conservative policy of developing inactivity, an alternative which although apparently absurd, should be considered in the light of the problems of its more active counterpart. The problem contains a second assumption, however, that raises more obvious and immediate problems. Is it true, as Hodgson claims, that effective CPD, as an

instrument of policy, can jolt us out of our torpor, and if so towards what should we be jolted, and exactly how?

One response might be found in the recent Lingfield report, which wanted to “help create an environment in which professionalism might thrive naturally, refreshing the sector with creative new ideas and continuously improved practices” (BIS, 2012d, p. 34), stressing the need for freedom from interference. Whether this transpires remains to be seen, and such assertions remind us of the fact that teachers, as Scales (2011/2012) argues, have become used to “having things done to them”. And while few would surely argue that ITE constitutes the end of the process of learning to teach, particular forms of CPD imposed from on high risk eliciting either grudging compliance or uncritical assimilation, not a jolt to practice. At worst, they risk turning teachers away from any desire to innovate they may have harboured.

3.2.3 Naturalism

The third question regards our personal relation to creativity and the claim that our natural state is a creative one. Hodgson certainly asserts that, when we deviate from its norm by becoming uncreative, we can be forced back into this ordinary position. This belief is implicit in much sector discourse, but despite its obvious appeal, Hodgson’s “return” to creativity implies a certain naturalism, according to which creativity is assumed to be both given to us and (therefore) desirable. But do we know what this original creativity is, and why it should be somehow more natural than its less creative counterpart? If we are to take the assertion seriously, we might ask whether we are indeed naturally endowed with this capacity and, if so, speculate why this should be.⁴³ The ability to make a distinction between the *de facto* and the *de jure* lies at the heart of the critical thinking tradition (Burbules and Berk, 1999), and certainly, as Peters (1970, p. 98) points out, even assuming that we are creative does not explain why this particular feature of human activity should be favoured or promoted more than, say, a capacity to play bingo.

Some claim that CPD enhances initial training by responding to new theories, ideas and models thus preparing teachers “to be better and more effective lecturers” (Stiggers, in IfL, 2013, p. 15). Others argue, however, that this actually prescribes a fixed form of idealised

⁴³ Richard Dawkins (2006) has famously argued that the basic natural function of biological organisms is one of replication and simulation: it is not only those entities which can change and adapt which are privileged by evolution, but those able to replicate themselves in mathematically sustainable ways. On this view, why should we have any reason to agree with Hodgson that a “return” to the creative is even plausible? If Dawkins is right to claim that we are genetically coded for replication and simulation, there seems little reason to believe that creativity has a “natural” role to play.

professionalism which individualises and reifies both teachers and learners as objects of technical intervention (Colley et al, 2007). Far from improving quality, some claim, this boils down to finding cost-effective ways of maintaining control (Kingston, 2008), moving the debate away from issues such as whether or not the CPD is “good”. For Plowright and Barr (2012) the “professionalisation” agenda in LLL offers only criterion-based, skills-focused “training” which reduces professionalism to the performance of docility. This is particularly relevant to LLL when human capital theories place the responsibility for creativity on the individual’s investment in their own professional development through (mandatory) CPD in LLL.

When it does this, the “skills sector” does not only promote creativity as coterminous with productivity and adaptability to economic circumstances and roles, but also aims to develop the “attitudes and skills” needed to prepare learners to “take their place as flexible and adaptable employees and consumers in western capitalist societies”, according to Simmons and Thompson (2008, p. 601). On this view, instead of providing flexibility, professionalism and change, it is simply another example of practitioners having to adapt and compromise. When institutionalised as CPD as Hodgson claims above, can creativity avoid being conflated with staff training to meet the demands of the latest “big idea” (Scales, 2011/2012, p. 4)? Indeed, the whole notion of getting “back into a groove” is highly suspect if the State adopts precisely these means of capturing creative thought in order to measure and control it.

3.2.4 Individualism

Another problem here is that creativity on these terms risks becoming a technical activity, defined in terms of systems, categories and diagrams. Political issues of social value are imputed to the individual’s willingness to upskill, and it becomes easy to see why Craft (2001) sees creativity as synonymous with the individual ability to cope with change.

This focus on individual productivity must be examined. Runco (2007, p. 386) lists several studies whose focus is the unpredictable, chaotic nature of creativity and Treffinger et al (2002) criticise creativity which assumes that creativity is an attribute of a “creative person”. In their attempt to escape this limitation, they “mention”, as an aside (op. cit, p. x) Rhodes’ four strands (the four Ps of Person, Process, Product and Press) and their own four-faceted “COCO” model⁴⁴ of interdependent factors stresses dynamism and complexity:

⁴⁴ *Characteristics* include the personal characteristics above; *Operations* involve strategies and techniques people employ to generate and analyse ideas, solve problems, and so on; *Context*

Creative productivity is best described as a dynamic, complex system, in which all four components are interdependent. These components can either facilitate or inhibit one's expression of creativity in observable ways within any domain of human effort.

(Treffinger et al, 2002, p. x)

These references to complexity, however, accompany an attempt to categorise the concept in terms of conveniently-numbered blocks of activity. As their diagrams show, these categorisations quite quickly collapse from within as soon as they are postulated, and indicate a pre-analytical preference for quadratic division which automatically codifies the results of the enquiry.⁴⁵

Indeed, in its tendency to atomise creativity from the point of view of an ideally productive individual, Treffinger et al's study is representative of the treatment of creativity in education. They repeatedly state that the aim of education is to develop "creatively productive" adults, aligning creativity with employability and education research with the productivist goals and apparatus of human resource management. Hence, while Treffinger et al's work is careful and serious, it vehicles some of the most obvious cultural stereotypes (for instance about the supposedly creative benefits of individualism and the necessity of productivity) which, it might be surmised, result from the context in which the document was written rather than the wide-ranging intercultural perspective which globalisation might require.⁴⁶ Indeed, while in the first sections of their work the term "creative" is systematically linked with that of productivity / outcomes, it is the former which frequently disappears in its latter stages: creativity is literally conflated with productivity and busyness. "Creative productivity", as they say, "is in action!" (Treffinger et al, 2002, p. 70 *original punctuation*).

Treffinger et al's report is helpful in identifying the twin trend in education's creativity discourse, namely its references to complexity and agency. It helps to define not just a

includes the culture, the situational dynamics and the physical environment in which one is operating; *Outcomes* are products and ideas resulting from people's efforts.

⁴⁵ The recurrence of this four-sidedness may have escaped the four authors of Treffinger et al's report, which is composed of four chapters (plus overview) and based on four data sources with four rows and four ways of gathering data and test standards in four areas. See note above on this tendency in some of the literature.

⁴⁶ Indeed their bibliography is remarkably parochial, containing no non-Anglophone sources. The overwhelming majority of their book sources were from publishers in New York, Cincinnati, Massachusetts etc., with one reference to the *Indian Psychological Review*.

dominant position in the study of creativity, but also some of the weaknesses of this position. On this account, creativity's three characteristics are that it is:

1. Categorisable into four simple types in order that it can first be recognised and then, crucially, evaluated and measured in four performance levels
2. Essentially individualistic with a component of social behaviour offering tangential interest
3. Defined by its productivity, its activity and its amenability to organised training

3.2.5 Hylomorphism

However, despite its popularity, this belief in the necessity of agency and the control of easily categorisable creative processes is not universally shared. For Tim Ingold (2008) our understanding of the relation between material and individual needs to be reversed:

Specifically, I am concerned to reverse a tendency, evident in much of the literature on art and material culture, to read creativity 'backwards', starting from an outcome in the form of a novel object and tracing it, through a sequence of antecedent conditions, to an unprecedented idea in the mind of an agent.

(Ingold, 2008, p. 16-17)

A problem lies with an understanding of creativity which has both dominated western thought and become increasingly unbalanced, according to Ingold (2008, p. 3). Although creation, Aristotle felt, involved bringing together form (*morphe*) and matter (*hyle*), increasingly we have come to think of the forming process as something to which matter is subjected: our agency is exaggerated just as that of matter is dismissed.⁴⁷ Western metaphysics has been a "prisoner" to this representation of matter as static and the forming process as anthropocentric (Sauvagnargues, 2012, p. 2).

⁴⁷ For example, this form/matter division influences the early stages of Kant's critical philosophy. Kant argues that "ancient barbarism" risks degenerating into "intestine warfare", "anarchy" and nomadism of thought which despises the "settled" notion of "cultivation of the land" (Kant, 2007, p.6). Kant seeks to impose his critical will on the formless and the material, destituting thought of its metaphysical dogmatism and naive empiricist illusions. The critical philosophy can be understood from the point of a separation which enacts a systematic and explicit cleansing of the *grounds* of thought (Martin, 1993, p.91) articulating a discourse of hygiene which has become increasingly unsavoury.

My analysis of creativity suggests that practice too is influenced by this perspective, producing a “command and control” view of the relationship between individual and world in the form of a dualistic hylomorphism. If this desire for control opposes the “fluid, creative responses” which some see as best suited to a context of bureaucratic de-professionalisation (Colley et al, op. cit, p. 176), then a high degree of ambiguity seems to persist in the precise nature and goals of calls for creative education. Importantly, this ambiguity can be seen in the discourse of policymakers and professional organisations as well as of the practitioners and researchers who work under their aegis. Does the aspirational discourse of creativity and innovation vehicle a less palatable discourse of reproduction and control, and if so, to what end?

In response to this analysis of hylomorphism, Ingold draws on Deleuze and Guattari not only to critique this dualism, but also overturn its anthropocentrism. For Deleuze, this instrumental relation between matter and form ignores the way bodies are constituted by an immanent power which moulds them by first individualising and then massing them together (Deleuze, 1990, p. 243).⁴⁸ This moulding cannot be definitive, since systems are never homogeneous and even regimes of discipline and control, however pervasive, are destined to evolve as events as a result of the variations within them. In the context of this affirming vitalism,⁴⁹ it is important to look for the “lines of flight” in this situation, or ways in which professionalism can escape the attempt to reduce it to static objects (prescriptive rules, practices and relations). Far from the result of agency or management, they are “the primal force upon which society is built” and which form “a productive, affirmative and positive dynamism pointing to the nexus of change” (Albrecht Crane and Slack, 2007, p. 102).

⁴⁸ In his early study of Hume, for example, Deleuze (1953, p.91) argues that subjectivity involves a double movement of becoming-other as the new emerges and stabilizes temporarily. The importance of becoming as a double movement between that which was and that which will be, that which I affect and that which affects me, is fundamental to this logic of relations because it concerns not the terms, but what passes between them and carries them both away.

⁴⁹ Both Bergson and Deleuze distance themselves from the idea of some “vital principle” which might reduce life’s heterogeneity by coding or controlling its objects (cf. Bergson, 2013.p. 42 & 415). A “new vitalism” on the other hand concerns processes and multiplicities which are self-organising, self-generative, differentiated and differentiating (Cronin, 2008, p.308). (New) vitalism draws inspiration from technological advances to apply a morphogenetic ontology of relations to processes, stressing the fundamental importance of immanence and the specificity of events (Olma and Koukouzelis, 2007, p.3-4). It is also, for these reasons, closely related to many of the characteristics of complexity theory, notably adaptability, co-evolution and self-organisation through time (cf. Urry, 2005b, p.237).

Ingold's aim is therefore to supplant the focus on the creative individual with the creative forces and materials which transcend the forms to which they lend life (Ingold, 2008, p. 3). Ingold's main point here is that the hylomorphic model confuses creativity with novelty (repetition) because it focuses on product, however unique, rather than process. By abducting agency backwards from objects, we reinforce the subjectivist position and occlude the essential genetic relation of skilled practice to matter and the environment. Reversing the process to focus on learning rather than knowledge implies that learning in this context cannot involve exchange or transmission because (skilled) practice is not an iteration of but an improvisation with these processual flows of matter as indivisible intensities. As a result of these criticisms, this product-oriented view of creativity seems unhelpful on all of the counts mentioned above. Instead, creativity can be better understood as:

1. **Holistic:** it is impossible to reduce creative manifestations to four quarters of a whole because this atomisation obscures the concept's essentially relational nature
2. **Dynamic:** the interaction between its components is too sophisticated and integral to the term to be ignored;
3. **A-subjective:** creativity is in no way individualistic and cannot be understood without an overturning of many subjectivist presumptions;
4. **Processual:** creativity is fundamentally processual, which is why it is a-productive. The genuinely new cannot be defined by its productivity and indeed only relates to activity insofar as it must imply a halt to the flow of ideas and activity which simply reproduce the given.

These criticisms underpin a redefinition of creativity which tries to take them into account may be helpful to LLL teacher educators. This redefinition is my next step.

3.3 Operative creativity

I would like to respond to this demand by offering a different model of "operative" creativity, drawing on the work of Gilles Deleuze and on aspects of artistic creativity.⁵⁰ Understood on

⁵⁰ Deleuze's perspective on a creative life is clearly inspired by Nietzsche's view that becoming what we are is an unruly process strewn with unpredictability and error:

That one becomes what one is presupposes that one does not have the remotest idea *what* one is. From this point of view even the blunders of life – the temporary sidepaths and wrong turnings, the delays, the "modesties", the seriousness squandered on tasks which lie outside *the* task – have their own meaning and value.

such philosophical or artistic terms, the new is essentially a riddle, whose solution effectively annuls its novelty (Ventzislavov, 2011). Creativity cannot therefore be reduced to the solution to this riddle, and while creativity is usually defined as the production of new and relevant objects, operative creativity focuses on the processes of creation, challenging the relevance of novelty and utility to the debate. The “riddle” of the new is dramatised by replacing the question of “what” creativity “is” by the problem of when, where and who its processes imply.

The term “operate” is central to this distinction between process and product. The concept of operators is particularly important to a philosophy of relations, and Deleuze uses it in many ways. The most important of these is to describe the combinatory mechanism of linking disparate things, where a non-relation is still considered a relation. In principle, an operator is a function which connects these different terms (typically addition, multiplication etc. in mathematics), and thus describes the way a concept can operate a conjunction/disjunction between entities, often producing a third. Deleuze insists, however, that philosophy needs to make the term for itself without limiting itself to the well-known connectives from science and mathematics (Deleuze, 1984), and so uses the term to describe the way any idea can be introduced to produce new ideas by connection. An author, for example, is an operator when a problem is set up so that the work becomes “a process of learning or experimentation (...) where the whole of chance is affirmed every time” (Deleuze, 2004a, p. 249). Chance is introduced by an operator because combinations, even when they are reciprocal or chiasmic, are little more than exchange. Becoming therefore must have a differently creative, zigzag motion (Lawlor, 2008). The best example of this is arguably the brain itself, which is notable for “operating [transversally] across fields, bringing them together in new ways” (Murphie, 2010, p. 28). Hence, in *Francis Bacon: Logic of Sensation* (Deleuze, 1981b/ 2004b), artistic gestures of scrubbing and blurring are operations because they do not just remove clarity but, by doing so, introduce a new connection with vital forces of change at an ontogenetic level:

(Nietzsche, 1992, p.34)

The stakes of such a change are high, for Deleuze: only when thought is free, and hence vital, he asserts “nothing is compromised” and when it stops being free, he says, “all other oppressions are also possible” (Deleuze, 1988a, p.4). Deleuze is interested here in the potential for freedom of a “nomadic” thought which might operate like a rhizome by assembling disparate connections rather than imitating or reproducing the given (Deleuze and Guattari, 2004b, p.26).

this operation is possible only if the sensation of a particular domain (here, the visual sensation) is in direct contact with a vital power that exceeds every domain and traverses them all.

(Deleuze, 2004b, p. 42)

Creativity which actually produces something new would work at this level. But I would also like to stress that it would do so operatively, which is to say that it brings things into movement, or more accurately, movement into things. Operative creativity would therefore work differentially with the matter around us, relating form to the sensible, but also performing the central task of linking sensation to duration (Deleuze, 2004b, p. 112). I propose therefore to treat operative creativity as *the differential prehension of affective matter*, a set of terms which needs explaining.

3.3.1 Differential prehension

Cropley (2001, p. 10) argues that “creative potential” could exist where a person was deemed able to create in principle, but unable to realise this potential. He sees educators’ jobs as realising such potential, but there is an interesting degree of ambiguity in Cropley’s remark. Realised potential is certainly valuable, but does its value accrue to its exchange value in the form of marketable objects, or to its ability to perpetuate creativity? In fact, potential in these two cases is different. In the first, realised objects can be described as organised products of a power capable of drawing them from chaotic disorganisation which essentially plays the part of impediment. This power is discontinuous because it is enshrined in individual objects. In the second however, power is continuous potency or the ability not just to produce but to affect, and produce further affections in the form of affective matter.⁵¹ Cropley’s aside leads therefore to a less well-examined facet of creativity, namely its *differential* capacity as process to inspire further creativity, that is to say more *difference*.

For Deleuze, it is only when thought is constrained from the outside into new combinations that we actually begin thinking at all (Marrati, 2008, p. 83). Differential prehension here is the process by which changes at a presubjective level result from being affected by something

⁵¹ This difference between objects and their potential for change is not in itself an innovation. For example, Merleau-Ponty claimed that the philosophy of such objects “is collapsing before our eyes”, since natural objects have disappeared. This has been recognised by physics, and demands a recasting or reshaping of things (Merleau-Ponty, 1962, p.56). For more recent responses to this recasting of objects cf. Osberg et al (2008).

(prehension) in this way. But as they enhance the capacity for further change, they are enhanced in turn by it (differentially). Change, in a world where relations such as these supersede terms, is synonymous with the capacity to make new connections, and these new connections themselves increase our capacity to make further connections. This process of differential change is not driven by a desire for novelty, but rather by the immanent properties of relations: it is in the nature of relations to relate, and they do this constantly, producing connections all the time by differentiating themselves.⁵²

Creativity cannot therefore be individualistic if “the very core of existence” is that “one produces a body’s own existence rather than ‘discovering’ its invariant form” (Zembylas, 2007b, p. 26). Zembylas points to the issue of identity and the related questions of internal difference and the ways of negotiating it which underpin Deleuze’s work. For Deleuze, identity does not have much meaning: it may make good sense to apply difference externally to already existing objects, but transforming the unequal into the divisible reifies it without explaining variation (Deleuze, 2004a, p. 283). Instead, intensive difference is internal to the relations which, he maintains, constitute the events we understand as extensive objects of consciousness. Here, creative thought itself depends on our being able to make contact with that which precedes our undesirable habit of codifying the undetermined new:

Here we find the principle which lies behind a confusion disastrous for the entire philosophy of difference: assigning a distinctive concept of difference is confused with the inscription of difference within concepts in general – the determination of the concept of difference is confused with the inscription of difference in the identity of an undetermined concept.

(Deleuze 2004a, p. 40)

3.3.2 Affective matter

Difference works through encounters, where new relations are produced. As Colman (2011, p. 56) insists, encounters are not subject to method but rather to a “long preparation” (Deleuze and Parnet, 1997, p. 13), since the necessary openness they demand is not a

⁵² Bergson defines creativity as the production of effects through which it surpasses itself (Bergson, 2013, p. 52) . This productive capacity is what makes it differential.

simple attitude to be adopted or discarded, but rather the transcendental condition of thought (Marrati, 2007, p. 96). Encounters are always affective, and involve one body being affected by another and affecting it in turn to create new relations: art's cultural energy is precisely this "affective information" (Colman, 2006a, p. 3), transforming the collective interests of a community and producing divergent forms. These transformations however are not of opposition or identity, but rather of the distinctness and obscurity of sensation and continuous matter (Williams, 2006, p. 112).⁵³ Creation always involves this affective matter, and postulates a fundamental similarity between the differential processes which constitute our physical environment and the differential processes which constitute ourselves as subjects. If no affective encounter has taken place, then there is no creation.

In fact, all affective contact between bodies is potentially creative, since it literally embodies difference. This is central to Deleuze's appraisal of the way art works by changing us. Deleuze sees more than truth value in art and literature, because for him the individual work of art can generate the conditions for insights into the "vital *in*-finitude" of what he believes is the univocity of difference (Langlois, 2012, p. 18). Because actual terms never resemble the singularities they incarnate, every actualisation is a differentiation and therefore "always a genuine creation" insofar as it actualises difference (Deleuze, 2004a, p. 264). Even if the products of these encounters seem banal, the processes to which they point are not, and we can choose to experience creativity either indirectly in the form of actual concrete objects or experience the more fundamentally constructive forces of creativity in difference.

From the point of view of LLL, Deleuze's view that encounters are central to the learning process help us to link creativity and materiality and the way learning depends on both:

That is why learning may be defined in two complementary ways, both of which are opposed to representation in knowledge: learning is either a matter of penetrating the Idea, its varieties and distinctive points, or a matter of raising a faculty to its disjoint transcendent exercise, raising it to that encounter and that violence which are communicated to the others

(Deleuze, 2004a, p. 243)

⁵³ "[O]pposition teaches us nothing about the nature of that which is thought to be opposed" (Deleuze, 2004a, p.256). The point here is that in order to oppose two identities, a superior measure must be presumed in which the two objects can be compared. For Deleuze, we therefore miss any singularity in things, reproducing an abstract schema instead as ideal category.

If taking creativity seriously implies a concern for these processes in thought, our attitude to creativity changes radically. For Deleuze, an act of genuine thought is synonymous with creativity. But this is only true on the condition that to create is understood as first of all to engender “thinking” in thought (Deleuze, 2004a, p. 185). We are therefore no longer concerned with the objects produced by creativity, but by the dynamic movements which produce creative thought. The study of creativity in these circumstances is no longer an epistemological question of what or how we know. Operative creativity is inseparable from ethics and the question of how we are to live, making it singularly relevant to LLL.

Regarding the issue of how this question might be addressed, I have already related doubts as to the ability of language to capture these processes in my consideration of method. Instead, I would like to use a series of three diagrams to show how operative creativity differs from more widely accepted views and what it offers as a concept.

Diagram 1: functional creativity (useful novelty)

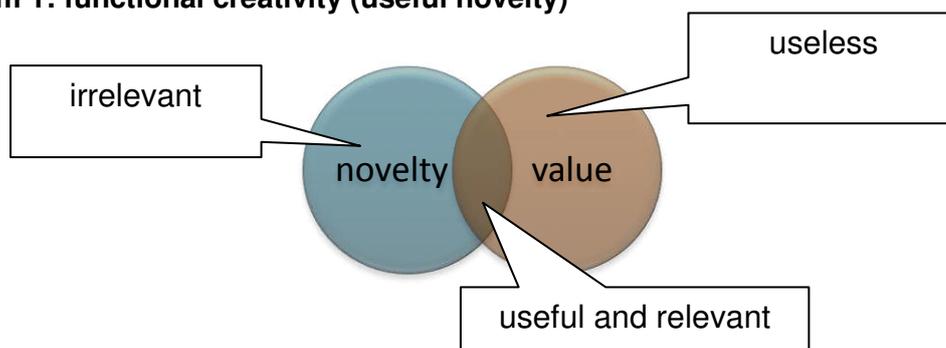


Diagram one shows how the functionally creative is defined as that which is both new and valued for its relevance and utility. Many products are novel, but many are irrelevant or incomprehensible froth. Alternatively, things may have intrinsic value but be effectively useless, if, like a child’s painting, they have no exchange value. This view has much to commend it: it provides a way of measuring creativity by its end product, and thus a means of calculating returns on investment in it. Creative people can be identified by measuring their activity against this standard, and we can imagine that the boundaries between the various parts of the diagram may change over time as beliefs change about what counts as useful / new.

However, there are drawbacks, one of which is the implicit wastefulness of this view. Much creativity on this view is useless and irrelevant, it implies, and can therefore be dismissed or discarded. This is because creative products from the past risk being judged practically irrelevant, and current creativity has an equally narrow scope defined by current, and

therefore contingent, criteria. Creativity which may be useful for the future has little chance of recognition for the same reason as the new evolves and falls by the wayside.

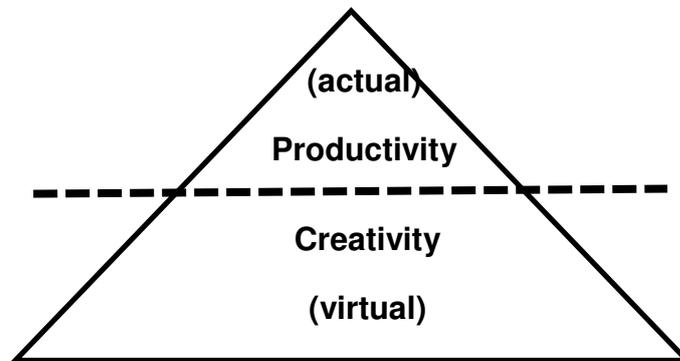
Looking more closely, the decision to identify certain practices with usefulness or novelty is not an objective one, but the result of a set of contingent factors and choices made *hic et nunc*. Similarly, the criteria of usefulness and novelty are used as if they were objective facts, when in reality they are contestable values. The central question of how the judgement of usefulness is made, and precisely how an object's relevance is measured are elided. Thus agency is both assumed and denied: this selection itself and the fact that a selection has been made are both occluded, as if novelty and usefulness were given.

Secondly, its amenability to management is open to question. Innovation, it is argued, is not just a matter of "luck, eureka moments or alchemy", but can be "managed, supported and nurtured" for anyone and everyone (Murray, Caulier-Grice and Mulgan, 2009, p. 7). For this management to be possible, originality must not be too uncomfortable, and should instead make existing discourses "more palatable to teachers and students" (Simmons and Thompson, 2008, p. 605). This assumes creation operates within a closed system, defined and bounded by terms which, themselves, are transient within these boundaries. This omits reference to any process of creation which might disrupt the system from the outside, and from this standpoint innovation includes any practice, object or even idea that is believed to be new by those adopting it (Hillier and Figgis, 2011).

However, this focus on individual perception of novelty seems relativistic: is an individual's perception of novelty a sufficient guarantor of newness and change? Does it encourage an encounter with new material, because it is judged on the terms of usefulness, where acts of accommodation or adaptation to the given may be favoured over those which change or challenge it? Effectively discouraging change, the focus on product does not account for the ways in which creativity might inspire further invention, even at the level of the actual products with which it concerns itself. Indeed, because the product is the only focus, the all-important process(es) of creativity risk being ignored in favour of activities that can be identified with individuality and productivity instead. The double focus on novelty and value might be better expressed as the conjunction of continuity and individualism which underpin this view of creativity. Paradoxically, the more individual activity is continuous and coterminous with current desires, the more "creative" it is deemed to be as a necessarily productivist activity.

An alternative to this view would postulate a creativity which is impersonal rather than individualistic, relational rather than relativistic and processual rather than productive, a set of contrasts which the next diagram sets out to explain.

Diagram 2: operative creativity



An impersonal description of creativity would not rely on relativism for its justification, but rather a rationale of expression. It would be impersonal insofar as it would concern relations between a-personal terms, not an individual and a creative product, and expressive insofar as the creative product is a necessary actualisation of the creative process. In the case of operative creativity, the process of creativity is separated from its product above only by a threshold where material and forces of change can be reciprocally connected: a state of affairs “cannot be separated from the potential through which it takes effect and without which it would have no activity or development” (Deleuze and Guattari, 1994, p. 153). But if intensity and extensity are inseparable (Deleuze, 2004a, p. 281), no object can be appraised without reference to its capacity for becoming precisely because of this basic creative differentiation which drives quality into quantity and transforms product into process. This has a number of implications.

Firstly, in line with the definition above, operative creativity necessarily implies a virtual or abstract process of recombination of objects and ideas. This recombination is analogous to the neural functioning described above or a mathematical relation. As these processes are mastered and recognised as objects of perception, difference is cancelled out (Deleuze, 2004a, p. 283) sedimenting into forms whose properties are those of (re)production rather than creativity. They nonetheless participate in the differential movement of creativity through the capacity for affect, or the sensation of intensity.

Secondly, it suggests that production is useful only insofar as it remains connected to these forces of difference, since ultimately objects, once fixed or defined, can serve no other purpose and so disappear at the point of the pyramid. Hence, for Deleuze, the intensities created by difference are supremely useful, because they are precisely what makes things different. Mistaking “functional” utility with the necessary participation of intensity in creation is a transcendent illusion with its own naturalistic moral perspective: not that things are this way, but that they *should* be this way. Deleuze’s ethical challenge on the other hand has a double focus in response to this tendency: firstly, he argues that things are not this way, but, more tellingly, that they *should not* be so. Our focus shifts from dead objects to living forces of change.

Focusing on these living forces is helped if we agree with Deleuze that “[i]t is not even enough to invoke activity in the process of occurring or taking place, so long as the contemplative base on which it occurs has not been determined” (Deleuze, 2004a, p. 99). The “contemplative base” of creativity is the line of pure immanence on which the diagram rests. It is on this plane that intensities are combined by the chaotic forces of difference. Ultimately, on this plane of pure immanence, all matter is subject to the same axioms, regardless of the forms they might take up, since any forms in chaos are immediately changed. This immanence is what allows prehension to be mutual, affective and material in line with my definition.

Thus instead of the fixed forms criticised by Colley, above, a “radical epistemological pluralism” is provided which rejects both individualism and holism (Brighenti, 2010). The goal, for Deleuze and Guattari, is to achieve the consistency of an abstract line or trait rather than of a single point, and “to find one’s zone of indiscernibility with other traits”, and thus “enter the haecceity and impersonality of the creator” (Deleuze and Guattari, 2004b, p.309). This means that the products of creativity would be of little creative interest compared with the processual capacity to engender wider relations, and indeed the effects of these relations on what we are capable of. Here, the body is not simply alive but “replete with the ontogenetic tendencies of the plane of immanence’s *a life*” (Manning, 2010, p. 118).

3.3.3 Threshold

As these references to immanence and pluralism imply, an especially important feature of operative creativity is this integration of a limit or threshold as an in-between space. On this view creativity happens when thought draws novelty from a sphere of chaotic activity, establishing this threshold as a sort of membrane between the two. Forces of differentiation work from below and achieve consistency through this act of thought, but only at points

defined by immanent properties (just as ice melts at a temperature defined by its own chemical properties, and just as ground-breaking views reach an audience in a time and place which allows them just enough acceptance for them to endure and break the ground on which they fall). The goal is to use “a minimum degree of order necessary to actualise the maximum amount of chaos” (Goddard, 2005, p. 23).

This threshold is the space where a stutter is provoked by an encounter with chaos or brute matter. The prehension *of* matter expresses succinctly the idea that we both prehend and are preheeded by matter. Deleuze refers to this activity as “capture”, as two material entities are affected by each other at the same time. This mutual influence implies a special in-between zone where such metamorphoses can take place.⁵⁴ There can be no doubting the importance of this zone of change for Deleuze and Guattari:

The middle is by no means an average; on the contrary, it is where things pick up speed. *Between* things does not designate a localisable relation going from one thing to the other and back again, but a perpendicular direction, a transversal movement that sweeps one and the other away, a stream without beginning or end that undermines its banks and picks up speed in the middle

(Deleuze and Guattari, 2004b, p. 28 original emphasis)

This ambitious claim refers to a specific ontological context. Deleuze does not claim that direct access to real objects can be achieved, but does claim that as material parts of a univocal universe, we do express this univocity, albeit in ways which seem confused or liminal. Expression, here, is a key term in that it is opposed to the Derridean notion of a play of signifiers: rather than show the entrapment of language within itself, expression demonstrates a “function involving a real transformation” (Massumi, 1992, p. 18) as a single substance is developed into multiple new terms and their relations at this threshold.

3.3.4 Surface

An interest in such limits, and particularly in the surfaces between events, can only take place if the things being preheeded have something in common, allowing a limit or surface of interference to exist. For Deleuze, this common feature is the way matter constitutes a flow as it changes in becoming. Dealing with this flow is the task of creativity:

⁵⁴ We are fortunate that the English language’s analytical character allows us to use the same preposition to both describe and situate this in-between space.

Activities can only be brought together on the basis of what they create and their mode of creation (...) what is given, at the limit, could be called a flow. It is flows that are given, and creation consists in cutting out, organising, connecting flows in such a way as a creation is drawn or made around certain singularities extracted from these flows

(Deleuze, 1980a)⁵⁵

For operative creativity, the common factor in creative environments is their flows of changing forces and relations rather than subjects, objects or terms. These flows are by definition emergent, and Deleuze and Guattari insist that experience is basically disruptive because it is constituted not by repetition but by lines of flight which constantly escape what is already known. These are connections between disparate components, forming new series which “jump from tree to tree and uproot them” (Deleuze and Guattari, 2004, p. 557).

But this transversal leap in thought requires a topos⁵⁶ for relations to form. Relations cannot transcend each other, and must therefore exist on a plane where their relations can achieve consistency. What matters is the activity of “instauration” of a plane where creativity can take place on these terms. Ideas are fixed on the base or foundation of a chaotic and material surface or a plane which works analogously to the plane created when making marbled paper. In this process, buoyant colours are poured into a bucket of water and stirred, and the resulting undulations are captured on a sheet of paper as the colours undulate with the movement of the water (Souriau in Lawlor, 2011, p. 402). The analogy is an accurate one insofar as construction of the surface on which such designs can be fixed demands a plunge into swirling and unpredictable matter. It also implies a belief that the possibilities within it will produce something new in the form of a (double) membrane between water / colour/ sheet which can then itself be turned (over) to new (industrial) uses. Of course, the precise identity and conditions of these possibilities must be unknown both from the point of view of their conditioning ground (turbulent water and paint) and their identity-product (turbulence fixed on paper).

⁵⁵ « On ne peut confronter les activités qu'en fonction de ce qu'elles créent et de leur mode de création. (...) Ce qui est donné, à la limite, on pourrait toujours le nommer un flux. C'est les flux qui sont donnés et la création consiste à découper, organiser, connecter des flux, de telle manière que se dessine ou que se fasse une création autour de certaines singularités extraites des flux. » The hesitancy which Deleuze expresses regarding the notion of flow refers to the fact that what interests him are the cuts, breaks and reorganisations in such flows which account for creativity.

⁵⁶ One could speak of a space here, if space itself were not also a set of relations.

Conclusions for practice can be drawn from this analogy. For example, one helpful unit of measure of the creative success of professional practice is that of the differential of a given technique, which can help us to evaluate strategies for teaching and learning. For example, Ecclestone (2010) has proposed a “problem-based methodology” of self-definition, problems and trial and error. Looking for differential relations in the process, we see that the issue here is not whether such an approach can work, but rather whether it can be shown to be differential i.e. effective in engendering other creative practices. This also leads us to question the view that professionalism can lie in the development of frameworks of trial and error whose most obvious defect is their wastefulness and, ironically, lack of creativity as we simply “mess about”, as Compton (2010) says. Trial and error moreover lacks the kind of strategy needed to avoid being manipulated to one’s disadvantage, and provides very thin evidence for future choices. It could be argued that this is why we have developed the ability to *simulate* instead: simulation as a form of re-enactment allows us a way of constituting the future creatively (and fairly effectively) compared with the uninformed tinkering which is often openly advocated in the pseudo-pragmatic guise of doing “whatever works”.⁵⁷ Instead of this “tinkering at the edges”, professional learning involves thinking “across the unknown” where we have to use what we know without entirely relying upon it (Pearce and Maclure, 2009, p. 259). This may feel risky, but as Zembylas (2007a, p. 344) points out, “no risk, no creativity, no good invention, thus no difference that makes difference”. Creativity, if it comes, is not a return to the groove, but on the contrary of breaking flows and working with what culture brings into the training room to do so.⁵⁸

To reiterate, creative thought must be “plugged into the outside” and the fluxes of intensity which cannot be represented or signified but which make experience singular and memorable. An act of genuine thinking is necessary to creativity, but it is far from natural and needs to be “forced into action” (Bogue, 2008, p. 7). Rather than resulting from the accomplishment of some higher synthesis, it involves a violent reversal and a form of aggression towards many long-held beliefs about the nature of thought:

⁵⁷ A stance criticised as unhelpfully scientific by Biesta (2007 and 2010) and even “sublinguistic” by Thomas (2009).

⁵⁸ An important criticism of the new/useful view of creativity is that it sees creativity as an extension of the given or a flow from what already exists confined by current conceptions of novelty and utility.. Being creative, for Bell (2003), does not entail constant, unceasing communication and expression of ourselves but rather breaking with these flows. He points out that it is not efficiency and productivity which makes an economically successful city, but rather their inefficiency and impracticality which forces them to innovate. The process of experimentation may not in itself be very productive but it is what makes creativity possible and what leads to economic transformation and vibrancy.

It is not a question of acquiring thought, nor of exercising it as though it were innate, but of engendering the act of thinking within thought itself, perhaps under the influence of a violence

(Deleuze, 2004a, p. 139)

Deleuze wants to uproot thought from commonplaces, particularly those thought holds about itself (i.e. that it serves higher ideas and is basically benign). Creative work attacks such socially acceptable ideas because it connects with artistic processes whose laws are not amenable to exchange, which is why “puritans of all stripes condemn it” (Adorno, 1970/2004, p. 296). Crucially for Deleuze, creativity does not just exist to crystallise inwards, as Adorno implies, but operates a creative assembly whose particularity is to work “in the enclaves or at the periphery” where other notions do not regulate it. This allows it to cross limits and frontiers, “causing deterritorialised flows of desire to circulate” and even “transport fascising, moralising, Puritan and familialist territorialities” (Deleuze and Guattari, 2004a, p. 305).

Diagram 3: contrasts

Functional creativity		Operative creativity	
Defining Characteristic	Consequence	Defining Characteristic	Consequence
certainty	relativism	improvisation	relationality
control	individualism	chance	impersonality
truth	productivity	error	processual
End point		Starting point	

Diagram three contrasts the properties of the two views of creativity in question. Functional creativity is marked by certainty: only the useful is acceptable, and utility itself is assumed as a criterion for judgement. Creativity is judged according to need (only the useful and appropriate is creative), which implies an unavoidable relativism. Usefulness is judged relative to current values, including the need to be cost-effective, commoditised and exchanged on certain principles, *in fine* to meet a collective’s existing need.

Questioning the necessity of these values retroductively leads to an interesting reversal: can we reverse the question, asking whether to create on the basis of need really “makes”

anything? To work according to need reproduces the circumstances of that need without changing it (Lambert, 2002, p. 157). Here, to create out of need is to conform to pre-established notions of who we are, what we “need” and even how these needs are to be fulfilled. Thus, “need” can also become an individualistic vehicle for control, since it demands that the individual take responsibility for a capacity for change “needed” by their professional context. Far from demanding some natural tendency within the individual to act in a particular way, operative creativity points to the ways in which biogenetic processes also lead us necessarily beyond the individual. In particular, examination of the processes of the brain do not take us into an increasingly closed, individual world, but rather open out the functions of *the* brain into the differential operations of *a* brain and the spaces between extended connections:

If the objects of philosophy, art and science (that is to say, vital ideas) have a place, it will be in the deepest of the synaptic fissures, in the hiatuses, intervals, and meantimes of a nonobjectifiable brain in a place where to go in search of them will be to create

(Deleuze and Guattari, 1994, p. 209)

Finally, functional creativity assumes that useful, relevant objects do not change: they can be apprehended, judged, exchanged and used without reference to the changes that entering into these new relations bring. Productivity becomes the measure of creativity, but remains a vicarious one because creative processes are at best subsumed and at worst disavowed. On this view, functional creativity is no more than a dead end.

The key point here is that although tendencies such as the need for productivity express differential relations in the way we think about and practice creativity, they quickly become homogenised and codified as discursive statements. This congealing as values and ultimately products construes creativity in its different forms as just another object of industrial production and distribution. This congealing is antipathetic to innovation, since it can be equated with the knowledge which emerges as the solution to a problem when we believe that we have solved it: it becomes a product in the form of a conscious representation (Deleuze, 2004a, p. 336). This conscious product, however, is a “platitude” insofar as it repeats the determination of the problem itself, adding nothing and missing the way the problem develops as a multiplicity: if matter has a tendency to organisation in closed systems, it is also undermined by its failure to achieve them (Deleuze, 1983, p. 29). The most important task is “that of determining problems and realising in them our power of

creation and decision” (Deleuze, 2004a, p. 337). Losing sight of this means losing our freedom to choose.

3.3.5 Creation

Operative creativity is therefore not the production of an object, useful or otherwise, but the operation of a force of and in thought which eliminates both the object and the subject as unified wholes. This way of describing creativity is based on Deleuze’s understanding and use of creativity, which are both radically different to those analysed above. Three main features characterise this approach, all of which both reflect and inform Deleuze’s wider philosophical position.

Firstly, Deleuze’s approach to creativity is distinctly different to one which links creativity to the idea of a creative individual (Lines, 2008, p. 130). It is incompatible with a return to a “well” of artistic inspiration or transcendent values, since it is both influenced by and implies “the most radical Modernism” (Williams, 2000, p. 203). Williams situates Deleuze’s Modernism in a rejection of idealism, which includes any search for abstract identities, and which turns against ideas of progress, ideals or lost origins. This sets Deleuze’s view squarely against those in education who, like Tennant (2009), see modernism in necessarily consolidated forms of subjectivity. Deleuze exemplifies Tennant’s view of a “postmodern” perspective on a fractured subject, but does so by undermining the two main pillars of Tennant’s analysis of postmodernism: the linguistic turn which sites subjectivity in language, and the inverted idealism of the supposed subject positions which the postmodern agent is supposed to adopt. Actively spurning reductive linguistic explanations of subjectivity and explicitly undermining transcendent positions with his philosophy of events and surface effects, Deleuze turns to an ontology of becoming which continuously undoes the way in which things can be compared or revisited (Williams, 2000). This in itself is creative in so far as it endeavours to create and analyse new concepts necessary for innovative thought. Deleuze reverses the focus on creating products which can be exchanged to one of creating ways in which deep ontological processes might be respected. Unlike the spatialised matter in extension embodied by products, Deleuze’s creativity reflects an entirely different interest in the way the actual is only understandable in terms of its existence within the unhinged time of events.

In Deleuze’s terms, only difference is repeated in time. This disrupts a temporal scheme which sees moments in time as empty vessels for events which simply add up. One moment cannot simply replace another, as we have seen, and a non-linear time scheme emerges

which is capable of sustaining the correspondences between these series. So when we turn to the virtuality of events which is actualised in states of affairs, Deleuze argues, we find a completely different reality. Here, it no longer matters what takes place from one point to another or from one instant to another (Deleuze and Guattari, 1994, p. 157). This is the “unhinged” or “sick” form of time (“Aîôn”) which coexists with sequential time of objects and allows the disjunctive and paradoxical experience of events to happen.⁵⁹ Aîôn is the time of the event and of problems (Deleuze, 1969, p. 69) and works as a multiplicity of processes in order to account for its fundamental nature (Williams, 2011b, p. 164). Williams shows how this multiplicity of time(s) helps understand time’s asymmetrical, and therefore irreversible, nature: we can never revert to what was because change has always already taken place, undermining any attempt to segment time as past - present - future. Moreover, because time’s multiplicity is always becoming other, transversal links between series are enabled by what they share: the joint medium of difference which is determined in new series where creativity can actually happen.

Secondly, Deleuze is less interested in creativity as an attribute of particular people or circumstances than in acts of creation which involve a wide range of factors as a multiplicity. This is because for Deleuze creative life works *between* entities on creative lines of flight in series, not on individual objects. As such, acts of creation cannot be understood as the product of a given agent, and must by definition at least point to very different, passive ways of understanding real actions and knowledge. As Williams (2011a, p. 66) shows, this concept of the real goes beyond actual abstractions and into a speculative model with a single purpose: to explain transformations which expose abstract forms for what they are, i.e. incomplete. Acts are neither useful nor new if by this we mean products whose claim to novelty lies in their relative and entirely transient originality or their correspondence to actual “need”. Instead, operative creativity substitutes the narrow field of interest of the actual with the much larger zone of the virtual whose creative promise relies on its being an operator rather than a producer:

⁵⁹ This claim is in fact synonymous with Deleuze’s (controversial) reading of the Nietzschean Eternal Return’s two moments. Its first is the linear form of time which breeds (the possibility of) resentment because it allows the same to return. Its second moment is the redemption of this resentment: the Return is possible because of the unity of past, present and future, and is therefore the metaphysically non-sequential, sick structure of time itself (Somers-Hall, 2011, p.73). This allows us to see the relations between Chronos and Aîôn as reciprocally determining moments, like those of the virtual and actual as Williams (2013) suggests. For Deleuze, certainly, virtual and actual presuppose and exchange with each other like images in a crystal (Deleuze, 1983, p. 94-95).

Autonomy gives way to interdependence, preservation of the individual agent to cooperative procreation, anxiety about keeping boundaries intact to a feminine-encoded program whose enfolded structure, rather than closing in on itself, opens outward toward complexity and prolific progeny.

(Hayles, 2001, p. 151)

This is also why operative creativity is marked by improvisation, chance and error. It is improvisational because connections are made with whatever comes to hand, and what is prehended varies constantly in line with its dynamic functioning. It relies on chance rather than control, because of a proliferation which escapes attempts to codify its movements. A shift from instrumental motivation towards the wider aims attributed to “life” itself cannot provide a system to use as a basis for utilitarian calculation (Williams, 2008, p. 137). Weighing up choices is not simply a case of either one thing or another, but rather one set or assemblage of affective states rather than another, neither of which is really reducible to the other.⁶⁰ Such calculations can take place, but must be added to or balanced with considerations of non-human concerns, namely events and sense, neither of which can legitimately be judged by a higher power since they embody the only transcendent power of life itself. Human considerations must be resisted when they trample roughshod over the singular and individual nature of living reality.

The resulting environment is therefore expansive and impersonal because what matters is that these material environments and their dynamic worlds are all affirmed. This means that they are not prejudged, feared or reified in ways which reduce the operation of creativity to the management of individual risk. Finally, operative creativity is dependent on error rather than truth, since it recognises that these relational environments are always emergent and therefore in the process of becoming what they are not.

This is all based on a view of creation as a process which works like mutant abstract lines (Deleuze and Guattari, 2004b, p. 326). These no longer represent a world, but assemble a new type of reality which escapes the punctual binary of true and false, this or that.

⁶⁰ Smith (2007, p.72) gives the example of choosing between going out for a drink and writing a paper: both involve complex ideas of place, time and feeling which tiny perceptions and inclinations may or may not wish to enjoy: “The error of the usual schema of judgement is that, in objectifying my two options - staying home or going out - as if they were weights in a balance, it presumes that they remain the same in front of me, and that the deliberating self likewise remains the same, simply assessing the two options in terms of some sort of decision procedure”

Deleuze's creativity therefore offers a different view of humanity which does not fulfil its potential when faculties harmonise by recognising a common object. Instead, our thinking and selfhood are at their peak when confusion prevails in moments of change. Gould (2006, p. 198) argues that this functional view of conceptual creativity as part of an empiricist trend in philosophy makes it similar to pedagogy since both, he argues, are "affirmative and artistic" and based in experience. When we can find no over-arching idea or story to explain how discordant images cohere – while yet being *constrained* to do so – then we are *learning* new things (Shores, 2009).

Overall, the difference between the two views of creativity can be summarised in the following way: functional creativity is concerned only with the actual and is ideal because it ignores the dynamic functioning of real material variation. Operative creativity is concerned with the virtual and pure events⁶¹ and is real in the sense that it focuses precisely on this essential dynamism in order to be actualised. Perhaps the best way of explaining this contrast, however, is to see it in action. Turning to the creative processes at work will show the extent to which operative creativity and its micro-practices of improvisation, chance and error can work through a creative stutter.

⁶¹ Deleuze distinguishes events generally from pure events: the former are a double sided combination of actual and virtual properties, whereas the latter are a single surface composed exclusively of virtual flows.

Chapter 4.0 The Creativity of Michelangelo Antonioni

An investigation of the work of Italian director Michelangelo Antonioni informs this study's three research questions. In particular, his work provides a rich example of the sort of stuttering which I have linked to creativity as a challenge to more commonly held views in the literature of LLL. This argument constitutes the first part of a response to my third research question:

- How might examples of creative activity inform and enhance teacher education research and practice in LLL?

This response examines Antonioni's work from two directions. In the first instance, I discuss the films themselves and their introduction of creative ways of thinking. I contend that thought and its correlates (reflection, creation, learning) are far from natural activities, but that cinema can activate them by pushing thought to its own limit, thus enhancing creativity by provoking a creative stutter. I draw on Deleuze's analysis of a "spiritual automaton" created by cinema to clarify this idea, and examine the ways in which Antonioni's work exemplifies and practises it.

In the second part, I examine the extent to which Antonioni's artistic practices show how such stuttering is actually induced. Drawing on the director's own accounts of his work as well as more critical writing, I also suggest that the systematic deployment of a particular set of artistic practices can provide lessons for teacher educators in LLL at a time of significant change.

4.1 Introduction

Michelangelo Antonioni (1912-2007) has been described as "one of the true originals of contemporary cinema" (Zucker, 1996, p. 39). It has been claimed that Antonioni was "one of the most subversive and venerated" of a generation of rule-breakers (Lyman, 2007). He was an "utterly unique filmmaker" who "literally remade what cinema can be" for Ford (2004). As a result, Antonioni's films have been seen as paradigmatic of a certain modernism and 1960s' "auteur theory". They are "all that the cinema has ever sought to achieve beyond mere entertainment" for Brunette (1998, p. 1) and "the first truly modernist cinema" for Brown (2002). For Youngblood (1999) Antonioni "opened the way to a more mature art form" with

the “historical milestone” of *L’Avventura*. According to Melzer (2010) they are “enunciations of the intricacies of the Modern”.

Such ambitious films have always divided audiences, however. *L’Avventura* was initially derided at Cannes in 1960 and *L’Eclisse* in 1962 was hissed (Cameron, 1962, p. 1). Many early critics saw the films as “difficult” (Cameron and Wood, 1970, p. 8) or “cold” (Nowell-Smith, 2008, pp. 197-8). They have been accused of being pretentious and a-political (Bondanella, 2007), with a “stubborn” obsession with abstraction (Rascaroli and Rhodes, 2011, p. 1). Some found them tedious (Ingmar Bergman in Sarris, 2007), others either passé or simply boring (Sharratt, 2012), with preoccupations which seem better suited to the 1960s zeitgeist than today’s less glamorous world (Rosenbaum, 2005).

However, while most of Antonioni’s films are undoubtedly “aesthetically complex” (Brown, 2002), for some they are more different than difficult (Cameron, 1962, p. 1). This difference is why, for Nowell-Smith (op. cit), they merit closer inspection, a feature that some viewers learn to appreciate:

When I first saw *L’Avventura*, the film bored, annoyed, frustrated, and infuriated me. Inspired by the critics, I tried again. The second time, knowing nothing was going to happen, I made what turns out to be the necessary gesture of surrender to Antonioni: waiting without hope or expectation. Then I loved the film.

(Holland, 1960, in Rascaroli and Rhodes, 2011, p. 11)

Holland’s experience is perhaps a typical response, as feelings of boredom subside to fascination when one “surrenders” to the film’s own rules. This is why such feelings are perhaps better understood as unease, compounded by an inability to say exactly why we feel bored or uneasy.

This is a sign of the modernity of Antonioni’s cinema which means, among other things, that it cannot but be self-conscious, and that his work is arguably paradigmatic of this reflexivity. Indeed, while Antonioni’s films often use popular formats, they never really fulfil their expectations (Nowell-Smith, 2008, p. 200) because they are so highly self-conscious. For example, although many of Antonioni’s films exploit the detective genre, they do so in ways which contradict its usual precepts, with films such as *L’Eclisse* fading into more personal

narratives (Chion, 2010, p. 8). Detective stories are basically confirmatory (Johnston [1978]1993), because they eliminate the problematic nature of social and moral reality by imposing the monolithic discourse of the law as unproblematic and natural. Antonioni deliberately sets out to disrupt this discourse in films which, like *L'Avventura* (1960), claim to be a “*film noir* in reverse” (Chatman, 1985, p. 16). This disruption of convention is clearly one of the reasons why these films stop us in our tracks as we struggle to participate in their alternative narrative. But creativity is more than reaction to a dominant tradition, and I would like to argue that they also operate autonomously, in their own way. It is because of this genuine creativeness that they introduce a disruption in the form of a stutter both to our own approach to the film and to filmic language in general. This is Antonioni’s “staggering achievement”, or redefinition our concrete understanding of reality and perception (Williams, 2008, p. 57).

This disruption works at technical levels but its innovations are also apparent in the plot summaries from early and late films. Few *films noirs* can, like *L'Avventura*, claim to have made a “remarkable contribution toward the search for a new cinematic language” for example.⁶² The plot initially follows that of a murder mystery. Anna (Lea Massari), the daughter of a diplomat, has invited her less wealthy friend Claudia (Monica Vitti), to join a group of well-heeled Romans on a short cruise around the Aeolian Islands. When their yacht stops at the barren island of Lisca Bianca, Anna completely disappears following a quarrel with her fiancé, Sandro (Gabriele Ferzetti). After an extensive but fruitless search, the trip resumes on the mainland. Sandro and Claudia continue searching for Anna, following vague rumours of her reappearance, and then begin an affair which seems to mirror that between Anna and Sandro. Failing to find Anna, they re-join the others at a hotel near Taormina in Sicily. During the party, Claudia finds Sandro in the arms of a prostitute, and runs outside. Sandro follows her, and the two appear to make some sort of uneasy compromise about their relationship. Antonioni described this moment at the film’s release as “a sort of mutual pity” (Antonioni, 1960b).

L'Avventura offers a striking counterpoint to the classic murder mystery, and indeed as author Alain Robbe-Grillet remarked, Antonioni’s films could be contrasted with Hitchcock’s (Chatman and Duncan, 2008, p. 9). Like *Psycho*, for example, released in the same year (1960), the film quickly and provocatively dispatches its leading character, but unlike

⁶² After the intervention of a group of prominent critics and filmmakers, including Roberto Rossellini, it was awarded a special jury prize for “its remarkable contribution toward the search for a new cinematic language”. In 1962 *L'Avventura* was voted “second best film of all time” by *Sight and Sound* (Chatman and Duncan, 2008, p.91)

Hitchcock, Antonioni never develops suspense. On the contrary, he gives us clear clues from the start that Anna is already in some way spiritually or emotionally absent and ready to be replaced by Claudia. Neither is the mystery of her physical disappearance solved, because, unlike in Hitchcock's work, where every detail is important, Antonioni introduces a symbolic economy where everything that seems important loses its value.⁶³ Narratively, *L'Avventura* is more interested in the tension between the haunting knowledge of Anna's disappearance and the equally haunting fact that most of the characters come to act as if she never existed. Rather than simply reverse or undermine convention, the film draws us into a world where our expectations about what happens and what matters are systematically both questioned and changed. The resulting disjointed plot challenges our belief in control and reminds us pedagogically that non-resolution is indicative of the human condition.

Similarly, in the much later film *The Passenger* (1975), the thriller genre is redirected by deliberately reducing suspense to a minimum (Antonioni, 2003, p. 107). A TV reporter - suggestively named Locke (played by Jack Nicholson) - adopts the identity of a dead gun-runner and is eventually murdered in an obscure hotel. Despite its traditional parallel chase narrative, most of the film recounts Locke's slow progress through Europe with a strangely detached and nameless girl. There is very little actual "action" as they head towards the increasingly desolate landscape of southern Spain, and indeed using the usual action scenes of a thriller would have been "banal", Antonioni claimed (in Brunette, 1998, p. 133). Instead, the goal was to make a suspense film where "action itself becomes problematic" (ibid, p. 135).

These plot outlines provide a useful introduction to the tenor of Antonioni's work, and to the extent of his creative contribution to cinema. Discussing Rossellini's *Germany Year Zero*, Jean Narboni (in Rohdie, 2000, p. 123) argued that each narrative step does not push the story forward but rather erases the one before, providing an alternative process or an "alter-narrativity". Antonioni's systematic erasures (in the form of untimely disappearances of characters and motifs) also fit Narboni's analysis, and so while the reorientation of film away from action marks *L'Avventura* and *The Passenger*, it was also important to other filmmakers linked to the post-war Italian "neo-realist" movement, suggesting that Antonioni's work might best be understood in this context. However, because of their psychological focus, films

⁶³ This haunting absence is, for Nowell-Smith (2001) a key to the film which inevitably recalls similar themes in Hitchcock (e.g. *Rebecca* (1940) and *Vertigo* (1958)), in particular that of the wrong man and which is further developed by Antonioni in *The Passenger* (1975.)

such as *Cronaca di un Amore* (1950) and *Il Grido* (1957) were quickly identified as a shift away from neo-realism's concern for social environment and recent history towards "interior" problems (Newman, 2012). This approach to Antonioni's work has been influential, and many critics have seen Antonioni as a filmmaker of depression, alienation and angst (e.g. Orban, 2001; Newman, 2012) and especially Arrowsmith (1995). Zucker (1996) however believes that a tendency to relate film to literary practices effectively limits studies such as Arrowsmith's. Antonioni himself distanced his films from this interpretation (Antonioni, 2003, p. 116), and the emphasis on a negative picture of alienation has also been questioned by critics such as Moore (1995), Williams (2008) and Sharratt (2012). Moore argues that ultimately Antonioni's characters achieve a positive and creative state; for Williams (2008, p. 46), the films are a step beyond individual psychology and such "outdated clichés"; for Sharratt, rather than examine existential angst, the films echo neo-realism's roots in concrete social reality, albeit the reality of "a burned-out European civilisation" (Sharratt, 2012). Antonioni's relation with neo-realism is clearly both important and complex for reasons such as these.⁶⁴

4.1.1 Italian Neo-realism

"Am I a neo-realist director?" Antonioni once asked (2003, p. 10), adding that neorealism itself was in continuous evolution. His work is perhaps best understood in relation to a movement whose central themes it pushes to an extreme (Williams, 2008, p. 50).⁶⁵ In

⁶⁴ Antonioni resisted being compared to a philosopher, "which is something I absolutely cannot be" (Antonioni, 1969b) because it was "not my business" (Antonioni, 2003, p.136). But many have underlined the philosophical content of his work. For Shiel (2006:89), influential critics like Bazin, who strongly promoted neo-realism, were themselves working within an idealistic ethical framework with parallels in the ideas of Sartre, Camus and Merleau-Ponty. Brunette (1998, p.1) also recalls how a focus on the bleak prospects of an undetermined world in these 1960's films was read in the light of contemporary existentialist ideas. Brunette seems to follow more closely the director's own view in challenging this contemporary interpretation, which says more about its time than Antonioni's films. Cameron and Wood (1970, p.8) prefer a formal rather than strictly philosophical analysis when suggesting that, although not revolutionary in technique, the devices used in the trilogy of *L'Avventura* (1960), *La Notte* (1961) and *L'Eclisse* (1962) are used in a singularly "rigorous and meaningful way". This singularity shifts our interest from a search for the films' meaning in philosophy and onto a search for their purpose in, for example, their disruption of expectations such as the desire for cinema to reflect, augment or complement existing ideas.

⁶⁵ Antonioni (2003, pp.115 and 122) claimed to have "invented" it with his 1943 documentary *Gente del Po*, but the term usually designates a group of films made in post-war Italy (ca.1945-53) by directors such as Lucchino Visconti (*Ossessione*, 1943), Roberto Rossellini (*Roma Città Aperta*, 1947) and Vittorio De Sica (*Ladri di Biciclette*, 1948). It is possible to speak of a school, albeit loosely: directors who later became well known in their own right often worked together throughout the period. There were "neo-realist" actors such as Anna Magnani and Massimo Girotti (who starred in both

terms of these themes, neo-realism is perhaps best known for its focus on social and aesthetic alienation coupled with spatial disorientation (Gandy, 2003, p. 219; Rascaroli and Rhodes, 2011, p. 8). While true of influential films by directors like Visconti, De Sica, Rossellini and Antonioni,⁶⁶ the movement as a whole also offers a wider analysis of a people's inability to connect as a generalised "disenchantment", and thus remains an empirical statement focused on the exposition of a certain reality (Moore, 1995, p. 22). Italian neo-realism's particular concern with concrete social problems proved highly influential in cinema and beyond, but for Williams (2008, p. 50) the central feature of Italian neo-realism was its detachment of space from narrative intrigue and desire as it focused precisely on wider social questions: landscape, he argues, became "the focus of social and political struggle" with neo-realism.⁶⁷ Landscape, although always present in Italian film, was politically reappropriated by the movement (Gandy, 2003, p. 219). For Deleuze, this redefinition of filmic space as a political phenomenon involved a break with purely spatial coordinates, effectively opposing the movement with realism (Deleuze, 2005a, p. 124).

Two stages or phases are often identified in Italian neo-realism, developed conceptually by films such as Antonioni's. But many of its products can be identified by similarities in both content and form which make up a "distinctive visual style" (Shiel, 2006, p. 2). On one hand, neo-realist films often presented an unflinching depiction of post-war society, for example by including documentary footage and non-professional actors. The classics of neo-realism also shot much of their action outside, in natural light, focusing, like De Sica's *Bicycle Thieves* (1948), on previously taboo "social themes" (Bogue, 2003, p. 109). These themes included

Ossessione and Antonioni's *Cronaca di un Amore*) and Vittorio de Sica (who acted in Rossellini's 1959 *General Della Rovere* and directed *Bicycle Thieves*). It is said that Antonioni's repeated filming of Monica Vitti in the 1960s may have been influenced by Rossellini's "obsessive concentration" on Ingrid Bergman in the previous decade (Brunette, 1998, p.8). Antonioni also worked on the script of Rossellini's *Un Pilota Ritorna* (1942), De Santis' *Caccia Tragica* (1947) and Fellini's *Lo Seicco Bianco* (1952) as well as co-writing scripts for and with Visconti in 1945 (Chatman and Duncan, 2007, p.90). As Rosenbaum (2005) points out, the period was particularly rich one for cinematic innovation.

⁶⁶ Antonioni's films influenced "art house" movies in the 60s and more commercial cinema in the 1970s (Ford, 2004), including films by Brian de Palma (*Blow out*) and Francis Ford Coppola (*The Conversation*). More recently, Michael Haneke, Catherine Breillat, Gaspar No , Wong Kar-wai, Claire Denis, and Bruno Dumont are cited as being directly influenced by his work (Sharratt, 2012). An example of the far-reaching influence can be seen in the "classic Antonioni character" of Don Draper, the central character of the TV series *Mad Men* (Clark, 2010). Draper makes pointed references to Antonioni's work and seems to be reliving some of its plotlines.

⁶⁷ However Steimatsky (in Gandy, 2003, p. 219) has argued that landscape is central to the "Italian cinematic imagination" generally, playing an important role and providing aesthetic continuity from the 1920s on.

poverty, loneliness and crime, but neo-realism went beyond this concern for new content by representing a formal “rupture and renaissance” with the “classical” filmmaking which preceded it (Bazin in Shiel, 2006, p. 47). For Bazin (in Forgacs et al, 2000, p. 159), neo-realism was not found in the choice of subject matter but rather in its way of “processing awareness”. Bazin asserts that the originality of neo-realist filmmakers such as Rossellini lay in their ability to synthesise the real by treating it as if it were a bloc. Social, psychological and even theological issues were interwoven to provide rich accounts of the diversity of the post-war experience of reconstruction.

Such commonality nonetheless masks a great deal of diversity (Nowell-Smith, 2000, p. 9), not least because directors like Rossellini took control of their own work (Forgacs, 2000) explicitly in order to make films which changed with the times (Bondanella, 2007). This freedom was precisely Rossellini’s great strength for Antonioni (2003, p. 133), but it also helps situate the way Antonioni’s own work both continued and broke with his contemporaries’ in terms of its subversive content and its formalistic approach to realism. “Neo-realism” in fact was little more than a label for some (e.g. Rossellini, 1972, p. 74), but was certainly marked by attempts to create an “other cinema” for Nowell-Smith (2000, p. 9) or “a new form of dramaturgy” (Wagstaff, 2000, p. 36). For Newman, this link is clear in films like *Il Deserto Rosso* (1964) which profoundly alter the treatment of a common theme of neo-realism (a certain emptiness in its characters). This treatment moves “from the level of theme to that of visual style” (Marcus, 1986, p. 206) as Antonioni sought to achieve with the new medium of colour what neo-realism had done with the techniques that were available to it a decade earlier (Luzzi, 2011, p. 2). If Antonioni’s aim was to innovate, it was from within a context where other directors were also seeking to do so.

4.1.2 Content

In line with a certain post-war political consensus to tackle social issues, Antonioni shared roots with many neo-realist directors, drawing a sense of realism partly from early work in wartime documentaries (Forgacs et al, 2000, p. 150). This influence marked them out from the epics, comedies and melodramas which occupied the pre-war years (Shiel, 2006, p. 29), as neo-realism turned its spotlight on survival and what Rossellini (1975) called the drama of reconstruction. As Antonioni points out, there was a definite sense of the importance and proximity of charged social issues:

After all, it was a period in which everything happening around us was quite abnormal; *reality was a burning issue*.... It really wasn't necessary to know the protagonist's inner thoughts, his personality, or the intimate

relationship between him and his wife; all this could very well be ignored. The important thing was to establish his relationship with society. That was the primary concern of the neo-realist films made at that time.

(Antonioni, 1962)

Antonioni may be overstating the case by saying that early neo-realist films ignored the inner thoughts of characters. *Bicycle Thieves* for example certainly depicts the often silent relation between father and son as the latter observes the former's desperation with an intriguing mix of love and accusation. The realism of such films is more than just an "erasure of style in the face of raw reality" and involves such aesthetic decisions (Marrati, 2008, p. 57). The bicycle theft itself is a deliberately tenuous narrative device in a picaresque film which highlights observation and "a complex web of metaphysical meanings" rather than "social realism" (Shiel, 2006, p. 55). De Sica's bicycle motif, for Colman (2005, p. 107), encapsulates the ontological dimension to a film concerned with mapping a patchwork city of intersecting zones.

Exemplifying these concerns, Antonioni's *Gente del Po* (1943/1947), has been seen as a precursor of neo-realism.⁶⁸ *Gente del Po*, a documentary about the poverty of the fishermen of the Po valley, condenses many of the features which would come to define neo-realism. The 9-minute film is a traditional documentary in many ways, depicting human situations as intimately tied to a context which at times overshadows them (Chatman, 1985, p. 8). Its own "narrative core" is ensured by the explicit relation of its double subject: the people of the Po valley live on much as the river itself flows. Montage and commentary ensure that we see the film as a story and relate to its down-to-earth characters.

Despite this conventional feel, *Gente del Po* exemplifies some of neo-realism's subversive appeal. Shot in 1943 near Ferrara, it was not released until 1947, its treatment of the harshness of country life making it politically unacceptable (Williams, 2008, p. 50). By then, most of the footage had been stolen and subsequently damaged or lost through neglect or deliberate tampering by authorities in the fascist republic of Salo (Brown, 2002).⁶⁹

⁶⁸ Although early films by De Sica (*The Children are watching us*, 1944) and especially Visconti (*Ossessione*, 1943) could legitimately make the same claim (Shiel, 2006, p. 34).

⁶⁹ More than 1000 metres of film were destroyed, Antonioni claimed (Antonioni, 2003, p. 121).

Yet, without difficulties such as these and the ingenuity they demanded, neo-realism would doubtless have been very different.⁷⁰ Low budgets, poor quality film, and the lack of studio space and availability of new recording equipment after the war all had an impact in recently-liberated Italy (Brunette, 1998, p. 18). Indeed, part of the appeal of the movement was its ability to make the most of opportunities in a hard-headed way:

...when we find ourselves up against practical obstacles that can't be overcome, we must go forward. You either make the film as you can or don't make it at all

(Antonioni, 1969b)

It's unsurprising then, that Antonioni identified modernity with extreme political moral, social and physical instability both outside and within, and it was the instability of feelings and their mystery which interested him. Antonioni's "going forward" is often seen as a "going inward" as he insists on the link between social and emotional instability rather than the more concrete problems which occupied early neo-realist films (Antonioni, in Cottino-Jones, 1996, p. 20)

4.1.3 Form

Neo-realism was always keen to distance itself formally from a classical cinema defined by the way in which "image and reality are fused" (Rohdie, 2006, p. 112). Theorists like Siegfried Kracauer argued that films "cling to the surface of things" because they are "uniquely equipped to record physical reality": they therefore become more cinematic when they distance themselves from inner life, ideological or spiritual matters (Kracauer, in Totaro, 2000, p. 3). Hervé Bazin also argued for neo-realism as a cinema of "fact" and "reconstituted reportage" (in Shiel, 2006, p. 2) and Cesare Zavattini, who scripted several key neo-realist films, argued for a cinema of "documentation".

However, De Sica argued that cinema could never be "mere documentation" (Shiel, op.cit, p. 59) and Antonioni insisted that reportage could not account fully for events:

⁷⁰ Anecdotes such as these include Rossellini's use of black market film stock, but as Shiel (2006) suggests, what is perhaps more remarkable is the way in which the difficulties of filming in post-war Italy were transformed into creative opportunities, lending neo-realist films much of their character and evocative strength.

During the postwar period there was a great need for truth, and it seemed possible to photograph it from street corners. Today, neorealism is obsolete, in the sense that we aspire more and more to create our own reality. This criterion is even applied to films of a documentary character and to newsreels, most of which are produced according to a preconceived idea. Not cinema at the service of reality, but reality at the service of cinema

(Antonioni, in Cottino-Jones, 1996, pp. 62-63).

For Antonioni, attempts at cinema vérité were naïve to believe that they could simply register factual events in an objective manner. Attempting to do so would produce a “vulgar imitation” of thought and the image, he claimed (2003, p. 92) and indeed neo-realism at its best avoided this trap in its desire to explore reality in many ways, including via flights into fantasy (Nowell-Smith, 2000, p. 11).⁷¹ In Rossellini’s case, this meant a cinema which had “very little to do with realism” (Bernardi, 2000, p. 50), and for Antonioni the anti-realistic principle behind the cinema is the same for all the arts. Citing Camus, he feels that this principle rests on the choice made by the artist, namely “the revolt of the artist against the real”:

If one holds to this principle, what difference can it make by what means reality is revealed? Whether the author of a film seizes on the real in a novel, in a newspaper story or in his own imagination, what counts is the way he isolates it, stylises it, makes it his own

(Antonioni, 1960)

Indeed, whereas classic cinema before the war used shot and montage to enhance the impression of realism by emphasising continuity between images, post-war montage did the opposite by emphasising the discontinuity, immediacy, circumstance and atmosphere which was demanded by the times (Rohdie, 2006, p. 21). Although the focus of this new realism

⁷¹ It is interesting to note this as one of many parallels between the debate around cinematic realism and similar questions in education research, mentioned in the methodology discussion above. Given the more or less conscious interpenetration of cinematic images and everyday life, it is perhaps to be expected that the two areas should in fact reflect and inform each other.

was criticised by some as a “recycled naturalism”, Rohdie argues that its techniques marked a “significant transformation” rather than a misplaced return to naturalistic values (ibid).

A tendency to adopt a realist aesthetic deflected contemporary critics from seeing the value of Antonioni’s formal innovations (Brunette, 1998, p. 75). For the supporters of this new realism, Rossellini and Antonioni were not just the “most modern and innovative” of their peers, but were also not content to flatter the political left by dishing up “conformity dressed up as social protest” (Rohdie, 2000, p. 119). This analysis applies well to Antonioni’s work, notably his 1947 documentary about Roman street cleaners, *NU* (“Nettezza Urbana” / “Sanitation department”). The film, “about street sweepers, not street sweeping,” (Haller, in Lyman, 2007) partly justifies the view that Antonioni’s main link to the neo-realist current is his understanding of class (Brown, 2002). *NU* certainly indicts capitalism’s wastefulness and the poverty at the heart of the post-war Italian society, but its aesthetic statement extends neo-realist themes into new territory. This development is typified by the film’s approach to waste as more than simply a social problem:

Waste is for Antonioni is not simply a question of material loss but also a complex aesthetic and philosophical problem integral to the experience of modernity and the perpetual forces of entropy and disintegration

(Gandy, 2006, p. 327)

NU’s narrative is therefore not simply a documenting of the gestures of wastefulness, but also a dreamlike rendering of the workers’ lives dictated by daily rhythm rather than action.

To see them as criticisms of a social system would be too hasty, therefore. Like the rest of Antonioni’s films, *NU* does not flatter our taste for progressive politics and social reform. The care with which shots are prepared and then presented automatically discourages easy judgements, forcing us to think more deeply about the different environments in which the cleaners operate as common denominator. Rather than sympathise with the cleaners, we see the way in which space is constructed and territories are defined by simple, regular rhythms. The everyday gestures of the cleaners interconnect spaces and act as mobile focal points which draw our attention to the city’s movement. The camera makes long, slow sweeps across the city, hovering over the “dead time” when workers eat a sandwich, take a nap or just smoke. We focus on the way pigs are fed on rubbish and, crucially, are allowed to make up our own mind about what this might “mean”. Antonioni’s camera is always moving, uncovering what was unseen and constantly recomposing the frame. It undermines the suspense and forces the question of what the film is actually about, imposing flashes of

poetic images and expressive nuances rather than a social message (Antonioni, 2003, p. 36).

This mobile focus on the seemingly irrelevant or inconsequential draws our attention to the small variations in the environment which we normally miss but without which experience would lose interest. This attention to the surface minutiae of everyday effects is essential if we are to appreciate their constant movement. Paradoxically, it is Antonioni's play on the stasis and business of the city which makes this point most clearly. This is perhaps a form of extreme "honesty" which rejects the need to always explain (Chatman, 1985, p. 55) or provide solutions.

The effect is frequently surreal, perhaps because of this evolution from some of the traits attributed to neo-realism. In fact, the film helps explain why there is no "pure neo-realism" (Bazin in Forgacs et al, 2000, p. 160) simply because "neo-realists" were always keen to respond to changes in the world around them in novel ways:

I think filmmakers should always try to reflect the times in which they live - not so much to express and interpret events in their most direct and tragic form, but rather to capture their effect upon us

(Antonioni in Gandy, 2003, p. 222)

The way in which documentary is used here to define a set of ethical questions certainly seemed strange in 1948, and in fact differed from anything that cinema audiences had ever seen (Chatman, 1985, p. 7). Most demanding of all is the increasing commitment to the camera as enquiry which refuses easy judgement of what it sees. On the contrary, the new forms and purposes of modernity have a beauty of their own and, however strange, they make ethical demands on us and our customary ways of being. Adapting to these demands is a necessary change that we have to make to avoid the neurotic responses which seem so common in these films. But they also pose pressing moral questions about how we are to adapt emotionally to this new environment. Learning to live with modernity is more than simply being aware of change, or of having enough economic capital to avoid hunger. It demands emotional and moral adaptation too, implying that a new ethic must be adopted if we are to learn to appreciate the language of social and economic change. In *NU*, a couple argue and their torn-up letter is swept away into the rubbish by a sweeper. Old forms of communication, however emotionally charged, are buried and become obsolete.

4.1.4 Archaeology

Beyond their preoccupation with survival in harsh times, many neo-realist films have been seen as basically road movies telling of the search for the new Italy (Wagstaff, 2000, p. 41). For Restivo (2002, pp. 22-23) rather than simply document reconstruction's problems or a given set of themes or values, neo-realism's overarching goal was to "discover Italy". In particular, this meant showing the differences and forgotten lives that were emerging after the fall of fascism. *Gente del Po* is certainly an example, but Visconti's *Ossessione* (1943), De Sica's *Umberto D* (1952) and Rossellini's *Journey to Italy* (1954) and Antonioni's own *Il Grido* (1957) arguably carry out this search more powerfully and originally.

Antonioni's films nonetheless extend this focus on shifting, rootless people confronted by new cultures and languages. This focus aims to show how, away from the safety of home, characters seek self-knowledge in and around a specific place (Mulvey, 2000, p. 97). For Deleuze these journeys also provide the viewer with an encounter with new "psychic situations", or ways of being in the world (Montebello, 2008, p. 93), and this encounter involves a certain shock⁷² because of the profound changes it implies.

Perhaps the best known example of this is the frequent reference by Antonioni to emotional sickness or the "sickness of Eros". Many critics have pointed to what Elder (1991) describes as repressed male desires expressed in distorted eroticism in sequences such as the Gloria Perkins episode in *L'Avventura*. Gloria Perkins (Dorothy De Poliolo), a famous prostitute, is mobbed by a crowd of men in Messina, crystallising the film's thematic treatment of sexual tension in a media-fuelled "moronic circus" (Williams, 2008, p. 52). The dehumanised masses portray a society addicted to spectacle but quickly satiated by it. But they also supply a key narrative thread by setting up Sandro's betrayal and humiliation as the result of another chance encounter. Hence, the sexual drives of *L'Avventura*'s male protagonists have been displaced onto iconic objects and voyeuristic spectacles, a sign of a certain sickness in their emotional relations. The consequences go beyond the simple problem of self-delusion which it implies:

⁷² Deleuze combines a double connotation within the verb "choquer" here, which combines both the (metaphoric) emotional idea of an encounter with something strange (and perhaps violent), but also the (literally) physical idea of a "bumping" of two things together. In my view, it would be wrong to privilege the former over the latter if we are to take Deleuze's frequent invocation to understand such ideas "to the letter".

the masses in *L' Avventura* are so hungry for human attention that they mob the pseudo-writer/prostitute Gloria Perkins. But often, the interest in life is crushed and people become bored, sullen and, even what ought to be life's delights become unappealing, and even ugly.

(Elder, 1991, p. 7)

Antonioni's (1972, pp. 326-7) argument is that, beyond changing circumstances post-war, people had changed too, and needed to recognise this rather than revert to old myths and morals. The issue transcends gender stereotypes, since characters like Giuliana in *Il Deserto Rosso* are no longer helped by anachronistic attitudes to change which are "deeply rooted" but "dead and gone" (Antonioni, 2003, p. 79). These characters can only survive by adapting, and need self-renewal rather than self-discovery, so Antonioni described his work as digging, a form of "archaeological research among the arid material of our times" (in Cottino-Jones, 1996, p. 97-98).

This implied a rupture with the past which must be reflected in cinema's necessary break with traditional plot vehicles. It no longer seemed important to make a film about a man who has had his bicycle stolen, and a different set of preoccupations were needed. Effects rather than causes, and psychology rather than activity were the new pressing reality:

Now that we have eliminated the problem of the bicycle (I am speaking metaphorically), it is important to see what there is in the mind and in the heart of this man who has had his bicycle stolen, how he has adapted himself, what remains in him of his past experiences, of the war, of the period after the war, of everything that has happened to him in our country-a country which, like so many others, has emerged from an important and grave adventure. (ibid)

So, in line with the restlessness of the characters in many contemporary films, the inability to find a home emerges as a common theme for most of Antonioni's characters (Antonioni, 1969a). But the idea of home is often a highly abstract one, introducing further problems for the film and its viewers.

Whereas even films such as *Journey to Italy* or *Stromboli*, which both develop deep psychological questions, have tangible geographic and emotional destinations, Antonioni's *Il Grido* (1957) presents a circular journey around an empty place. In *Il Grido*, a mechanic in a

sugar refinery (Aldo, played by Steve Cochrane) learns that his lover, Irma (Alida Valli), wishes to leave him. Taking his daughter, Rosina (Mirna Girardi), he wanders from one desolate place to the next, staying pathetically in shacks and houses on ill-defined roads and shorelines caked in fog and mud. Aldo is clearly searching for his lost love, but he also admits at a key moment in his peregrinations that the problem is a deeper, existential one, namely of the lack of desire to act. After a series of unsuccessful haphazard relationships and encounters, Aldo eventually returns to his home town and falls to his death from the tower where he used to work.⁷³ His isolated, alien environment typifies the alterity of a space which cannot be mapped or coded, but it also provides the plot with a typically modernistic circular pattern of return back onto itself (Melzer, 2010).

So, while *Il Grido*'s realism clearly reflected the transitory nature of life in the post-war years, it is "probably the grimmest" of Antonioni's films (Lyman, 2007). Aldo's journey served to underline the growing awareness that moral as well as material and aesthetic certainties had disintegrated, introducing a new set of character traits to film. Individuals of this kind had been portrayed in film before, but a whole society affected by this listlessness was new at the time (Nowell-Smith, 2008, p. 201). So was a cinema whose express intention was to engage in the deconstruction of the act of looking in this systematic way.

Hence on one hand the films explicitly carry out a sort of archaeological enquiry because they try to dig deeply beneath appearances such as the idea that what we do is a direct indication of who we are. Instead, an elliptical portrayal of these effects is produced on the bodies of the characters by forces which remain largely invisible. *L'Avventura*, for example, is less concerned with "meaninglessness" than with the characters' response to it (Youngblood, 1999). If nothing seems to happen in these films, it is because movement, for Ford (2004) "is never where the real action or meaning is" because action itself works as "a regressive turning away from real problems". As such it is a displacement of real concerns onto, for example, various types of displacement activity, notably, as we have seen, barely suppressed sexual violence.⁷⁴

Despite their apparently obvious psychological focus, however, it is perhaps a dogged attempt to unearth forgotten curiosities in apparently unspectacular settings which best

⁷³ Whether he falls or jumps is unclear, seeming to waver and fall from an undefined sense of vertiginous confusion. Extremely long takes, deep focus and subtle lighting in the film all underline this un-defined sense of malaise (Chatman, 1985, p.49).

⁷⁴ Like Chatman (1985), Sitney (1995) reads the film psychoanalytically, suggesting that Sandro "translates" his feelings of professional inadequacy and "nearly rapes" Claudia in their hotel room in *L'Avventura* (Sitney, 1995, p.137)

characterises Antonioni's work. The films certainly stress the eerie beauty of landscapes which both frame and narrate this "archaeological" search for meaning. The cinematic landscape, Gandy argues (2003, p. 218) is a natural focus for any systematic exploration of the way space is depicted in modern culture, and its role in *Il Grido* is clearly much more than a simple setting for the action. This voyage through landscapes is a psychologically painful experience for characters like Aldo, who come to question their own existence as moral beings just as the landscape, masked in fog, becomes a dreamlike and shifting non-place. The persistence of fog and mist here (and in the later *Il Deserto Rosso*) add to aesthetic tensions as landscapes are reduced to indistinct forms in which "all traces of human life threaten to disappear completely" (Gandy, 2003, p. 225). Indeed, Gandy argues, this indistinction tests the limits of our perception in a constant tension between what is visible and what is imagined. It would be possible to see this as a statement of the essential ineffability of experience, but this would be a mistake because cinema, like the modern novel, had found a new language by turning from such narratives to a form of wandering enquiry. For Alain Robbe-Grillet, the modern novel is precisely tied to this discovery of experience as essentially problematic. Reality is discontinuous, formed of elements juxtaposed without reason, and each of the elements is unique, and all the more difficult to grasp because more elements continue to appear, unpredictable, untimely, and at random (Robbe-Grillet, 1984 in Bourdieu, 2000, p. 301). In this situation, the real is no longer represented or reproduced because it is mobile, but "targeted" (Deleuze, 1985, p. 7) by an equally mobile subject in constant becoming.

4.1.5 Reflexivity

Awareness of this displacement is particularly relevant to our emotional state, since as reflexive moderns, we cannot ignore our present psychic afflictions. Aldo knows that his search is not romantic, but spiritual: what he's looking for is not love but the *desire* to love. *L'Avventura's* Sandro, like *The Passenger's* Locke, is also perfectly aware of the "vulgarity" and "uselessness" of his erotic impulses:

To be critically aware of the vulgarity and the futility of such an overwhelming erotic impulse, as is the case with the protagonist of *L'Avventura*, is not enough or serves no purpose. And here we witness the crumbling of a myth, which proclaims it is enough for us to know, to be critically conscious of ourselves, to analyse ourselves in all our complexities and in every facet of our personality. The fact of the matter is

that such an examination is not enough. It is only a preliminary step.
Every day, every emotional encounter gives rise to a new adventure.

(Antonioni in Arrowsmith, 1995, p. 31)

For this reason both films overturn the myth that it is enough to “know oneself” or to analyse the “hidden folds of the soul”,⁷⁵ and introduce the idea that a very different narrative is at play. Antonioni insisted that certain moral and sentimental values, particularly reactions to change, were outdated (Antonioni, 1972, p. 321), and felt that we are “saddled with a culture that hasn’t advanced as far as science” and are “still living with the moral concepts of Homer” (Antonioni, 1969b). This fact requires no analysis or introspection, he felt, because we are all perfectly aware of it (Antonioni, 1960b).

This self-reflexive awareness indicates a dislocated “modern” time which is “as dissociated as the individuals who live through it” (Adorno, 1991, p. 75) and is therefore reason for pessimism. However, for Deleuze (2004a, p. 245), this change of certainty into problems does not indicate a “generalised method of doubt” or a “modern scepticism” where nothing is certain. On the contrary, the discovery of the question at the heart of the aesthetic indicates the transcendence of the problematic itself: problems are, he suggests, the “transcendental element which belongs ‘essentially’ to beings, things and events.” (Deleuze, 2004a, p. 245). Dealing with a problem implies that as we encounter its different aspects, we struggle to understand them but learn experimentally in the process. This problematic aesthetic is evidenced by *Il Grido* because it goes beyond the idea of the film as a journey of self-discovery or return to wholeness. Antonioni moves the theme of rootlessness from the literal to the figurative by effacing any sense of “home” from the narrative. For example not only has Aldo lost his home, but his intended destination is in transit too, since Irma has already “moved on” emotionally. Antonioni once said that “the world, the reality in which we live is invisible...hence we have to be satisfied with what we see” (in Nowell-Smith, 2008, p. 200).

The importance of destination should not be underestimated in films where it is the setting which speaks rather than the character. The frequently abstract lines of landscape, urban architecture, domestic objects or indeed natural shapes (including other people) are the main medium of communication (Quart, 2011). The visual world of form and (in later films) colour, takes on the narrative function in the place of the traditional tools of exposition,

⁷⁵ « Voilà un autre mythe qui tombe, cette illusion qu’il suffit de se connaître; de s’analyser minutieusement dans les plis les plus cachés de l’âme » (Antonioni, 1960b).

dialogue, music or facial expression. For Moore (1995, p. 29), zones in urban Rome such as E.U.R's park and Piero's office (after hours) in *L'Eclisse* (1962) offer "marginal areas" which, although within the sociocultural system, invite the novelty or difference typical of these liminal spaces (see also Mariani and Barron, 2011). Here, Moore says, "concepts shade into sensations and impressions speak louder than words". Antonioni's films therefore do not seek to "mean" anything, but to act much more directly on our participation with the image through an "unambiguous, direct and forceful realisation of ideas" (Solman, 2004).

Hence, the fact that films are sometimes interpreted in ways which do not correspond with the director's intentions has, Antonioni feels, little importance. Films do not need to be understood or rationalised, but operate on a much more material level, so it's enough that a film be "lived" as a "direct, personal experience" (Antonioni, 2003, p. 110). This is one reason why we are not always invited to identify with the characters, some of whom are used as "environment" rather than protagonists in a traditional sense (Cameron and Wood, op cit, p. 12). These features, while present in other neo-realist work, are pushed to their limit by Antonioni and come to distinguish a particularly sparse style which, he felt, characterised all his work (Antonioni, 2003, p. 39). This sparseness demands that we surrender many of our expectations of what a character or a setting is actually for. In *L'Avventura*, for example, Antonioni refuses to provide many of the linking shots normally used to make the spectator feel comfortable by carrying us gently through the times and places of the narrative (Cameron, 1962, p. 2). Increasingly, this ellipsis comes to define a typically "Antonionian" cinema of empty spaces and disconnected lives. Although all the relevant information is in fact included (albeit in the specifically "visual language" which distinguishes these films), this ellipsis expresses a gaze with little concern for the viewing subjects' conventional demands. This makes the purpose of a given film or shot difficult to identify (Nowell-Smith, 2008, p. 198). Indeed, visually sparse shots evacuate such expectations and seek beneath them a form of "objectivity" which reminds us of the necessarily material existence of a "registering" camera, its director and of the film itself. The final shot of *Il Grido* is exemplary in this regard, with no real information being given as to how or why Aldo falls to his death. On these terms Verstraten (2012, p. 126) compares it to the work of Virginia Woolf and Terrence Malick, finding Antonioni's consistently ambiguous visual approach both "depressing and eye-catching". This double response seems appropriate because Antonioni's modernism defies interpretation and challenges our desire for a particular message to be given (Quart, op.cit).

This indeterminacy is seen as part of a cinema which claims to render truth rather than logic, thus being both realistic and anti-naturalistic (Bondanella, 2007, p. 109). Antonioni certainly

claimed to be seeking truth of a sort through his “archaeological” method, stating that “[t]he greatest danger for those working in the cinema is the extraordinary possibility it offers for lying” (Antonioni, 1969b). Here, “lying” is defined as a certain infidelity to what the artist feels driven to do:

Whenever I make a film, I have inside me a certain truth -"truth" is a bad word. Here inside, rather, I have a confusion in the pit of my stomach, a sort of tumor I cure by making the film. If I forget that tumor, I lie. It is easy to forget, even if I subconsciously realise I am forgetting. Very easy.

On one hand therefore, Antonioni’s reflexive archaeology concerns the issue of the gaze itself as revelatory not of some profound reality but of the multiplicity of images which the careful gaze exposes. The status of the real is questioned as each image is shown to hide other images *ad infinitum*. Unambiguous significations are constantly withheld by this process, and an hermeneutic task of auto-analysis is “introjected in to the characters themselves” (Brunette, 1998, p. 2). The viewer is also invited to participate in this task by a probing camera which shifts restlessly from the subjective viewpoint of the characters to other, stranger perspectives. Hence, beyond the desire to subvert genres such as *film noir*, arguably the most important of the conventions which Antonioni aggressively disrupts is that of the cinematic gaze itself. This is significant because narrative conventions in cinema are frequently mistaken for reality (Jameson, 1992, p. 175), and as viewers we sometimes forget that the images on the screen are at several removes from the real they sometimes purport to convey.

A challenge to this conflation implies a demarcation of image and world. This happens for example when we see a scene from the subjective point of view of a character or imagine that a documentary is shot from an objective point of view. For Mulvey (1993, p. 123) however, our gaze is actually composed of three different types of cinematic gaze, all of which are dictated by convention. On one hand, we have the knowing/manipulating look of the camera as it records the event. However natural the film may seem, it is always a partial representation of a reality which the camera “frames” for the viewer. On the other hand, the (critical) audience watching the final product has its own distinct gaze. We bring our own expectations to a film and judge what we see in this light. Finally, the (sincere) characters on screen have their own way of looking at the events in which they are diegetically involved. Characters in a given narrative will interpret events in particular ways depending on their role in the narrative itself. Mulvey argues that narrative cinema uses this third convention to pretend that the first two do not exist. In effect, we rely on the perceived sincerity of the

character's diegetic gaze to efface the extra diegetic existence of camera and audience. Without these absences, Mulvey feels that cinema cannot exist as reality, obviousness and truth, and she labels this gaze "fetishistic" precisely because it projects a human reality which denies the constructedness of the film.

Any film which subverts this process by drawing attention to a gaze which is supposed by convention to be objective and invisible is likely to disrupt our expectations. We are led to question not just what we see, from which perspective we are seeing it, but ultimately why we are even looking at it.

The work itself is always fragile as a result because, although cinema has great potential to appeal to a wide variety of tastes, in order to do this it must confine itself to "known and safe ideological trends in society" (Ellis, 1992, p. 79). From the point of view of a social context used to the comforting narrative certainties of moral rectitude, redemption, or resolution, work steeped in such indeterminacy is always under threat and threatening. Roland Barthes felt that Antonioni's films demonstrate a certain "fragility" which tied them to a disruptive artistic vocation. He argued that that Antonioni never confuses meaning with truth, and instead "scrupulously leaves the path to meaning open and indeterminate". For Barthes, the activity of the artist is therefore suspect because:

It disturbs the comfort, the security of the established senses, because it is at once expensive and free, and because the new society which seeks to find itself through diverse regimens has not yet decided what to think

(Barthes, in Chatman and Duncan, 2008, p. 11)

One analysis of Antonioni's work therefore is that it is closer to truth than we suspect precisely because it disrupts our comforting fictions about experience's supposedly logical structure. The result can seem bleak (Rascaroli and Rhodes, 2011) or even inhuman, but may be all the more truthful as a result. Boundas (2011, p. 118) for example, argues that no detective story could be an example of its genre if its plot were arranged to "the deductive necessity of formal logic". If it were, there arguably would be little to actually detect since events would be clear to any logical mind. On this view, the nature of Antonioni's cinema makes it well placed to offer a form of visual discourse which is not restricted to the lexical, syntactic and morphological rules which condition what is said and how. For Marks (1994, p. 246), if events themselves are lost in the layers of words and things that build up in the form of discursive representations of it, cinematic images have the unique ability of presenting various "disjunctive" archaeological strata. The attempt to disrupt these conventions and

make us look again (and differently) marks all of Antonioni's films to a greater or lesser extent. Making a film is an effort against ourselves and creation is always an effort (Antonioni, 2003, p. 160).

4.2 Stutter

This effort is exemplified by his 1975 film, *The Passenger*. In the film, a burnt-out investigative reporter, David Locke, abandons his old identity and regrets that "we translate every experience into the same old codes". He expresses a wish to "recharge his life" (Walsh, 1975) by escaping from his professional life as a reporter. The film indicates a desire for a profound philosophical escape from habitual forms of perception and thought, but it also embodies a more affirming message about a confrontation with the alterity of a constant becoming-other.

Film in general is well suited to this challenge, since it works by forcing our understanding:

Films do not allow us to stop and reflect on what we have read; the projector, not our eyes controls the pace. So reflection is deferred, and visual attention and memory are exercised by the deferral

(Chatman, 1985, p. 2)

Antonioni felt that film did not have to be understood, but rather sensed (Antonioni, 2003, p. 102). A film should modify our faculty of perception by blending visual image, sound and idea into a single experience (Antonioni in Roraback, 2005, pp. xviii-xix). And if Antonioni's work is creatively critical of rational thought, it is creative in this double sense: it changes our way of looking, but it also changes the world that we look at. More than just a reaction against certain conventions, it presents us with genuinely new experiences which shock us into thinking differently, inducing a sort of creative stutter as we struggle to come to terms with them.

This claim raises the question of whether these films actually achieve this blend. What does Antonioni propose in the place of understanding as the purpose of a film? Do his films modify our faculty of perception and subvert the dominant language of classic film (narration) with a different, minor, discourse (vision)? If so, do they make our thought processes stutter as we try to comprehend what we are looking at, and does Antonioni make film itself stutter?

There has been much debate about whether cinema can, strictly speaking, be described as a language. On one hand, it is a culturally-defined set of codes, working with signs and syntax. On the other hand, language works with a limited number of words whose meanings are defined paradigmatically, whereas cinema commands a potentially infinite number of shots whose meaning cannot be defined by what other shots might be substituted for them (Lapsley and Westlake, 1988, pp. 39-40). Cinema has information content, but this doesn't mean it can be equated with language.

For Deleuze, cinema certainly cannot be reduced to the formal rules of language or discourse as representation of some other world. Cinema, for Deleuze (2003, p. 266) is not comparable to a language, and assimilating one to the other is "the best way to bypass cinema's singularity" (Marrati, 2008, p. 49). It can, however, be understood as a signifying material which uses its own tools (light or space in Antonioni for example) to convey sensations. Rather than a language, the cinematic frame resembles an information system which is more or less saturated by data collected in sets and subsets (Deleuze, 2005a, p. 13).⁷⁶ Like all art, it is a communicator or, better still, an operator of sensations by producing disruptive encounters in which we participate.

This disruption does more than simply challenge a given system of expression, and Deleuze argues that the possibility of such stuttering depends on how we understand language itself to work. We can for example see language as a homogenous, closed system with its own relations and terms in more or less constant equilibrium. Stuttering in this case changes nothing, since the closed system of language has already incorporated its possibility within itself. However, if we understand language as an open system, everything changes:

But if the system appears in perpetual disequilibrium or bifurcation, if each of its terms in turn passes through a zone of continuous variation, then the language itself will begin to vibrate and stutter

(Deleuze, 1997, p. 108)

Rather than reproduce or even negate a given system, great writing therefore actually undermines it to the extent that the system itself is changed from a hierarchical structure to a much more fluid multiplicity. This openness is a central part of Deleuze's view of language

⁷⁶ For example by *mise en scene* and depth of field

as a system in disequilibrium (Deleuze, 1997, p. 110). Its codes are inherently unstable and always open to disruption from an outside which is always already at its heart, allowing it to change and create.

Great writers are creative insofar as they act as conduits or mediators which introduce something to this open system. Deleuze insists that a “milieu” is needed for this to happen, because stuttering is not a purely subjective activity: in effect, it is the milieu which allows a sort of vibration to take place by acting as a “conductor of words” between the speaker and the environment and the enunciation and its context. Because speech is always conducted by an environment such as this, new content can enter speech and we can step into this zone of indeterminacy between the known inside and the new outside. In this way, language itself, he believes, is made to scream, stutter, stammer or murmur, and grows in this way “from the middle” because, as an open system, this potential for change lies at its core:

Creative stuttering is what makes language grow from the middle, like grass; it is what makes language a rhizome instead of a tree, what puts language in perpetual disequilibrium

(Deleuze, 1997, p. 111)

There are many ways in which this can work, and the concept of stuttering helps us to situate Antonioni’s work as genuinely creative cinema rather than simply reactive or cumulative work defined by its building on or negation of a more conventional discourse. This is important because this tendency to situate one phenomenon in terms of another as either a repetition or negation is a common strategy. Unfortunately, for Deleuze, it cancels out our ability to understand what makes anything special, the “haecceity” or “thisness” of an event. A challenging philosophical approach is therefore needed which seeks to subvert this type of “sedentary thinking” by using “nomadic interventions rather than analytical reversals” (Kozin, 2009, p. 105). These interventions look at a phenomenon’s specificity, rather than its difference from something else, by creating concepts which are adequate for this haecceity rather than constantly referring back to some transcendent model or dualism.

This demands a creativity which, for Deleuze, is unavoidably subversive and has a double movement. Firstly, it introduces a gap between dominant values, and secondly this small change makes these dominant values stutter because they are revealed to be no longer self-sufficient (Bouaniche, 2007, p. 229). Secondly, unlike the descriptions of creativity studied

above, Deleuze's creativity is non-representative: it does not operate by reproducing, reversing or reacting to cultures or artistic givens, but by producing them.

Art such as Antonioni's, on this analysis, can exemplify this sort of operation. On one hand it does not require reference to other "dominant" models to be understood. On the other hand, it builds our autonomy from negation or reaction by presenting us with information from "outside" our expectations, making us stutter as we try to integrate what it has to say. This works because the image attains a strangeness of its own through a discourse which removes itself from its ordinary (visible) coordinates (Bogue, 2003, p. 188). The result, Bogue suggests, is a troubling, non-humanised world "unaffected by conventional linguistic categories".

For O' Sullivan (2009, p. 249), this produces "moments of noise" or "glitches" in which language is brought into contact with other forces and freed from its basic task of signifying something.⁷⁷ This "in between" zone of disjunction is literally vital for creativity, since it is where change happens. When language is strained in this way, it reaches a limit which both marks its outside and makes it confront its own silence, for Deleuze. The question of creativity is therefore that of becoming, and lies in the way an aesthetic encounter operates at the limits of our capacity to understand and act *between* what we already know:

Everyone can talk about memories, invent stories, state opinions in their language; sometimes one even acquires a beautiful style, which provides the adequate means and makes a writer appreciated. But when it is a matter of digging down under the stories, of cracking open the opinions, and reaching the regions without memories, when the self must be destroyed, it is certainly not enough to be a "great" writer, and the means must remain forever inadequate.

(Deleuze, 1997, p. 113)⁷⁸

Carrying out this archaeological operation in art means breaking the means of expression in ways which fragment style and allow an unknown, foreign language to grow in the cracks of

⁷⁷ Similarly, Albert (1978 in Runco, 2007, p. 49) describes the "wobble" that happens in situations of unharmonious adversity which, some research suggests, is a necessary environmental factor in creativity. Commenting on similarities between Lacan and Deleuze, Watson (2013, p.10) stresses that "we can never identify fully with the Other because (...) a [productive] gap always remains".

⁷⁸ Translation modified

writing, painting and music. The sensations created by art in this way are therefore not just fragmented versions of the same sense data which we habitually use to understand the world. This data is related to existing ways of thinking as soon as we perceive or recognise it and does not really change us. But creative practices are not recognised in this way, and therefore do not speak to current audiences. Neither do they produce knowledge, if by this we mean information which is readily digestible on well-known terms. Creativity and artistic practices are bound together, because no art is content to respond to what the public expects, producing the untimely, the unrecognisable and the unexpected (Deleuze, 2003, p. 268).

Ultimately, therefore, art refuses to reassure us with a mirror image of a subjectivity which already exists (O'Sullivan, 2009), introducing something new in the form of becoming. Becoming describes our move away from the centre to the periphery at the limit of what is deemed normal. Both individually and collectively, minority subverts majority (De Schauwer et al, 2011, p. 230), and becoming radically overturns hierarchies and transcendence. This point is important because it serves to justify the view that minority cinema such as Antonioni's is not simply an aberration from a dominant model. There are several reasons for this.

Minorities, firstly, are not necessarily numerically inferior, and therefore the issue of their integration or otherwise is not a question of whether or not they integrate a numerically majoritarian group. The difference between established and creative knowledge lies elsewhere. Secondly, for Deleuze, it is precisely from within minorities that creative change can be expected, since their ability to take existing structures to their own intelligible limits by making them stutter is, to a certain extent, what defines them and their micro-political impact. It is precisely the extent of a minority's "molecular" capacity for change which distinguishes it from its established "molar" counterparts' tendency towards stasis. For Deleuze, minorities, whose activity is never entirely suppressed, do not overthrow majorities, but rather undermine them like weeds, introducing emergent new forms in a constant process of becoming, creating for a people yet to come.

More specifically, this evocation of a people to come works through creative practices which perform the new by producing sensations during "affective moments". The chief characteristic of such moments is to escape the signifying function often attributed to language. Instead of being vehicles for meaning in this way, they impact on us at a visceral, asignifying level, inducing a certain hesitation or "glitch" as we encounter something

essentially new. And while this “glitch” does act to break the flow of our usual thoughts and ways of thinking, for O’Sullivan it is a far from passive moment for the spectator:

We might say that the listener – or spectator – must respond to the glitch, the affective-event, as an event, as the bearer of the potentiality of something else. Put simply, one must, in order that this procedure work, be open to the possibility of something different occurring. This, I think, is crucial.

(O’Sullivan, 2009, p. 249)

Affective events are therefore “autonomous” in that they possess the ability to provoke change by “impingement” (Zembylas, 2007b, p. 26). This impingement takes place before it can be coded in, for example, emotion, which is only realised when affect is subject to conscious attention and / reflection.

It is useful to see Antonioni’s films in this light, which casts them as both essentially strange and essentially modern. Exactly what is meant by this can be understood by returning to one of the key features of his images, namely the concentration of their gaze. The consistency of approach which marks Antonioni out as a scrutiniser of character and emotion implies that he aims to do more than simply manipulate us. Moreover, despite his reference to “direct” experience, Antonioni is just as keen to evoke the epistemological problem of the visible and its obscure relation to the real:

Lucretius, who was certainly one of the greatest poets who ever lived, once said, ‘Nothing appears as it should in a world where nothing is certain. The only thing certain is the existence of a secret violence that makes everything uncertain’. Think about this for a moment. What Lucretius said of his time is still a disturbing reality, for it seems to me this uncertainty is very much part of our own time.

(Antonioni, in Cottino-Jones, 1996, pp. 39-40)

Working with such a disturbing reality, Antonioni rarely offers any clear solutions to the problem behind the assertion that one set of images simply covers further sets. Indeed films like *Blow up* and *The Passenger* seem to accept that the problem is either irresolvable or

vacuous, casting an ironic glance back at the viewer watching this “pointless” film. A similar irony can be identified in Antonioni’s other practices, notably his photography. In a series of major exhibitions in 1980, Antonioni exhibited a set of enlargements of watercolours and collages called *le Montagne Incantate*.⁷⁹ The process of bleeding which characterises these two techniques was emphasised by the enlargements, echoing the sequence in *Blow Up* where pictures of a crime scene are enlarged to the point where they lose definition and resemble abstract paintings. This highlights the ways in which the images themselves suggest the existence of myriad other images at a virtual level, Rohdie argues:

Every image of *le Montagne incantate*, it seems, contains an infinity of other images as if these were, virtually, always present from the beginning with the originals and their enlargements (...) as if each image belonged to a series of itself.

(Rohdie, 2006, p. 109)

It would seem that once again, *le Montagne Incantate*, evoke, albeit poetically, the old problem of reality and appearance without offering any further comment beyond the artists’ own ironically superior gaze. However, Antonioni himself was much more committed to both his films and his characters as real objects capable of transforming us politically. This works because although the spectator is the character in many ways, between spectator and film there remains the concrete fact of the film itself. An act of will is required to force this separation, but this act releases us from abstraction and returns us to the concrete. It is this act which transforms and motivates us: “from proletarians into bourgeois again; from pessimists into optimist; from solitary and alienated people into people who want to open a dialogue and communicate” (Antonioni, in Cottino-Jones, 1996, p. 60).

Sharratt (2012) agrees that there is more to the emptiness evoked by the destructive moments which so often mark the end of Antonioni’s films. He believes that Antonioni is deeply interested in his characters, and his approach has little to do with “the smug, detached ‘irony’” which, for Sharratt, marks “the trivial cinema of the present moment”. If, like Sharratt (op. cit) we see the pictures in the wider context of Antonioni’s searching films, what comes across is the compassionate sense of a permanent investigation of a dynamic problem. Its parameters may change with each encounter, but Antonioni’s practice of repeatedly returning to the indiscernibility of the image necessitates a profound shift in the way we conceive such problems. Rather than a *spatial* problem of the sets of images hiding

⁷⁹ “*The Enchanted Mountains*”

one another *ad infinitum*, what may be described in Antonioni's work is a shift in the way in which time is seen to operate in the work of art. When we "return" to "the same" problem in this way, we see that each return to the problem is in fact different, because it has accumulated changes over time. The spectator must participate in a series where perplexity induces stuttering and undermines the subjective meta-language of cinema. Although it demands a great deal of the spectator by exhausting them of their previous experiences, it offers a contact with the outside of what we are used to thinking.⁸⁰ For MacCabe (1993), when cinema does not achieve this, it becomes reactionary, "petrifying" the spectator because it demands nothing of them.

For Deleuze, this demand is essential to cognition. The fact that we are capable of thinking does not guarantee that we actually do so (Deleuze, 2005b, p. 152). Moreover, thought is not a natural capacity to which we can return at will. Nor, by implication, do we keep thinking once we have started. On the contrary, the "image of thought" as a natural activity which tends towards the discovery of the truth is a subjective presupposition which, Deleuze argues, too many thinkers have failed to recognise. The prime example of this is the Cartesian subject's formal isolation of the representative content of ideas and the separate form of a consciousness. Descartes' deduction of a cogito must be seen in its historical context: the great scientific discoveries of the 17th century brought mechanistic explanations of movement and scepticism about other less rationalistic explanations (Montebello, 2008, p. 12). Philosophy reacted by postulating transcendent bodies such as the self and the cogito and which rely on a dualistic world view. However, such a universe struggles to account either for our relation with the world, or our constitution in it without recourse to subjective presuppositions, namely the existence of a cogito endowed with a "natural ability" to think (Deleuze, 2004a, p. 164). Not only are these presuppositions not acknowledged, but Descartes, like others before and after, misses the brut(e) content of ideas as things themselves because of his distinction of ideas and things on the grounds of transcendent reason. Objectivity is deduced axiomatically, but the participation of subjectivity and its synthesis in beings is denied. Matter and thought are sundered by this sleight of hand and our link with the world is broken.

Deleuze sees this "break" as a major preoccupation of cinema, but it can also help to explain the disruptive force of Antonioni's images and their material impact. Hence, Deleuze believes that hope exists for a renewed belief in the world on condition that thought, if it

⁸⁰ Mednick (1962, in Runco, 2007, p.11) argued that original ideas only come about "after we deplete the most obvious ideas".

happens at all, is not produced by logic, speculation or any other form of idealism. On the contrary, he argues, it works in the form of an automatic body, unpredictably and not always comfortably as a result of an affective shock brought by the image. Prior to effort or social conditioning, Deleuze argues, the artistic essence of the cinematic image is realised in a shock to thought as a violent, direct effect on the nervous system (Deleuze, 2005b, p. 151).

This “nooshock” is the communication of movement within images themselves, and thus has nothing to do with the shock we feel before representations of violence so common in commercial cinema (Deleuze, 2005b:159). On the contrary, a shock to thought happens when cinema brings together what is essential in the other arts to arouse the thinker within. At bottom, Deleuze argues for the “dark glory and profundity of cinema” whose images carry out a “theft of thoughts” and render the viewer like a mummy or idiot at the very limit of their cognitive capacity. For Deleuze, a plane of immanence belongs to thought *de jure*, even if *de facto* other images of thought have tended to emerge (Marrati, 2008, p. 91). This plane is the outside or non-thought within all thought, “that which must be thought and that which cannot be thought” (Deleuze and Guattari, 1994, p. 59).

Deleuze’s (transcendental) empiricism is based in this view of thought as both undermined and empowered by this outside, and can therefore claim to interrogate “the event or encounter of the given grounded on neither a subject (idealism) nor an object (realism)” (Colebrook, 2005, p. 241). It is precisely at the limit of this plane that thought can be awakened in its “impower” (Deleuze, 2005b, p. 161). This limit is a “fissure” or “crack” where the core or reverse side to thought lies in a “hole in appearances” as images are unlinked and voices appear in voices.

If thought thinks only when constrained or forced to do so, if it remains stupid so long as nothing forces it to think, is it not also the existence of stupidity which forces it to think, precisely the fact that it does not think so long as nothing forces it to do so?

(Deleuze, 2004a, p. 345)

If it is true that thought must be forced or shocked, it is not the return to creativity which takes place, but the arrival of a profound moment of realisation that we are not yet thinking. This limit is both a source and barrier to thought because it introduces a thinker into thought, shattering the “monologue” of a thinking self by confronting it with its own outside. This

outside is not a homunculus, but a material, unknown body which provides evidence of the fracturing of our selfhood and therefore a little time in a pure state. This shock to thought is analogous to the stutter described above because it provokes a “suspension of the world” (Deleuze, 2005b.163). In effect, thought reaches its limit and is faced with the impossible necessity of responding to it. Cinematically, this suspension brings the visible to thought by presenting the visible as a mobile, emergent phenomenon. Rather than being there, the visible is constantly arising and being revealed in thought. This may be why Antonioni’s insistent use of fog and mist in *Il Grido* and *Il Deserto Rosso* and indeed his dogged examination of the gaze itself are so troubling. The mists of the Po valley or his painted trees do not mask or veil anything, but rather present the story of thought’s emergence from its own impossibility.

This claim, that affective behaviour, in these conditions, transcends its coding by discourse is a bold one to say the least. It implies that there is a “pure reaction” to certain images, whereas the history of cinema explicitly demonstrates the falsehood of such a view in the ways audience reactions change with convention. After all, if they had this great potential to affect, why were cinematic images so clearly unable to actually fulfil this promise of a grand, popular, transformative art form?

The reason, for Deleuze, that cinema cannot impose its mass transformative “vibration” is intimately tied in to the logic of formalism on one hand and that of representation on the other. Effectively, when moving images were not being used for abstract experiments of little interest (formalism), they became the site of “bad cinema” (representation), i.e. the predominance of the commercial distribution of gratuitous violence and exploitative sex. These banal representations effect no direct action on the nervous system, no birth of thought, and despite the continued existence of occasional artists, cinema is dying under the sheer weight of its own mediocrity (Deleuze, 2005b, p. 159).

This argument involves a number of paradoxes. Whereas traditional cinema may petrify the viewer, the kind of stutter described here as a result of genuinely creative moments in film also induces a particular form of inactivity or exhaustion demanded by the surrender to film mentioned above. This contradicts some of the common views of creativity described above, which conflate it with new and useful things and the agency which this choice both implies and occludes.

A further paradox appears in this rather abstract view of creativity when this passivity is justified by an explicitly realist perspective. For Cavell (1979) cinema’s reproduction of the

world is far from being simply voyeuristic precisely because it has no need for power over creation:

How do movies reproduce the world magically? Not by literally presenting us with the world, but by permitting us to view it unseen. This is not a wish for power over creation (as Pygmalion's was) but a wish not to need power, not to have to bear its burdens.

(Cavell, 1979, p. 40)

Cavell recalls the neo-realist view that cinema's power does not lie in ability to simply document events. On the contrary, its great potential lies in its critique of the anthropomorphic myth of control and subsequent destabilisation of the narrative of subjectivity. Similarly, Antonioni's "modernist" montage, rather than provide this narrative, shows us the story, its construction and its falsehood. When this construction highlights a disjunction between images, a sense of intensity is produced in the infinite possibility of the image. This moment is deeply affective because we perceive, in a largely passive way, that montage also has the power to evoke endless numbers of new meanings.

There is something of the Kantian mathematical sublime in this evocation of an infinity where there are simply more images behind each image. Gandy (2006, p. 323) believes that Antonioni's "neoromantic emphasis on primal origins" relies on a teleological viewpoint and informs his search for a "primordial aesthetic". This analysis applies effectively to Gandy's reading of *Zabriskie Point* (1968), but downplays the complex figure of subjectivity which Antonioni's films develop when seen more holistically. On screen, characters such as Claudia and Locke are clearly confronted by natural phenomena in striking ways, and both "urban" and "natural" deserts are central to the visual language in question. However, the contrast between character and setting, or figure and ground, is never so sharp as to fully justify this "neo-romantic" reading. Indeed, a key part of Antonioni's style is precisely the de-subjectivation of character which, Deleuze argues, operates by "dicsigns", "reumes" and "grammes" according to a sliding scale of indeterminacy (Deleuze, 2005a, p. 221). In sequences where the presence of the camera is drawn to our attention, we are not shown a scene or object but rather the perception of that object: we are invited to see the act of looking as more or less indeterminate depending on what is visible.⁸¹ For example, when

⁸¹ What is visible can be well defined ("dicsign") for example when it seems clear that the director is pulling our gaze; it can be less well defined ("reume") from a mobile but still common-sense "floating" perspective; finally it can be from a perspective which completely defies assimilation by some

the camera switches from the common-sense perspective on Sandro's car in *L'Avventura* to the eerie position of where Anna "might have been looking if she had not disappeared and followed them to the plaza for some unaccountable reason and sharing with us her point of view", we have an example of an attempt to render a floating perspective which goes beyond the simple contrast between figure and ground, subject and object, nature and observer. The extent to which this might allow genuinely creative thought can be gauged by looking closely at images such as these for the way(s) in which they embody this view and provoke a creative stutter.

4.2.1 Images

Examining Antonioni's images involves looking at his montage as disruptions which induce the kind of stutter mentioned above into the signifying material of cinematic language. It implies that his films work as performative rather than descriptive devices, because of the effect they have on the viewer.

The first of these effects is one of strangeness, for Rascaroli and Rhodes (2008, p. 42), who feel that rather than describe reality, the concentrated gaze of these films "make[s] the familiar strange" and "warp[s] things out of familiarity". Rather than cold or empty, Rascaroli and Rhodes (2011, p. 1) find them "shocking" and "jarring". It is said that they work as a kind of training because Antonioni forces us to tackle serious issues, albeit "without offering any help" (Chatman and Duncan, 2008, p. 31). This is training in living with uncertainty, reflecting the claims of a consciously "modern" cinema:

that is, a cinema which is not concerned with externals as it is with those forces that move us to act in a certain way and not in another. Because the important thing is this: that our acts, our gestures, our words, are nothing more than the consequences of our own personal situation in relation to the world around us

(Antonioni, in Cottino-Jones, 1996, p. 25-26)

"normal" perspective ("gramme"). Here, pure auditory and optical situations replace the ability to perceive action and a new perception arises where "[c]amera consciousness raises itself to a determination which is no longer formal or material, but genetic and differential. We have moved from a real to a genetic definition of perception" (Deleuze, 2005a, p.88).

This approach to the purpose of cinema is a further sign of Antonioni's formal modernism.⁸² His images do not fuse with the real, forcing us to seek meaning elsewhere than in such a simple correspondence. He argued that this disruption was demanded by disordered experiences which contradicted this sense of order:

I felt somewhat annoyed with all this sense of order, this systematic arrangement of the material. I felt a need to break it up a little. So, having a certain amount of material in my hands, I set out to do a montage that would be absolutely free, poetically free.⁸³

(Antonioni, in Cottino-Jones, 1996, p. 24)

Such poetic freedom claims to work through images whose task is to challenge our sense of order and the assumption that this is more "real" than a more chaotic alternative. At one level, this implies we need to learn a new way of looking at films whose "meaning" is displayed in novel ways. But on another level it implies that it operates on a highly emotive plane through images which shock and displace us as we stutter in our attempt to know them. Their aim is therefore both creative and pedagogic, by preparing the audience for a "new visual challenge" (Chatman, 1985, p. 42), testing both patience and memory (Nowell-Smith, 2008, p. 199). The challenge implies that we have to examine the ways in which narrative conventions are consistently and continuously set up and disappointed (Nowell-Smith, 2008, p. 199). This examination involves a number of stylistic features, the most obvious of which is montage.

⁸² Although the extent to which this approach is evident in earlier films is often debated: cf. Chatman (1985, p.99) and Carr (2010). Whereas for Chatman, the use of setting for narrative purposes for example is a feature of Antonioni's "mature style", for Carr the technique is visible from the earliest films. These, for Carr, display "the overt pretence of using location as a major contributing factor to nearly all diegetic levels of a motion picture". Shiel (2006) challenges Chatman's teleological view of Antonioni's later work for similar reasons. Gandy (2006, p.316) agrees that the "Antonionian landscape" is present as early as *Gente del Po*, although the shift is less of style than object, moving from urban deserts in the early films to real deserts in later work.

⁸³ This attempt at poetic freedom in cinema is inseparable from a series of technical features which have come to distinguish what Chatman calls Antonioni's "mature style". Four of these features (montage, dead time, dialogue and framing) play a large part in the attempt to create poetically powerful "affective moments" in his films.

4.2.2 Montage

Montage is “simply the joining together of different elements of film in different ways” (Rohdie, 2006, p. 1). There are many different types (Colman, 2011, p. 58), but as a technique it can combine or separate frames to construct narrative through a sense of continuity, discontinuity and juxtapositions. Through these (dis) connections, montage determines a link with a wider Whole, because it presents time as a qualitative change in this Whole beyond the individual image (Marrati, 2008, p. 44). Montage thus goes to the heart of what cinema is supposed to do, by presenting an image of time itself.

Russian director Sergei Eisenstein is often considered a key thinker of montage. His ambition for cinema as a popular art form lay in dialectical montage techniques which contrasted sharply with Hollywood’s “intellectually inert” preference for drama and dialogue (O’Rawe, 2006, p. 397). For Eisenstein, these techniques involve “the manipulation of definite representations to produce images in the mind of the spectator” (MacCabe, 1993, p. 60). Films such as *Battleship Potemkin* exemplify the way many brief shots are organised and edited together in such a way that emotional impact is maximised (Nowell-Smith, 1991, p. 1). Such montage aims to reduce particular images to their greatest possible intensity in order to produce a third, super-intense moment of the image which works between them to produce a new connection (Jameson, 1992, p. 212). Montage, in these conditions, produces an “affective moment” whose principle characteristic is to open us to new possibilities.

The space produced by montage involves “both an interaction between representations and a shock” (MacCabe, op.cit, p. 59), and is therefore the space of a creative stutter which results from the fundamentally performative nature of language (Deleuze, 1997, p. 107). For Deleuze, when we are confronted both with the exhaustion of the given and its opening onto the unknown, we attempt to refer what we see to the representative schema which we already know. This is disrupted, however, by the new image which forces us out of this zone and into new connections. These connections in turn provoke new attempts at codification, and so on, disrupting the sense of a seamless, unproblematic “real” in cinema and indeed in thought. Montage disconnects the eye from a particular perspective and introduces the possibility of a multiple gaze from any point whatsoever (Marrati, op.cit, p. 38). It also illustrates how relations can exist between the disparate.

For Deleuze, montage is the act of composition or assemblage of movement-images. It is “the operation which bears on the movement images” and which is equated with a whole

which is the image of time (Deleuze, 2005a, p. 30). Time here is represented in a necessarily indirect way by movement in the image, but the time in question is not the homogeneous or mechanised time measured by action and movement. On the contrary, montage connects the static image in the frame with the whole outside it and to the intensity of a-temporal duration rather than the extensive form of chronological time (Deleuze, 2005a, p. 31). Rather than simply disturbing sensorimotor links, these images are able to create links with other forces of “the earth itself” which opens thought beyond movement into the realm of pure duration (Marrati, 2008, p. 62). This is largely because the image is able to convey aberrant movement which is never entirely in the present: the image we see is haunted by a past and a future which do not follow logically from what we see now, giving it a “temporal density” for Marrati (op cit, p. 68). When made to stutter in this way, images become affective and intensive, breaking free of the usual syntactic flow of well-known words, thoughts and images. The stutter works through this connection to the whole, by introducing the new into an existing scheme, forcing us to stop thinking automatically and start thinking creatively. This is why a stutter is impossible whenever cinema tries to be “seamless”, as in classic cinema for example.

On this view, the kind of ordered cinema Antonioni resented so much wrongly positions the spectator as a subject in control of the images in the film and their “message”. This order exists, for example, in classic Hollywood cinema which ensures action takes place in a single time and space (Bogue, 2003, p. 108). Traditionally, shots are never cut during the action which they depict, for instance, allowing the viewer to see the action in its entirety before moving on to the next event in linear fashion. For Zahn (2011), this is the meta-language of a cinema which comforts our preconceptions and resolves all possible contradictions.

But beyond contradiction, the transcendent subject is purely artificial and loses out on what cinema can do. Like Deleuze, Antonioni is interested in cinema as a performative medium which, as a result of disruptive montage, becomes is a cinema of “expression”:

I began searching for expressive ways and means, not so much through an orderly arrangement of shots that would give the scene a clear-cut beginning and end but more through a juxtaposition of separate isolated shots and sequences that had no immediate connection with one another but which definitely gave more meaning to the idea I had wanted to express

(Antonioni, 1962)

The celebrated final sequence of *L'Eclisse* (1962) is arguably Antonioni's most successful attempt to achieve this. The film recounts the beginning of a love affair set against the background of Italy's economic boom. The two lovers (Monica Vitti's Vittoria and Alain Delon's Piero) agree to meet up on their favourite street corner, but simply fail to do so. Instead of their meeting, Antonioni ends the film with a long montage in which various residents go about their business in the street. Once the last of these residents has passed through the crossroads, the crossroads itself actually takes over the film and the montage focuses on a range of artefacts and spaces from in and around the corner. We are left to ponder the relation between them and the film.

Perez (1991, p. 234) argues that the film "begins at the end" with the aftermath of the main drama. The characters are already exhausted and seem to be eclipsed, like the wartime spaces obliterated by violence (Marrati, 2008, p. 61). For Moore (1995, p. 30), it is the vision of "a benighted and anxious world" which closes as the bright white glow of a street light blots out the picture in the film's "devastating" final montage (Rascaroli and Rhodes, 2008, p. 46). This example of "saturation", where the frame is reduced to complete emptiness or filled with light, is in many ways a "pure" Antonioni image, where the content of the frame is so condensed as to appear illegible or out-of-field.

For Deleuze, however, our inability to read a frame signals the need to learn to do so. He argues that the frame itself is disposed, for example, as a geometric space which exists prior to action. The frame "deterritorialises" the image by giving it a new set of relations both within itself (as a closed set) and with the out-of field as open set (Deleuze, 2005a, pp. 14-17). This is why another response to Antonioni's empty spaces is to examine their exemplary ability to leave the viewer asking profound questions:

No other film has left its audience so rudely to ponder the question, Is that all? Is that all there is to this love affair? To our common destiny? To our civilisation? To the earth itself?

(Chatman, 1985, p. 112)

These sequences are therefore performative, and this may be why, rather than communicate a message, Antonioni hoped to hold the viewer's interest. It is precisely at issue in the passivity and exhaustion of the character of Locke in *The Passenger* (1975). Jack

Nicholson's reporter suffers from a central problem in that is unable to get involved in the things he reports. He is a "filter" who can only show things to others as a witness rather than as a protagonist (Antonioni in Brunette, 1998, p. 136). The vision is bleak, but "[I]f life is not always happy and one must have the courage to look at it from all sides" for Antonioni. What matters is "that the story should be told with a firm and impassioned conscience" (in Cottino-Jones, 1996, p. 16-17). Expressing this conscience led Antonioni to develop the singularly sparse, stripped back style mentioned above and his trademark ellipsis, to which I now turn.

4.2.3 Ellipsis

Ellipsis is conventionally used to establish transitions in film narrative. Typically, it exists to ensure that only essential detail is retained for the viewer by editing out anything which might distract us from the story. Only those events and information which are needed for the unfolding of story are included. The aim is to imply that inessential events happen without mentioning them in the belief that they will obscure the plot or even confuse the viewer. Such ellipsis also tends to accelerate the pace of film and increase tension.

The result of such editing is paradoxical, however. On one hand it increases tension by telling the viewer that "everything is important" in a film. On the other hand, precisely because we know that the contents of a film are all framed by a single narrative, it can have the effect of reducing our attention. We know that, even if we miss a detail, the film will end in the same way. Such ellipsis also destroys any inherent rhythm which the actions might have, just as it eliminates any incidental or minor event, character or piece of information.

Complex daily life does not have the facility of ellipsis, and Antonioni argues that a truer rendering of daily life must therefore avoid editing out such moments. For Antonioni, this is a pervasive technique which asks spectators to "respond to the points between the dots, to respond without being certain how to respond" (Bergen-Aurand, 2004, pp. 3-4). In this use of ellipsis, especially in the later films, Antonioni was "ahead of his time" (Chatman, 1985, p. 79), and his evisceration of material in his films became something of a trademark:

So, film by film, I gradually began to divest myself of certain precious and professionalised techniques (...) Thus, I have rid myself of much unnecessary technical baggage, eliminating all the logical narrative transitions, all those connective links between sequences where one sequence served as a springboard for the one that followed.

(Antonioni, 1962)

Il Deserto Rosso, for example was no more than the beginning of a “series of problems” (Antonioni, 1972). This serialisation of unresolved problems is an attempt to force us to relinquish our desire for answers and resolutions (Gilman, 1962). The simple reason for this, according to the director, is that these answers are simply not there. Defining himself as “the product of a middle-class society” Antonioni was concerned with the problems this presupposes but unequipped to answer them, and therefore confined to “pointing out existing problems without proposing any solutions” (in Cottino-Jones, 1996, pp. 39-40).

Ellipsis is therefore a technical gesture which concerns the relation between what is present and what is not, and is more than a purely stylistic feature. For Cameron and Wood (1970, p. 68) a thematic reversal exists in Antonioni’s “better” work which can perhaps be explained by the centrality of ellipsis. For Cameron and Wood, *Il Grido* is the reverse of *L’Avventura* because the former concerns the depressing inability of Aldo to forget, whereas the latter tells of Sandro’s (arguably) less depressing inability to remember. This view however underplays the ways in which Aldo’s melancholy is “nebulous” rather than focused on a particular object (Brunette, 1998, p. 8). Sandro, too is plagued by insecurities and cannot forget his own obsessions. Throughout the film, his search for Anna and her replacement, Claudia, are affected by his search for ways of forgetting his deep sense of failure as an architect. But while this sense of failure may be at the bottom of his shallow nature, its principle characteristic is to “seep out” in a way which affects all of his relationships. Nowell Smith (2001) argues that the viewer is infected by this amnesia because, like the other characters, the spectator is unaware of Anna’s not being present.

Sandro’s obsession is never fully articulated verbally, but it is amply demonstrated in gestures and expressions of dissatisfaction with anything which reminds him of the mediocrity he cannot efface. Rather than tell us that Sandro is deeply troubled by his own failure, Antonioni shows us. Such ellipsis excludes what we expect (verbal narrative assistance) in favour of dense images such as the ink bottle which Sandro tips over to ruin the young architect’s drawing. It also mocks the infantile nature of the gesture by showing Sandro leaving the scene to join a troupe of school children, providing an ironic comment on what appears to be a deep psychological problem for a central character. Hence, nothing, in *L’Avventura*, is ever more than a mystery or a “shadow hanging over the plot” (Nowell-Smith, 2008, p. 199). The uncovering of an image in Antonioni is never a revelation of truth or reality, but “only the reality of images” (Rohdie, 2006, p. 110).

Ellipsis is Antonioni's way of remaining on the surface of things. It reduces our ability to understand what is happening in the film as a whole because we have to make the link between images ourselves, often at speed and between contrasting or conflicting points of view. This forces us to witness the narrative as a whole without atomising it. Time is distended as we lose the ability to separate out the elements of the story, and as viewers we are forced to respond to images in a pre-rational way. This gives a greater density to narrative because the gaps between disjointed images work like pockets or vacuoles in which thought can literally take place between what is already known.

4.2.4 Surface

A linked phenomenon is Antonioni's use of depth of field as an expressive technique which produces a "tension between figure and ground" (Chatman, 1985:8). Deep field, for Antonioni, is essential to realism, because it provides the illusion of three dimensions. Stressing this illusion provides a different sort of realism, however, and with a very shallow field figure and ground are in tension with one another. In effect, when the field of vision is flattened, figure and ground seem to be in contact or even compete with one another and the illusion of cinema's realism is exposed. Rather than the illusion of a three-dimensional image, we see a set of two-dimensional planes or surfaces which seem disconnected from one another.

A telephoto lens was used in earlier films to exaggerate this flattening effect (Antonioni, 1972, p. 327), making the characters seem vulnerable and confused. The telephoto lens was used even when characters were very close to the camera, having the effect of reducing the distances between characters on different planes in the shot. The physical presence of objects is stressed by their location on the same plane as the characters, and barriers which exist on this plane (doors, frames, bars and so on) seem to separate characters permanently. The result is that all the characters often seem to be on the same plane, but that the distances between them and objects are widened.

This heightens our sense of their estrangement in a "lucid and anti-sentimental view of life" (Chatman, 1985, p. 79). When used in conjunction with objects and flat lighting, characters can seem "pinned" against walls, doors and rocks which themselves seem flat. Fragile characters are "caught" by the environment and weighed down by it. As a result, we cannot forget the environment and have to pay special attention to it, rather than just see it as ancillary to the dialogue. The boundary between people and things is deliberately reduced and we are forced to notice the bond between individual and environment.

This flattening effect is extenuated by a rhythmic use of narrow focus – deep focus and the emphasis which strong vertical and horizontal lines bring to this rhythmic movement. For example, in the opening scene of *Cronaca di Un Amore*, a dark figure crosses a square and is framed between two pillars. The feeling of voyeurism is reinforced by the framing and the jazz music which clashes with the historic architecture. This heightens the sense of solitude because its melody does not reflect the traditional harmony or rhythm implied by the classical architecture which frames the action and provides a space from whose shadows we observe the action. The shot is a *mise en scene* with great depth of field, but the *mise en scene* uses buildings to create a sense of scale in which the human is at once isolated, dwarfed and trapped. The columns and arcades reinforce this: halls, lines, rows of trees and corridors all work to emphasise the helplessness and isolation of the characters by pressing at the borders of the screen (Rascaroli and Rhodes, 2008, p. 43).

These manipulations of field depth are an integral part of Antonioni's modernist reflexivity because they allow the camera to challenge the realist illusion. Interestingly, the technique is reminiscent of early cinema, which tended to shoot straight on. Here, actors generally face the camera and frontal, eye-level shots make two-dimensional elements more important than three-dimensional ones. In this way they recall medieval painting which presents flat surfaces rather than perspective: there is no off-screen space, and the space behind the action is like a backdrop, making the screen a surface which absorbs the spectator's gaze (Apra, 2000, p. 137).

With later films, such as *Il Deserto Rosso*, the intention was to put characters in contact with things. In an interview with Jean-Luc Godard, Antonioni (1972) remarked that "today" it is things, objects and materials which have weight and people who have lightness. In *The Passenger*, deep field shots serve to emphasise the separation of people and things or show things trapped between sheets of screens. In an intriguing hotel scene, Gaudi's remarkable architecture prevents contact between the characters – especially those seeking Locke – and ensure that it is the characters who remain indecipherable. Once again, in the penultimate shot at La Gloria hotel, the camera is able to leave the room and penetrate a deep field of vision, but it cannot provide the information that the characters seek about Locke's "true" identity.

These different ways of playing on depth of field signal a particular preoccupation in Antonioni's work, namely the desire to present events as surface effects. Naturally, this is literally true of all cinema projected onto a flat screen. But for Antonioni, our attention is drawn to the ways in which events occur between things at an interface between characters,

objects and setting which is deliberately rendered in a tactile or haptic way. The purely visual image, flattened in shallow shots or juxtaposed with objects in depth shifts to a quasi-tactile experience as the eye seeks to isolate physical dimensions on the screen. The narrative is precisely this haptic exploration of the image, forcing our appraisal of the image into the interstice, between sheets of characterisation, where screen space itself rather than movement per se is made sensorial (Colman, 2005, pp. 105-8).

4.2.5 Modernity

As we have seen, Antonioni is well known for his complex stance on the issue of modernity. Despite depicting many of the drawbacks of economic progress, however, he was also attracted by it and in particular the new ethical and aesthetical forms which he believed it heralded. Deleuze also believes that the issue of our relations with industrial production lies at the heart of our experience of modernity, and that we need to interrogate the potential of change and our relation to it:

Modern life is such that, confronted with the most mechanical, the most stereotypical repetitions, inside and outside, we endlessly extract from the little differences, variations and modifications. Conversely, secret, disguised and hidden repetitions, animated by the perpetual displacement of difference, restore bare, mechanical and stereotypical repetitions, within us and without us.

(Deleuze, 2004a, p. xviii)

In particular, he raises the question of how a truly industrial genre such as cinema might deal with a relation between repetition as the production of the same and repetition as the production of difference by referring both back to the operation of time. Cinema is interesting in this regard because of its particular relation to time and because time is an economic problem insofar as capital is dependent on the “appropriation of the time of others” (Harvey, 2010, p. 199). The creation of surplus value and its return on investment both require the speculative transformation of time to take effect, hence the essentially economic value of the race against in time in film.

This reflects a certain metaphysical abstraction which some commentators have identified in late capitalism. Time itself, when seen as a guarantor of dividends, becomes a commodity to race against, even bought and sold, forming the repetitive basis of our economy and our relations with each other, colonising even the future (Giddens, 1999 in Adam, 2003, p. 72). If we are therefore literally living on borrowed time as Parikka (2011) suggests, being free

means having control over it (Hess and Paltrinieri, 2009, p. 56).⁸⁴ The time borrowed, however, is heterogeneous, meaning that it agrees with a logic of difference and abstraction. Labour is measured in temporal units, and the brands, products and affective relations it produces are the increasingly individualised commodities of “metaphysical capitalism” based in the profitability of difference and the “neo-commodity [which] is itself a virtual” (Lash, 2007, p. 9). The neo-consumer, in turn, is subjectified to maintain market relations rather than simply acquire things, involved in “the production of possibles” (Tarde, in Cronin, 2008, p. 297). The affective consumer has agency as a creative relay of bio-technological or bio-informational capital and is thus a key biopolitical player (Toscano, 2007, pp. 74-82).

The question of whether cinema can contribute creatively to this re-appropriation of time is complex. Cinema may be a privileged way of expressing potential forces which have been previously oppressed or exploited (Bouaniche, 2007, p. 217). It may therefore evoke a “people to come” by changing the ways we currently perceive into new ways of seeing and feeling.

For Deleuze, however, we must accept that cinema’s early ambitions as a superindividual, federating political instrument quickly dissolved. Instead, he argues, cinema operates at a subindividual, psychic level to produce a “spiritual automaton” which has acted in different ways in response to different contexts over time. By tracing the development of this “spiritual automaton” in cinema, he states that we can better understand the ways in which thought can still hope to be creative after the industrial mechanisation and mass oppression which have largely defined modernity.

Deleuze contends that post-war cinema is involved in a change to the way we think: just as the cinematic image tends to lose control in fragmented images of time, transcendent images of thought lose their grip. Cinema, by forcing us to think the limits of our capacity to act in the world produces a “spiritual automaton” in thought which highlights a profound dislocation from our sense of our own subjectivity. It is this “spiritual automaton”, a figure drawn from Leibniz and particularly Spinoza, which plays a key role in Deleuze’s attempt find the identity of being and free thought from idealism (Jean-Clet Martin in Boundas, 2011, p. 142). A spiritual automaton, he argues, sustains our creativity by continually forcing thought

⁸⁴ « *Etre libre, c’est disposer de son propre temps* » (Hess and Paltrinieri, 2009, p.56). I will argue below that this non-equivalence of time contributes to an economy of debt in lifelong learning.

to think its own powerlessness or “inpower”, thus establishing a new link with the world (Deleuze, 2005b, p. 162).

Cinema forces this “inpower” by reminding us that thought is implicated in concrete forces of an autonomous world outside it. Deleuze’s argument is further underpinned by a belief in the ability of autonomous images to directly affect us and allow us to escape from the automatism of everyday clichés and non-thought. Deleuze looks to an immanent force which can provoke thought from within, and turns to the Spinozan concept of thinking to do so. In *On the Improvement of the Understanding* (1677/2009, p. 85) Spinoza writes:

As regards a true idea, we have shown that it is simple or compounded of simple ideas; that it shows how and why something is or has been made; and that its subjective effects in the soul correspond to the actual reality of its object. (2) This conclusion is identical with the saying of the ancients, that true proceeds from cause to effect; though the ancients, so far as I know, never formed the conception put forward here that the soul acts according to fixed laws, and is as it were an *immaterial automaton*.⁸⁵

For Spinoza, thought operates automatically with reference to nothing other than itself (Genosko, 2001, p. 378). Spinoza’s “immaterial” automaton is therefore spiritually automatic in the sense that it occurs without the need for an outside agent. In this, Spinoza’s spiritual automaton directly opposes theories of mind/body dualism: it is a monistic synthesis of a new content and a new form which places rupture within the mind, not outside it or between it and some Other realm (Deleuze, 1968, pp.301-303).

The mind, for Spinoza, is therefore a modified part of everything else, and acts “according to certain laws” to which all substance is bound. Conscious agency in these conditions is not just a useless concept: it is a meaningless one contradicted by the complex temporal problem of iteration. If it can be shown that thought operates automatically, the issue of truth and falsehood is radically altered, with truth becoming a largely inadequate concept because it is less we who have ideas than the ideas which are affirmed in us (Deleuze, 1978). Deleuze argues that such automatism exists in cinema, where a montage of static images can provide “movement-images” as a pure phenomenon: because the cinematic image is not just the technical juxtaposition of frames, it creates automatic movement and gives rise to a “spiritual automaton” in the brain. In essence, a circuit is formed between the brain and the

⁸⁵ My emphasis

image which creates pure movement in thought for the masses or a movement beyond the imagination (Deleuze, 2005b, p. 151-152).

However, Deleuze, as we have seen, is keen to interrogate any construct which is presented as given, autonomous or reified. Complexity demands creativity which in turn demands interference in order to account for and participate in the necessary variation resulting from interactions over time. As we have seen, for Deleuze, because a thinking entity (cogito) cannot be essentialised in this way, the possibility of thought presupposes a “flaw” in such a cogito in the form of a pre-subjective “non-thinker” within it. This is why, for Deleuze, cinema must first and foremost avoid teleology (Marks, 2006, p. 127) and why thinking is “a process of nomadic displacing of a receptive self” (Braidotti, 1991, p. 110). Once thought reaches this more creative level, a second type of spiritual automaton is created.

Following Antonin Artaud’s claim that there is something within thought that stops it thinking, Deleuze equates the mummification, petrification or paralysis of thought with a creative moment of contact with thought’s own outside. This is the “core” or “underbelly” of thought, (Deleuze, 2005b, p. 161), causing it to stutter and break its flow by introducing an interstice between automatic thought and the awareness of a body which disrupts it from within. This “idiot” within thought therefore is what actually allows thought to take place at all (Deleuze and Guattari, 1994, p. 60), existing in a space beside the self which, through this process, becomes a strange *topical* entity or site. It is the ever-changing scene of thoughts and affections (Arsic, 2005, p. 142) or a shifting archipelago of relations between thought and the unthinkable, sense and nonsense.

It is our inability to think this whole and its necessity that marks a transformation in cinema for Deleuze. This change was necessitated by a crisis, he asserts, in the notion of cinema’s treatment of action, and precipitated from within (Deleuze, 2005a, p. 124). Clearly, post war societies had to answer many questions about their implication in conflict: the demolition and reconstruction of urban spaces for example were profound changes. While these issues are crucial, for Deleuze an additional, and possibly more profound, shift occurred in the form of an entirely new sort of cinema which developed in these conditions and probably could not have existed without them. Post-war films by Rossellini, Dreyer, Godard, Antonioni and others were no longer concerned with the evocation of action on screen: their films were remarkable for their creation of a “time image” (a direct representation of time) rather than the “movement-image” (a direct representation of movement). Cinema increasingly concerned itself, for Deleuze, with the evocation of “unhinged time” in tune with a post-war world which had lost many of its previous certainties.

In particular, these new sensory situations were disconnected, fragmented and recognisable by particular characteristics: dispersive situations with deliberately weak links, brought together in a strolling style underscored by a new awareness of clichés and a denunciation of the conspiracies of those who produce them. Italian neo-realism, for Deleuze, marked this transition, with films like *Bicycle Thieves* bringing these features together. Crucially, while this new situation fragmented the action image and its logical belief in agency, it also brought hope in the form of a new openness and awareness:

The action-image then tended to shatter, whilst the determinate locations were blurred, letting any-spaces-whatever rise up where the modern affects of fear, detachment, but also freshness, extreme speed and interminable waiting were developing

(Deleuze, 2005a, p. 124)

In this way, the time image breaks from the logical relation of sensory-motor links required by a movement-image, introducing a new schema. Rather than the logical progression of images related to action, cinema provides a new experience of the image-in-itself where sensory-motor connections become redundant, taken over by false continuity and an aberrant depiction of movement. False continuity is an essential pole of cinema because although montage may establish logical continuity between images, the whole with which the shot relates is always implied by the frame: false continuity is thus “the act of the whole” on a set of continuities in the frame, disrupting their logic and purpose (Deleuze, 2005a, p. 29). When cinema becomes concerned with this disjunction instead of the logical continuity of action and movement, it breaks the sensory-motor link.

This is often depicted by the image’s content in the form of empty, disconnected places at the margins of urban development typical of Antonioni’s films (Deleuze, 2004b, p. xi). Akin to “the knife to the heart” which makes a fissure and opens the text to the whole (Colman, 2005, p. 102), these images are marked by the irrational cuts and illogical connections which also abandon us to the content of situations which surge up when links between actions are broken (Marrati, 2008, p. 61). In such situations, bodies are no longer actors but acted upon. Rather than extend actions, purely optical and sound signs refer to situations where the possibility of “acting” shifts to that of “perceiving”, and characters change from “agents” to “seers.” They see the virtual in images which work like still life, evoking a movement which transcends material change. They are no longer marking time by their movement but revealing or developing it, particularly, in Antonioni, by their tiredness and waiting for

something to happen (Deleuze, 2005b, p. xii). Struck by something intolerable in the world, even in the banal and insignificant, a spiritual automaton arises within thought, seeing further than it is able to act (Deleuze, 2005b, p. 164-5).

Reduced to this pure sensory state, we can therefore no longer rely on action, agency or reason to come to terms with a nature whose activities are beyond our imagining. So the development of a time-image involves the creation of a very different type of spiritual automaton with a transformed relation to movement in thought. As we have seen, for Deleuze genuine thought is inseparable from an awareness of its own “inpower” or inability to think in new ways. The mind contains a body which it cannot control, awareness of which constitutes a “nooshock” or shock to thought. The material automatism of cinematic images induces an intellectual automatism in thought by bringing it into contact with an outside (Deleuze, 2005b, p. 173).⁸⁶ Cut off from the actual outside world, this automaton in thought is activated by a more profound “outside”, ethically redefining our sense of the world and restoring our belief in it as a whole and in our ability to choose new ways of living:

The time image asks us to believe again in the world in which we live, in time and in changing, and to believe again in the inventiveness of time where it is possible to think and to choose other modes of existence.

(Rodowick, 1997, p. 200)

What counts is not the movement of images but the interstice between them, which means that images are themselves taken from a whole to which they immediately return (Deleuze, 2005b, p. 173). As in montage, an interstice is introduced between images which operates a difference of potential between them to produce a third image as something new. It is an “irrational cut” which does not form part of an existing set, and is therefore not a matter of adding to a chain or series of images but of breaking out of them. Cinema shows us difference *literally* between images by using montage which inserts this interstice as

⁸⁶ Stanley Cavell makes a similar point, that cinema’s automatism draws attention to an outside world beyond control. This also frees us from the world as concrete, material outside by drawing attention to automatisms and autonomy outside ourselves:

A third impulse in calling the creation of a medium the creation of an automatism is to register the sense that the point of effort is to free me not merely from my confinement in automatisms that I can no longer acknowledge as mine (...) but to free the object from me, to give new ground for its autonomy

(Cavell, 1980, p.107-108)

“differentiator” (Deleuze, 2005b, p. 174). For Deleuze, cinema is creative when its intimate relation to the brain is deployed to produce these “gaps” or “interstices” which, like the cuts between images in montage, present thought with its own limit:

When the whole becomes the power of the outside which passes into the interstice, then it is the direct representation of time, or the continuity, which is reconciled with the sequence of irrational points, according to non-chronological relationships

(Deleuze, 2005b, p. 175)

This new spiritual automaton therefore differs from the classical conception of the mind’s ability to make movement out of static images. Now, the spiritual automaton is the “mummy”, or the unthought in thought itself, unable to think difference as the whole, confronted with its intolerable own limit. For Ford (2010), we can see this at work in *L’Avventura*, whose images violently disturb “the metaphysical superstructures of modernity and its inherited values”. Subjectivities deep in crisis are rendered *in* and *through* time and space and although they are confronted with the need for difficult thought, they are often too exhausted by their “creative future potential” to rise to the challenge.

For Deleuze, this creative gesture is both critical and clinical in that it serves to engender the act of thinking itself. The striking conclusion is that without this violence, we are not yet thinking, and the next part of my exposition concerns therefore the cinematic practices which might provide the necessary shock. Although Antonioni leaves us with “only a belief in this world” (Deleuze, 2005b, p. 181), its examples of creative activity can inform and enhance teacher education practice in LLL by posing the challenge of “creating new links between humans and this world” (Marrati, 2007, p. 64).

The conditions of a true critique and a true creation are the same: the destruction of an image of thought which presupposes itself and the genesis of the act of thinking in thought itself.

(Deleuze, 2004a, p. 176)

4.3 Diagrams

In this section, I examine Antonioni's own practices and what they might teach us about creative processes in this context. I refer to the director's statements, interviews and occasional writings because of the "experimentalist ambition" of this quasi-ethnographic body of work (Williams, 2008, p. 57). Clearly, Antonioni's comments should not be taken as the last word on the films' complexities (Cameron and Wood, 1962, p. 115), but taken as a whole they do offer insights. For example Antonioni asserts on one hand that creative acts escape our will, and on the other that experimentation and artistry are synonymous (Antonioni, 2003, pp. 107 and 136). At the same time, he frequently returns in his texts and interviews to the practices which, in his view, foster creativity. This apparent contradiction, among others, will be examined.

I first of all follow the ways in which the director describes his own work. As we will see, Antonioni claims that his filmmaking practices are deeply influenced by attempts to "lose" both himself and a degree of control. It is questionable whether a complex object such as a film can be simply explained by chance events, and I examine what Antonioni means by returning frequently to the role of intuition and chance in his practices. To do so, I begin by outlining Deleuze's discussion of "diagrams" in Francis Bacon's artistic practice. This provides a particularly useful analysis of the creative processes in question.

Similarly, Antonioni contrasts rational approaches to understanding his films with those which highlight their role as creators of "new thoughts and sensations" (Williams, 2008, p. 53). Having already discussed the way thought "stutters", in this second part, I deploy Deleuze's analysis of the role of sensation in art in order to identify exactly what is meant by sensation here. My discussion hopes to show that creative stuttering requires a material encounter, using Antonioni's practices as examples of how this might work, with lessons for creativity in LLL.

4.3.1 Diagram

Deleuze identifies a "diagram" in the practices which are particular to creative thinkers and especially artists. All thought, be it in the form of art, science, or philosophy "is always confronting chaos" in different ways: art's role is neither to save nor to forego this chaos but to "create the finite that restores the infinite" (Deleuze and Guattari, 1994, p. 197). The role of the artist is to "engage in an act of co-creation" with the forces of immanence which are both vital and autopoietic (Ambrose, 2006, p. 11). This is achieved, Deleuze argues, by constructing a "diagram", or an abstract pattern of a real situation which operates as a pilot

of that situation. It is therefore able to express and produce power relations (Deleuze, 2003, p. 234), but it also provides a means by which a-signification works directly on the nervous system, bringing together “nothing but sensations” (Deleuze, 2004b, p. 66). On this view, a diagram has a specific identity and a creative purpose, both of which I will now examine.

4.3.2 What is a diagram?

A diagram has neither substance nor form (Deleuze and Guattari, 2004b, p. 156) and is rather a map, “or rather several superimposed maps” (Deleuze, 1986a, p. 44). Based on the view that relations exceed their terms, this map charts “relations between forces” and acts as a “non-unifying immanent cause” because, unlike a tracing of the given, it creates it. This also differentiates diagrams from axioms, because whereas the latter reproduce themselves, the diagram is open to change by “creative lines of flight” which “run off in all directions” (Deleuze and Guattari, 2004b, p. 158). A diagram’s relations of lines of power are therefore discernible in actualised concrete assemblages that execute them in material form. This matters to Deleuze because a creation which relied on existing terms would not actually produce change. Only by “rupturing the predetermined notion of the possible” and by continuously distrusting the idea of possibility itself can we actually create, destroying mundane imitations and moving “beyond fear” (O’Sullivan and Stahl, 2006, p. 153). This leap from creation to confidence is an important one in the LLL context where, as I hope to show, creativity implies an ethical dimension which challenges the culture of distrust for teacher educators mentioned above.

Deleuze stresses that these power relations take place “not above” but “within the very tissue of the assemblages they produce” (Deleuze, 1986a, p. 37), so although the diagram itself is a virtual set of relations, it can only exist when it is actualised in this way. “The virtual”, May and Semetsky state, “can unfold into many things, but it cannot unfold into anything at all” (May and Semetsky, 2008, p. 145). As such, the diagram is an “immanent cause” which can also be described as a “quasi-cause”, or motivating factor which is only perceptible as such after the fact in a series where traditional causal connections are impossible to identify: events are never causes of each other (Deleuze, 1969, p. 46). Indeed, for the virtual to become actual it must create its own terms of actualisation in a kind of “future anterior” (Hardt, 1993, pp. 20-21), reconfiguring all previous series.

Diagrammatic features are therefore distinct from “lived fact” (Deleuze and Guattari, 1994, pp. 50-52) and are discernible at the heart of systems of thought in the form of “infinite movements” drawn from chaos. Although they are “supersensible” historical a-priori conditions (Rodowick, 1997, p. 197), they indicate the way in which a given thinker or way of

thinking has a certain consistency, allowing a particular idea to be related or realised in different ways. As a regime of signs, they are quite concrete and cannot be reduced to “discourse” (Deleuze and Guattari, 2004b, p. 163).

A good example of the way in which a virtual structure can affect actual forms is Foucault’s panopticon. Although based on the existence of actual prison structures designed to allow permanent effective surveillance of inmates, Deleuze describes the structure in more abstract terms as “the distribution of the power to affect and the power to be affected; it is the mixing of non-formalised pure functions and unformed pure matter” (Deleuze, 1986a, pp. 72-3). Deleuze is keenly aware of the many concrete manifestations of power, for example as spaces of enclosure described by Foucault. However, although empirical evidence of this existence will provide proof of actualisation in history, it will not provide proof of its event (Martin, 1993, p. 216). The empirical provides a concrete figure but does not explain what makes this figure possible or what it is becoming, and for Deleuze this possibility implies an underlying principle which demands analysis in the form of its event complete with virtual and actual facets. Hence, dissociated from any particular architectural structure or building, the event of Foucault’s panopticon is not an example or an instrument of a disciplinary system but rather its “virtual” blueprint. The principles of panopticism guide the evolution of disciplinary society whether an actual panopticon is built or not, and indeed particular disciplinary technologies only come into being once the disciplinary diagram is born.

Diagrams work in a similar way for artists. Drawing on the work of painter Francis Bacon, diagrams are, Deleuze argues, part of the intense preparatory work done by many artists who are also seeking to negotiate the space between virtual and actual in search of the new. Diagrams in Bacon’s art are not physical manifestations, line drawings or sketches, but are rather invisible, silent and intense, and can be described as working in a staged process. Working with a diagram starts when the artist makes random marks, by throwing paint or marking the canvas. Although random, they are nonetheless parts of a deliberate process of preparation, and so presuppose that there is some non-random preconception either on the canvas or in the artist’s mind. Such preconceptions certainly exist as “figurative givens” or ways of seeing in the form of reproductions or representations which illustrate or narrate (Deleuze, 2004b, pp. 99-100). The danger, for Deleuze, is that these givens counter creativity by actually resembling the thing they reproduce or by being related to it by convention or code (Deleuze, 2004b, pp. 90-91). Finally, they end up being the only thing that we see, which is why it is so important that they be disturbed by a diagram which works through them.

[T]he law of the diagram, according to Bacon, is this: one starts with a figurative form, a diagram intervenes and scrambles it, and a form of a completely different nature emerges from the diagram, which is called the Figure

(Deleuze 2004a, p. 156).

Diagrams are “a possibility of fact” rather than “the Fact itself” (Deleuze, 2004b, p. 110) for this reason. For Deleuze, Bacon’s act of painting is characterised by this use of a diagram which proceeds by removing these marks, offering therefore “the chance to clear the canvas of figurative clichés and reveal the Figure” (Radjabi, 2008). With Bacon’s figures, this act is particularly clear as Bacon effaces, covers or deforms them in some way. Typically, he uses a “brossage” technique where previously well-defined shapes are brushed in order to make them less defined and introduce other forms into a given image. The result of this deformation is “as if, in the midst of the figurative and probabilistic givens, a catastrophe overcame the canvas” (Deleuze, 2004b, p. 100).

The operation of the diagram is therefore a central part of the creative process, and it is material because it ties the artwork to a certain chaos. This connection with an “outside” occurs because these diagrammatic marks are a-signifying traits of what Deleuze calls confused sensation. In effect, the hand is guided in irrational ways by unseen forces which grant it a certain autonomy from the artist’s intention, giving the eye a new power as the diagram operates to “unlock areas of sensation” (Deleuze, 2004b, p. 102-102). The diagram must not however overcome the artwork: violent methods must be controlled and “the necessary catastrophe must not submerge the whole” (Deleuze, 2004b, p. 110). The challenge for art, on this view, is to use a diagram to negotiate the fine line between chaos and ossification by producing objects which are capable of bearing nothing but these sensations without losing their potential as operators of creative change: the diagram in other words “should not completely invade the canvas” (Beaulieu, 2011, p. 82).

The promise of such objects for education research and practice is their potential to escape a signifying regime already saturated with cliché. But the escape from cliché, for Deleuze, is not simply avoiding the mechanical and repetitive: rather, cliché freezes space and time by removing an image of reality from its context and its virtual, durational richness (Satter, 2012). Avoiding such clichés implies a contact with a real world of change and sensation in which we have little choice but to believe.

However, the challenge implied by this is that only experimentation can subject given elements to a diagram which itself is not given by experience. Thought, for Deleuze, is synonymous with such experimentation with experience:

Thinking is always experiencing, experimenting, not interpreting but experimenting, and what we experience, experiment with, is always actuality, what's coming into being, what's new, what's taking shape

(Deleuze, 1995, p. 106)

Without this shock from outside, art, science and philosophy are unable to avoid ossification and pre-established paths (Martin, 1993, p. 216). Instead, the cliché must be overcome by leaving chaos on the canvas as a continued material threat to the temporary or provisional order (Radjabi, 2008).

Primarily, as we will see, this means increasing the role of chance in the artwork. For example, in painting, the movements of the hand no longer depend on will or sight, and are therefore “blind” (Deleuze, 2004b, p. 101). Arguably the most striking result of this “blindness” is the way in which Bacon’s portraits are literally de-faced by scrubbing, brushing and wiping to remove their signs of “faciality”. For Deleuze, this allows Bacon to destroy the face as a concentrated image of subjectivity and by this process activate an awareness of deeper relations between the image and ourselves. For Deleuze, under the right (cinematographic) conditions, the attributes of the face (a concentrated form of subjectivity) can be detached from the face itself. This draws our attention to the ways in which anything, in principle, can express these attributes (Marrati, 2008, p. 41). In effect, by removing traces of the face, we are able to see beyond signification and subjectification towards a very different external world of objects in constant transformation.

This aspect of Bacon’s art is particularly important to Deleuze’s wider philosophical perspective, which is consistently critical of the unifying “image of thought” mentioned above. The differing senses and sensations attributed to subjects cannot actually be imputed to such a unified self-consciousness or indeed its capacity to reflect on mental representations in thought. These modes of thought merely reinforce existing ways of thinking, and so sensibility must be liberated through a constant innovation which in effect constantly de-subjectifies (Satter, 2012). For Deleuze and Guattari, this means that:

Instead of a string of linked propositions, it would be better to isolate the flow of interior monologue, or the strange forkings of the most ordinary conversations. By separating them from their psychological, as well as their sociological adhesions, we would be able to show how thought as such produces something *interesting* when it accedes to the infinite movement that frees it from truth as supposed paradigm and reconquers an immanent power of creation.

(Deleuze and Guattari, 1994, p. 139-140 original emphasis)

Bacon's canvases show this in action as the heads of his subjects are literally defaced. On one hand, these figures are separated from psychological and sociological frames, and become "probe-heads", seeking new ways of being in a pre-signifying world still open to them. As operators of absolute deterritorialisation, they form strange new becomings towards an "an altogether different inhumanity" (Deleuze and Guattari 1988, pp. 190–1) when a random act is deformed and redefined by a "productive encounter with chaos" (O'Sullivan, 2009, p. 255). For Bacon, this means that the effects of forces of change can be exposed on the canvas, offering us a chance to be affected by this encounter with the flesh subjected to them.

4.3.3 Pitfalls

The importance of such encounters for education is clear for Roffe. If education is concerned with movement, growth and change, then there must be "a moment of de-individualisation" and creation of "new ways of being in the world" (2007, p. 43). For Davies (2009, p. 627), this initiates not just a new aesthetic but a critical and creative "politics of becoming".

However, Ednie-Brown (2000, p. 2) contends that the discourse of diagrams is "confused", at least from the point of view of traditional line drawings and plans in architecture. In this context, it is not clear how a virtual object like a diagram or plan can be actualised in the way Deleuze and Bacon claim. Ednie-Brown quotes Bacon himself, for whom "[i]mages do drop in, constantly, but to crystallise these phantoms that drop into your mind is another thing. A phantom and an image are two totally different things". If the diagram is to work as a genuinely creative concept which links both virtual and actual, it is necessary, Ednie-Brown argues, to pay attention to the ways in which it remains operative throughout the process.

One way of doing so is to accept that often the diagram can indeed be "botched" (Deleuze, 2004b, p. 96). The main possibility for this failure of a diagram is the tendency to fall into

either figurative or abstract art, for Deleuze, (2004c, p. 36). Figuration, understood as narration and illustration, is a physical and psychic cliché which clamours to be reproduced and which prevents a real encounter with otherness, change or creativity. Abstraction, in losing any reference to a figure at all, also fails to produce sensation because it transforms chaos into a simple stream to cross in a purely intellectual activity. It creates either pure internal optical space or a purely manual space, neither of which manage to engage with sensations or an outside (Deleuze, 2004b, p. 103-4). As such, for Deleuze, these abstractions are exclusively cerebral products operating on one (individual / universal / transhistoric) level only. They “pass through the brain” and consequently “do not act directly on the nervous system”, Deleuze argues. “They do not attain the sensation, they do not liberate the Figure – all because they remain at *one and the same level*” (Deleuze, 2004b, p. 36 - original emphasis). Gandy (2003, p. 227-228) also criticises this impetus in abstract expressionism as a drive towards “universal, teleological and transhistorical modes of critical interpretation”. These link a neo-romantic “mystique of creation” to an emphasis on intensely individualised psychological drama.

This argument, however, does not counter the view from film theory associated with the “cognitive school” of theorists, who see cinema as confirmation of the existence of certain pre-existing (narrative) structures in the brain. Promoted by critics such as David Bordwell and Noel Carroll (1996), this “cognitivist” approach is described as an “analysis or explanation which seeks to understand human thought, emotion and action by appeal to processes of mental representation, naturalistic processes and (some sense of) rational agency” (Bordwell, 1996, p. xvi). The idea that cinema can or should facilitate an escape from cognitive structures makes little sense on this view.

This approach is further discussed in annexe 3, below, but a key criticism is the danger that cognitive theory itself presents for plurality, despite Bordwell’s claims to the contrary. What is at risk is not that multiple interpretations can exist, but rather that the role of theory should be to make film an adjunct to grander theoretical programmes. This sacralises the highly problematic notion of film as representation in an unhelpfully limiting sense: on these readings, the wide variety of images and texts in film are reduced to examples of the same limited number of cognitive constructs, leading to the exclusion of other aspects of a given film. Freeland (op.cit) gives the example of how the assumption that the “deep” meaning of a whole film in one genre (horror) might be reduced to a single expression of a highly contestable construct (Kristeva’s “abjection”, for example). This effectively occludes other important aspects, such as its societal critique, thus impoverishing the film, our reading of it and, arguably, our enjoyment of the experience. In a nutshell, grand theory blocks creativity

by reducing the range of possibilities of affection to a small number of constructs. These can themselves both seem implausible and disregard the social or wider import of a given work. Antonioni's work provides a good example of cinema which cannot be contained in this way, and like Cavell, Deleuze and Guattari insist on a wider context for the work of art insofar as it operates the material affection necessary to induce change:

No art can be imitative or figurative (...) imitation self-destructs, since the imitator unknowingly enters into a becoming that conjugates with the unknowing becoming of that which he or she imitates

(Deleuze and Guattari, 2004b, p. 336)

Against cognitive theory, therefore, an understanding of the stuttering made possible by diagrammatic practices in art undermines cognitivism's naturalism and provides one way of understanding how change can take place. Indeed, while the diagram is "a violent chaos in relation to the figurative givens", it is also a "germ of order or rhythm" because it introduces a new sense of order into the image (Deleuze, 2004b, p. 102).

Moreover, Deleuze feels that this artistic activity has ethical implications for the attempt to escape the constraints of the given. Its careful negotiation with chaotic forces means we resonate back and forth between the potentially dangerous a-signifying forces of the virtual and the potentially deadening repetitions of actual events whose meanings have already been mapped out for us. This negotiation demands carefully dismantling forms of organisation rather than renouncing them, in order to avoid becoming "emptied and dreary bodies" (Deleuze and Guattari, 1994b, p. 178). Opening a fragile body to an encounter with chaos therefore implies careful experimentation:

Lodge yourself on a stratum, experiment with the opportunities it offers, find an advantageous place on it, find potential movements of deterritorialisation, possible lines of flight, experience them, produce flow conjunctions here and there, try out continuums of intensities segment by segment, have a small plot of new land at all times [...] Connect, conjugate, continue: a whole 'diagram', as opposed to still signifying and subjective programs.

(Deleuze and Guattari, 2004b, p. 178)

This recourse to aesthetic practice can seem curious since it appears to use a paradigm with which other practices can be compared. However, as Bogue, (2001, p. 29) points out, Deleuze's recourse to art does not imply that it has a power of salvation. Art does sit apart from the world as an independent creation, but is rather produced through an experimental engagement with the unfolding signs of the world: it functions, Bogue says, entirely within the world "as an effect-producing machine" which turns readers into "readers of themselves".

However, rather than ushering in reflexivity or self-consciousness, both of which amount to a return of the same for Deleuze, this brings into existence a different world. This encounter with difference is vital, because sensation cannot occur until a connection is made with something which is not currently present to us. Deleuze and Guattari's description of dreary, exhausted bodies unable to create seems a strikingly appropriate way of presenting many of Antonioni's central characters, burnt out and condemned to repetition. This raises the issue of whether Antonioni's work can exemplify and inform this conception of a creative "diagram", to which I'd now like to turn, by examining the role of control in these creative processes.

4.3.4 Control

Antonioni was seen as a controlling and even manipulative director. There was a controlling and absorbing approach to each film which, for Antonioni, involved a heightened lucidity:

I mean that I cannot become interested in anything, day or night, which is not that film. Let no one imagine that this is a romantic pose - on the contrary. I become relatively more lucid, more attentive, and almost feel as if I were intelligent and more ready to understand.

(Antonioni, 1960)

Shooting in this way involved personal preparation of a quiet, intense sort, setting up each shot optimally in order to produce the desired effects, which he recognised could seem "slow and pedantic" (Antonioni, 2003, p. 20). He insisted on spending time alone on set at the start of the shooting day, when the set would be cleared of other people so that he could literally wander around it and try to get a sense of what was to be done (Antonioni, 2003, p. 28). At midday, he would go into his trailer and sit quietly, alone, thinking (Ebert, in Antonioni, 1969a). The resulting frames are "meticulous" and "fastidious" (Williams, 2008, p. 47), and the films are "expertly joined together" (Rascaroli and Rhodes, 2011, p. 1). Consequently, for

Youngblood (1999) “every frame [of *L’Avventura*] requires the same contemplation and reflection that we give to the work of our greatest still photographers or painters”.

Paradoxically perhaps, being “ready to understand” reflects Antonioni’s belief that creativity is essentially a process of relinquishing control in an attempt to be “authentic”. Authenticity, invention and lies become indiscernible, he argued, when the latter are “a reflection of an authenticity yet to be discovered” (Antonioni, in Cottino-Jones, 1996, p. 61). Authenticity involves undermining one’s preconceptions, because there is “something insincere or artificial” about an image that one has thought of.

This insincerity can be avoided by relinquishing control over images by a deliberate effacement of cliché, as we have seen, through the operation of a diagram. Hence, a lack of control may be both central to the creative act and indicative of a valuable research object:

It would be an interesting project to identify how specific artists incorporate this lack of control ‘into’ their practice, or simply, how they contact and somehow ‘use’ that which is outside them ‘selves’. How, for example, they might mobilise chance (and perhaps error) in the production of something new.

(O’Sullivan, 2009, p. 255)

This implies a double understanding of, in the first instance, the physical laws associated with every event (cause and effect) and, in the second instance, an acceptance that each event is singular and therefore irreducible to interpretation or prediction. This double understanding puts events as such beyond guidance and entails abandoning “the desire to control the flow of events” (Williams 2000, p. 217). Crucially, however, O’Sullivan describes an “incorporation” of a lack of control and a “mobilisation of chance”, rather than a complete loss of control. Doing so for O’Sullivan means that chance and error are exploited through the sort of intense, silent preparation described by Antonioni and which allows the results of improvisation to be expressive rather than repetitive.

O’Sullivan’s analysis highlights several aspects of the diagrammatic production of something new which help understand Antonioni’s practices as a reflexion of wider creative work. Beyond creative products, an examination of two linked creative gestures are needed to understand the creative process. The first of these gestures is the ability to work with a certain lack of control by making contact with that which is “outside”, notably chance and error. The second is the ability to mobilise the result of this contact in the production of

something new, implying that an encounter with powerful sensations demands a certain discipline.

4.3.5 Improvisation, chance and error

Filmmaking, for Antonioni, was a way of life in which each moment was “a new experience” (Antonioni, 2003, pp.16 and 69). Films started in a “confusion of ideas” (Antonioni, 2003, p. 145) which needed time to organise themselves. As such, filmmaking was a sort of continuous search in which he was fond of downplaying the role of directorial technique:

If you ask me what directing is, the first answer that comes into my head is: I don't know. The second: All my opinions on the subject are in my films.

(Antonioni, 1960)

In interviews, rather than discuss technical discipline and intention, he preferred to stress the role of improvisation and particularly instinct. His technique was “wholly instinctive” and “never based on a priori considerations” (Antonioni, 1969b). He claimed to start from the assumption that current techniques had been exhausted (Antonioni, 2003, p. 21), and that his films were “documents” built on “flashes, ideas that come forth every other moment” rather than a coherent set of plans. Moreover, since making a given film occupied him entirely, he refused to speak about authorial intentions and felt unable to analyse any of his works before their completion (Antonioni, in Cottino-Jones, 1996, p. 91).

Going further, he denied that his views could help understand the films:

... if you expect that I summarise my reasons and explain that which is almost impossible to explain – that is, certain impulses or intuitions, or moral and figurative choices – you risk arriving at just one result: To spoil the film itself. I do not believe that what a director says about himself and his work helps in understanding the work itself

(Antonioni, in Cottino- Jones, 1996, p. 57)

The improvisation required by such an “instinctive” approach is a means of dealing with the constantly shifting nature of a search for elusive truths owed a debt to neo-realism (Antonioni, 2003, p. 32). However, it became more important to Antonioni with *Il Grido* (1957)

and the “mature” films which followed (Lyman, 2007). He saw this improvisation as a guarantor of originality and even a sort of objectivity: “I always have motives” he admitted, “but I forget them” (Antonioni, 1969b). He felt unable to say whether his stories had any correlation to the world before they were told:

Today I still find myself at this stage, even if I am nearly finished filming *Blow-Up*. To be frank, I am still not completely sure of what I am doing, because I am still in the ‘secret’ of the film

(Antonioni, in Cottino-Jones, 1996, p. 91)

He seemed keen to work “in the secret” of the film itself, just as some artists turn straight to the diagrammatic potential of the canvas without making preliminary sketches. Once on set, there were constant attempts to allow improvisation to shape the film by working with the terrain and its contents: a shock or encounter between the set, the cast and the director produced the best work, he felt (Antonioni, 2003, pp. 41-42). Hence, despite using extremely detailed scripts, Antonioni liked to shoot unprepared for what was to be shot, in the documentary spirit. In fact documentary shots played a key role in films from *L’Avventura* on. For Williams (2008, p. 52), the films are marked by a “potent ‘there-ness (...) contaminated by doubt and instability” making them all like “pseudo-documentaries”. When asked whether he would prefer to dispense with narrative altogether (Samuels in Antonioni, 1969b), he once said that critics should not speak of documentary elements in his feature films but rather of narrative elements in his documentaries.

It is perhaps more exact however to suggest that narrative and documentary work reciprocally in Antonioni’s films to produce a whole. Documentary scenes are used to rhythm the narrative and reflect character as well as provide setting. This close relation often resulted from contemplating the terrain of the shot in order to identify what it might bring to the work. Looking over a location allowed him to “feel out the atmosphere”, allowing images to present themselves. Sometimes these would coincide with those in his mind, but usually not:

It also sometimes happens that in trying out a scene I abruptly change my mind. Or that I change it gradually, as the camera crews sets up the lights and as I watch the actors move and speak under the arcs. In my opinion, it is only then that one can make a proper judgement of a scene and correct it.

(Antonioni, 1960)

Antonioni claimed never to think ahead of the following day's shots at all. "If I did" he claimed "I'd only produce a bad imitation of the original image in my mind" (Antonioni, 1969b). This is perhaps why he preferred to make most of his decisions about particular shots on set. The argument was that the actual practice of shooting modified any plans made beforehand since "[I]t's only when I press my eye against the camera and begin to move the actors that I get an exact idea of the scene" (Antonioni in Lyman, 2007). The experience of shooting a scene could therefore challenge any plan made before hand:

Isn't it during the shooting that the final version of the scenario is arrived at? And, during the shooting, isn't everything automatically brought into question - from the theme to the dialogue itself, the real merit of which is never revealed until it is heard in the mouths of the actors?

(Antonioni, 1960)

Antonioni's intense eye for detail led him to change location details by painting them. He saw nothing unusual in this.⁸⁷ In the case of *Il Deserto Rosso*, trees were painted white simply because only snow-white would look grey in Eastmancolor (Chatman and Duncan (2008, p. 44). The desire to make trees look like cement (Antonioni, 2003, p. 131) is understandable in a film set in an industrial landscape and filmed before technology would allow colours to be changed later. Similarly, for *Blow-Up*, grass and roads were painted and pigeons dyed, contributing to a sense of heightened awareness as the photographer (Thomas) senses something unusual in a park scene without quite knowing what.

Such changes seemed necessary to respond to changes in light or his own mood or that of the film. In *Zabriskie Point* the bodies of lovers in the desert were also painted so that Antonioni could claim cinematic "sincerity" (Williams, 2008, p. 47). The aim was to paint film like a canvas, refusing to be limited to photographing natural colours (Antonioni, 2003, p.

⁸⁷ "In 'Zabriskie Point,' I have done some painting again. An airport runway, and some hangars, and some other things. And I put up some billboards in the front lawns of the houses across the street from the airport. But what of that? Airports must have billboards around them. And it gives me an opportunity to work in American advertising, which is so photogenic, so expressive" (Antonioni, 1969a).

59). For Williams, the practice of painting objects stems from the artist's investment in the real rather than its negation, requiring a complete faith in the moment of filming. The real on this view is shown in its authenticity because one should, Antonioni felt, "express reality in terms that are not completely realistic", rendering psychological drama by plastic means (Antonioni, 1972). Technical enhancements and amplifications of invisible forces could accompany the "gross regularities perceived by the naked eye" (Moore, 1995, p. 26) to heighten this drama. So, rather than from a desire to improvise every aspect of filmmaking, the technique of painting objects stemmed from the rational desire to compress as much as possible into a single moment or shot:

When I do something like [painting fruit grey in *Deserto Rosso*] it is not so much to make the scene more attractive visually, it is to compress. I can only show so much. In "Blow-Up" there were only so many scenes, and yet there were many things I wanted to show. So by painting a house or a road, I was able to compress.⁸⁸

(Antonioni, 1969a)

This "compression" means that each element of the image should serve the narrative in precise ways (Antonioni, 2003, pp. 27 and 102). What is at stake is part of a wider aesthetic intent present even in the early "dead-time" shots of *NU* and *Cronaca di Un Amore*. The camera is used in an obsessive way to "track" the character for as long as the director feels the need. This is precisely because the shot is expected to contain so much elusive information and because it seemed necessary "to catch those of the character's thoughts which appear - but are not at all - the least significant" (Antonioni, 1958). This is partly why Deleuze asserts that Antonioni is "one of the masters of obsessive framing", where framing involves the development of a free, poetic relationship between character and filmmaker. His self-obsessed, neurotic characters are observed observing themselves in the process of losing their identity (Deleuze, 2005a, p. 77; cf. Deleuze, 1983, p. 24). This "character study" approach produces a sense of extended time for Bondanella (2007), because we examine the character after the event to see how events persist into the present.⁸⁹ Indeed, we rarely actually see the significant events in the characters' lives because they have always already

⁸⁸ He expected similar improvisations, instinctiveness and sincerity from the cast and crew, an attitude which affected his relationships with actors who he considered a "material" (Antonioni, 2003, p.13-20).

⁸⁹ He mentions the influence of Bresson's *Les Dames du Bois de Boulogne* (1945) in this respect (Antonioni, 2003, p.159).

happened. The point of this paring back, he claimed, was to “keep myself from doing anything but looking” (Antonioni, 1960), and it results in an intrusively visual approach which expresses the need to capture something specific to the shot by being prepared for it to emerge. This obsessive gaze becomes even more intense in the 1960s films, leading eventually to the use of colour as an expressive rather than illustrative medium which compresses information into the shot. In *Il Deserto Rosso*, for example, inanimate objects are used to approach a character as buildings, decorations or toys supplement the increasingly scant and “only relatively interesting” organic life of characters such as Giuliana (Antonioni, 1972). Parallel editing contributes to this effect in *L'Eclisse*, which builds the story of Vittoria and Piero by developing a strong impression of each character as part of their own separate places, objects and relationships (Chion, 2010, p. 6).

Technique, here, accompanies improvisation, making the most of what it captures on set. Being ready to improvise in this way implies that Antonioni liked to remain open to chance events and take advantage of the terrain on set to make necessary changes:

I depart from the script constantly (...) I may film scenes I had no intention of filming; things suggest themselves on location, and we improvise. I try not to think about it too much. Then, in the cutting room, I take the film and start to put it together, and only then do I begin to get an idea of what it is about.

(Antonioni, 1969a)

Typically, shots were framed on the set, from immediately “behind the camera” (Antonioni in Chatman and Duncan, 2008, p. 23). He claimed rarely to reread a scene the day before shooting, sometimes arriving on location with no idea what he had planned to film. He described this as arriving “absolutely unprepared, virgin” (Antonioni, 1960), resulting in scenes which provoke our recognition that unpredictable things do happen without conforming to clichés of how we think they ought to happen (Nowell-Smith, 2001). For Antonioni, this works because, unlike stories, “the truth of our daily lives is neither mechanical, conventional nor artificial”: if films are made in this artificial way, they will show it (Antonioni, in Cottino-Jones, 1996, pp. 25-26).

Consequently, the film is seen as an emergent whole rather than a series of intentions to be acted upon, and Antonioni frequently refused to abstract the completed film from its development, pointing to the film itself as the basic unit of analysis. The traditional

separations between stages in filmmaking, he feels, have value for everyone who participates in the work except the director, for whom the separation is a purely theoretical and unhelpful one:

To speak of directing as one of the phases in this work is to engage in a theoretical discussion which seems to me opposed to that unity of the whole to which every artist is committed during his work.

(Antonioni, 1960)

This focus on the continuity of events means that Antonioni's ideal form is the desert, toward which all his characters tend, often both literally and metaphorically. At the limit, the ideal shot would be completely empty, compressed to its essence by the gradual amputation of all extraneous material (Antonioni, 2003, p. 66). This is why in film after film, the character and their face disappear alongside the action (through suicides, obscure deaths and untimely disappearances), and the individual merges with the nondescript any-space-whatever depicted in the frame (seascape, riverside, industrial landscape). The space itself, a familiar area which has lost its familiarity by being disconnected or emptied (a crossroads, a stairwell, an apartment, a park) is pushed "as far as the void" in its own movement of becoming (Deleuze, 2005a, p. 123).⁹⁰ The great power of this moment is its retention of the potential to become something else.

Hence, rather than dismiss actors, the aim was to compose films with respect for the wide range of elements which each played a part and the potential of every element to contribute to the overall result (Antonioni, in Brunette, 1998, p. 11). While this treatment of actors means that characters can seem alienating, it signals a challenge to conventional "protestations of 'human warmth'" which, according to Massumi betray "an inability to feel an ardour of a different kind" (1992, p. 470). Massumi implies that sensation comes from without, and that a profound creative potential exists in a gaze which sees the world as affective becoming rather than being. Antonioni's goal was to link this wholeness to a

⁹⁰ Deleuze describes these "any-space-whatevers" as spaces defined by parts "whose linking up and orientation are not determined in advance" (Deleuze, 2005a, p.123). Because they are undetermined, they can be linked up in an infinite number of ways by "opsigns" whose role is precisely to unlock this affective space (Colman, 2005, p.103). These non-Euclidean, Riemannian zones whose various segments are not connected by linear logical links but rather by shifting affective connections which are not bounded by linear space at all. The disorienting, disjointed space of Ricardo's apartment in *L'Eclisse*, for example, sets the tone for whole film and echoes particularly strongly in the final montage of disparate shots of the EUR district. They are a set of coordinates which eliminate action and therefore retain a pure potential to be something else.

widened sense of authenticity (Antonioni, 2003, p. 104), where the autobiographical is broadly contextualised in a material setting:

But the most crucial moment of all comes when the director gathers from all the people and from everything around him every possible suggestion, in order that his work may acquire a more spontaneous cast, may become more personal and, we might even say - in the broadest sense - more autobiographical

(Antonioni, 1960)

For O'Sullivan (2009, p. 255) this intensive, indivisible understanding of the nature of the artwork as continuous practice signals an awareness of the importance of chance and accident in creativity. He argues that this represents a means of distinguishing art from the mechanistic "production of objects" in this way. Random occurrences are not accidents which happen, but rather events which constitute art ontologically. This makes art practices always open to an outside. Specific examples of this include the old fisherman who seems to wander onto the set during the storm in *L'Avventura*. The old man actually happened to live on the island and was "discovered" during shooting, and Antonioni, who simply "found him interesting", adapted the script accordingly (Cameron and Wood, 1970, p. 26). The impact of chance is emphasised here for Solman (2004), since the chance encounter with the fisherman during the shot is reproduced as a chance encounter in the narrative too. While the scene seems to have little narrative purpose, it provides the viewer with "the keys to the inner sanctum of [Antonioni's] art".

Solman's interpretation stresses the religious connotations of an earthy father-figure looking for his lost lamb. This arguably rather crude interpretation seems at odds with Antonioni's usual practice of observation rather than dictation, though. The oddness of the scene, reflected in the eerie gaze of the photos on the wall staring back at the viewer, suggests a different, more formal role for this scene. Coupled with the imminent forgetting of the search for Anna, the scene provides a complex reflection on the role of chance by incorporating it into the heart of the film's structure, narrative and style. Rather than a religious message, three central themes in Antonioni's work are once again underlined: the attempt to use irrational elements in narrative to disrupt mechanical or conventional narrative devices; the repeated reminders that the film is a construction from a subjective viewpoint; and the self-referential "inner narrative" of the film as an interrogation of the gaze. The scene is therefore indicative of a dynamic between intense preparation and improvisation.

One way of trying to understand how this apparent contradiction between chance and preparation works is to recall Deleuze's analysis of similar practices in the work of Francis Bacon. In fact Antonioni's assertions involve a number of features comparable to the way in which Deleuze identifies an "internal law" in Francis Bacon's equally disconcerting work. On this view, Bacon's work is interested in a special kind of violence, namely:

a violence that is involved only with color and line: the violence of a sensation (and not of a representation), a static or potential violence, a violence of reaction and expression

(Deleuze, 2004b, p. x)

This is the "potential" violence in Antonioni's work which seeks to produce the effect of change without necessarily depicting it explicitly. Deleuze argues that these forces are not those of physical matter but of material because what is shown is the process in which the shape and the material of the body are changed rather than the end results of that change. Chatman's (1985) global analysis of Antonioni's work as an art of "surface effects" can also be understood as a cinematic attempt to render the same forces. For Chatman, Antonioni's films show us effects on the surface of the screen, as well as the surface of bodies of the landscape. What we see is what we get, unexplained except by the rich deployment of the visual medium itself.

So when Antonioni claims that he does not mean to say anything at a given moment "except what the moment itself says" and that "it has no significance, no necessary effect on their future" (Antonioni, 1969b), he needs to be understood literally. There is a deliberate attempt not to rationalise the process and to remain open to what happens "later" in ways that finally affect the film itself. The long takes, as we have seen, encourage this type of passivity in the viewer. Antonioni describes it as a "a state of mental virginity" which must be achieved by forcing oneself "not to over-intellectualise". So, if filming often seems to take place simply on the grounds of what seems right, editing brings it all together. This particularly true of *L'Avventura*, where the film's troubled process contributed to its final success:

While I was filming [*L'Avventura*] I lived through five extraordinary months. Extraordinary because they were violent, exhausting, obsessive, often dramatic, distressing, but above all fulfilling [...] We filmed without a

producer, without money, and without food, often risking our necks at sea
in the storms

(Antonioni in Roraback, 2005, p. ix)

It is perhaps inevitable in such conditions that “mistakes” were made. But even “errors” were seen as potentially contributing to the film’s authenticity, and the director’s role is to deal with this kind of “struggle” (Antonioni, 2003, p. 19). Antonioni sought to remain true to what the irrational is trying to express, and this led to techniques to capture “errors” in moments of dead time (Antonioni, 2003, p. 93). He used techniques such as the rapid filming of scenes with very few takes, as well as continuing filming after the scene was over to catch any revealing “errors” or unguarded moments:

I believe that these little failures, these empty moments, these abortions of observation, are, all things considered, fruitful. When we have put quite a few of them together – not knowing how, not knowing why – a story emerges

(Antonioni, in Cottino-Jones, 1996, p. 59)

Once again, Antonioni contends that the creative process must negotiate irrational events which can prove productive, sometimes retrospectively (Antonioni, 2003, p. 124). It reminds us of the relative unimportance of individual details, even of individual “mistakes”, such as choosing the inexpressive Richard Harris, who had to be dubbed into Italian, for *Il Deserto Rosso*. These “errors” contribute to a fragile balance which is all the more interesting and expressive because the practice of filmmaking has joined the situation which is filmed. When passing from intuitive work to realisation of a film, “the most delicate moment” was like the poet or the painter’s first mark on a page on canvas, when characters are arranged in setting and made to speak and move. This composition establishes reciprocal relationships between people and objects, as well as between the rhythms of the dialogue and of the sequence as a whole. All of this allows camera movement to fit in with the psychological situation (Antonioni, 1960).

This dynamic relation between people and things lies at the heart of Antonioni’s creativity, and is evoked and developed through improvisation, chance and error. The question which this invites is the extent to which these practices can inform LLL.

Chapter 5.0 Enhancing Creativity in Lifelong Learning

The first two sections of this thesis tackle two of its three questions, critically discussing definitions of creativity and its current importance in the LLL context. This discussion led to the identification of gaps in current conceptions of creativity, and the suggestion that these might be complemented by creative practices inspired by a dialogue between Deleuze's philosophy and Antonioni's cinema. As a result, I have identified components of creative practices which can be deployed for the benefit of practice in LLL.

The purpose of this final section (chapters five and six) is now to discuss how these practices might help develop more creative research and ethical practice in LLL. More specifically, this concerns the question of how the sort of creative stutter described in the previous sections might positively affect research and practice in LLL teacher education. I focus critically on this question by examining the extent to which improvisation, chance and error might be deployed to creative ends for the sector's research and teaching. My aim is to prepare the ground for my final section, where I outline an ambitious reconceptualisation of ethical action in teacher education.

Such action, however, must be understood in the context described above where practice and professionalism are in the LLL spotlight and concern a set of closely interconnected practices. The practice of teaching, firstly, is inseparable from that of learning: the professional teacher is not just a practitioner whose pedagogy is expected to be centred on the learners' needs, voice and expectations, but also a lifelong learner themselves. Often teachers in the sector come to the role as a second career, having already acquired skills in, for example, vocational areas, and so the process of training and becoming a teacher is a significant one from a pedagogical point of view. In addition to this, teachers in the sector are currently expected to maintain their professional status by Continuous Professional Development (CPD).

Secondly, as we have seen, teaching practice is increasingly linked to research practices. The current popularity of evidence-based teaching in political and sector discourse reflects the widely held view that teaching must respond to changing learner needs by engaging actively with research practices to update knowledge. Taken together, teaching and research are increasingly two sides of the same phenomenon, and must be understood as part of the drive to professionalise the sector.

Teacher educators in LLL are at the centre of this nexus: they often move into the role from standard lecturing positions, often maintaining their “ordinary” teaching roles and delivering teacher education and CPD at the same time. Indeed, without specific training or “codified knowledge”, it has been suggested that teacher educators themselves can do little more than reproduce the existing practices embedded in their “personal knowledge” (Spenceley, 2006, p. 290).⁹¹ Subject to all the particularities of a role in LLL, they are expected to synthesise best practice and literally model it axiologically for reproduction. Teacher educators, arguably, play a pivotal role in the dissemination of professional practice, whether the focus be pedagogy, research or indeed the link between the two.

5.1 Professionalisation

While the principle of “professionalism” is difficult to challenge, the way it is promoted and the forms it takes in terms of “professionalisation” are important to teacher education and need to be examined. For example, the UK Commission for Employment and Skills has explicitly set out to “explore the options for “professionalising” all parts of the lifelong learning workforce” (UKCES, 2010, p. 4), a goal shared by a wide range of bodies across the sector. As I show, below, however, the notion implies a number of questionable assumptions about the LLL workforce and its practices. I question the causal link assumed between professionalisation and quality, and argue that a very different objective can be identified by looking closely at the way learning, fundamental to the sector’s view of professionalism, is discussed in the sector.

Understood as the progressive achievement of a set of goals, standards or ideals, professionalisation is often described as an “agenda” (e.g. Robinson and Rennie, 2012) whose purpose does not always meet the needs of professionals themselves.⁹² Key to this agenda is the view that professionalism is largely inseparable from learning since it entails the constant upgrading of one’s skills and knowledge base (Sachs, 2007, p. 9; CAVTL,

⁹¹ Spenceley (2006, p.293) found that the dominant attitude in vocational lecturers studied was that “what was good enough for me is good enough for them”.

⁹² Professionalisation is to “give (an occupation, activity, or group) professional qualities, typically by increasing training or raising required qualifications: (oxforddictionaries.com) or “the act or process of imposing a professional structure or status on (something)” (<http://www.collinsdictionary.com/dictionary/english/professionalisation>). The UK Commission for Employment and Skills, explicitly set out to achieve this, an aim shared by a wide range of bodies across the sector.

2013).⁹³ Without other defining features of professionalism (a consolidated body of knowledge, high qualifications and salaries, social status, autonomy and independence of judgement for example) professionalism in LLL can be reduced to the demand for constant learning. I consider my experience typical in this respect: having begun my professional career as a teacher of English in HE, I have regularly changed disciplines, roles, jobs, sectors and possibly identities through a significant portfolio of training, qualification, CPD and geographical mobility.

There is an interesting paradox, however, in that as one's experience of the complexity of the sector evolves and develops in variety, one risks becoming more acutely aware of the single-minded purpose of formal teacher education based on the recycling of its own knowledge base and a sometimes reductive set of assumptions about good practice. This is significant, because although LLL is not the only sector keen to professionalise its staff, it reflects the fact that its professionals are largely responsible for this professionalisation. However, professionalism in LLL is too often understood in relation to fixed forms or normative ideals of what should happen (Colley et al, 2007). As a vehicle for inculcating learners with a specific but contestable set of moral and political ideas (Armitage et al, 2012, p. 15), LLL professionalisation exists not to fulfil a social contract, but to ground "a pre-determined product and brand image" (Shain, 1998 in Spenceley, 2006, p. 291).

Being a professional in this context has moved away from a covenant implying payment for expertise, autonomy and responsibility, moving towards a very different contractual arrangement based around the need to micro-manage everyday professional life. Such standardisation may assist organisation and even attract those who take it for a sense of identity, but does it effectively support creative practice? If, as Funicello (in Fendler, 2008, p. 250) suggests, we are seeing a professionalisation of the act of being human, does it provide an ethical perspective which actually supports its transformative ambitions, bringing professional practice to life rather than the other way round? Funicello's point is that professionalism too often boils down to the codification of basic forms of human activity which cannot be atomised without trivialising them. Professionalisation, in effect, redefines people in its own individualised, technicised and highly abstract image. Personal experience of membership of professional bodies in this area suggests that this is a common demand, and that its codification of individuals begins with the highly prescriptive application process

⁹³ What is less clear is exactly whether teachers are like other professionals in any clear respect, exactly what these skills are and in what way they might be "out of date". Moreover, whether a "knowledge base" is actually helpful in a rapidly changing world is also questionable.

and the sometimes threatening tone used against those who do not respond to it (cf. Thomson, 2008). Learning, in this context, is both a fundamental and highly problematic professional issue.

5.1.2 Learning

Learning is a difficult and “lifewide” endeavour from the sector’s perspective (Williams, 2007), involving a large number of dynamic factors beyond the classroom, which has no monopoly on robust learning (Billett, 2004, p. 110). However, if, as Wallace asserts (2007, p. 167) a teacher’s primary role is “to facilitate learning” and if, for Sachs (2007, p. 10), learning is “at the centre of the teaching enterprise”, a specific definition of learning seems indispensable to teacher education. Given the importance of learning in the discourse of educational policymakers and practice it is surprising that definitions remain elusive (Coffield (2008). There is indeed “a surprising lack of attention on issues pertaining to its definition and process” (Sawkut et al, 2010, p. 2). My aim here is to establish commonality in sector discourse about learning so that Deleuze’s views on the subject can be seen in this context.

Notwithstanding Sawkut’s assessment, many different and conflicting definitions of learning are available to teacher educators in LLL. Examples include Field’s (2000, p. 35) view that learning is unavoidable, constant and natural. Popular ITE textbook authors Reece and Walker (2007, p. 53) assert that “[l]earning is about change: the change brought about by developing a new skill, understanding something new, changing an attitude”. Burns (1995, p. 99) says it is “a relatively permanent change in behaviour with behaviour including both observable activity and internal processes such as thinking, attitudes and emotions.” More politically-charged definitions include that of Jarvis (1995, in Armitage et al, 2003, p. 97). For Jarvis, learning is an “emancipatory experience” that “may involve a change in self-organisation and perception”. It involves an educational ethics in the form of an unconditional concern for the other (Jarvis, in Tennant, 2009, p. 158).

These definitions raise a number of problems, notably the difficulty educators have in agreeing on any one of them. For example, Billett (2004, p.111) highlights the relevance of a Piagetian view of learning as social construction. Involving a relation with the material environment, it involves assimilation of the new via an overcoming of disequilibrium which reconciles difference. A difficulty with this account is that it explicitly equates new knowledge with a honing or reinforcement of the already known, since “most of the knowledge humans learn is not innovative, although it may be new to the individual concerned” (Billett, op.cit, p. 112). This may be true, but raises questions related to how we learn the new rather than

hone the given, notably that of the relation of learning to operations of reproduction concerned with the transmission rather than the creation of knowledge. Carver (2012) argues that commonalities in many learning theories embody a response to economic demands and a tendency towards “individualistic and didactic methods for imparting knowledge from teacher to student”. The direction of travel is important here, since she finds the process “relatively passive” and (therefore) inconsistent with modern collaborative working and learning environments. Coffield (2008, p. 6) also attacks any definition of learning which in his view “amounts to nothing more or less than the transmission and assimilation of knowledge and skills”. A dualistic view of learning risks assuming this passivity, and even when it identifies a reciprocal relation between agency and structure we are still left with broad concepts such as structure and agent whose genesis is left unexplained. The focus needs to shift from the obvious to the “hard-to-learn” knowledge which is increasingly important as individuals are expected to organise their own lifelong learning (Billett, 2004, p. 121).

Hence much discussion of learning tends to neglect one or other of the aspects of the wider psychological, social or political context (Illeris, 2004). Such technical definitions are challenged by “critical” or transformative” pedagogies because they neglect socio-political reality. Critical pedagogies seek to challenge power-play (Burbules and Berk, 1993), but may end up assuming that learners are dupes in need of enlightenment or emancipation. This can seem patronising (Usher, 1997 in Tennant, 2009, p. 150), since it appears to position lifelong learners – *a fortiori* teacher educators - as deluded puppets in need of remedial help. But it is also possible that such a mind-set undermines itself, if, as Woodhouse claims (2012, p. 141), it stems from Marxist roots, making critical educational theory unable to unpick “the serpentine relationship between power and desire” and the way we actually encourage oppressive practices. Even critical pedagogy can reinforce a view of the educator as an “enlightened person doing something to the underdeveloped or incompetent” (Jarvis, in Matheson and Matheson, 2000, p. 199), an image of professionalisation in search of a raw material to mould by reproducing its own image.

Thus, learning is often reduced to its contribution to economic performance as quantity to be exchanged. This seems strange, since the competitive functions of learning are merely “a secondary, late-modern addition” to the primary function of learning (i.e. “one of the most basic abilities and manifestations of human life”) for Illeris (2009, p. 1). This reduction often works in subtle ways such as, for example, where the development of creativity is hindered when learning too often relies on unsuitable metaphors of acquiring, filling or building. As criticised above, acquisition on these terms means constructing a boundary between an

improbable psychological inside and a context-free body of knowledge outside. Ultimately, this cannot account for the striving or desire implied by the process of learning about emerging objects, it is argued (Jensen 2007, p. 493). These non-social elements are occluded in this way, breaking the link between learning and the environment in which it takes place (Plumb, 2008, pp. 65-66). An obvious example in LLL teacher education is its tendency to personalise assessment through tasks such as reflective writing and portfolio-building. Both can become rather empty, mechanical activities with little relevance either to individual practice or wider educational issues, largely, in my view, because they are predicated in the prescription of personalised learning and its environment. Professional practice in LLL is in fact highly prescriptive, a problem which I now discuss before opening the question of how creative practice might emerge in such a context.

5.1.1 Prescription

A tendency to prescribe exists in the way teaching and learning are promoted. As already noted, a broadly suspicious view of theory in LLL sees it as an abstract concept to be applied to practice. This split does not just add to the view of professionalism as the implementation of orders from above. It also reflects other divisions between theory and practice, vocational and academic, professional and non-professional, and even mind and body. For Hagar (2004, p. 243), this is reflected in a “standard paradigm” of learning, which exists to stress internal changes to the contents of individual minds through a Cartesian mind-body division. Here, concepts, as representations of the world, are combined in propositions and are only supposed to affect the world through the body as medium.

Learning as a result is a logico-linguistic activity. It is separate from material circumstances and, for Hagar, dependent on “timeless, universal entities”. Hence, a common approach to the purpose of theories of learning suggests that they exist to be selectively and eclectically applied:

Theories of learning are based on psychological understanding and seek to describe what happens when learning takes place. Learning theories in essence is (sic) not about the conditions required for effective learning: it is for the practitioner to extract and interpret elements from theories and apply what is perceived as relevant to his or her own teaching.

(Armitage et al, 2003, p. 73).

The fact that the theories of learning commonly promoted in ITE and professional formation cannot claim to direct practice in its entirety is perhaps inevitable. It may also be useful

insofar as theories can complement each other.⁹⁴ What is more problematic is the tendency to present the *application* of theory as a natural, rational choice independent of circumstances. LSIS (2013, p. 14) stipulate for example that the new teacher education qualifications will contain “knowledge and application” of theory and pedagogical principles on one hand, and the investigation of “pedagogical principles and innovative and creative approaches in own area of specialism” on the other.

It seems clear that theory is simply there to be investigated and applied, but never developed or changed. Treating theoretical principles in this way, however selectively, risks doing little more than repeat both them and the supposedly a-priori circumstances to which they are applied. This does not just limit, *a priori*, what can be done and where, but implies again the “command and control” view criticised above against any notion that practice should be creative. Hence the discourse of theory as disease implies that a genuine analysis of theories is unnecessary, and that truncated versions of them can be simply imported into practice based on notions of “what works”.⁹⁵

Fenwick (2008) rejects this view that abstract theory can exist to be simply implemented on a separate body of practice. She demands a “turning away” from the kinds of learning which imply the depth of individualism, acquisition and psychology located inside individual heads (cf. Merriam and Brockett (1997, p. 6) for whom learning is a cognitive process “internal to the learner”). Her view of professional learning overturns the idea of knowledge which transcends practice, placing learning on a surface where it can be relational, interdisciplinary, practice-based, socio-cultural, and system-oriented. This implies a flat epistemological and praxological topology,⁹⁶ and in short, Fenwick argues that the spaces of

⁹⁴ See, for example, Illeris’s (2004) interesting overview of how these perspectives fit together to form a whole. At the risk of over-reading, Armitage et al’s ungrammatically singular verb (“is”) may be revealing here, insofar as it suggest that “learning theories” exist as a block to be ingested and applied rather than a shifting collection of attempts to understand complex change.

⁹⁵ Cf. Biesta (2007 and 2010) and Thomas (2009), above.

⁹⁶ It is here that Deleuze’s philosophy of events is most pertinent. A central aspect of this philosophy is its insistence that events themselves are effects and that these effects occur on a surface between points in series. Four key conclusions can be drawn from this, all of which repeatedly find their expression in Antonioni’s work. On one hand, events require a surface of absolute immanence. Events do not repeat or represent higher order objects, and so are produced on a single, immanent plane. Each one is different, while at the same time expressing this single univocal plane. Events also require a surface of composition. Here, individuals are composed in relation to other individuals. They are still subject to immanence, but what is immanent to them is the axiom of constant combination with other individuals to produce events and series. This implies the existence of a surface of interference between individuals where “things” literally takes place. We no longer see events as

knowing and of action are more important in professional contexts than any transcendent term as reference point.

It is important to stress, however, that what is being advocated is not a form of a-theoretical pragmatism. My training work with groups as disparate as English language teachers and Police firearms officers (Beighton and Poma, 2013) provides evidence of the effectiveness of approaches which replace deduction with induction and application with observation. Simple techniques such as eliciting and working with information rather than imparting it, or increasing time spent practising and analysing practice rather than prescribing it respond better to the needs and abilities of such groups. Theoretical perspectives, here, emerge within context, often unpredictably, and hence they are integral and necessary to it rather than applied from without. Like the events expressed in Antonioni's narrative and creative practice, learning in these spaces is emergent, unpredictable and provisional, driven by improvisation, chance and error. It creates more opportunities to learn and develop connections in an expansive way which opens practice out to the event of learning and its possibilities.

Reconceptualising professional practice as an event in this way has several implications. Perhaps the most important of these is the fact that the process of professionalisation is never fulfilled because its event does not lie in the goals or standards to which it is equated. There are always virtual aspects to practice which exceed present activities or states. The event of professionalism is therefore always already both past (what I was capable of) and future (what I am becoming capable of). Consequently, it provides spaces for learning and a degree of freedom. It exceeds the boundaries of individual practice, since it is a socio-material event reliant on emerging but quite physical networks and connectivity. The goal of professionalism as a tool of market expansion is therefore undermined, since it is no longer an object to be attained, granted, lost or paid for. Professionalism as an event is by definition irreducible to such an economy.

However, as I suggest below, this unlimited prospect can and is deployed for other, less benign purposes. These are tied to the formulation of subjectivity in LLL, to which I now turn.

individual objects but the dynamic activity which takes place between them on a surface which has no space for reification. This is the surface of superficiality, where being is said only of this encounter.

5.1.3 Subjectivity

The question of subjectivity arises whenever powerful agents in the sector take an interest in who we are. Documenting how, when, where and why we participate in learning and how our identity as professionals is constituted is a topic of great interest to those who would govern the unruly ecology of LLL.⁹⁷ Although often presented as a respect for individual difference, this interest in identity is increasingly functional in nature and implies not just a desire to document the minutiae of routine behaviour, but a questionable *moral* perspective on what we do as learners *en masse*. Treating individuals in this way relies for its effectiveness on a certain “formalisation” of the individual which goes beyond the familiar idea of the creation of docile bodies with little aptitude beyond the capacity to conform, reproduce and normalise others.

For example, despite its social constructionist claims, much learning and teaching in teacher education tends to be assessed in ways that reinforce behavioural conformism to a narrow set of unexamined values by constructing a “fragile” subject (Macfarlane and Gourlay, 2009, p. 457). Such approaches mistake the problem for the cause and suggest that identity is “a sentence to lifelong hard labour” (Bauman, 2007, p. 111). Just as people in classrooms are referred to as “learners” and “facilitators”, individuals become “dividuals”, reduced atomistically to a small number of their actual or potential attributes. A central attribute of a good sense which thrives on allocation, categorisation and enclosure (Deleuze, 1969, p. 93-94), the main purpose of this “dividualisation” is to give common measure to that which does not have one (Deleuze, 1983, p. 27). This facilitates their assimilation to similar others who can be controlled *en masse* and put to use as human capital (Deleuze, 1990/2003, p. 244). Particularly amenable to electronic control and surveillance, modern capital’s abstract flows of data need such subjects to function. For Deleuze and Guattari (2004b, p. 470) “pre-disabled people, pre-existing amputees, the stillborn, the congenitally infirm, the one-eyed and one-armed” are created. Shorn of possibilities to connect, these bodies have fewer

⁹⁷ The theme has attracted considerable attention in the research literature (e.g. West, 2004 *and passim*; Horsdal, 2007; Ecclestone and Hayes, 2009; Tuck, 2010; Zhao and Biesta, 2012; Watson, 2013). As suggested above, such documentation of the minutiae of subjects’ learning lives is itself problematic if its channels, objectives, rationale and implications resemble the opaque forms of “monitoring” or “dataveillance” used to control marginal(ised) populations (Genosko and Bryx, 2005). Such ordering flatters a need for predictability in a disordered world (Adam, 2006, p.121), but as Tennant (2009) argues, what is interesting here is why subjects appear so willing to do it to themselves. This is arguably the central question of Deleuze and Guattari’s *Anti-Oedipus* (1972/2004a), highlighted by Foucault in his preface to the (English) text. The key point made by Deleuze and Guattari here is that, in order for control to be normatively effective against the unwanted effects of desire, it must in some way include desire in its workings (Smith, 2013). Desire must be theorised as transcending both control and freedom, operating at a genetic level as the producer of such phenomena, not their lack

chances to affirm difference and become increasingly susceptible to control and stasis. On the ground, this translates into trainees with no discernible subject expertise, practice or knowledge base, undergoing generic training in preparation for a teaching role in which their only function is to facilitate learning, whatever the context or conditions. This is by no means the whole picture, but is an increasing trend, particularly in FE colleges where, to give a concrete recent example, an expertise in film theory is qualification enough to teach video games design or an approximate understanding of language qualifies one to teach literacy.

5.1.4 Capacity

One way in which we might avoid compounding this phenomenon is to stress the creative capacity of learning. Illeris defines learning as “any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing” (Illeris 2007, p. 3). The sheer breadth of this definition is open to criticism, but its stress on capacity change beyond the naturalistic seems valuable in linking the process of learning with the capacity to activate other processes. Roth and Lee (2007, p. 194) make a similar assertion, that learning expands action possibilities in and from the production of both knowledge and the artefacts which embody and mediate it. Because it expands opportunities to participate in such production, it expands learning and development, they state: learning, here, is “equivalent to the mutual change of object and subject in the process of activity” (Roth and Lee, op cit. 198).

In effect, these definitions situate learning as operative in the sense defined above: learning is an axiomatic process which is not unique to humans, and which is interesting for its ability to create other material processes. Concretely, a direction here is again provided by Fenwick, for whom learning is emergent and unpredictable; it is situated provisionally in networks of people, activity and technology; and it is expansive rather than acquisitive (Fenwick, 2008, p. 2).⁹⁸ From this perspective, learning is recognised as a complex, multi-faceted phenomenon which “can only be understood relationally” in (TLRP, 2009, p. 16). Importantly though, higher-level learning, on this view, is simultaneously disintegrative and creative, with shocks, jolts and crises (Bramming, 2007, pp. 50-53). Affects and unexpected events are “intimate, provocative, and worthy of our isolation and attention”, and each

⁹⁸ Fenwick’s view recalls John Dewey’s influential position, according to which “ [i]solation of subject matter from a social context is the chief obstruction in current practice to securing a general training of the mind” (Dewey, 1916/1966, p.67).

moment only endures long enough to encounter the next moment and “its attendant *crisis* of identity” (Woodhouse, 2012, p. 143).⁹⁹

These recent descriptions suggest that Deleuze’s account of pedagogy has contemporary value, tied as it is to his ideas about how we think via a creative stutter and the relations it produces. For Deleuze, learning involves this encounter between new and old but does not reduce the changes which result from the meeting to existing repertoires of ideas:

We learn nothing from those who say: 'Do as I do'. Our only teachers are those who tell us to 'do with me', and are able to emit signs to be developed in heterogeneity rather than propose gestures for us to reproduce. In other words, there is no ideo-motivity, only sensory-motivity.

(Deleuze, 2004a, p. 26)

Here, pedagogy is a form of cultivation which takes us beyond well-known commonplaces. Culture is a process of learning, not the product of the mind, and is therefore a material phenomenon which throws up chance encounters of a potentially shocking and disruptive sort through the signs it creates. It is “an involuntary adventure” whose movement links sensibility, memory and thought “with all the cruelties and violence necessary” in order to “train a nation of thinkers” or to “provide a training for the mind” (Deleuze, 2004a, p. 205).

5.1.5 Implications

Research highlights many ways for ideas to affect practice. François Zourabichvili’s (2005) summary of possible implications is particularly useful because it draws on three suggestive tenets about teaching theory. The first is that teaching concerns an experimental process concerned with what we are looking for, not what we know, and the second that we do not know what makes a particular student learn or succeed. Thirdly, he believes that thought, including what counts as true or false in a given context, only begins when we establish the problems which pertain to the context, not before. In essence, Zourabichvili tries to articulate the implications for teaching of two fundamental principles in Deleuze’s thought: that we do

⁹⁹ Original emphasis

not know what a body can do;¹⁰⁰ and that thought cannot be acquired or exercised as if it were innate. Both indicate that the pedagogue's task is essentially creative, "engendering the act of thinking within thought itself" (Deleuze, 2004a, p. 139). The implications for this for practice in LLL are worth considering in more detail.

The first of these is that a creative pedagogy will not emerge from prolonged abstract thinking or reaching to the sky for inspiration (contemplation), from thinking about experience (reflection) or even from dialogue (communication). This is because all three, as practices in marketing show, effectively concern the establishment of a universal in the form of a common, repeatable consensus with which to judge actual experience. This consensus can be seen in the way ideas about theory and application are promoted in teacher education, lending it a Platonic feel.

This transcendence also implies a certain reification of terms such as learning, teaching and research. Deleuze's philosophy challenges this because it refuses to see complex activity in such rigid ways. It also insists that such networks of implications must be problematised and unpicked, not represented by vague concepts. Hence, creativity is the more modest task of a pedagogy of the concept, according to which we analyse the conditions of creation as "factors of always singular moments" (Deleuze and Guattari, 1994, p. 12). Here, singular relates to the mathematical definition of a point where "something (new) happens" in contrast to the ordinal point "where nothing (new) happens" (Adkins, 2012, p. 508).¹⁰¹ We need to respond to these moments in ways which pay attention to signs of life, which itself does not speak, but listens and waits (Deleuze and Guattari, 2004b, p. 84). This means two things: firstly, challenging our tendency to look ahead (acting extemporaneously) and what this implies about our desire to control the future; and secondly learning from the actual conditions of activity and responding to them in a dynamic way with active, on-going enquiry rather than applying given ideas. A pedagogy of improvisation, chance and error is implied, which I now describe by looking first at the ways improvisation can enhance research practices. I then turn to ways in which chance might help pedagogical practices become

¹⁰⁰ Deleuze frequently refers to Spinoza's point that "no one has yet determined what the body can do (...) no one has yet come to know the structure of the body so accurately that he could explain all its functions" (Spinoza, 1996, p.71-72, Ethics III/P2.Schol).

¹⁰¹ "If we take the geometric figure of a square as an example, the four corners are singularities, the points at which "something happens." Between the corners, however, are an infinity of ordinary points where "nothing happens." The singular point at which something happens is what Deleuze refers to as an event" (Adkins, 2012, p.508)

more creative, before examining the impact of error on learning as the link between both research and practice.

5.2 Improvisation and research

If today's professional training "does not prepare practitioners for working outside established organisational practices" (TLRP, 2009, p. 17), it is because it seeks higher levels of standardisation on the presumption that order, coherence and similarity should overcome difference. The problem, some suggest, lies in an un-creative research economy in the education system, afraid of the influence of an "outside" to the professionalised space, and frequently preoccupied with "cycles of repetition and self-serving arguments" (Cole, 2009, p. 121). Central to this is the pressing issue of freedom to think:

[W]hat they hate, more than anything else, is any form of free thought, thought which can't be programmed. What they want isn't reform, its destruction. What they are demanding is either intellectuals in uniform or the good little drones of blueprinted "research"

(Brossat and Rogozinski, 2009, p. 35)¹⁰²

A concern for freedom to think also informs Stronach and Clark's (2011) call for more innovation and creativity. Professional competence, they state, is no more than a palliative slogan which evades the central problem of the heterogeneity of the real, thus failing to prepare practitioners for it. The heterogeneity they see in complexity demands an ability to respond to the unpredictable by improvising, where improvisation describes the activity or responding creatively to unpredictable events. This improvisation is demanded by the "profound uncertainties" about the nature of action itself (Fenwick and Edwards, 2011, p. 721), an uncertainty which is external to the certainties of policy and micro-management but nonetheless defines its boundaries. This outside is a space where "multiple heterogeneous actors and materials interact", working "in ways that confound conventional categories deployed in educational research" (Fenwick and Edwards, op cit, p. 709). It's worth examining what this might mean, first for research, and then for practice.

¹⁰² « On voit bien par là que ce qu'ils haïssent, avant toute chose, c'est toute forme d'activité de pensée libre, non programmable. Ce qu'ils veulent, ce n'est pas réformer, c'est détruire. Ce qu'il leur faut, c'est soit des intellectuels en uniforme, soit des petits soldats de la "recherche" sur plan »

Research in teacher education which places inquiry and experimentation centre-stage, would avoid the “methodolatry” of seeing research as the possessor of a privileged gaze (Barthes, 1986 in Honan, 2007, p. 532). Gale (2007) for example, writes that a focus on experimentation means developing the ability of education research to make connections with other research approaches, thus developing multiple interconnections between different forms of emergent practice. For Waterhouse (2011) a “Deleuzian” research demands a complete transformation of what research means, aiming not to develop new methods, but rather “intriguing spaces” whose liminality invites further inquiry. In this vein, De Freitas (2012) discusses situations of “dispersal” and shifting dynamics in the classroom, where change is a becoming-Other of research which is already in train. One way of improvising in this way is to work “rhizomatically”, tackling head-on the issues of “mess” in the sector and the ambiguous status of representation and “voice”, issues to which I now turn.

5.2.1 Rhizomatics

The rhizome is one of the first conceptual devices introduced in *A Thousand Plateaus* (Deleuze and Guattari, 2004b, pp. 3-28). For Carlile and Jordan (2012, p. 8) the term is synonymous with creativity, which counteracts what Deleuze and Guattari insist is the restrictive and inaccurate tendency to assume that thought works in “arborescent”, hierarchical ways:

We are tired of trees. We should stop believing in trees, roots and radicles. They've made us suffer too much. All of arborescent culture is founded on them, from biology to linguistics.

(Deleuze and Guattari, 2004b, p. 15)

“Arborescence” here concerns the tendency to categorise and prioritise according to hierarchies of values (theory-practice, man-world, object–essence). Such tree logic is unlovely and inaccurate because it is a logic of tracing and reproduction where a logic of creativity is needed. It describes *de facto* states, unconscious givens and balance in inter-subjective relations, all of which neglect the essentially multiple, rhizomatic nature of things (Deleuze and Guattari, 2004b, p. 13).

Examples of rhizomes include weeds, roots or tubers, packs of wolves or networks of tunnels (Deleuze and Guattari, 2004b, p. 7). They are flat multiplicities or productive material systems defined by connections with the outside, growing from the middle rather than top-

down (principle-object) or bottom-up (object-principle). Thought itself is “rhizomatic” insofar as is “not amenable to any structure or generative model” (Deleuze and Guattari, 2004b, p. 13). Rhizomatic activity is proper to thought, which is creative by right and set in motion by its own limit.

A key function of rhizomatic thought is to allow us to operate on existing terms “by thinking them in non-dialectic connection” (Kuppers, 2009, p. 223). Thought is non-dialectic because it does not progress via negation and synthesis: on the contrary, negation is no more than a “shadow” of the much more important movement in thought, the “absolute profundity of affirmation” (Evens, et al, 1998, p. 274) or that of rhizomatic, creative involution.¹⁰³ The concept has been promoted by many researchers in education and LLL (e.g. Amorim and Ryan, 2005; Honan, 2007; Hodgson and Standish, 2009; Edwards, 2010; Stone, 2011; Munday 2012; Friedrich et al 2012), but its interest lies in its role in operative creativity outlined above.

For Honan and Sellars (2008, p. 111) “rhizomatic” research exhibits three features of importance to educators which all help define this way of being. The first is inclusivity, since although it is partial and tentative, it allows for the inclusion of the authorial voice by recognising that this voice is always a composition of other voices. The second principle is multiplicity, since a rhizome recognises the myriad of discourses which intermingle in a given text or event. A third property of a rhizome is its unpredictability, since it makes unpredictable connections between disparate elements. Rhizomes are therefore improvisational in that they assume diverse forms, growing from the middle by undermining constraints in processes of challenge and renewal which are perpetually prolonging themselves, breaking off and starting again (Deleuze and Guattari, 2004b, p. 22). Because this growth is unpredictable, it leaves much to chance encounters, but it is also an embodiment of “error” insofar as its creativity works underground, developing spaces which do not correspond to existing ways of being. For example, Leach and Boler describe their attempts to deploy the concept as overtly improvisational and anti-didactic, allowing a renewed challenge to authority from minor discourses, in their case “women’s gossip”:

¹⁰³ In his 1966 study of Bergson (1966, p.7), Deleuze relates Bergson’s insistence that thinking in terms of negation and opposites tends to rely on unwarranted presuppositions. For example, we understand dis-order as a form of order which lacks something, and our tendency to relate things in this way leads to confusion and poorly-posed problems. The essential positivity of things and the need to affirm them is perhaps the stance which most strongly underpins Deleuze’s own ethical view.

Contrasted to the organisation and interpersonal dynamics of a symphony, we have improvisational jazz. Contrasted to the authoritative, didactic efforts of dialogic teaching, in which we try to instill the idea that meaning inheres in concepts, propositions that are transparent, we have the rhizomatic practice of gossip.

(Leach and Boler, 1998, p. 159)

5.2.2 Apprenticeship

First and foremost, then, reconstructing the goals and methods of research around such unpredictability turns research itself into an apprenticeship in formal inquiry. The value of developing such an apprenticeship for critical teacher education lies in its alternative to an illusory desire for mastery of complexity. This is perhaps the main reason why rhizomatic thinking has been influential, to the point where Stephen Zepke drily comments (2011a, p. 74) that it is already “today’s reality”. On this view, it is not a question of whether research can be rhizomatic in LLL, but rather how it is so and what changes will emerge.

One way of examining this is to focus on the way rhizomes establish new territories by continuously growing from the middle and undermining the identity of objects. Although identity can be assimilated by the establishment of territory by habit (Macgregor Wise, 2000), territories themselves are “passing places” (Sarnel, 2007, p. 99) typical of LLL’s complex spaces. But they also constitute spaces of resistance beyond the “us and them” binary which dogs the academic colonisation of subjects (Moulard-Leonard, 2012, p. 832). In particular, this concerns the way LLL spaces are gendered in line with masculine working practices of technico-rational instrumentalism (Linstead and Pullen, 2006; Cronin, 2008, p. 305). Such instrumentalism can be linked to a gendered view of learning as processes of acquisition, mastery and control whose abstractions are systematically undermined by rhizomatic experimentation.

This undermining is possible because here, as elsewhere, the shifting territories and processes which emerge through this apprenticeship are creative spaces where processes of conceptualisation are always new (Gale, 2010, p. 305). Referring back to my experience with firearms officers, the development of territories where meaningful interaction can take place between very disparate communities of practice has meant changes in practice for all involved (Beighton and Poma, *op.cit.*). But more importantly these changes continue to have an operative and rhizomatic, if unpredictable, impact on my practice in other contexts. This unpredictability, and the way it both challenges existing knowledge and pushes innovation to

the fore constitute a kind of “stutter” which effectively describes the reality of my teacher education practice.

5.2.3 Stutter

Creative thought is a kind of “stutter” in this emergent process of enquiry, moving from one territory to another. It is a movement of virtualisation since what is perceived in the actual is disrupted by emergence of virtual properties. We forget the old, which dies as the new is created, and stutter into new forms of more intense selfhood. Pedagogy on these terms is synonymous with virtualisation insofar as it involves “an art of going back to the problem” in this way (Daignault, 2008, p. 50). From the point of view of LLL research, this implies that it is not enough to produce texts which are fragmented and stuttering if they do not make the language itself stutter or push thought to encounter its limit: ¹⁰⁴

It is easy to stammer, but making language itself stammer is a different affair; it involves placing all linguistic, and even nonlinguistic, elements in variation, both variables of expression and variables of content (...) one attains this result only in sobriety, creative subtraction.

(Deleuze and Guattari, 2004b, p. 109)

Deleuze’s challenge is therefore not to think differently about identity, but rather to undermine all forms of thought which rely on identity in the form of abstractions of representation, repetition and transcendence. Creative research will seek to interrupt the flow which allows identity to be constituted in thought in the first place and the “creative significance of rupture” (Linstead and Pullen, 2006, p. 1306). Research which does this enacts the ways in which new ideas come forth, break off, develop differently and are again blocked in a continuous process of creative improvisation. There are many ways in which research approaches can enhance teacher educators’ creativity by provoking this stutter. The first of these involves working collaboratively with the sector’s messiness. This is particularly relevant to teacher education, where collaboration between different communities of practice (e.g., FE, public service provision) involves risky, “messy” encounters with real potential for creativity.

¹⁰⁴ Hodgson and Standish (2009, p.316) also warn against the “misuse” of such approaches in “narrative” research when closer reading shows that rather than induce stuttering, it contributes, ironically, to orthodoxy.

5.2.4 Mess

As Adamson and Walker (op.cit.) point out, these collaborations in teacher education practices are doubly “messy”. Not only is teacher education itself a “messy text” with a heterogeneous mixture of actors and practices, but the collaboration within the field is also marked by the messiness of complexity, unpredictability and difficulty. This is particularly clear, they claim, in the management and monitoring of collaborative work. The authors conclude that, given divergent understandings even of basic points of reference in teachers’ roles in collaborative work, a question of social justice arises from the need to ensure that these multiple voices are heard (Adamson and Walker, op. cit, p. 36). They quote Kelly (2006, p. 42), for whom messiness is an issue of social justice:

The challenge here seems more than bringing personal differences together and building positive support for teachers. In the interests of improving students’ education (...), the challenge is to “*create (...) speakers of multiple points of view*, but with sufficient expertise to be relevant.”¹⁰⁵

Deleuze and Guattari (2004b, p. 22) theorise this notion of multiple points of view by suggesting that, in order to designate something exactly, anexact expressions are needed. For example, instead of the individual subject of enunciation which expresses a molar tendency to organise and reproduce systems, a collective subject of enunciation is needed to exactly express the multiplicity of communication which cannot be reduced to a single subject or voice but must on the contrary be explored as a collective or collaborative phenomenon. Writing and *a fortiori* creative thought are collective, unruly, messy processes.

Difference, here, is not just the difference between inside and outside professional discourse, but the more radical ontogenetic differentiation which makes creation and learning purposeful. The desire to respect this difference is tied to the idea that encounters with otherness are crucial for creative research. Ways of doing this include collaborative biography (e.g. Davies and Gannon, 2006; Gonick et al, 2011, p. 746) as well as collaborative semi-fiction (e.g. Gale and Wyatt, 2009; Wyatt et al 2010; Wyatt and Gale, 2011) or metafiction (Gough, 2008). Here, the focus shifts to broken flows in communication produced by the researcher’s awareness of their own transience or becoming. Breakdowns in storytelling might be analysed as articulations of difference on one hand and its affective

¹⁰⁵ my emphasis

dimensions on the other (Gonick et al, op.cit.). Improvisational responses to the other's interjections are also formulated in the light of the "fractured" nature of selfhood, for Wyatt and Gale (2011). Encounters in the writing process express the emergence of new relations and suggest new directions for thought, blurring the lines between fiction, theory and inquiry. This "writing to and with each other" creates movement, intensity and flow of matter, time, and space which constitute the research relationship as assemblage. These disruptions in style and content aim to deploy creative improvisation and undermine any notion of a coherent narrative. The "narrative" in question here is not the "story" of the writer as learner, but of the text's own multiplicity as its unity and sense of purpose crumbles under the influence of multiple voices.

This highlights the essential multiplicity of language which consists less in communicating what one sees but in transmitting what has been heard; "hearsay" for Deleuze and Guattari (2004b:85). Juxtaposed with such widely accepted practices as formal reflexivity, this view of thought highlights a distinction between the comfort of doxa (orthodox ideas) and the discomfort of creativity. However discomfiting the latter may be, as Ambrose (2007) points out, for Deleuze reason, common sense and pre-existing powers of recognition do not provide sufficiently radical grounds for genuine thought to take place. The latter, for Deleuze, is in fact far from reasonable:

[Thought] implies a sort of groping experimentation and its layout resorts to measures that are not very respectable, rational or reasonable. These measures belong to the order of dreams, of pathological processes, esoteric experiences, drunkenness, and excess...To think is always to follow the witch's flight.

(Deleuze and Guattari, 1994, p. 41)

In fact, Deleuze and Guattari add, if thought searches at all, its operation is less like the application of a method than like a dog's seemingly erratic leaping. Thought, on this view, is not grounded in a Cartesian subject's "premeditated decision to think" (Semetsky and Lovat, 2008, p. 172), but in an internal "mummy" or "idiot" with a penchant for absurdity. That said, we have no reason, Deleuze and Guattari assert, to derive any pride from a chaotic image of thought, since this image points to how far thinking has become increasingly difficult in its relation with immanence (Deleuze and Guattari, 1994, p. 56). Indeed, they are clear that it is not enough to simply proclaim multiplicity but that "[t]he multiple must be made" by actively seeking out new connections (Deleuze and Guattari, 2004b, p. 7).

This invites us to evaluate the extent to which these new connections are made by (for example) writing, a point stressed by Wyatt and Gale (2011, p. 496) about their own work. What is valuable about the process of writing is far more important than its product, and the value of this process lies in its differential capacity to facilitate further unexpected encounters and collaborations and, therefore, further improvisations. In particular, writing collaboratively is seen as performative and affective, leading for example to actual public performance of the text in a quasi-theatrical way (Wyatt et al, 2010). Here, research practice comes closer to the sorts of artistic diagrammatic practices described above, where the researcher tries to work with the research context rather than trying to represent it. The attempt is to render what Deleuze sees as the birth of modern thought, namely a “failure of representation”, a “loss of identities” and the discovery of forces which underlie them (Deleuze, 2004a, p. xvii).

This “modernity” has important implications for any methodical approach to inquiry in LLL. There is clearly for example a tension between the demands of an educational research world and those of radical thought bent on undermining some of its most cherished concepts (the benevolence of thought itself, for example; or the concept and utility of method; or indeed the desirability of rational, subjective unity in identity). The idea that creative experience is the result of a going-beyond of the self, and that it is provoked by a shock to thought certainly challenges any sustained focus on strictly individual concerns and indeed questions traditional means of dissemination via (written) representations.¹⁰⁶ The individualistic approaches to teaching and learning mentioned above, as well as the implication of LLL in the construction of neo-liberal, calculating subjects, are clearly targeted.

On the other hand, Deleuze’s unearthing of an idiot within thought invites a study of how disjunction works in (narrative) discourse and indeed creativity. Rather than evidence of the discursive constitution of a rational subject, moments of affective puzzlement break the flows of thought and unification and express the disorientation and stuttering found as a result of “discord in the faculties” (Faulkner, 2005, p. 138). The depth of this discord should not be underestimated, since it introduces not just another sense but a completely different form of sense:

¹⁰⁶As Colebrook points out, Deleuze’s wider philosophical project hinges on this point: “Transcendental empiricism, or radical empiricism, is the culmination of the project of immanence (...) a univocal givenness which exceeds the human, being, the subject and the real – for all these are effects of the given. The question – the question – is whether the given can be thought as immanence, freed from the subjection to transcendence, freed from all those illusions of being, presence or the human which are the effects of the given” (Colebrook 2005, p.201).

There is thus a point at which thinking, speaking, imagining, feeling etc., are one and the same thing, but that thing affirms only the divergence of the faculties in their transcendent exercise. It is a question, therefore, not of a common sense but of a para-sense.

(Deleuze, 2004a, p. 243)

The “disorder of the senses” in question here is key to Deleuze’s configuration of the emergence of the new. To make this link, Deleuze focuses on Kant’s view of sublime moments as incommensurable with rational understanding: in fact, the new is a sublime experience which shatters reality in a destructive or catastrophic way, introducing a “harmony in pain” (Deleuze, 2004c, p. 62). However painful, this is “the mechanism by which genetic rhythms emerge from chaotic infinity” (Zepke, 2011a, p. 78). Its troubling potential goes well beyond the uneasiness provoked by poor syntax or unwelcome photos where more traditional content and layout are (perhaps) expected. There is, for Deleuze, no point in messiness for its own sake or in overthrowing sedentary forms if it is merely to re-create them (Deuchars, 2011). This applies particularly to the attempt to represent the “voice” of learners, a common theme in education research which brings its own problems in the form of a “crisis of representation” (Louden and Wallace, 2001 in MacMath, 2009, p. 141).

5.2.5 Voice

The idea of a subject endowed with its own voice is, for Deleuze and Guattari (2004b, p. 143), a “strange invention” which confuses the subject (the speaker, *l'énonciateur*) and the spoken (the spoken, *l'énoncé*) when it suggests that the speaker is the cause of statements of which it itself is a part. The paradox here is that just at the moment when we believe we are most autonomous or speaking for ourselves, we are most subject to the order words of the dominant culture and demands for subjects to embody and articulate them. A good example is the discourse of emotional need, according to which learners are assumed to lack emotional intelligence and are therefore in need of training to attain it. Such ideas depend on a false opposition between rationality and emotion (Zembylas, 2007b), but are so popular that education “has no hiding place” (Cole, 2008, p. 29). Cole argues that, however real emotions may be, their articulation in language is always at least partly colonised by their marketisation to the point where voices of authentic feeling and those of advertisement become indistinguishable. Subjects may believe they are articulating a profound inner need, when in fact they are disseminating an economic discourse which is actualising psychological well-being and happiness as latent sources of profit.

One direct implication for LLL is that research does not have to see the (formal) absence of a research subject as a lack which requires filling by a “voice”. In fact, as our discussion of the event of LLL and Antonioni’s work suggests, what is missing can drive knowledge production through a process of creative de- and re-territorialisation, for example as an opportunity “to read against and in the interstices of the texts assembled” (Kuppers and Overboe, 2011, p. 218). By this, Kuppers means that a given text can and should be read creatively because it is an assemblage with gaps and holes, not in spite of it. To encourage this affirmative reading, she appends poetry, photos and video to a text which is performed online as a “rhizomatic assemblage” (Kuppers, 2009, p. 237). Readers of her article (Kuppers, 2009, p. 235n9) are invited to interrupt their “reading” of it, and become “operators” when engaged in this activity of forming different connections. The flow of activity is broken, introducing a juddering discomfort into the reading process:

Experimental poetry is not only stuff that is unintelligible on the page. It is also poems that become unintelligible as they are performed, as their familiar words enter a machine that sticks and shudders with aching gears.

(Kuppers, 2009, p. 238)

Kuppers’ approach explicitly attempts to do more than just challenge a focus on a thinking subject in this area, and can be applied to less ostensibly personal texts. Policy discourse analysis for example changes from the deconstructive attempt to identify an underlying disavowed narrative or hegemonic voice, and insists instead on the essential variability of the text itself. A given text is understood to embody several voices, and the variety of different voices and semantic schemes within it are studied for their potential opening into disruptive new ways of discussing the topics in question. The key point here for Deleuze is that representation is “a site of transcendental illusion” (Deleuze, 2004a, p. 334) because we cannot and should not represent objects which cannot be repeated without difference. “Voice” evidences such an illusion by attempting to represent people by allocate them spaces but denying their capacity to become other, missing the chance to speak for those who are still to come. As he says, everyone claims to speak for someone else, often in the name of a linguistic majority supposed to grant this privilege of voice. But “[i]t’s the people which is missing” (Deleuze and Bene, 1979, pp. 126-127), a “people that do not yet exist” (Deleuze and Guattari, 1994:108), because change happens at the frontier between the known and the yet-to-come, passing between structures and the lines of flight which constitute their event.

This non-representative appeal to a people to come can be examined in research which deals explicitly with the missing subjects of these events. For example, Mazzei (2011) reads the silences of excluded black students as an imprint of overdetermination. This overdetermination works by the identification of a people which – most especially on racial grounds - can never be anything other than a “bad copy” or simulacrum of the “old race” or majority (le Colombat, 1999, p. 844). Instead of reproducing this over-determination, a-linguistic communication’s performative aspects are stressed (non-speech as communication of a positive undetermination), in order to take into account the “silent struggles at the heart of language” whose suppression is required for dominant forms to emerge (Roy, 2008, p. 167).

This issue of communication in research reflects this critical over-determination of subjects in research situations. It is hard for any research process to claim originality as soon as the situation implicates forms of communication which reproduce perceptions through attempted representation. For example, progressive models of empowerment for the disabled depend on an act of “discursive subjugation” which works via the “facialisation” of disability (Bayliss, 2009, p. 282). Rather than a granting of voice or empowerment, this facialisation attempts to render the specificity of disability into a generic narrative. As such, it is synonymous with an attempt to subjugate its unruliness and bring it under control. Rather than a potentially narrow focus on individual selfhood, creativity and experimentation involves a transformation which is based precisely on such an encounter (Bayliss, 2009, p. 293). This is an encounter which goes well beyond the limits of “voice” in research, underpinning the possibility of actually articulating something worth saying:

If anyone can speak to anyone else (...) it is within the limits and function of their creative activity. It is not that we need to talk about creation – creation, on the contrary, is something very solitary – but it is in the name of my creation that I have something to say to someone.

(Deleuze, 2003, p. 293)

5.3 Chance and pedagogy

The potential for improvisation in creative research offers a number of avenues for the sector, but as suggested above, these must be understood in relation to practice. The pedagogical implications of Deleuze’s thought on creativity are radical insofar as it focuses

on subjects as expressive parts of a highly complex, dynamic world where chance plays a key part. Deleuze's ideas work in dialogue with some of the conclusions made about chaotic, far from equilibrium systems (Prigogine and Stengers, 1986). Elsewhere, Prigogine (1986, pp. 42-44) points out that chaotic and complex systems cannot be described in terms of the individual trajectories of their components, since by definition these do not follow predictable pathways when examined on their own. However, if randomness is no longer considered an exception or a problem to be resolved, such systems display the characteristics of emergent order, since under particular conditions these components show a statistical tendency to act in a particular way when seen as a whole. It is the laws of chance which govern such systems, drawing our attention towards the behaviour of blocs of moving objects and the forces between them rather than the positions or even trajectories of individuals. In fact, because of the exponential nature of these changes shown in such systems, the notion of trajectory itself becomes inadequate since any "memory" of a starting point is lost. For Fenwick (2008) this means that pedagogy in professional learning situations should reflect the fact that it cannot be fully planned or controlled. If outcomes are unpredictable, practice can only participate in this complexity by being creative in the way it explores the problems it faces. This is why Leach and Boler (1998, p. 168) argue that Deleuze's ideas can contribute to more creative practices with effects and outcomes which "may be (one hopes) far beyond our control".

Our discussion of Antonioni's work, however, suggests that the question of how much control to relinquish is a central issue in relation to professional practices in LLL which cannot be solved by abrogating responsibility in events. In a complex professional world, problems are more important than solutions, and the need for imaginative pedagogical approaches to reflect the role of chance has not escaped theorists of professional practice in LLL. For Jerome Bruner, for example the development of a "sense of possibility" is a risky but necessary aspect of pedagogy:

Education is risky, for it fuels the sense of possibility. But a failure to equip minds with the skills for understanding and feeling and acting in the cultural world is not simply scoring a pedagogical zero. It risks creating alienation, defiance and practical incompetence

(Bruner, 1996, pp. 42-43)

Bruner clearly asserts that if pedagogy does not teach how to sense the possible, pedagogues fail in their role as caretakers of professional competence. Harkin et al (2001, p. 55) argue that intellectual development comes when *possible* solutions to problems are linked to *potential* outcomes, and it is possible and perhaps necessary to capitalise on “moments of contingency”, some suggest, by responding to times when “learning might go one way or the other” (Ecclestone, 2011, p. 4). For Woodhouse (2012, p. 148), learning which involves such potentialities is a “subjunctive pedagogy” of multiplicities, affects and non-linear timescales. The detours and different layouts of a pedagogy based on a subjunctive “could be” contrast with the straight lines given to us by prescriptive pedagogies which she associates with an indicative mood.

The view that education should prepare citizens for the challenges of the increasingly complex nature of modernity is also reflected by those who, like Anthony Giddens, link globalisation with a “runaway world” (1999). Donald Schön (2001) influentially argued that the central question for professional practice is of how to educate professionals in conditions of instability and uncertainty. Professional artistry, he claimed, is needed in these situations rather than the recycling of given ideas. Schön notes that the problems faced by professionals are not technical issues of how to accomplish tasks, but rather the plural, ethical questions of choosing where to direct energies in the first place: in his prosaic example, not how to pour concrete but which motorway to build, or indeed how to avoid building it. “Problem-finding”, he regrets, “has no place in a body of knowledge concerned exclusively with problem-solving.”

Here, fluid, complex problems such as internet are like juggernauts or have co-evolving “boomerang effects”, defying notions of casualty (Urry, 2005b, p. 242).¹⁰⁷ Such technological “runaway objects” lie at the centre of organisational learning, but they exceed the mastery of any single individual (Engeström, 2006, p. 1784). Their real value therefore only exists as a networked phenomenon, with communication devices being the most obvious example. Their value lies in the relations they establish and maintain, and they remind us that a lack of control over our environment is a direct result of increasingly complex working contexts which demand a reconfiguration of what passes for knowledge and expertise.

LLL needs to respond to this need if it is to fulfill its role. But can chance and its impact on everyday professionalism be incorporated into practice in a sector so used to regulation? Although often neglected in trainee manuals keen to promote behaviouristic methods which

¹⁰⁷ Cf. also Adam (2003) and passim.

lend themselves to measurement and evaluation, concrete methodologies do exist to do this. These include task-based approaches which place learning, not abstract criteria, at the heart of the learning process. “Problem-Based Learning” (PBL) in teacher education (cf. Gravells, 2012) also offers a possibility of deploying moments of chance in teaching. PBL “appears to be one of the more coherent pedagogical approaches in higher education” (TLRP, 2009, p. 28), and was initially popularised in some areas of clinical training in the 1960s (Major and Palmer, 2001), subsequently spreading rapidly and inspiring many variants (Kim, 2012).¹⁰⁸ PBL can be seen as a development of an awareness of the role of complexity in education, and is based on the idea that “the starting point for learning should be a problem, query or puzzle that the learner wishes to solve” (Boud, 1985, in Boud and Feletti 1998, p. 1).

Drawing on constructivist principles of structured inquiry and discovery learning, PBL is increasingly popular in professional development workshops offered to teachers (Pecore, 2012). Given that “some researchers acknowledge the complexity of getting students to engage” (Ecclestone, 2011, p. 3), PBL seems to respond to LLL’s pragmatic culture by asking what students “really” need to learn and where, using “real” situations, sequential components, and sufficient complexity to engage students and teachers with its “creative energy” (White, 1995). This may also explain why some research into PBL, despite failing to provide evidence that it actually teaches more or better, made students more likely to solve new problems in spontaneous, versatile and meaningful ways than those who acquired the same information by more traditional means (Major and Palmer, 2001). As this suggests, PBL is not about problem-solving itself, but rather concerned with deploying problems as operators in order to increase both knowledge and understanding and a set of generic (social and professional) skills and attributes (Wood, 2003).

However, a tension recognised by the PBL literature is the extent to which PBL can actually operate in the confines of a traditional curriculum. Analyses of its effectiveness remain ambivalent: the Teaching, Learning and Research Programme’s initial study in 2004 identified some advantages to the approach, but later also found cases where it failed to meet students’ expectations of learning, teaching or their own role, leading to very high drop-out rates in health contexts (TLRP, 2009). Kim (2012) imputes such dysfunction in PBL to its use in “hybrid” curricula where PBL is appended to more traditional approaches, attenuating its positive effects. Some critics have suggested that PBL’s effectiveness is

¹⁰⁸ Although Rancière’s (2004a) study of an “ignorant schoolmaster” suggests that in some situations the idea of basing learning around the establishment and resolution of problems without formal input is far from new.

undermined by a tenuous link between theory and practice (e.g. Colliver, 2000). It could also be argued that its structure and focus on “attributes” such as interpersonal skills and teamwork constitutes a source of socialisation which undermines the sort of autonomy promoted by Ecclestone (2011). Such criticisms are familiar to LLL where the problem of practitioners’ relation to autonomy is in constant debate. Teacher educators need to be aware that PBL’s focus on “applied solutions to everyday problems” may be a pseudo-utilitarian attempt to turn education into the engineering task of solving existing problems (Fendler, 2008, p. 22-23).

From a theoretical perspective, this particular difficulty in PBL can be understood through a distinction between possibility and virtuality. Any group of people involved in an ordinary activity is complex enough to constitute a “multiplicity of multiplicities” with degrees of variation, difference and intensity between them (Adkins, 2012, p. 508). These dynamic multiplicities highlight a problem with “possibility” in that it is too like the current: the possible resembles the present and is always produced “after the fact” for Deleuze, as a kind of principle of generalisation which, therefore, misses the event (Deleuze, 2004a, p. 263). Creative education therefore should not be about the possible, but about the virtual source of intensity in pure difference. This virtual ruptures our relation to the real and our expectations of it, radically excluding “possibility” on these grounds:

Difference and repetition are in the virtual ground and movement of actualisation, of differentiation as creation. They are substituted for the identity and the resemblance of the possible, which inspires only a pseudo-movement, the false movement of realisation understood as abstract limitation

(Deleuze, 2004a, p. 264)

Rather than an impossible search for solutions to these complex movements, creative pedagogy becomes concerned with problems, but accepts Fendler’s critique. Reclaiming the notion of problem from those who conflate it with solution leads to the creation of a pedagogy of problems.

5.3.1 Problems

It is Kant, Deleuze argues, who puts problems at the centre of Ideas (1969, p. 70), following this analysis into Bergson’s philosophy, where movement and multiplicity further disrupt any sort of dualism by their immanence to matter. Transcendent forms can no longer be considered simple objects, and perception becomes a synthetic, problematic mix in which we

participate. Thus a pedagogy of these problems places them at the heart of learning processes, granting them very creative qualities:

True freedom lies in a power to decide, to constitute problems themselves. And this “semi-divine” power entails the disappearance of false problems as much as the creative upsurge of true ones

(Deleuze, 1998, p. 15)

Problems necessarily form part of learning since “problems can only be learnt and only learning allows us to follow on from problems” (Williams, 2003, p. 135). Problems themselves cannot be understood as given (Runco, 2007, pp. 15-16), and for Deleuze is “a series of tensions demanding transformation but always resisting resolution” (Williams, 2008, p. 139). To pose a problem is not to solve it (Deleuze, 1966, pp. 3-4), and although problems give rise to answers or solutions, these solutions themselves “overlay” their problems without exhausting them (Deleuze, 2004a, p. 203). Learning for Deleuze is therefore to learn both how to be sensitive to problems and creative in one’s relations with them. Hence, he argues, the idea that a problem should be set and then solved is infantile, given that posing a problem already presupposes the conditions of its solution. It is the schoolmaster, he says, who sets problems, and the pupil who must solve them, based on a social prejudice in favour of ready-made problems.

A problem moreover does not indicate ignorance, but rather the nature of Ideas as such (Deleuze, 2004a, p. 336). Problems are themselves “affirmations of differences” (Deleuze, 2004a, p. 336) in that they bring problems of their own and thereby testify to ontological differentiation. They cannot therefore be reduced to the propositions which frame either them or responses to them, and a problem remains therefore sub-representational. The creative posing of a problem begins a process of Bergsonian intuition, whereby posing problems leads to an awareness of difference and, ultimately, real time (Deleuze, 1966, p. 3). Deleuze does not just criticise the schoolmaster/pupil relationship in this context, therefore, but explicitly relates the process of learning and apprenticeship to these problems as an ethical choice of affirmation. Our most important task is determining problems and realising in them our power of creation and decision, he says (Deleuze, 2004a, p. 337) and thus problematisation is the key pedagogical skill to be activated (Bogue, 2008, p. 8).

The openness of problems is central to this, since learning involves a concern for “the outside”. For Deleuze, creativity as a mediation with the outside is intimately linked to learning, which in turn involves an act of physical combination:

[C]omposing the singular points of one’s body or one’s own language with those of another shape or element, which tears us apart but also propels us into a hitherto unknown world and unheard-of world of problems. To what are we dedicated if not to those problems which demand the very transformation of our body and our language?

(Deleuze, 2004a, p. 241)

This combination must implicate “another” element, since it is this link with otherness which “tears us apart” and allows change to happen. This change is a violent, physical transformation which introduces creative novelty in the form of “worlds” which are not just different but “unknown” and “unheard-of”. These new worlds, for Deleuze, can be understood as problems whose demands, he asserts, hold precedence, constituting a sort of ethics. The overriding concern of this ethics, as we will see below, is difference, since different orders of problem exist where each order is “a different expression, a different realisation or projection” of the basic differential schema (Olkowski, 2011, p. 125).

The repeated references to the juvenile nature of some talk about problem-solving indicates that the issue is close to LLL. Adult learners know that learning cannot be reduced to the acquisition of finite chunks of information, and that problems always open out into other problems. Deleuze’s analysis helps us to critique a tendency to infantilise in LLL, but also provides a set of concepts with which to develop an alternative practice. Indeed, a set of defining features can be identified, all of which tie this pedagogy of problems to the operative creativity mentioned above. These include their positive nature, their essential relation to practice and their relation to knowledge.

5.3.2 Positivity

Problems indicate ontological differentiation for Deleuze (2004a, p. 336), and so rather than signal any sort of lack or conflict in the form of a question to be resolved, they are positive, complex multiplicities which express the indeterminacy of pure difference and the vital processes of change. The problematic therefore is not to be done away with by being

solved. This explicitly undermines “outcomes” based education whose means and destination express and maintain processes of control:

Outcomes-based education, the sociology of health, the programmes of the carcereal, all these define the arborescent, the sedentary, the measurable. They allocate closed spaces; they define both the destination and the road.¹⁰⁹

(Bayliss, 2009, p. 291)

The organisation of learning in these circumstances places emphasis on the flexible conditions in which it occurs. The key risk is that problems lose any improvisational content, and are only posed in order to reproduce the appearance of discovery, thinking and learning in their solutions. Here, learning becomes synonymous with the behaviouristic curricula and their excessive recording, tracking and assessment which, some argue, at times replace the pedagogical goals they are intended to enhance (Torrance, 2007). Such formulaic approaches might actually limit students to “procedural autonomy, external or introjected motivation and coaching for success” (Ecclestone, 2011, p. 13).

Needless to say, this approach would not respect the genetic ability of problems suggested by Deleuze. The problematic as such is of crucial importance because it designates precisely the objectivity of Ideas and the reality of the virtual. Deleuze wants to think a world without essences, and to do so replaces essences with concepts, and identities with problems. The problem is “necessarily differentiated” by these virtual relations and, instead of being solved, is developed or perpllicated, complicated and explicated (Deleuze, 2004a, p. 351). Problems as such therefore are once again constituted by movements beyond them which enable the connections which constitute them as rhizomatic networks or events rather than fixed entities.¹¹⁰ Only creation can provide a response to problems which do not revert

¹⁰⁹ Roy (2008, p.163-164) suggests that the concept of healthcare is part of a “massively entrenched discourse” which links the health “industry” to phenomena such as insurance networks and national budgetary concerns. These, although closely related to drugs, disease and of course the pharmaceutical industry, obscure health as such. LLL might be described in similar terms, with its large-scale operations, corporate interests and bodies designed to palliate the perceived social “diseases” of injustice, illiteracy and unemployment. On this view, learning takes a back seat to managerialist interests, where the language of quality serves to vehicle the actions of expediency and the medicalisation of social phenomena and, ultimately, the act of being alive.

¹¹⁰ This distinguishes them from the Kuhnian paradigms mentioned above, since they are not just social constructs happening in the mind but quite specific collections of material affects with the power to change and be changed (Bogue, 2008, p.8).

to the illusion that the problem has been solved, respecting at once their positivity and their relation to practice as inquiry and experimentation.

5.3.3 Practice

Problematizing is a practice rather than a fact. Although problems make up our world, they do not come ready-made and must be created or “posed” (Deleuze, 1966, p. 4). In line with this view of the singularity of teaching and learning situations, Roth and Lee (2007, pp. 190-91) distinguish *praxis* (“moments of real human activity that occur only once”) from *practice* (“a patterned form of action”) because everything has consequences and there is no time out from a given teaching situation. Here, problems cannot be posed by assuming that a solution exists for them, but rather by making new links and constantly developing new maps for experience to engage with.

At a purely practical level, this undermines “transmission” models of pedagogy. These are a “fanciful” notion for Billett (2004, p.114) since they implausibly postulate universal knowledge which can be simply transferred across contexts. Problematization replaces this with an exploratory pedagogy redolent of the research inquiry processes discussed above. An example would lie in the type of teaching which sees the teacher-learner relation itself as a multiplicity and teacher education practice as a collection of problems whose development would be the teacher educator’s prime practical and ethical concern. In this sense problematizing corresponds to the creative desire to “broaden our sense of alternative futures” (Jones, 2009, pp. 77-78). A pedagogy for LLL based in such problems might also begin by stressing that problems always reflect their conditions in order to show how these can be changed. The conditions of a problem may be economic, of course, and material, but this does not imply that solutions will necessarily be welcome or worthy of their problem. They can involve stupidity or cruelty, Deleuze states, such as the horror of war. But the solution provided for a problem is always one which a given society produces as a consequence of the manner in which it poses its problems (Deleuze, 2004a, p. 234).

5.3.4 Inquiry

Inquiry is central to teacher education and arguably one of the most important ways in which practice and research meet. Teacher education is equated with a process of inquiry itself (Brown and Cherkowski, 2011, p. 63), which can be understood as the practice of determining collective goals, experimenting with practices and entering in to “open and trusting dialogue” (Sachs, 2007, p. 16). As Sachs’ focus on the discursive aspects of the process suggests, this equation is far from self-evident in LLL, however. LLL contexts such

as FE are often singled out for their lack of engagement with research (e.g. Harwood and Harwood, 2004; Goodrham 2006; Gale et al, 2011), and FE teachers are frequently identified with teaching, rather than research (e.g. Weatherald and Moseley, 2003; Connolly et al, 2007). On the other hand, “[t]he level of research-informed practice, professional development and thinking within further education has increased” (IfL, 2012, p. 7) as the sector aspires to a stronger research profile through professional development activities increasingly based in formal and informal inquiry and research.¹¹¹

This view of inquiry in teacher education offers great potential. Black et al (2003, p. 21) nonetheless warn of a “perverted model of discovery learning” in education research, where research which claims to be inquiry-based is in effect reproductive. Here, they argue, the inquirer (i.e. the researcher) knows what they want but doesn’t let on, in order to get others to “discover” it for themselves. Constructivist pedagogy (for example) has long argued against the “myth” that learning involves the incorporation and implementation of exact copies of teachers’ understanding (Fosnot, 1996, p. ix), and the danger of reducing the practices of inquiry to those of reproduction is a real one. This misunderstanding of the role of inquiry may be one reason why, despite an attempt to develop a research culture, FE retains its image of a transmitter of information rather than a creator of knowledge (Feather, 2010; Wilson and Wilson, 2011).

One way of countering this risk is to focus on chance by insisting on the immanence of learning to inquiry as a process rather than an established practice disseminated for the purposes of transmission. Unlike formal research, such inquiry is a crucial and on-going process which involves making choices in unpredictable circumstances. It is both vital and improvisational, since inquirers “can’t predict which rabbit hole we will want to dive down” (Gallas, 2011, p. 39). Moreover, personal experience suggests it is precisely these “rabbit holes” which are best remembered by learners, perhaps because they are able to bring a “something extra” which escapes the contractual basis which predefines professional identities before they have had a chance to be explored (Daignault, 2008, p. 57). It is important that teachers do not waste the chances of learning breakthroughs in unexpected moments by not looking for them (Derrick, in IfL, 2013, p. 24). It seems even more important that they should not actively plan them out.

¹¹¹ Several reasons might be suggested for this, ranging from the desire to emulate the HE organisations with which FE has had increasing contact, to the wish to reduce management and consultancy costs by conflating initial training with individual research projects inspired by an organisational agenda. It is at least possible that the two poles are in fact interdependent.

Instead, the inquiry process reflects a “pedagogy of problems” because it works by divergence and the critical consideration of multiple outcomes and possibilities. A “yes but” in inquiry (Cordeiro 2011) concatenates like Deleuze’s stuttering “and...and ...and” to explore the different (and differing) facets of a problem which is never actually given and whose lines of flight are themselves worthy of thought. Learning and thinking share this stuttering moment of “puzzlement” which Deleuze’s discussions of creativity identify in thought.¹¹² Creative practice can be enhanced by enquiry which incorporates the unpredictability and puzzlement of being faced with the unknown when both teaching and learning are “simply names for genuine thought” (Bogue, 2008, p. 15). They can be based in a form of inquiry that “captures the confusion and search for clues” in our learning about the world and living in it because it involves the puzzlement of having “no ready answer for resolution and satisfaction” (Cordeiro, op.cit, p. 113).

LLL needs to consider carefully the pragmatics of such an approach to pedagogical development. The ponderous machinery of formal research may take longer to set up, complete and disseminate its findings. At the limit, it is possible that more formal research may actually distort findings from their environment (the classroom) by exporting it for the purposes of formal dissemination within contexts which are quite alien to it. This may be why teacher education, when it is based on transforming the unpredictability of inquiry into certainty by formalised practitioner research, runs the risk of losing that which Gallas sees as crucial to “healthy” lifelong learning itself (ibid). Solutions only have the truth they deserve depending on the problems we pose, but problem and solution are differences in kind and cannot cancel each other out (Deleuze, 1969, p. 69 ; 2004a, pp. 197-8).

5.3.5 Experiment

A major implication of Deleuze’s creative philosophy is therefore that, because it is ephemeral, learning must involve experimentation. “That any form is precarious is obvious”, he states, “since it depends on relations of force and their mutations” (Deleuze, 1986, p. 138). If it is the case, as Deleuze holds, that “it is by means of difference that the given is given” (Deleuze, 2004a, p. 286), then creative experimentation is explicitly equated with

¹¹² This is one of many parallels between Deleuze and Dewey which have been noted (e.g. by Semetsky, 2006). Cordeiro reminds us that critical thought, for Dewey, begins when a learner confronts “the forked road” where “the origin of thinking is some perplexity, confusion, or doubt”. Thinking, in these circumstances, is not a case of “spontaneous combustion” but entails “something specific which occasions and evokes it”

thought itself. Learning is necessarily experimental, but rather than the sense of using experiment to enhance the process of acquisition, learning is experimentation “free of goals in knowledge or skills” (Williams, 2003, p. 136).

The importance of this approach can perhaps not be overestimated for Deleuze, and can be seen as one of many links between his aesthetic theory and his ideas on learning. The key thing for an artist like Bacon is not to reduce the figure to immobility (Deleuze, 2004b, p. 1), just as in defining learning Deleuze insists on the way the learner composes their own body with the material around them. Learning, for Deleuze, does not take place in the relation between a representation and an action, because this would be a reproduction of the Same. On the contrary, it always implies “an encounter with the Other” (Deleuze, 2004a, p. 25) because the learner must be somehow affected by something outside. The strategy suggested by Deleuze is to experiment and connect new ideas in constant vigilance of the potential of organisation to dull the intensity of the cutting edge of creativity. Although this seems to rule out, a priori, the act of “application”, it also encourages the implication or recombination of ideas or problems in experimental ways. On this view, a practice of experimental thought would imply “a violent training, a culture or *paideia* which affects the entire individual” (Deleuze, 2004a, p. 205). The point of such pedagogy is to seek interesting problems which emerge in the process of experimental thought (Deleuze and Guattari, 1994, p. 111).

This emphasis on experimentation as an aspect of creativity is not new to educators. Theorist Phillippe Meirieu describes the teaching and learning process as essentially creative, suggesting that we “knock things together” and “make the living with old fossils, improbable arrangements” in which “we find a little joy that we call “creation” (Meirieu, 2011).¹¹³ The compounds that we “knock together” in creative gestures, even at the level of language, are not themselves radically new: they are vestiges of the known in the form of existing items recombined. What matters, as we have seen, is the novelty of the relations between terms, not the terms themselves.

Interpreting Meirieu’s comments in a Spinozist sense, the joy of creation is precisely the powerful knowledge that we can further affect and be affected by these relations. This is an important ethical move with a significant capacity for enhancing creativity. This is because from the perspective of teacher education, skills and knowledge in this light seem insufficient guides to emergent practice when the latter’s dynamism is its defining feature. Instead, a

¹¹³ « Nous bricolons ainsi avec des vestiges, nous faisons du vivant avec des vieux fossiles, en des arrangements improbables ou nous trouvons un peu de jouissance que nous nommons « création » »

“shock to thought” therefore involves more than presenting a series of more or less difficult or unusual ideas to our existing ways of thinking. Its goal is to unearth “the new, remarkable and interesting that replace the appearance of truth and are more demanding than it is” (Deleuze and Guattari, 1994, p. 111). It is more demanding because such activity literally creates the spaces in which subjectivities develop, a necessarily useful notion for educators:

It is in these dynamic, volatile, and potentially transgressive spaces that the extensivity of the defined subjectivities of teacher and student, manager and researcher, and so on comes to be troubled by and through the recognition of the multiple, molecular, and interconnected world of intensities which become the habitus of these spaces

(Gale, 2010, p. 305)

On this view, transgressive spaces are created between physical objects in extension and the intensive multiplicities of feeling and sensation. But this is more than a simple participation of the feeling subject in the hylomorphic creation of objects subsumed by it: the spaces themselves are fully intensive because at bottom they are both dynamically differing and the source of affects / passions which transgress and change. In creative practice, it is the cutting edge which propels the formula, not vice versa (Deleuze and Guattari, 2004b, p. 402), introducing a space of assemblage between what we do and what we know, between the nomad practice of encampment, flows and differential relations and “royal” science of metric definition, measurement and enclosure. So if art must form the non-artistic by awakening and teaching us to feel, creative thought does not require experimentation, because it is synonymous with it.

The relevance of this for teaching and learning may seem unclear, but Zembylas (2007b) sees learning as profoundly altered by the view that we do not know what these fluid assemblages of relations or bodies can do:

We do not know the limits of what is possible for such assemblages to do. We may stumble across unexpected connections with assemblages not immediately apparent. But we may also create new assemblages of bodies as organisations of desires, powers and affects.

(Zembylas, 2007b, p. 25-26)

Zembylas implies that pedagogical practices can be described which involve O' Sullivan's three characteristics of creative practice described above - improvisation, chance and error. This is largely because even the well-posed problems demanded by experimentation involve features which cannot be adequately understood by rational processes alone. Radically democratic learning "cannot bypass the material, the biological, the physical" (Hart, 2010, p. 44), but as Springgay (2008, p.1) notes, knowledge production does not centre within a single material body, but rather takes place through and between their intermingling. An affective form of practice focuses on the actual impact on the body of learning situations and the signs, sensations and affects which compose them. For Deleuze the body is a fully material phenomenon defined by equally material affects and intensities such as speeds and various thresholds. An organism, he suggests, is "a set of real terms and relations (dimension, position, number) which actualises on its own account, to this or that degree, relations between differential elements" (Deleuze, 2004a, p. 233). It is therefore hard to speak of pedagogy from the point of view of Deleuze's philosophy without taking account of the role of affect within such a pedagogy. Indeed, for Cole (2008, p. 81), affect and pedagogy are synonymous and imply that "the materiality of change, the act of learning" is identical with the passage between states of bodies which affect one another. Bodies themselves are made up of these affective relations and are thus planes of becoming, desire and creativity (Zembylas, 2007b). Becoming on this plane can be slowed down as the body is "organised" to the extent that it can no longer create, or on the contrary accelerated so that all organisation is lost and it becomes a plane of pure intensity.

Despite or because of this risk, an apprenticeship in the signs and affects of teaching and learning is important if novel training ideas are to prepare educators for the ethical implications of pedagogical encounters. On one hand, this introduces the notion that a pedagogy based in this encounter will by definition be transgressive because it interrupts given ways of being. Hickey-Moody and Haworth (2009, p. 90) for example argue that responding to signs in affective ways achieves this:

[m]aking meaning and exchanging knowledge online or through non-verbal affect at a music concert are two examples of ways in which learning and meaning-making in community spaces happens through affect in ways which are socially transgressive

This particular account of “transgressive” activity is interesting because of its references to the context of mass-media events. Rather like the “small ads” and “personal columns”, promoted by Semetsky and Lovat (2008) as possibly valuable sites of education research, there remains a doubt as to how far such mass activity really is socially transgressive.

The point however is that creative activity can be transgressive provided it is understood in its relation to deterritorialisation of a more or less absolute sort. This helps explain the potency of artistic practices such as those described above and their pedagogical capacity. If the effects in Antonioni’s films induce a stutter, it is so that they can provoke new ways of thinking, feeling, and perceiving the world composed of a multiplicity of living relationships. On one hand, Deleuze’s treatment of sensation as undifferentiated “waves” (Deleuze, 1981b) would seem to exemplify a certain powerless banality (Joyce, 1985, p. 27). But if the relations which result from being affected by sensation perform an ethical task, it is that of restoring our link with these material sensations and therefore with the world (O’Sullivan, 2010). Here the “destabilising moment of the encounter” with such sensations becomes the ethical *per se* (Ruddick, 2010, p. 23). Crucially, for Deleuze, it is particularity which transcends the general and evokes “an inexorable responsibility for the other [which] does not preclude political and social activism but may add to its affective and ethical force” (Gannon, 2011, p. 74).

Examples in practice might include a reorientation towards the dynamics of classroom communication. Because all things human and otherwise are essentially dynamic, they can be called flows since they incorporate rather than single out entities such as teacher, learner or institution. Given this, affective means of communication become explicitly subversive because they challenge the unsophisticated rationalism of linear communication theory. The affective content of “gossip” in learning contexts, for example, ensures its multi-directionality “because of the subtexts of affect and desire that drive the desiring machine of gossip as a transgressive practice” (Leach and Boler, 1998, p. 160). It is precisely the multi-directional flow of affect through this particular means of communication which makes it transgressive of didactic authority.

5.3.6 Reflectivity

An interesting feature of this assertion for educators is that thought need not be equated with the activity of a reflective subject. Many influential models and approaches have been proposed by thinkers, often from the US, to develop critical or reflective practice for professionals. These include Schön’s (1983), Argyris’s (1994) and Brookfield’s (1987; 1993; 1995) different versions of reflective practice; and Mezirow’s “transformative” pedagogy

(Mezirow et al, 2000). All share a belief in the power of reflecting on one's circumstances in order to change them, an activity often seen as synonymous with resistance to oppressive circumstances (Tennant, 2009).

However, such reflexivity's ubiquity as a training tool and its incorporation by LLL have blunted its creative edge (Done and Knowler, 2011; Benade, 2012). Evidence of reflective practice to produce genuinely creative change is scant (Stein, 2000), and it risks being "hijacked by instrumentalism" in order to facilitate "a regurgitation of standard responses" (Fulford, 2012, p. 77). In practice, the flow of potentially creative practice remains unbroken by the various circles, cycles and more or less formulaic writing tasks which are so popular in teacher education. In fact, some argue that reflective practice cannot achieve its promise, and instead aims to expose the fragilities of the individual for public examination. It resembles a confidence trick on one hand and reality TV on the other (Macfarlane and Gourlay, 2009, p. 457). The result is criticised as a "[m]imetic pedagogy of simulacra and ventriloquy that thwarts reflection, diminishes teachers' agency and stunts learners' autonomy" (Maclure, 2006, p. 14). This seems no coincidence if, like Deleuze (1990, p. 242), we see the success of TV game shows as an extension of the unending competition of the workplace and the flows of information which define a society of control.

A further difficulty in reflective practice arises from the desire to give scrutiny of one's own practice a principal role in creativity. Hillier and Figgis (2011) assert that such scrutiny is essential for the dynamism and effectiveness of the (VET) sector since what matters, they suggest, is that practices are new to the individuals using them rather than wholly new for the sector. Unfortunately, self-scrutiny and the belief that it suffices¹¹⁴ risk leading practice into individualism and stasis, but it also places the burden of the sector's creativity on the individual responses of practitioners. Such ideas raise the question of whether the actual practices of reflectivity offer anything new, or if they resemble so many ideas "born old" to simply "exhibit their conformity, their conformism, their inability to upset any established order" (Deleuze, 2001, p. 81)?

¹¹⁴ Theorists of reflective practice such as Brookfield would not endorse the view that self-examination is enough, but it can appear an easy option, especially when endowed with the halo of radical or critical practice with which some proponents are keen to endow it.

5.4 Error and learning

Reflective practice in teacher education can, however, be enhanced as a process of professional development by collaborative dialogue for Adamson and Walker (2011, p. 29). But doing so increases the possibility of error and the feeling of alarm which can accompany it (Fenwick, 2013). From Deleuze's perspective, this fear of error suggests a counterproductive attitude to change which relies on unrealistic expectations of life itself, as a process of learning whose creativity falsifies the given and countermands received wisdom. When Gonick et al (2011, p. 741) argue for a "Deleuzian interest in engendering new synergies and possibilities through the juxtaposition of the disparate", they express this shift towards an appreciation of the working of difference in learning. For them, collective biography is a site for both inquiry and analysis into processes of "selving" which, ultimately, adds to "a growing awareness of the importance of affect and embodiment in thinking about issues of power, the research process, and the possibilities for change". When Parker (2009, p. 31) asserts that the attributes of given entities can and should not be understood as being limited to those they appear to have, the point is that becoming and change replace truth as a focus in lifelong learning, drawing our attention to the "powers of the false" in learning generally.

Falsehood, for Deleuze has genetic powers, partly because error disturbs orthodoxy with its powerful evidence of the potential of knowledge to change. However, the notion of error must not be confused with banality and nonsense, both of which are more dangerous than simply getting things "wrong":

Teachers already know that errors or falsehoods are rarely found in homework (except in those exercises where a fixed result must be produced, or propositions must be translated one by one). Rather, what is more frequently found – and worse – are nonsensical sentences, remarks without interest or importance, banalities mistaken for profundities... badly posed or distorted problems – all heavy with dangers

(Deleuze, 2004a, p. 191)

Deleuze's position here exemplifies the pluralistic epistemology described above. Things always have several senses, a pluralism which itself expresses not the existence of different points of view but their enfolding in a nomadic subject as the forces and the becoming of

forces operate through relations. In this way, interpretations hidden in one another replace the idea of a thing, “like masks layered one on the other, or languages that include each other” (Deleuze, 2004c, p. 118). So because there are worse things than simply being wrong (Burbules and Berk, 1999), a creative pedagogy would actually seek out error in order to engage with more profound issues of the production of truth and falsehood.

5.4.1 Falsehood

Of special interest to the complex problem of LLL teacher education is the empowerment which results from an enhanced capacity to be affected. This draws our attention to the positive benefits of falsehood and the powers it brings to learning. By raising the false to power “life frees itself of appearance as well as truth”, Deleuze claims (2005, p. 140). Falsehood is not a poor copy of something which lacks truth to make it complete, but something positive in itself and therefore a model rather than a copy.¹¹⁵ These concerns for the relation between the authentic and the inauthentic are far from abstract, and are tied to a certain vision of the classroom relations, as the following shows:

The companion-teacher makes full use of that ‘already-there’ inequality between him/herself and the student. One does not offer explicit arguments as to why students should respect one’s authority (e.g. ‘Because I’m your teacher’, or ‘Because I know more’). Instead, one walks into a classroom with the benefit of the hierarchical superiority that the educational system bestows on one, and behaves at all times (including when challenged by students) as though that superiority is unimpeachable. The companion-teacher internalises his or her authority; he or she exudes authority. And, equally important, he or she maintains that authority by showing (not arguing for) the reasons why he or she deserves his or her superior status

(Razvan, 2010, p. 538)

This argument that teachers can be more “immediate” in this way is interesting because it is imbued both with ideas of direct, authentic relations which support an apparent desire for

¹¹⁵ Deleuze again draws inspiration from Nietzsche’s belief that “to renounce false judgements would be to deny life”, since untruth is “a condition of life” as will-to-power (Nietzsche, 1990, p.36). Failing to do this involves repeating customary value-judgements, he asserts, unlike acts of knowing, which are necessarily synonymous with creating (op.cit, p. 142-143). A grain of wrong, Nietzsche quips, is “even an element of good taste” (op.cit, p.151).

status and power.¹¹⁶ Many would agree with Plant (in IfL, 2013; 21) that better “behaviour management” is demanded by demographic trends. Razvan’s claim is striking in this context, because more “immediacy” to the student as Other comes with an “authority” and “companionship” which provide this “raw relation”. Despite the language of companionship, the teacher’s unimpeachable authority as the classroom law which incarnates the practices of “do as I say” rather than Deleuze’s “do with me” approach described above. The sort of creative complicity demanded by learning in LLL is lost in the teacher’s unattractive but all-too-human desire for an authentic authority.

Challenging this rationale offers interesting perspectives on the role and treatment of “falsehood” in LLL teacher education. If we accept the view that the false has a power unavailable to truth, we may need to look beyond hierarchical models of learning for insights. On this account, irrational moments of error might tell us more about experience than our already well-documented attempts to contain it, as indeed research mentioned above suggests. The teacher educator’s role as best practice model also evolves, as the desire to copy or reproduce practice becomes counterproductive as an illusory attempt at reproduction. Deleuze’s view, that our attempts to codify experience are guilty of introducing illusion, is quite unambiguous on this score:

It seems to me we have the means to penetrate the sub-representational, to reach all the way to the roots of spatio-temporal dynamisms, and all the way to the Ideas actualised in them: the elements and ideal events, the relations and singularities are perfectly determinable.

(Deleuze, 2004c, p. 114)

A concern for such singularities demands that researchers operate by “extending, blurring, or bypassing boundaries of their research traditions” (Stone, 2011). In particular, this implies a blurring of the line between traditional inquiry and fiction, as we have seen. These include Gough’s (2008) use of fabulation, above, and other research approaches which openly promote hybrid styles and methods. Drummond and Themessl-Huber (2007, p. 433) for

¹¹⁶ In changes to the new teacher education qualifications, LSIS (2013, p.10) outlines optional module content in “managing behaviours in a learning environment”, an “option” which is my organisation is currently incorporating into its provision across a consortium of 20 FE and adult education partners and four regional police forces.

example argue that an action research project can be developed on the basis of a hypothetical project in order to be future-oriented:

First, to have used an actual example would have been to impose Deleuzian ideas onto events that had already occurred, including the thoughts, feelings and actions of those involved, and that would not, in our view, be ethically sound. Moreover, in terms of accuracy, it would also be contrived. We are seeking to introduce ideas for the future.

Another source of “falsehood” for research lies in historical fiction and personal websites rather than, for example, more legitimate documents and history books. Similarly, culturally “minor” phenomena such as newspaper “opinion” pages, open-structured interviews and biographies are likely to be more revealing of the rhizomatic development of voice than in “commercial” media for Semetsky and Lovat (2008, p. 172). Some also argue that this type of data can constitute a critical challenge, as fiction and theory work together to critique some of the assumptions of education theory, notably those regarding the distinctions between fact and fiction on one hand, and between presentation and performance on the other (Gough, 2008, p. 84).

5.4.2 Knowledge

Knowledge itself can be treated as a creative, rather than a repetitive, phenomenon both within the classroom and without. For Deleuze, knowledge is distinguished by formed relations. He challenges the Platonic view that knowledge is abstract, a “generality of concepts”. Derived from the idea that knowledge is an object to which memory can return, it tends to distribute truth and falsity according to a false understanding of a given problem, namely that it has finished distributing itself. On the contrary, for Deleuze thought concerns the unformed, the emergent and the new by being awakened from the outside (Rodowick, 1997, p. 198). “The final truth”, Deleuze suggests, can only emerge as if it were the limit of a problem which has implausibly been “completely determined and entirely understood” (Deleuze, 2004a, p. 204). “A new Meno” therefore would see that knowledge is a result which depends on experience, not a form to which experience should strive. Learning which takes place when genuine problems are explored is the genuinely transcendental structure “which unites difference to difference, dissimilarity to dissimilarity, without mediating between them; and introduces time into thought” (Deleuze, 2004a, p. 206). By this, he means that the singularities encountered in experience disrupt and falsify thought because they are

materially other to it. Coming from the outside, their effect is to trouble the flow of ideas and induce a stutter.

5.4.3 Questions

One way of seeing the implications of this is to consider the use of questions in learning. Instead of a narrow focus on skills training influenced by human capital theory, it is argued the sector needs models of learning with questioning at their heart. These should foster “skeptical, critical analysis” where “all questions are open questions” (Taylor, 2007, p. 89). “[h]igher order” thinking skills are favoured over “correct answers to any imaginable question” (Bramming, 2007, p. 46). A relevant question therefore is “open to the possibility that the experimental object might bite back” (Mackenzie, 2005, p. 61).

This attitude is partly reflected in current teacher education practice. In an attempt to recognise that classroom interventions are merely part of the learning experience, we are frequently advised to adopt the role of facilitator rather than instigator of learning (cf. Wallace, 2007, above), leading learning out of the learner. By doing so educators both promote and model a role which, for Fisher and Webb (2006, p. 342), complements a curriculum based on itemised, criterion-based assessment. Here, techniques based in enquiry practise discovery learning, problem-solving and questioning strategies, and reflection is encouraged to challenge assumptions and develop personally as well as professionally. These teacher-facilitators or “learning professionals” respond to a new learning paradigm (Parsons et al, 2001) and are not just midwives to knowledge, but to the “knowledge society” itself (Goodson, 2003, p. xiii).

To accomplish this, Race (2005, p. 113) for example suggests “learning through answers to questions” driven by students’ queries. It is of course very common for teacher educators to use a range of eliciting techniques to gain information about their learners, and manuals regularly include advice of how to ask different “types” of questions. Petty (2004, p. 189) for example suggests data recall, naming, observation and control for example, as “lower order” questions compared with higher order problem-solving or reasoning questions.

Too often, pedagogy reinforces this relation, inculcating docility. Sometimes, the aim in using different questions is to provide differentiation, and Keeley-Browne (2007, p. 127) provides a useful list of techniques for actively involving learners in questioning. More often, though, questions are seen as one-way, teacher-controlled technical interventions, designed to provoke and assess the ability to display itemised knowledge. Examples include Petty (2004, p. 181) and Armitage et al (2012, p. 183), who both present the practice of

questioning as largely (if not purely) teacher-originated. Lambert and Lines (2000, p. 148) take a similar position, as do Reece and Walker, who promote the technique of “pose-pause-pounce” (2007, p. 282) where it is the teacher who is in charge. If learners are “lead out” towards a given object, this involves a self-mastery whose parallels with the seduction of control are often troubling reminders of the mechanics of oppression for Colebrook (2008, p. 35) and suggested by Razvan’s comments, above.

Accordingly, Petty (in *IfL*, 2013, p. 29) regrets that open questioning is not sufficiently developed in the sector’s ITE. But the openness of a question depends as much on tone as on syntax (Deleuze and Parnet, 1996, pp. 27-28), and an interrogation can close down discussion very effectively. Indeed, questions are not just useful ways of conveying information, but, for Deleuze, serve to establish and maintain certain relations. However, Deleuze is less interested in denouncing the way power is established by these relations than in the way they perpetuate a particular kind of “either-or” dualism in thought. Questions are always pre-formed and calculated on the answers they are supposed to provide, and one is either questioner or questioned, person or learner, teacher or taught. In a sense, he argues, we have already been “had” by such questions, since whatever we might have wanted to say has always already been decided by someone else.

This approach to questioning also recognises a debt to Socratic maieutics (e.g. Armitage et al, 2012, p. 18), according to which trainees and learners alike are encouraged to activate existing knowledge and potential in order to achieve a particular learning goal: a series of carefully planned questions leads learners towards “the statement of a principle or truth” (Neary, 2002, p. 69). However, as Bogue (2001, p. 16) points out, this practice implies a philosophical tradition which in itself does not deny the complexity of the objects of perception. Socrates famously claims to induce perplexity by means of this enquiry, but has a fondness for pointing out contradictions and apparent paradoxes with questions steeped in irony and sarcasm (Fearn, 2001, p. 27). Petty (2004, p. 191) quips that the “moral” of Socrates’ execution is “don’t ask questions that are too difficult”. But maieutics has much in common with the kinds of problematising described above, provided the truth sought does not transcend the democratic process of questioning itself. As part of this process. the perplexed end-state of maieutics is always “at the onset of thought’s encounter with the contradictory perception” (Bogue, 2001, pp. 16-17), introducing a moment of *elenchus* or unblocking which allows authentic thinking to take place (Abbs, 2003, p. 73). Hence, a pedagogical approach drawn from truly open questions and the workings of difference relies on the view that puzzlement and not-knowing introduce a kind of stutter which itself is vital to learning.

The point here is to replace the persistent focus on getting teaching and learning “right” with a focus on exploring divergence as the central pedagogical activity. Really useful questions are not limited by their presumed answer but are rather both epistemologically creative ontologically genetic:

The power of the question always comes from somewhere other than the answers, and benefits from a free depth which cannot be resolved. The insistence, the transcendence and the ontological bearing of questions and problems is expressed not in the form of finality of a sufficient reason (to what end? why?) but in the discrete form of difference and repetition

(Deleuze, 2004a, p.132).¹¹⁷

The ways in which this creativity is denied by “questioning techniques” which serve to establish and maintain control rather than effectively promote or assess learning deserve more attention. Indeed, this focus on questioning as a technical intervention obscures four risks in pedagogy: the potential of radical questioning and perplexity implied by maieutics is undermined by this reification of both form and content in training; the negative effects of power in the student-teacher relationship are concentrated on the former; interaction is reduced to the reproduction of facile dualisms which actively counter the possibility of affective change or becoming; techniques such as questioning are promoted for their pedagogical effectiveness when their actual purpose is subjectivation.

Examples of how these risks might be countered exist: not every question needs or deserves an answer for Inglis and Aers (2008, p. 160). A good example of this qualitative division between good and bad questions can be found in the distinction, common in English Language Teaching (ELT), between “display” and “referential” questions. “Display” questions for example are used when teachers want learners to show they know something. They are often closed and concern the learner’s ability to recall information or knowledge and exemplify the type of convergent thinking often seen as an antithesis to creative thought (Runco, 2007, p. 10-11). As Black et al (2003) suggest, they also reduce the amount of time spent by learners interacting, and, perhaps more importantly, reduce the quality of dialogue between teacher and learner. “Referential questions” on the other hand do not imply answers decided in advance, leaving space for divergent thinking and a more connective, non-linear development of ideas. They also concern things that teacher and learner may actually want to know – including whether or not something has been learnt. Such questions

¹¹⁷ Translation modified

might actually be worth discussing, because their solution is not planned upstream as a form of knowledge to be acquired, thus enhancing the relational quality of what is learnt.

This brings a number of benefits, according to Shomoossi (2004).¹¹⁸ Referential questions increase the quantity of learner output, adding to the flow of information from students to the teacher. But they also constitute near-normal speech, thus providing a setting in which problems can be worked through without a sense of being forced to go through the motions of artificial problems in an artificial teaching environment. They also provide a chance for flows in communication to be broken by the unplanned contributions which language, an exemplary open system throws up rhizomatically. Stevick (1975) for example suggests a pedagogical method can be inflected by this kind of interaction.

This display/referential split also serves to define a distinction between different sorts of problems in pedagogical practice. One type involves the application of existing knowledge by deduction and, by extension, display questions. These might be termed “vertical” problems which depend on a higher order of explanation which is applied to them. A second type demands experiment by induction and, to facilitate this, referential questions. These might be called “horizontal” problems because they lead to a multiplication of possible outcomes with no a priori hierarchy. A third type demands new explanations by retroduction which serves as a key to a pedagogy of problems. These might be termed “diagonal” problems since they involve the suggestion of new explanations, often drawing unexpected connections with falsehood.

It may be a matter of chance whether these connections can be recognised as such at the time of their emergence in discourse. Experienced teachers know that concepts are best understood in the way they unfold in particular classroom situations (Lines, 2008, p. 138). When learning is situated in this way, questions cannot have determined solutions, but rather provide the falsehood of an “open field” for a variety of solutions to emerge (May and Semetsky, 2008, p. 147). This unfolding can result in feelings of loss or disorientation, but only in reference to the fixed point of the master’s own trajectory (Gregoriou, 2008, p. 96). On the other hand, a genuinely open field can provide the stuttering moment of unthought which is essential to creativity. It is a field where we work “only at the frontiers of our

¹¹⁸ Shomoossi refers to an EFL (English as a Foreign language) context, but her comments are valid for wider educational theory and, in my view, especially LLL.

knowledge, at the border which separates our knowledge from our ignorance and transforms the one into the other” (Deleuze, 2004a, p. xx).¹¹⁹

5.4.4 Sensation

The concrete implication here is that pedagogy should be increasingly “sensational” in the sense that it should provide the possibility for affective rather than purely rational encounters. Sensation is never an individual event and involves, instead, a “fundamental and exterior encounter” (Scott, 1998, p. 125). This “exteriority” is crucial to Deleuze’s position and underpins the ethical implications of a “sensational pedagogy” which becomes indistinguishable from the practices of socialisation which cannot ignore these impersonal becomings (Springgay, 2011). Such a pedagogy involves learning to respond to signs and their processual potential to develop themselves in creative ways. Although signs affect thought in unpredictable ways, their affection is inevitable (Bogue, 2001, p. 16).

These ways of being materially affected by signs and sensations can be understood as explicitly artistic, as we have seen, having examined Antonioni’s films and practices in this light. Creativity there was understood “diagrammatically” and involved maintaining a distance from both chaos and order. A “plane of consistency” must be constituted with the flexibility necessary for the new to emerge from chaos. For example, people and objects can have high impact in classroom creativity because they assist the proliferation of “surfaces to work on”, when new networks of activity develop and interlink through sensation. Such “folding” occurs, for De Freitas (2012, pp. 566-8) when a classroom visitor comes or when the students first meet materials such as clay or oil paint. By folding, she means that transversal connections between learners and objects on the flat surface of pure difference can be established.

This operation is a “unique feature” of Deleuze’s superior empiricism for May and Semetsky (2008, p. 146). For Deleuze, it is the virtual which provides the transcendental condition for such transformation. This necessarily works through encounter in the form of a sensation that something is different, albeit in an unidentifiable way (Williams, 2005a, p. 165). If this change could be identified, Williams argues, it would not be new since it would not actually imply a break. Sensations are therefore not sense data, which would imply that they can be “understood” by a given body already constituted as a phenomenological subject. Rather

¹¹⁹ In this respect, Bouaniche suggests (2007, p.115-116) Deleuze once again recognizes a Kantian influence. Like Kant, he sees our relation with knowledge as essentially problematic and a matter of interaction, unlike, for example, the Platonic view of a much less complex binary between matter and its Form.

than assume as given a subject with intentionality capable of apprehending sense, Deleuze examines how we become what we are through a co-creative act of becoming. Sensations on this account are defined as vitalistic, material flows: they are vitalistic because they are constituted by an essential form of dynamism, which individuates them through the de-subjectified workings of a “non-organic, anonymous force or life” (Del Rio, 2005a, p. 62). They are nonetheless material because their effects are concrete, changing everything in actual experience.

This is why the only way in which transcendental principles of genesis can be approached is by sensation for Deleuze (Zepke, 2011a, p. 75). Since sensations are “an expression in the actual of a particular configuration of intensities” (Williams, 2003, p. 187), they are the result in lived experience of the intensity of differential movement at an ontological level prior to this actualisation. They play a fundamental role in change as “the master of deformations [and] the agent of bodily deformations” (Deleuze, 2004b, p. 36) because they are the agent of synthesis and therefore a motor of becoming. Here ethical action cannot be measured against an ideal or pre-established code, but can be measured against its operative creative capacity. All texts effect this operation, insofar as they take up the subject and change them, permitting meanings to become available that would not otherwise exist (Lapsley and Westlake, 1993, p. 198).

Sensation therefore brings error into creative pedagogy, since it disrupts codifications such as what is true by undermining its possibility with the chaotic outside it evokes. Accordingly, subjects are not changed by experience, but are constituted and reconstituted by them in chaotic and irrational ways which draw the actual from the virtual, becoming fixed by force of habit (Deleuze, 2004a, p. 94). Here, the subject is a creative product of a complex passive synthesis of affections where “an individual human being is caught up in a multiplicity of series of actions and passions” (Carrier, 1998, p. 191-192). These encounters take place at a level of biological composition where no human organisation has yet been constituted and indeed where none could operate. That this chaotic environment is a challenging one is obvious, implying that survival involves a particular form of highly dynamic “larval” subjectivity:

A composed, qualified adult would perish in such an environment. The truth of embryology is that there are movements which the embryo alone can endure: in this instance, the only subject is larval (...) the only patient able to endure the demands of a systematic dynamism.

(Deleuze, 2004c, p. 97)

For Roy (2008, p. 167), bodies are most useful to us in this state of “sub-determined” flux because it is here that they can be used to effect a becoming in time.¹²⁰ Change comes from encountering that which we are not, placing error at the heart of learning and creativity.

5.4.5 Nomadism

Nomadic thought is a “perpetual migration of intensities” (Deleuze, 2004c, p. 257). As an encounter between what we already know and what it is possible to know, it operates outside the mapped territories of understanding, making transversal links and new, unmapped relations in unenclosed conceptual space. It provides a creative “resistance to the present” in this way (Deleuze and Guattari, 1994, p. 108).¹²¹ Because it operates in smooth, unmapped space, the nomadic subject deploys chance as a “principle of uncertainty” because, rather than being reducible to finality (in terms of method, model of knowledge, or proof for example) thought’s movement is activated by the question(s) which it raises

¹²⁰ Deleuze draws heavily on Bergson, who is keen to distinguish useful and real knowledge. This is not simply because he seeks more effective ways of knowing, but because the difference is a key indicator of the extent of our actual freedom which comes from knowing as an ethical activity (Bergson, 1939, pp.207-208). There is a vital difference, he says, between a situation when we *watch ourselves act* and one where we *actually act*. In the former case, we consider the elements of such an experience as detached or separated from one another. Here, knowledge is useful on the condition that the objects of consciousness be extended, delineated and distinguished from each other. But in the latter case, the elements of experience melt in to one another, and an effort of thought is needed to plunge into this flux in ways which allow us to actually think about the real nature of indivisible actions and a theory of liberty. For Bergson, when we watch ourselves act, we do so with a view to what use can be made of our actions, thus missing out any actual knowledge of them. Freedom comes from action, not its spectacle.

Hence, although the notion of solidity and its effects derives its apparent clarity from the habits and necessities of practical life, such habits cast no light at all on the essence of things (Bergson, 1939, pp.224-235). For Bergson, the only way to perceive such solidity is by supposing a mind-body dualism in which pure things are somehow separate both from our perception of them and indeed from each other. Bergson argues on the contrary that perceptions themselves are material effects animated by the same movement which underpins all substance. Objects and their environment are thus “images”, that is to say both essentially indistinguishable from our perception of them and, Bergson unequivocally states, really existing as things independent of consciousness. They exist autonomously, shorn of anything consciousness might add, but they also accrue all sorts of relations beyond our awareness of them (op.cit.460). It is by activating this relation with the duration of images that we can achieve consciousness of a fundamental relationship with matter, or rather the pure movement which constitutes it.

¹²¹ In particular, this creative resistance to the present involves reappraising the view that what is granted to thought *de jure*: what thought can claim by right (creativity, speed, a capacity to express a Whole) is very different from what it is granted in fact (a good nature, a tendency to seek the truth, systematic and regular activity). This is why sense and value replace truth and falsehood in Deleuze’s philosophy, giving it an ethical tenor which focuses on what is important or interesting rather than what is deemed to be true.

(Rodowick, 1997, p. 199). If working near this moment is potentially dangerous, it is, for Deleuze, simply more interesting and important than repeating questions of fact or behaviour. Such repetitions seem banal because they do not reflect internal difference expressed by the specificity of real problems, and pedagogically speaking, failing to deal with this leads teachers to focus on the trivial issues and false problems criticised above.

On this view, creative learning needs to start us thinking. Occupying existing spaces in thought and practice is not enough, and new ones must be carved out if a “war machine”¹²² is to emerge to change things (Deuchars, 2011). For example, when learning becomes a process of enquiry, the distinction between research and practice which defines the two spaces is revealed as largely one of convention. A new space is opened up where the two are inseparable because both are based on the same radical immanence of knowledge to (creative) inquiry. This is particularly evident to teacher educators working in the turbulent context of LLL. Everyday practice is one of adaptation to new information, often gleaned from classroom situations to which pragmatic solutions must be put together in the light of the improvisations, chances and errors which constitute them. New spaces are constantly being opened up and need to be reconfigured by a thought process which is both nomadic in its distribution of space and machinic in its activation of creativity.

The subjects who operate nomadically are themselves “manifold problems” (Howard, 1998, p. 119) which enfold this unknown and unknowable potential just as they embody an unthought within thought and a stuttering form of creativity. At its (internal) limit, this nomadic stuttering is suggestive of profound ethological implications and what might be called a “posthuman era”. Rather than announce the extinction of the human species, for Hayles (2001, p. 146), this means “a privileging of informational pattern over material instantiation”, a relation derived from complexity and evolutionary theory. Internal mechanisms of mutation and repetition (tending towards order) accompany those of selection in the development of biological organisms. What is truly *vital* about the organism is its virtual capacity for becoming, introducing a very different view of the body itself as “as an originary prosthesis that we all learn to operate at birth” (Hayles, *ibid.*).

This perception of the body places learning at the centre of its “informational pattern”, not least because the body on this view is continually supplemented by other prostheses, for example in its articulations with (more or less) intelligent machines. Deleuze’s approach

¹²² Cf. my comments on *bricolage*, above.

recognises this inasmuch as it incorporates a necessary “informational pattern” (movement) within “material instantiations” (otherness) in the form of becoming. This promiscuity of otherness provides the basics of what Cole (2008, p. 32) welcomes as a “politics of difference” where otherness is integrated into education. Learning, here, is not instrumentalised in relation to the discovery of knowledge or even subservient to the needs of the economy or its discourses, but rather idealised insofar as its basis in material encounters and the operation of creative difference are seen as fundamentally ethical acts. Examining this ethical link between creativity and lifelong learning events constitutes the final part of my thesis.

Chapter 6.0 Ethics

The analyses of creativity which I have carried out in between the apparently disparate areas of LLL and in Antonioni's cinema respond to my study's research questions. But they also lead to the conclusion that creativity has a very specific ethical dimension, whose details deserve development.

Deleuze's philosophy of events is central to my analysis, because it holds that ethics can and indeed must be understood in quite practical ways. This practical perspective lies at the heart of Deleuze's Spinozism, and is inseparable from the bold insistence that affective change is a material and embodied phenomenon which expresses the dynamic movement of life itself. It is therefore anchored in the view that we do not know what bodies can do because we do not - and thankfully cannot - ever know the full range of connections of which they are capable. Initially, as Mercieca (2011, p. 55) asserts, this means that although we do not know the capabilities of teacher-student bodies, their mutual engagement is always an enhancement. In direct opposition to the unimpeachable presence of the teacher sought by Razvan above, it is the very unpredictability of the effects of such encounters which, according to Mercieca, contributes to their creativity.

The undecidability which this implies is often seen as making ethical demands (e.g. Clark/Keefe, 2012), but it cannot alone guarantee creativity. Indeed, while it certainly raises ethical issues about whether certain becomings might be more or less desirable than others, undecidability provides no guidance as to how judgements might be made or what action might be envisaged to discourage undesirable behaviour. Calling for a respect for individual views on the grounds that they can rival the value of dominant discourse is clearly not enough, as Hunt (2001, p. 361-362) shows. She criticises the silencing of her own gendered experiences by dominant (male) discourses on the ground that sensory, mental and spiritual experiences are all part of a single "chain of being", in which her experiences are as valuable as any other. The difficulty in this seductive position lies in the fact that for Hunt this is a chain of equivalence where each type of experience can be translated into another. Feeling equates with image for example, since meaning is already lying there "ready to be grasped" (op.cit, p. 364). Such examples of a postmodernity keen to level out difference imply, for Rodowick (1997) a certain circularity in their unconscious repetition of the past (pre-existing selfhood and meaning) and unwillingness to invent the future (new forms of selfhood and meaning). This devaluation of value is uncongenial to any ethical decision or practice.

A problem for Deleuze in distancing himself from this approach is that he cannot actually assert that one thing is better than another since, for him, things as such do not exist and nothing is therefore good or bad in itself (Patton, 2007, p. 3). But if we traditionally establish the identity of things by comparing them to other things, and seeing if they match or not, Deleuze offers a twofold challenge. On one hand, while we are carrying out this comparison, we are never actually looking at the things themselves, only at the *set* of things (the set of this thing and another as a set with something in common, i.e. (non) similarity) we have created as a category. Secondly, while we are doing this comparison, we miss precisely that which is most interesting about the way things are, namely their specificity, capacity for change, difference rather than similitude. For Deleuze, the way to avoid this reduction of our capacity for engaging with the world is to adopt a higher or transcendental empiricism which eschews similarity and actively seeks intensity, singularity, and ultimately difference in and for itself. This, for Deleuze, is how we become worthy of events.¹²³

But can teacher educators in LLL work according to such an immanent ethical or ethological framework? Can we avoid relying on the contingent and anthropocentric reasoning of moral values? Can we be worthy of pure difference in everyday practice? My response to these questions has a number of stages, but first examines the existence and nature of moral values within discourses of creative professionalism in LLL. I distance these from the goals of quality which they ostensibly promote, and link them instead to the establishment of an economy of debt. Having criticised, above, the tendency to confuse creativity with (re)production, I now pursue a similar attempt to illustrate ways in which this other conflation of quality and morality fails to take the question of ethics seriously enough. This critique only serves, however, to foreground a more affirming ethical approach.

6.1 **Morals**

The precise moral status of creativity is open to discussion. Creative products and the processes leading to them need to be governed by ethical standards for Tan et al (2007, p. 554), but as Cropley (2001, p. 2-6) suggests, the “production of novelty” is ethical in itself,

¹²³ Again, Deleuze’s assertions here have a distinctly Bergsonian tone, as his transcendental empiricism involve the same plunge into events as Bergson’s “intuition”. Concretely, a striking example is the light this sheds on gender: often represented as part of a male/female binary, abandoning identity on this view means an invitation to explore (female) gender as multiplicity, or a site of “complex, multiple, contested experiences” (Linstead and Pullen, 2006, p.1295). Deleuze and Guattari’s controversial call to observe a “becoming-woman” should, in my view, be understood in this light.

making any ethical regulation of creativity redundant. The first implication of Cropley's view is that ethical behaviour can stem from creativity itself, undermining the idea that ethical practice is a matter of applying standards to practice. Secondly, we have also noted how, in today's complex educational world of rapid change, the ability to repeat is useless. Difference, not repetition, must guide practice, and educators have an ethical responsibility to respond to this demand by avoiding the tendency to repeat by application.

Linking these two points, my analysis of creativity has identified a confusion between creativity and productivism. I am seeking to replace this confusion because it implies a kind of repetition which hinders creative practice in at least three ways. Firstly, productivism only values the products of creativity to the extent that they comply usefully with current ways of thinking and doing. This allows conditions to be reproduced, effectively countering creation. Secondly, these products themselves must be reproducible to be considered useful, and they can only be exchanged by being iterable. Thirdly, these products indicate a tendency to perpetuate a certain double-speak which promotes reification in the discourse of change, once again undermining creativity with repetition.

However, even if discourses of creativity work in this way, this does not explain their relation to the ethical claims made by and for the sector. Although compared with guidelines from the rest of the UK, the language of morals and values in teacher education is relatively low key or "cold" (TLRP, 2009, p. 34), ethical practices are certainly important to LLL. In fact a moral discourse penetrates LLL and often promotes the intrinsic moral value of the sector, its practices and its products. Philosophy of education has for example tried to equate LLL with aspects of the good or worthwhile life (Edwards, 2010, p. 146), granting the sector "a sort of moral duty" to itself and in particular its "social, cultural, spiritual and elements" (Hyland and Merrill, 2003, p. 32). This view frames practice and influences attempts such as Coffield's (2008) definition of learning which excludes that which takes place between criminals. It also features in interpretive research, where "fundamental questions" of value must be addressed (MacMath, 2009, p. 137). Professionalism generally is linked with ethics (Hoyle in Spenceley, 2006, p. 290) and is said to involve "an ethic of altruism" (Lea et al, 2003, p. 60). Teaching as a whole in LLL "is essentially an ethical business", requiring judgement about whether its goals are worthwhile, beneficial to society, or just "right" (Derrick in IfL, 2013, p. 24).

LLL's occupation of the moral high ground is an important phenomenon and deserves interrogation. A "tangle of ethical issues" (Fendler, 2008, p. 1) develops from the increasingly technical focus on learning as a field of intervention, and learning becomes increasingly

responsible for wider social problems as it is “educationalised”.¹²⁴ Indeed, Plowright and Barr (2012) identify a shift in the professional agenda for teacher educators in LLL, notably as concerns the codification of their professional conduct. They argue that since the creation of the sector’s professional body (the IfL) in 2002, the sector has not just witnessed a growth in unthinking managerial, micro-controlled behaviour and a codification of professional identity, but also the imposition of a highly artificial and even morally dubious code of ethics.¹²⁵ On this view, the IfL’s “Code of Professional Practice” (2008) is an overt attempt to systematically control “behaviours” such as “disclosure” through processes of technological surveillance which, in different times, may well have seemed unethical in themselves.¹²⁶ This seems to echo the “moral authoritarianism” discerned by critics such as Ecclestone (2002, p. 23) and Furedi (2004), whereby an infantilising pessimism about individuals’ ability to cope with everyday life accompanies a desire to control even mundane risk at any cost (Stronach and Clark, 2011). On the ground, it is claimed that the expectations of the role as articulated by professional organisations place LLL teacher educators in the invidious position of promoting policies and practices which they themselves contest (Lawy and Armstrong, 2009).

Such moral authoritarianism does not just risk undermining creativity, but even appears anti-ethical. This is because a view of the good life often implies a commitment to individual autonomy and the active promotion of the view that individuals should be able to exercise independent control over their lives (Benade, 2012, p. 340). Without this independence, activity cannot be ethical, and yet Benade’s definition simplifies the problem somewhat. As Clark/Keefe (2012, p. 4) suggests, the good life is itself steeped in the discourses of

¹²⁴ Adam (2006, p.124) for example points out that fast throughput and short capital outlay are considered necessary components of increased speed which itself is “an unquestioned an unquestionable goal”. This reminds us to question whether certain practices are promoted for their value on genuine ethical grounds, or whether they are an unthinking application of the assumed benefits of such goals without little actual ethical content.

¹²⁵ There would seem to be a wider trend, whereby moral /ethical conduct is seen as a subject to be taught in a range of professional settings to avoid misconduct (e.g. Stout, 2011).

¹²⁶ This view is not shared by those who see the organisation of professional practice as a necessary and even desirable stage in democratic leadership. On this view, a democratic professional organisation would exist to *ensure* that its members were not subjected to unethical conduct. For some, (e.g. hooks, 2010, p.10) this implies that the organisation’s first responsibility is discursive or dialogic: a “radical commitment to openness” passes through the maintenance of critical knowledge by a discursive community whose deliberations are further validated by consensus. This community requires systemic and relational trust for Pine (2009) as well as solidarity amongst its members (Kemmis, 2008). Kemmis argues that this solidarity involves not only actively maintaining principles of social justice and democracy, but also actively condemning instances of injustice, inhumanity and even irrationality.

globalisation and individual consumption, and the issue of autonomy reflects this. But professional bodies might understandably argue that their role is precisely to guarantee effective practice, responsibility, public safety and democratic functioning by governance and regulation, defending their own role as ethical guardians of LLL.

This tension between ethical challenges to practices attributed to globalisation and the ethical arguments which protect them underlines the difficulty of speaking of genuine change in professional practice. Real change would have to overturn the moral arguments which justify stasis and involve instead a “transformative professionalism”, contributing to a society which values “equity, participation and social justice” (Sachs, 2007, p. 18). It would deny that professionals can simply be updated or re-equipped for the future, and involve resisting many regulatory practices in LLL. In particular, current conceptions of what constitutes ethical conduct according to rule-based systems would be overturned because they contribute to the development of a society of control. No longer explained by terms such as autonomy and subordination, such control is exercised by frequent self-monitoring, proliferation of standards and, in particular, the impossibility of closure or completion which is most visible over time in the “enduring and pervasive support for lifelong learning” (Fendler, 2008, p. 18). In the absence of traditional methods of coercion, a culture of debt with its own very particular features is developing as a means of control in LLL.

6.1.1 Debt

When Nietzsche asserted that the task of higher schooling was to turn people into machines, he felt that this dehumanisation involved using boredom to inculcate the concept of duty (Nietzsche, 1998, p. 57). Nietzsche’s model is the civil servant, and behind his scorn for functionaries lie real questions for LLL if we take seriously the idea that duty (and the desire to fulfil it) can be instrumentalised as a management tool.¹²⁷

¹²⁷ Nietzsche’s hypothesis that debt is a psycho-social phenomenon is instructive because it indicates relations between morality and economy which seem highly apposite to professionalism in LLL. He asserts (Nietzsche, 1996, pp.51-54) that guilt, as a feeling of personal responsibility, originated in the primordial relation between buyer and seller. As soon as one measures oneself against another, a scale is assumed according to which this measurement can take place on the basis of a quantifiable equality. This equality allows prices, values, equivalents and exchanges to be determined, but it also defines the ways in which principles of cognitive and economic astuteness are valued as marks of superiority and even subjectivity: man is defined as the measuring animal capable of meting out justice to a populace deemed to be equal before this law of the quantifiably similar. Debt arises when individuals become beholden to a community which offers them protection from crime, trust and peace under the aegis of this equality. For Nietzsche, whatever the advantages of such comforts, they rely on a reaction to and a denial of difference, which is actually subjugated it when it inevitably threatens these comforts. An interesting twist also occurs when society takes on the role of justice and especially the punishment of criminals. Punishment of crime supposes an economy of guilt,

Consider, for example, the possibility that LLL works as a concept because of a contract which is established between practitioners and the sector. Contractual agreements are increasingly used to manage corporate relations, using techniques which apply to many practices of professionalisation in education (Krejsler, 2007, p. 481). Such contracts, Krejsler argues, are staged to articulate the individual's creativity and initiative and commitment to organisational goals. In LLL's recent history, the contract has been sealed by certification which exists to both limit the boundaries of professional identity and record the quantifiable limitations of the deal. This record includes initial qualifications defined in terms of credit value and level in core skills (English, Maths and ICT for example), both of which establish accessibility to the profession, its status, and its continuous processes of professionalisation. These include a given quantity of CPD, which establishes one's right or licence to practice, ensuring that professionalism remains, officially, a tick-box binary of yes/no or in/out. As we have seen, recent debates favour deregulation of this qualification system on the grounds of its inefficacy. However, whether the contract is technically mandatory or not is of less importance than the unchanging discourses which naturalise its rationale. If, as Apple (1996) argues, democratic professionalism should "demystify professional work and build alliances between teachers" (in Sachs, 2003, p. 27), then the apparent paradox between qualitative change and its quantitative measurement needs to be separated from the mystifying language of ethics and values.

For example, while they help to establish boundaries to entry, the criteria used to measure professionalism also ensure that the process of achieving these goals is never actually complete, introducing the idea that professionals are, in this sense, indebted.¹²⁸ Individuals are judged on the basis of criteria (cf. list below) according to which they will necessarily be inadequate. A pervasive culture of objectives, whose criteria-based curricula signal a lack of trust in teachers and teaching (Hendricks, 2002, p. 118), brings this into classrooms as a measure of professional quality. The time between the setting and checking of objectives is not meant to be open, substantiating instead "heavy handed" forms of control (Williams, 2011b, p.17). The abstract and depersonalised language of performativity used as its measure also guarantees that teachers' maturity and judgement is relocated (Mercieca,

redemption and ultimately grace ordained by a sovereign justice which itself is beyond law, since the granting of redemption places the accused in a position of an infinite debt which can never be repaid.

¹²⁸ Recent developments in some FE colleges have seen a growth in numbers of volunteer teachers who are at the same time paying to attend initial training, in effect subsidising their own employer and simultaneously stretching the field of what is understood by "professional" in the sector (cf. Marcus, 2012; Robinson and Rennie, 2012).

2011, p. 44).¹²⁹ Benchmarking, for example, is a common norm-referenced technique for ensuring that success is technically unattainable. Judgement on these terms implies infantilisation because it grants the power of judgement, punishment and gratification to a worthier, more responsible Other. ¹³⁰ Heading a system of judgement whose goals are vague enough to be forever out of reach (cf. Spenceley, 2006; Coffield and Edward, 2009), it ensures that learning is truly lifelong and never actually stops (Hyland and Merrill, 2003, p. 21).

This unattainability is integral to the notion of flexibility demanded by LLL, and echoes a troubling pseudo-Darwinian discourse which demands endless adaptation for survival (Brown, 2003). Only the fittest are accepted, and the IfL for example has recently and unequivocally asserted the necessity of training to achieve superlative performance levels:

In order to truly make a difference to the people who need it most, the further education, skills and vocational training sector does not require less qualified practitioners: it requires ‘super teachers’.

(IfL, 2013, p. 10)

Just as it underpins quality control, this discourse of the “über teacher” reflects some of the ethical questions which I have already alluded to in LLL. The tendency is to see lifelong learners as lacking something, allowing “conformist pressures” which indicate a “culture of control” (Thurston, 2009, p. 29) where nothing is ever finished.

Revealing recent examples include the discourse of “continuous improvement” which is used to enable governing organisations like BIS to be “more flexible, open and innovative” (BIS, 2012e, p. 3). This innovation is “critical to the successful delivery of sustainable and balanced growth across the UK economy”, and involves “building staff engagement and strengthening our leadership” (ibid.). In principle, CPD responds to this need, offering a persuasive discourse of adaptability to these professional and economic demands in the gendered

¹²⁹ See Annexe 1 for further analysis of this point.

¹³⁰ For Levi Strauss (1955, p.465) we are wrong to believe that forms of contract and consent are secondary to social organisation. But a basically coherent anthropological model which infantilises subjects in the face of punitive social law breaks down into absurdity when gratification is not also handed out in the same way. Subjects, he suggests, are mutilated when they are treated in this way: infantilised for the purposes of punishment, they are responsabilised for those of gratification and success, demanding that they be both adult and child at the same time.

language of construction and power. But too often in LLL, CPD exists to multiskill rather than upskill, reflecting the “bad jobs” culture of low pay, low status, routine employment. Staff are re-trained and saddled with tasks which offer no fundamental difference from the old ones, shifting attention away from poor management and job design and onto employees’ perceived unhelpful attitudes (Warhurst, 2011, p. 576). In this culture, lifelong learners receive a “non-status” as a result of vocational skills which depersonalise and technicise learning (Allen and Ainley, 2007) and thus bar the way to other, more meaningful occupations.

This discourse of inadequacy informs the final Lingfield report, which adopts the aims and language of debt in a context where current provision is deemed inadequate. Lingfield’s first step in promoting professionalism involves identifying this deficit, in this case the ineffectiveness of (Ofsted) inspection. This ineffectiveness is “widely acknowledged” (BIS, 2012d, p. 30), it is claimed, not least because collusion between staff and inspectors is widespread, the report claims. But rather than pursue the ineffectiveness identified, individual practitioners are targeted with a refreshed form of professionalism and an extensive set of characteristics (BIS, 2012d, p. 22 - my emphasis):

- *Mastery* of a complex discipline;
- *Continuous* enhancement of expertise;
- Acceptance that the field of expertise is a vocation to be pursued *selflessly* for the benefit of others;
- **Public accountability** for high standards of capability and conduct;
- Membership of a group earning and **deserving** the respect of the community;
- Membership of a defined group with similar skills, *transcending local loyalties* to achieve **national and international recognition**;
- Acceptance of **responsibility** for the competence and good conduct of **other members** of the professional group;
- Membership of a group which accepts **responsibility** for planning succession by **future generations**;
- Membership of a group which seeks *continuously* to extend and improve its field of knowledge;

- Membership of a group *deserving* an above-average standard of living.

Lingfield's list seeks to reconfigure professional ethics in LLL in three familiar steps which can be labelled homogenisation, abstraction and moralisation. By first installing a set of criteria which serve as binding reference points, the terms and phrases which I have italicised in the text imply the need to accept and overcome one's inadequacy before demonstrating one's worthiness of the status which has been granted. By doing so, one enters a community of practice which protects the organisation against innovation: either the community's boundaries are protected by "old-timers" and their fear of displacement (Billett, 2004, p. 116), or it exists explicitly to "control, execute and evaluate teaching and learning strategies" (Crowther in IfL, 2013, p. 13).

Secondly, this deficit is bounded by abstract terms which describe a profession undeserving of the title. Terms in bold qualify this discourse of "deserving" status by stating explicitly that the judge of such merit will be external to the profession and represented by vague abstractions of "public accountability" or "national and international recognition". As Crowther (ibid.) suggests above, the spaces of this judgement creep into "other [unspecified] relevant areas" beyond classrooms and workshops, where they become essentially limitless. The locus of judgement thus cannot actually be defined, making it impossible for the practitioner to ever really know to whom they must demonstrate their worthiness, or where.

Thirdly, terms which I have underlined moralise this abstraction further by showing that the task in hand is actually limitless. It does not just concern skills, but "capability"; not just knowledge but the "field of knowledge". Hyperbolic language is explicitly used in criteria of continuous selflessness, mastery and transcendence which all place the goal of professionalism beyond actual reach and into the realms of moral judgement.

This list of apparently disparate criteria can therefore be understood as a tool of discipline rather than quality. LLL is often keen to promote its emancipatory or reconstructive goals, but following Deleuze's analysis of these relations, it is unsurprising to see professionals recruited as the functionaries of a network of blame and control:

Every category of professional is going to be urged to exercise police functions which are more and more precise: professors, psychiatrists, educators of all stripes, etc. Here we see something [Foucault] predicted

a long time ago, and which we didn't think possible: the global reinforcement of the structures of imprisonment

(Deleuze, 2004c, p. 210)

For Deleuze, structures of imprisonment go well beyond prisons and even physical walls. In education, they are reinforced by the view of learning as a series of steps, none of which actually prepares one for its successor. Learning must always recommence because the debt contracted can never be repaid (Deleuze, 1990, p. 237). Learners are always starting afresh, called to either prove that they deserve to be where they are, or to suffer the moral sanction of unprofessionalism or incompetence.

The three mechanisms of homogenisation, abstraction and moralisation used by Lingfield, above, can be understood in relation to this debt. A segregative, central sovereignty first installs a category which we are all too eager to recognise and belong as superior beings (Deleuze and Guattari, 2004a, p. 305). This professional group is thus homogenised by its collective responsibility to a higher power whose recognition it must “deserve”. This responsibility is defined in abstract terms such that repayment of the debt by is always deferred: it is so hyperbolic that even continuous training and qualification will never meet its terms. Finally, the judges of this repayment are themselves dis-located from any possible real place, and their judgement is exercised from a transcendent moral plane far removed from the ethical considerations of day-to-day practice. In this way, the body actually deciding when the debt has been repaid can never be identified or reached.

6.1.2 Criticality

Critical perspectives on LLL, however, are common, as we have seen, and Deleuze's contribution needs to be assessed on the extent to which it undercuts common criticisms of control and offers something new. Still, attempting to activate Deleuze's position on morality to do this is difficult for several reasons. Explicit references to morality are scant in his work, and when they appear, they often do so allusively as part of his preference for ethics. In fact, his own position on ethics is perhaps best expressed through his studies of other authors whose own ethical propositions are also open to much debate (Nietzsche and Spinoza). In addition, Deleuze's criticisms of ways of thinking have already been highlighted, and his position runs the risk of appearing entirely negative. Deleuze and Guattari (1994, pp. 107-108) do indeed vituperate against “[t]he ignominy of the possibilities of life that we are offered” and the fact that we “continue to undergo shameful compromises with it.” This negativity poses problems for any system, challenging the role of rules, judgement and duty

in ethical behaviour. These three areas need examination if Deleuze's approach to ethics is to have any positive impact.

6.1.3 Rules

Teaching well cannot be defined by a list of simple rules (Derrick, in IfL, 2013, p. 24), but for Deleuze all moral notions are suspect because fixed notions of what should be done are necessarily flawed in a dynamic world: normativity can no more be prescribed than objectivity. He also feels that a respect for the creative process of life can help see more clearly how and why systems of thought can work counter-productively. As we have seen, his moral philosophy is anti-humanist in this sense, because it rejects those attempts which prejudge the encounter of events and mistake the place of the human in them (Williams, 2008, p. 138).¹³¹

This stance leads Deleuze to a number of assertions about ethics, including a criticism of rule-based systems such as those promoted in LLL. For Deleuze, morality is any set of confining rules (Smith, 2007, p. 66), and he follows Nietzsche in divorcing morality as a system of rules from ethics as a mode of behaviour.¹³² He sees a clear parallel between

¹³¹ A liberal, humanist tradition in education has been criticised for impoverishing the notion of learning. The problem with the concept of human is that it presents itself as an origin or presence from which other concepts are appraised. It is thus not one concept among others but a transcendent original presence (Colebrook, 2000, p.11) which fails to understand emergent properties because of the outside they imply. An anti-humanist stance therefore challenges the usefulness of such constructs in these contexts, and agrees with perspectives on networked behaviour which reflect, for example, advances in cybernetics (Lafontaine, 2007, p.44) and complex economic phenomena (Urry, 2005, p.3). Similarly, some seek to relegate notions such as "human" to the realm of "folk taxonomy" (Clark, 1999, p.45). For Clark, limited ideas of the "human" rely on notions of speciation which struggle to withstand scrutiny from a bio-ethical perspective and so cannot, he argues, justifiably claim a place in academic discourse. However, individualistic "folk metaphors" such as selfhood are deeply rooted influential explicators of learning and transition (Fenwick, 2013). Indeed, they are so deeply rooted that less essentialist accounts of selfhood can prove difficult to articulate: Clark/Keefe (2012, p.6) for example asserts the vitalism of "an affirmative disposition" and "a desire to be dispossessed by deeply coded sensibilities", while still claiming to be "identifying oneself on the basis of what I am not; inhuman and/or undecidable."

¹³² Moral judgement for Nietzsche is "the favourite form of revenge of the spiritually limited on those who are less so" (Nietzsche, 1990, p.149). The attempt to moralize stems from *ressentiment*, he argues, and is indicative of a weak or slavish state of which we are all capable. This "slave morality" is the attempt to judge all activity according to the same values, according to ideas of utility. This judgement is both malicious and immoral because it falsely asserts that what is good for one is good for another, denying difference and incommensurability (Nietzsche, 1990, p.151). A moral discourse is thus a "Procrustean bed" because (human) life is always being distorted to fit its demands: life itself – "any diving, gulf-opening, sub- and superordinating energy" is idealised (Nietzsche, 1998, pp. 64-68). Moral tartuffery, he asserts, is therefore Puritanical, not least because of its desire to impose a morality across the board, and therefore "a protracted audacious forgery by virtue of which alone it becomes possible to feel pleasure at the sight of the soul" (Nietzsche, 1990, p.217).

morality and the individual person: morality is what the individual wants or believes to be good, and it is deemed desirable and good to be an individual. This position can be described as pragmatic. Deleuze does not believe that a viable ethical position can rely on idealistic visions of what should be done, but rather on what actually happens, seeking an ethical position immanent to practice. His ethics concerns what is becoming, what takes place, what is new, and history, politics and global massification are only ever side effects (Mengue, 1994, p. 77). For Bryant (2010), this has an immediate impact on the way in which ethical practice is codified in rule-based systems:

If ontologically we cannot presuppose the formal identity of agents across diversity— indeed, if we cannot even presuppose *our own* identity by virtue of the fact that we become new agencies when we enter into new relations – *rule-based* ethical systems are out the window. Or perhaps, less dramatically, rules, criteria of judgement, are *effects* or *results*, not grounds.

On this argument, difference (the non-identity which our existence as complex systems of relations implies) cannot be codified by rule-based systems which themselves need to be explained. Even in matters of justice or truth, becoming is “never a case of imitating or reproducing a model” (Deleuze and Parnet, 1996, p. 8). In effect, we can only use rule-based systems to regulate ethical conduct by overturning the link between our codes and practice. This is because, as criteria of judgement, such codes are not the grounds of practice but rather its result. So although rule-based systems are intended to regulate ethical conduct, they indicate a contingent set of ideal beliefs such as an ideal, rational subject which remains unchanged over time. A good example of the risk of oversimplification which this involves can be seen in the debate about autonomy mentioned above. The terms of the debate, “freedom” and “unfreedom” for example, are not particularly helpful concepts in themselves, with “free will” itself working as “a mask which can only articulate a static and frozen expression” (Evens et al, 1998, p. 273). This echoes

Further, this link between moral discourse and the interests of those who would see it perpetuated is hidden by cant, he argues. Cant’s tedium is essential, he argues, in ensuring that no-one should actually discuss morality or discover that it is in fact dangerous (Nietzsche, 1990, pp. 157-58). An interesting development exists, moreover, in this analysis. When it identifies the essential benevolent disdain expressed by such a moralising position, slave morality wants to identify goodness with the harmlessness and credulousness of a good nature (Nietzsche, 1990, p.197). This effectively annihilates the possibility of an immanent ethics based in this contemptible state, providing a starting point for Deleuze’s (1981a) own separation of morality and ethics. However, rather than just perpetuate Nietzsche’s attacks, Deleuze clearly identifies the second term as the field of experience where the intensities, speeds and slownesses of individual movements provide the necessary basis for ethical thought rather than pre-conceived (moral) ideas.

the view that, once freedom is identified as a concept with fixed parameters, it loses its actual effect of liberating thought and can actually “facialise” subjectivity and bridle creativity. Relying on these beliefs provides a convenient framework for judgement which transcends empirical situations, but it leaves us powerless when they change and masks their subjective presuppositions.

It is of course possible to see these criticisms of rules as a relativistic justification for quietism. As Archer (in Plumb, 2008, p. 68) suggests, attacks on the human subject deprive critics of the ability to claim ideas such as inalienable human rights, an “unnecessary and dangerous” move. For example, we might well ask how we can ever come to know which features to explore in this shadowy Orwellian world, and why, since the process of production of oppression is endless, we should even bother looking for them (Williams, 2000, p. 213).

More pessimistically still, this point of view makes the kind of activist professionalism espoused by some in LLL (e.g. Evans, 2008; Sachs, 2000 and *passim*) seem naïve and empty. In fact, for Deleuze, the very notion of time organised around action in the present is inadequate, and he consequently denies that ethical action can be based on such simple empiricism (Williams, 2008, p. 173). Williams is right to focus on Deleuze’s instance that events demand an other time, and the implication is that his events actually take place in some far off, ideal zone of “pure potential” with no relevance to the here and now. On this view, given the necessity of change and the need to affirm it, “activist” attempts to fix and regulate the future seem at heart nihilistic because they refuse the possibility of change by trying to manipulate the dice throw of chance (Roy, 2004). We are also reminded of the paradox that ethical conduct begins with a modest acceptance of the fact that we are not yet capable of ethical conduct (Goodchild, 1996, p. 208), effectively depriving us of the motivation to choose at all.

6.1.4 Judgement

However, for Deleuze the question of morality is at bottom one not of individual action but of the judgement of Being: morality, he says, is a way of judging our own essence according to values (Deleuze, 1980c). This judgement implies some value superior than Being by which it can be judged, but nothing can be superior to Being, and so a discourse of

judgement, morality and value is necessarily false and even unworthy.¹³³ Rules of morality which fail to recognise the essential dynamism of life are themselves nihilistic.

Deleuze proposes instead that the *art* of distributing good and bad should replace the action of judgement of good and evil. What is good and bad can be defined by conducting an ethology or study of territories, behaviours and the pure events which they incarnate. Thus ethology, Deleuze argues, is a way of explaining behaviour according to immanent modes of existence, and it replaces the recourse to transcendent values. For example, it ensures that ethics surpasses individual beliefs, since the assumption of “preformed homunculi” is just one of these values (Ansell-Pearson, 1999, p. 171). Similarly, it does not claim to know the capacities of a given being ahead of experimentation and observation (Gatens and Lloyd, 1999, p. 100), turning instead to the territory of action rather than its *a priori* judgement. This dismantles what might be seen as a gendered model of creativity centred on agency and unification according to the hylomorphic schema criticised by Ingold and Sauvagnargues, above. Its focus on location against essence can, for Clark/Keefe (2012, p. 5), challenge the “dominant cynicism” which partitions the subject as consumer, that is to say a dividual capable only of one action.

Ethology states moreover that the territories in which we act are established less by staking out their physical boundaries than by the behaviours which define these territories in affective ways (Beaulieu, 2011, p. 70). Deleuze and Guattari draw on animal behaviour (e.g. birdsong or nesting rituals) to show how a “refrain” or simple, habitual gesture can do this. To become meaningful, these gestures require practice and repetition (Colman and McCrae, 2005, p. 2), and a study of these behaviours can imply the kind of existence involved instead of deciding its value before they happen:

Rather than “judging” actions and thoughts by appealing to transcendent or universal values, one “evaluates” them by determining the mode of existence that serves as their principle. A pluralistic method of explanation by immanent modes of existence is in this way made to replace the recourse to transcendent values

(Smith, 2007, p. 67)

¹³³ « Je ne crois pas qu'une morale puisse se faire du point de vue d'une ontologie. Pourquoi ? Parce que la morale ça implique toujours quelque chose de supérieur à l'être; ce qu'il y a de supérieur à l'être c'est quelque chose qui joue le rôle de l'un, du bien, c'est l'un supérieur à l'être. En effet, la morale c'est l'entreprise de juger non seulement tout ce qui est, mais l'être lui-même. Or on ne peut juger de l'être que au nom d'une instance supérieure à l'être ». (Deleuze, 1980c)

Deleuze is interested in the possibility of an ethics derived from the ontology of problems described above, and defined as “the immanent evaluation of an encounter of bodies” (Protevi, 2012) or “the inventiveness called for in response to problematising events” (Bryant, 2011d). Here, the distinction between human and non-human is no longer of interest, since what matters is how bodies come together, and what these compositions enable (Zembylas, 2007b, p. 25).

We can test these assertions about judgement and transcendence by applying them to teacher education and what it values. A good example is the discourse of flexibility in LLL mentioned above, where the flexibility in question is an adaptation to given manifestations of change. Change itself is taken to be given, and current manifestations of change are therefore a teleological necessity.¹³⁴ Our adaptation is judged, along with any “creative” products (new delivery modes, sophisticated ICT, innovative techniques and so on) in accordance with a set of values which are assumed to be given (i.e. the necessity of this form of change, the necessity of this form of flexibility, the impossibility of any other). They are valued if they repeat teacher-learner relations by perpetuating them, hence the metaphors of “retooling” and “equipping” which have been used to describe this sort of training. On this view, subjects of learning are thought to pre-exist change, which is then added them *post-facto* as a hylomorphic process carried out by some undefined force. Thus, theories which rely on notions such as shaping or modelling assume that the individual is passively moulded by outside forces, and those which rely on ‘interaction’, ‘internalisation’ or ‘accommodation’ assume a unitary, rational, pre-given individual subject (Tennant, 2009, p. 151). Such illusions of transcendence seem simplistic, and they separate us from the power of acting in the world which grows through affection rather than acquisition. This limits what we are capable of becoming, fundamentally restricting our freedom.

6.1.5 Duty

In this way Deleuze’s ontology maintains a radical openness to the effects, affects, sensations and problems of a very material world. It also draws the ethical conclusion that we have a duty to respect our material condition as inseparable from any other. At the most basic level, the ethical responsibilities of one group cannot be abstracted from those of another, demanding a “charity towards objects and nature” in line with our growing knowledge of complexity (Urry, 2005a, p. 3). Any form of discrimination, violence or

¹³⁴ E.g. “The design and implementation of the new teaching qualifications need to respond to the opportunities and challenges presented by changes to further education and skills workforce regulation, to the recommendations from CAVTL and to longstanding issues affecting the quality of initial teacher education.” (LSIS, 2013, p.5).

destruction of any aspect of the material environment is unjustifiable on this view. Ethology neutralises all morality, be it sentimental or cruel, since both reflect an anthropomorphic perspective “in which the human being maintains its position on top of creation” (Beaulieu, 2011, p. 84). And this can be understood even from a human standpoint: we cannot fulfil the potential of our own bodies without connecting with others’. Since this connecting is a mutual enhancement, we cannot talk of exploitation or condescension without realising that the encounter has been botched by a return to transcendent forms and their supposed hierarchy. And because its mutual enhancement is dynamic, its creativity is differential, creating new relations between entities in process.

Still, this standpoint remains better at defining what should not be done than what we should actually do. Deleuze is understandably cautious about recommending action to others, but for critics such as Hallward (2006) it is not always clear from his pronouncements on, for example, the unworthiness of certain types of action, that we are being invited to do anything other than contemplate some wonderful, but quite empty, life-force. It is not just utterly divorced from actual questions and day-to-day life, but it also demands that the actual become redundant (Hallward, 2000, p. 98). Critics argue that the resulting vitalist ethics has therefore insufficient critical purchase (Toscano, 2007, p. 88) and, as a “metaphysics of experience” (Brassier, 2011), leaves us with no way of justifying ourselves (Buchanan, 2000, p. 196). This negative impression is exacerbated when the virtual, its time frame (Aïôn) and its paradoxes are explicitly described as “beyond any possible function” by Deleuze and Guattari (1994, p. 157), part of a “mental void” (Deleuze, 1969, p.92). Indeed, rather than present a critically valid ethical scheme, Deleuze’s essentially optimistic take even on the darkest of events, visible in his treatment of Bacon’s work, constitutes an apology for them (Joyce, 1985, p. 27). Joyce argues that Bacon’s depiction of humanity’s degeneration and misery are rendered bearable in Deleuze’s eyes by the dissolution of our limitations into the undifferentiated cosmic flow of all matter. The fact of our brutal limitation is simply ignored, and Deleuze’s event abstracts itself from actual bodies, leaving mere religiosity behind (Badiou, 2007, p. 41).

6.2 Therapy

On the other hand, any discussion of negative aspects of Deleuze’s thought risks seeming very superficial,¹³⁵ and must account for his repeated claims to eschew resentment,

¹³⁵ Badiou’s own critics have suggested that his reading of Deleuze is mischievous (cf. Dosse (2007) and Lemieux (2007)).

negativity and oppositional criticism in favour of “joy in creation” (Deleuze, 2004c, p. 134). At the most basic ontological level, the negative never appears in processes of difference, and Ideas know nothing of the negative because they all have their own positivity or singular existence (Deleuze, 2004a, p. 258). Hence, the aim in painting a pessimistic picture of professionalism (for example) is not to induce gloom, and ethical activity for Deleuze cannot be a negative process. On the contrary, it is an “aesthetics of sobriety” and constitutes a practical engagement with literary, philosophical and social practices in the form of “an aesthetics, ethics and politics of everyday life” (Goddard, 2005, p. 23).

The ethical implication for LLL teacher education is that it is never a case of simply accepting things or resigning oneself to events, but rather opening up to their various connections and differentiations. A critical and clinical project, as Smith (1993) points out, runs through Deleuze’s work. He is uninterested in remedying an underlying trend, because his understanding of a clinical gesture is not content with the destruction of past regimes, but rather demands the creation of new ones (see Deleuze, 2004a, p. 176 above). Those who criticise without creating are no more than beautiful souls who take pleasure in “scratching their wounds”. Accordingly, Deleuze argues that no critical gesture is complete without its clinical or therapeutic moment, and that this moment can often be more successfully achieved by artists than clinicians (Deleuze, 1967). Whatever their weaknesses and contradictions, Deleuze’s ideas cannot therefore be used to simply demonstrate that debt (or any other single term) lies at the heart of a problem, since to do so the term would have to transcend its actualisation in the problem. What therapy then, does Deleuze offer for the problems he identifies?

In the first place, this means being opposed to those who would foreclose creativity (Williams, 2008, p. 141), including those who would reduce it to productivism or abstraction. So the first positive conclusion which might be drawn for is LLL the development of a more effective ethics which keeps its eye on change rather than fixity. Assuming that ethical conduct should be regulated at all, effective criteria for judgement must seek what is immanent to practice rather than idealise its effects. This may challenge our desire for rules, systems and even our desire to be oppressed by them, but, as we have seen, immanent forms of pedagogy are being developed in exactly this direction. Teacher educators need to fulfill their role by constantly problematising practice to find new ways of being, not new ways of reproducing relations.

This might be also helped by recognising the networked, ecological nature of learning in LLL. For example, as Roth and Lee (2007) and particularly Hodgson and Spours (2009) argue, references to a learning ecology in LLL are both challenging and potentially productive. But our understanding of educational practice must be a situated one which at least attempts to take account of the complex web of interactions which make it up. The advantage, for Brown and Cherkowski (2011, p. 63), is that the development of a complex “ecology” of learning is more “healthy” than the maintenance of relations of command and control:

How can educators truly own their learning when professional development is funded by school districts and targeted to improve perceived system deficits? For each project, we wonder at what point organisational meaning and personal meaning will connect to create a healthy life and learning sustaining ecology?

On this view, it is “unhealthy” to assume that practice can escape the consequences of such ecology without innovation and creativity, and professional competence is no more than a palliative slogan which evades the central problem of the heterogeneity of the real, thus failing to prepare practitioners for it. Similarly, Gallas (2011, p. 33) argues that a tension exists between “choice, curiosity and gut instinct” on one hand and educational research, together with its correlate in standardised curricula, on the other for. Importantly, for Gallas, it is the former (choice, curiosity and gut instinct) which are “central to maintaining healthy lifelong learning”, not the latter.

Health, on this view, is equated with our becoming worthy of the event of lifelong learning.¹³⁶ We must not lose sight of “grand health”, Deleuze warns us (2004b, p. 182). The central task

¹³⁶ Bearing in mind points made in earlier about the “medicalisation” of learning, talk of health in this context deserves nuance. As Badiou (2010a, p.15) argues, declaring the pathology of a period is a highly suspect move redolent of the tactics of totalitarianism. Deleuze also reminds us that discourses of health are themselves suspect, and that creativity, growing like a crack in a state of normality, might actually depend on a certain refusal of the conditions of “normality”:

If one asks why health does not suffice, why the crack is desirable, it is perhaps because thought only occurs by means of the crack and on its edges, because anything great or good in humanity enters and leaves by it in people quick to destroy themselves, and for whom death is preferable to the health we are offered. (Deleuze, 1969, p.188/2004b, p.182)

Translation modified: « Si l'on demande pourquoi la santé ne suffirait pas, pourquoi la fêlure est souhaitable, c'est peut-être parce qu'on n'a jamais pensé que par elle et sur ses bords, et que tout ce qui fut bon et grand dans l'humanité entre et sort par elle, chez des gens prompts à se détruire eux-mêmes, et que plutôt la mort que la sante qu'on nous propose ». Deleuze's interest in health as a philosophical problem can be traced to his Nietzscheanism, just as it is difficult to separate it from (or reduce it to) his own long-term ill health.

of a philosophy such as Deleuze's is therefore three-fold: to interpret, to evaluate and to create (healthy) new ways of living (Rodowick, 1997, p. 205). This is why Schwartz (2005, p. 105) believes that beyond film studies, Deleuze uses the concept of life not to escape material actuality but to prepare us to "think the ethical and political" differently, informing our understanding of today's modes of social control. This linking of thought with chaos and creativity includes but exceeds the political (Plotnitsky, 2001, p. 55), and indeed imbricates an assemblage of questions. For some, this has the basic ethical value of avoiding reductive materialism which substitutes things for relationships (Moulard-Leonard, 2012, pp. 844-845). Deleuze, who replaces things with the effects of differentiated elements constituted in a differential (mathematical) space (Olkowski, 2011, p. 125), disrupts this reification from the ground up.

A fitting example is rhizomatic thought, which can be deployed as "a tool to help describe a 'surface without depth'" by Friedrich et al (2010, p. 580). As a structure, we have seen that a rhizome is a system of dynamic interconnections, but as part of a flat ontology it helps us to reconceive equality in the light of difference. Friedrich et al contend that when difference is conceived rhizomatically as non-hierarchical, the notion of equality is radically shifted onto the view that we are all equally different rather than essentially unequal. Issues such as social justice and representation, which occupy LLL research from an ethical perspective are, in theory at least, challenged if not actually overturned:

While the root-tree—in this case the opinion of inequality grounding democratic education and allowing it to partition—inscribes its foundation and produces a difference based on the inequalities it is trying to erase, a rhizomatic equality and its moments of visibility emerging as the political force shifts in the way we see and experiment with the world.

(Friedrich et al, 2010, p. 581)

Thus difference can be affirmed in three moments: firstly, in events generally; secondly in pedagogy in particular; and thirdly, by the counter-actualisation of events, where we resist what is given and look to a renewed relation with the world. These three ways of working with events are worth discussing before I turn to what they imply for resistance and belief in LLL.

6.2.1 Events

The scope of an event is not representative, but rather creative, being defined by the problem it poses and the future it creates (Stengers, 2000, p. 67). Thus on Deleuze's view, we can and should pay attention to events as chance moments and become worthy of them (Deleuze, 1990, p. 239). There is dignity, he claims, in recognising the necessity of life and affirming it rather than pretending or regretting that it cannot be otherwise. Being equal to the event, he says, is becoming the offspring of one's own events by embodying them. This is why "[t]here is no other ethic than the *amor fati* of philosophy (Deleuze and Guattari, 1994, p. 159). However, because we often misrecognise them, events need to be lived rather than identified because their capacity for variation is what differentiates them from mere objects of contemplation. Events cannot be fully explained by the circumstances in which they arise, and so can only be grasped in the brief moment of their appearance on the surface of things, in the flesh, as a chance which must be seized (Deleuze, 1990, p. 239). If this were not the case, the world would not be an on-going process of differentiating trajectories, and there would be "no events and no intelligence either" (Olkowski, 2011, p. 128).

A comparable concern for events leads Antonioni to crystallise multiplicities of ethical ideas and their possible consequences as they largely transcend the individual grasp. As such, these aesthetic practices are, on Deleuze's terms, attempts to be "worthy" of events, playing out to a greater or lesser degree his ethical position or "a moral philosophy of creativity in relation to events" (Williams, 2008, p. 136). Less cryptically, it is possible to see "being worthy of events" as interdependent moments or practices leading to a final ethical statement about our relation with the world. What emerges is a driving responsibility for alterity which does not preclude social or political activism, "but may add to its affective and ethical force" (Gannon, 2011, p. 74).

The possibility and doubt this suggests is unavoidable. But rather than angst, it expresses a networked world of runaway objects, where we do not know what any single body can do. Affective relations can happen polymorphously, at any time and with anything:

We do not know the limits of what is possible for such assemblages to do. We may stumble across unexpected connections with assemblages not immediately apparent. But we may also create new assemblages of bodies as organisations of desires, powers and affects.

(Zembylas, 2007b, p. 25-26)

Hence either ethics makes no sense at all, Deleuze says, or it means not to be unworthy of what happens to us (Deleuze, 2004b, p. 169). Being “worthy” of this possibility means affirming both the transformative potential of learning (St Pierre, 2008, p. 194) and the pedagogy of problems mentioned above.

6.2.2 Pedagogy

Pedagogy must be based on some notion of change, but there is for Deleuze nothing at fault with the human condition apart from the fact that it can and should be extended (Ansell Pearson, 2007, p. 10). Artistic practices are paradigmatic of this “going beyond” at the heart of creative becoming for Deleuze and Guattari, who stress their pedagogical role:

It is not just a question of saying that art must form those of us who are not artists, that it must awaken us and teach us to feel (...) [s]uch pedagogies are only possible if each of the disciplines is, on its own behalf, in an essential relationship with the No that concerns it.

(Deleuze and Guattari, 1994, p. 218)

This relation with the future or the outside makes it impossible to generalise about these encounters with sensation in art. It is the particularity (haecceity) of such events which contribute to their ethical portent. Every sensation is a question, Deleuze and Guattari state (1994, p. 196) “even if the only answer is silence”. This outside relation is *essential* in the double sense of being both necessary and ontologically fundamental. For example, as we have seen, artistic practices embodied in cinema’s irrational cuts splits the subject and introduces a caesura in time within which the subject becomes part of a new series. These irrational intervals use the undefined, floating perspective of the “gramme” to activate the outside of a space which is immanent to it as a defining feature. These grammes point to the thinker within and “a power of transformation”, which is to say “the power to transform life” by revealing new variations and directions (Rodowick, 1997, pp.196-201). Creativity and the “destabilising moment of the encounter” becomes the ethical per se (Ruddick, 2010, p. 23). The flatness of Deleuze’s planar univocal ontology means that no legislator can actually gaze down from above, leaving us free to embody the radical difference which overturns such law.

This also refines the unenlightening suggestion that cinema somehow makes us more creative by showing us how, where and when. Cinema’s mobile perspective in time introduces many possibilities, including the “higher moral value” of this connection with the

outside (Epstein, in Verstraten, 2012, p. 118). Given the creative need for a shock to thought, and indeed the current (de) moralisation of the sector, the cinematic image may better exemplify the ethical nature of rhizomatic work because of its functional capacity to produce irrational cuts and force the spectator to experience them. Teacher educators have much to learn from the movies.

Following Deleuze, one lesson is cinema's ability to restore an expressive relation between bodies and the material world. This matters because education has traditionally divided the material from the cognitive, exemplifying the hylomorphism criticised by Ingold above. This hierarchy in learning situations neglects the role of material (the body of the learner) and consequently much writing about teaching and learning (not unreasonably) "refuses to problematise the body out of fear for getting into the sexual dynamics of the classroom" (Zembylas, 2007b, p. 28). On this view pedagogy can - and should - pay attention to this phenomenon by re-examining the role of material affect on the bodies of learners, since without bodies and affects there would be no pedagogy or even a learning subject. An ethics of respect for creative becoming is implied here rather than rules of conduct for practice reduced to creative stasis.

Artistic practice can help understand the nature of this respect. An ethical statement can be found in the way Antonioni's characters demonstrate a special kind of sensitivity to the finitude of mutual materiality. Francis Bacon's contorted, eviscerated forms express an awareness of the fleshy materialism of bodily becoming:

What fascinates Bacon is not movement, but its effect on an immobile body: heads whipped by the wind or deformed by an aspiration, but also all the interior forces that climb through the flesh. To make the spasm visible, the entire body becomes plexus. If there is feeling in Bacon, it is not a taste for horror, it is pity, an intense pity: pity for the flesh, including the flesh of dead animals...

(Deleuze, 1981, p. xi)

This is a form of pity which does not regret the way things are, or condescend to offer consolation to those less fortunate. Above all, it is an unsentimental respect for the fragility inside which is simultaneously an expression of our link with the outside: the virtual movement which provides the condition for actual physical change as becoming, developing our power to be affected. The static forms of thought, representation, subjects and objects

are destroyed (Le Colombat, 1999, p. 843), and mobile signs of intensity take over. A “crack” engenders originality, running through the body and compromising its organisation. Anything which is good and great passes through this change, since events can only be grasped when inscribed in the flesh (Deleuze, 2004b:182).

The apparent abstraction of such an analysis can be attenuated by its direct relation to practice. Becoming offers the chance of going beyond what we thought possible in the knowledge that any effect can be achieved through other means, albeit means which can only be discovered by playing them out. For example, it offers a genuine alternative to a certain tendency towards abstraction in thought, as well as a reason to believe that creative conjunctions are not just virtually but actually possible and tangible within an altered view of agency. Moments such as the end of *L'Avventura*, above, provide a poignant reminder of the ways in which a gesture can transform relations in significant ways and enhance our power to be further affected. Human suffering may be eternal, but a revolution can create new bonds between people (Deleuze and Guattari, 1994, p. 77). A material pity for the flesh humanises fractured relationships and uneasy emotional truces result from the need to go beyond given ideas and allow oneself to be carried beyond existing boundaries. In his case, this crossing of the boundaries of mechanical conventions and preconceived notions is itself a moral act:

And I believe that one must not start from preconceived ideas, from premises, because this mechanises everything, it cools everything down. Rather, it is necessary to follow the story itself, the character themselves – who are what they are – and, in this way, express a certain morality

(Antonioni, in Cottino-Jones, 1996, p. 6)

Antonioni's contention that working from preconceived ideas “cools everything down” is as suggestive as it is elusive, but I would like to argue that it finds concrete expression in certain forms of pedagogy which aims to foster the “counter-actualisation” of events.

6.2.3 Counter-actualisation

In *Logic of Sense* Deleuze (1969/2004b) examines the lives and work of artists to demonstrate ways in which we might be able to meet events with an ethically worthy response. He refers to art's ability to treat ethical problems because art in particular expresses communal significance through singularity (Williams, 2008, p. 142). It is because

events are singular that they express the wider ontological movement of differenc/tiation,¹³⁷ and playing out this deeper potential for change is what he calls a “counter-actualisation” of events:

Counter-actualising each event, the actor-dancer extracts the pure event which communicates with all the others and returns to itself through all the others, and with all the others. She makes of the disjunction a synthesis which affirms the disjunct as such and makes each series resonate inside the other

(Deleuze 2004b, p. 204)

Deleuze’s descriptions of counter-actualisation reflect the allusive nature of what he wants to describe and what he thinks we should do. Events are always actualised insofar as they do not exist fully without their physical manifestation and difference is deduced from its expression. If we are to grasp this, we must act by “doubling” events in order to avoid confusing them with their actualisation (Deleuze, 2004b, p.182). But they are only remarkable because they are singular, and we cannot actually fully understand them because each event is not actually “like” any other. Because of differenc/tiation, reality’s events cannot be understood by simply analysing their actuality (Van Wezemael, 2008, p. 177). Events are like problems which are distributed as false problems when they are solved: their essential virtuality is perverted by falsity (Deleuze, 2004a, p. 259). To avoid this, we counter-actualise events by affirming or selecting the eternal return (Rozzoni, 2012, p. 244) whose role, for Deleuze, is to redistribute difference, singularity and more intense ways of living.

Counter-actualisation thus takes place at the limit of our faculties, where rational judgement breaks down and chaotic events diverge rather than repeat themselves (Alliez, 1993, pp. 37-41). Deleuze wants us to understand that we cannot deal with experience as spectators who watch events happen from without by representing them, but rather as actors who play them out by implicating ourselves in them. This is risky, a dice throw whose outcome cannot (and should not) be calculated. This is because when we encounter sense, we are changed by it,

¹³⁷ These two moments describe the operation of ontological difference as it is actualised: differentiation concerns the determination of the virtual content of Ideas which is succeeded by differentiation or the actualisation of this virtuality into species or parts. The first is the way a problem is laid out initially as a multiplicity, the second to the way its different parts are established as finite (cf. Deleuze, 2004a, p.258). The two moments are best understood as a zigzag movement between the virtual and the actual.

and thus making sense from events induces the stutter described above: we try to relate the new to what we know, fail and forget the past, building new meaning and changing as we go. If we can change in this way, not just understanding but actually acting out the difference in events, we are counter-actualising them, taking an ethical alternative to repeating ourselves *ad infinitum*. It is the act of selection, of taking account of something in the event in order to go beyond both it and ourselves by affirming its possibility to differentiate itself and us (Zarifian, 2001). It is replaying events so that their potential for change is maximised, not regretted, reduced, disavowed or foreclosed: strafing the surface to transmute the stabbing of bodies (Deleuze, 2004b, p. 182).

This means refusing to accept that things are necessarily this way, that the product of events is all there is, and that objects can be identified and exchanged as if they were equivalent. Passive resignation to war, wounds and death, are a sign of repetition and resentment for Deleuze (2004b, pp. 170-173), since simply accepting things the way they “are” refuses to see that they can and will change. Affirming such singularity in events means turning complaints and rage against what happens (Deleuze and Guattari, 1994, p. 169). As counter-actualisation, creativity necessarily involves opening the sphere of practice out to the limitless possibilities immanent to it “playing out the event in the realm of sense in a different way” (Williams, 2008, p. 31).

Creativity does this by expressing the significant aspects of our world dynamically in ways which will inevitably change them. Waging war against war (death, destruction, resentment, and other means of foreclosure) “counter-actualises” experience by subtracting the banal from experience. Subtracting from experience that which makes it repetitive and dull replays it so that both its singularity and its expression of absolute difference can be perceived in ways which affect and empower us to be further affected. It is a dance or theatrical performance whose creative response to events adds to the infinite series of enactments which precede them. But it is fully pragmatic since it tells us more about what our bodies can do by developing the connections of which we are (becoming) capable.

What is revealed in this gesture is disjunction itself and its crucial role in ethical practice: one becomes the actor of one’s own events (Deleuze, 2004b, p. 171). In this way, effective counter-actualisation introduces the new by actualising an essential becoming-other. On one hand, this is a simple and necessary activity: actual terms never resemble the singularities which they incarnate, and so any actualisation by definition is always a genuine creation (Deleuze, 2004a, p. 264). Counter-actualisation on the other hand is “problematic” because it is the source of endless complications. But the alternative (becoming the same) is

undermined by a contradiction that cannot be resolved: “its objects can never be what it makes them” for Massumi (1992, p. 107), meaning that although we may try to fix events or ignore their problematic nature, they are always already undermined.

From a pedagogical perspective, this means working with education by problematising it, and refusing to reduce learning to the communication of pre-established ideas and judgements, as we have seen. But it also means trying to foster this approach in others in the belief that its essential dynamism is of the greatest possible benefit in today’s complex world. Doing so, however, implies a degree of resistance to the forces of reification and homogenisation criticised above. As part of a moralistic, productivist agenda with little interest in creativity itself, they represent a significant threat to lifelong learning.

6.2.4 Resistance

At the heart of Deleuze’s educational thinking is the question of the enticement to be *lead* (Colebrook, 2008, p. 35).¹³⁸ Education is literally a leading out, and its pre-defined parameters are a constraint with both advantages and drawbacks. For Deleuze however the issue of resistance to being “lead” needs to recognise the rhizomatic growth which produces freedom just as it produces oppression (Gregoriou, 2008, p. 101). Freedom will not come from “resisting” oppression if, in the process, resistance encourages a new orthodoxy of “critical” pedagogy or “emancipatory” education with its own clichés and commonplaces.

Ethically speaking, resistance does not mean a return to the same by creating a new paradigm to be applied, however critical. Indeed, it is *ressentiment* which leads us to ignominiously “scratch our wounds” rather than enjoy the life which events embody. We should instead produce the sense which is always an effect of the actualisation of events, never a given moral object of measurement (Deleuze, 2004b, p. 82). So, when Kozin (2009, p. 105) asserts that Deleuze’s philosophy is necessarily a critical inquiry that seeks to “subvert sedentary thinking via nomadic interventions rather than analytical reversals”, it is the entire set of illusions implied by a rational, decision-making subject that is subverted.

On this view, creativity must have a double relation with the outside. It must incorporate disparate objects by developing relations between rather than within them, and it must resist the present in order to do so effectively (Deleuze, 2003, p. 300). To do this, it introduces a gap between dominant values, which are then made to stutter because they are revealed by this interstice to be no longer self - sufficient (Bouaniche, 2007, p. 229). So, the kind of

¹³⁸ Recent examples include Brookfield (2010) and IfL (2012b).

creativity which can be identified in Deleuze's thought explicitly implies resistance to a very explicit set of problems:

[B]ooks of philosophy and works of art also contain their sum of unimaginable sufferings that forewarn of the advent of a people. They have resistance in common – their resistance to death, to servitude, to the intolerable, to shame, and to the present.

(Deleuze and Guattari, 1994, p. 110)

Resistance to the present here refers to the actual: products, individuals, the given are all present in so far as we tend to take them for objects of perception or agents of action. Effective resistance can therefore only be measured against each attempt to grasp events and thereby create new zones of space-time (Deleuze, 1990, p. 239). This is why to create is to resist.

Our decisions to act are situated in complex assemblages of cause and effect (Smith, 2007), and so creativity should not necessarily be viewed as a conscious inventiveness, but rather as openness to evolution (Williams, 2008, p. 137). For Deleuze, this is an on-going power of creation as an individualising force (Bogue, 2001, p. 10) and Nature on these grounds is life lived no longer on the basis of needs and ends, but rather on that of production, productivity and potency (Deleuze, 1988a, p. 3). Deleuze gives the example of the grey butterfly which is able to use its singular essence as camouflage. What interests him is not (just) the surprising fact of evolution, but the way in which the butterfly's ability to hide on a stone wall sets in motion the singularity of other events. The butterfly does not actually move, but by simply hiding, it actualises the event of being hidden and thus expresses its own particular ethology. This particular actualisation of "to hide" is not the only one; other butterflies successfully use other means, a fact to which the grey butterfly's particular selection draws our attention as an expression of the infinite variation immanent to events, a life (Deleuze, 2004b, p. 204).

6.2.5 Belief

It is true that contemplation of such events risks inducing an impotent nostalgia for a more meaningful, harmonious existence. This might induce a crisis of praxis in education, for example, in the form of an impossible desire to be connected to the world (MacMath, 2009, p. 142). It is certainly in concrete social fields and particular moments in time that we must seek ethical movements towards new ways of being (Deleuze and Parnet, 1996, p. 163), and this evocation of a world with which we might reunite has echoes in some recent work in

education research. Maclure (2011, p. 997) for example asserts research itself has “lost its innocence and its faith” following the ruins of a foundational myth according to which decades of theory have eroded its belief in truth claims and the possibility of wide scale progressive change. Post-war cinema’s telos and pathos lie in the fact that it is forced to agree:

The modern fact is that we no longer believe in this world. We do not even believe in the events which happen to us, love, death as if they only half concerned us. It is not we who make cinema; it is the world which appears¹³⁹ to us like a bad film

(Deleuze, 1984, p. 223)

The world is lost to us, and our action can neither reveal meaning, nor provide the necessary confidence to reform ourselves (Marrati, 2008, p. 185). This erosion of faith has also left the field of education research ready for new ideas which can influence practice. Indeed, for Deleuze the knowledge that thought is cracked from the inside may be our best reason to believe in the world and the possibility of creativity. Similarly, for Antonioni the world is a concept which is “always present in the image”, because the image frames both the world of everything that can be seen as well as the world of everything which cannot (Antonioni, 2003, p. 139). Cinema’s paradox, and proof of its creativity, lies in its ability to at once document this rupture and perform its healing. When its “time-image” situations “surge up” when sensori-motor links are undone, and, like the character, we are abandoned to what there is to see (Marrati, 2007, p. 61). Detached from sensori-motor situations and the ability to act on them, we become “seers” able to conceive duration, without which there would be no experience. As seers, movement shifts into thought, and we are affected and changed by experience, not mere spectators. Here, at least, is evidence that change will come, provided thought’s essential mobility is shocked into action by the encounter.

Rather than suggest ways of transforming the world, then, an encounter with this world leads to the fundamentally ethical necessity of believing in its materiality, and our own, as bodies, “before or beyond words” (Deleuze, 2005b, p. 167). In *this* world, belief is our only link, and an ethical choice is imposed. This is a choice which no longer concerns opting for a

¹³⁹ Translation modified: Deleuze’s *apparaître* (not *paraître*) is originally translated as “looks to us”, suggesting that the issue is a matter of individual perception which, for Deleuze, it is not. The world “appears” to us in the sense that it comes to us out of obscurity – the fact that this operation is a visual one is of less importance than of the relation of cinema to the world as Whole.

particular term, since the links between the terms have been broken. It is rather the Pascalian opting for “the mode of existence of one who chooses” (Deleuze, 2005b, p. 171), choosing to have more choice in order to affirm one’s participation in the world’s becoming.

On this view, we need to believe in an absolute form of creativity and in the world for ethical rather than epistemological reasons. Faith in such a world is not an object of knowledge but of choice: we choose to live in this faith in immanence and in creating new possibilities of life (Marrati, 2008, p. 89), not in the forced choice of what is true or false:

Which then, is the subtle way out? To believe, not in a different world, but in a link between man and the world, in love or life, to believe in this as the impossible, the unthinkable, which nonetheless cannot but be thought

(Deleuze, 2005b, p. 164)

I hope to have shown that this does not mean that “nothing is to be done” in the usual sense of the term.¹⁴⁰ Radford (2007, pp.266-267) believes that notions such as action and improvement might be less important than explanation and critical interpretation. This is why cinema provides particularly rich data about the methods and focus of research, and also why it imposes choices and the need to make them. Modern cinema creates new visual and aural images whose purpose is not to re-present clichés, but to “give back” the body’s relationship to a world (Lambert, 2002, p. 131). Bringing choices into play is the highest object of an art able to challenge bare repetition by displacing banality as an ethical leap of faith:

We have to go beyond all spoken information; to extract from each a pure speech-act, a creative story-telling which is like the obverse of dominant myths, of current words and their keepers; an act capable of creating myth instead of drawing profit or business from it.

(Deleuze, 2005b, p. 258)¹⁴¹

¹⁴⁰ Although a focus on saying nothing and the production of silence has its interests (cf. Mazzei, 2011), not least as a form of protest against the demand for busyness incarnated in the changing demands evoked above.

¹⁴¹ Translation modified: « Il faut donc dépasser toutes les informations parlées, en extraire un acte de parole pur, fabulation créatrice qui est comme l’envers des mythes dominants, des paroles en cours et de leurs tenants, acte capable de créer le mythe au lieu d’en tirer le bénéfice ou l’exploitation ».

Chapter 7.0 Conclusion

An examination of this approach and its implications has driven this thesis. My opening section looked closely at existing ways of discussing creativity in the field by describing LLL as an “event”. This analysis led to a research strategy and a complementary alternative in the form of “operative” creativity. My central contention has been that creative practices are possible in LLL, but that these do not coincide with current policy’s interest in conflating the concept and practices of creativity with productivity and repetition.

Learning from artistic practices, I linked a diagrammatic function to creativity, showing how improvisation, chance and error can be deployed by enquiring teacher educators prepared to engage materially with a world of sensations. Preparation is vital to any engagement with sensation and indeed is part of it (Deleuze and Guattari, 1994, p. 166), and so it is important to stress that the kinds of improvisation which seem to enhance creativity do not imply an abdication of responsibility. We have seen that for Antonioni, for example, chance encounters are only rendered meaningful through a special kind of rigour and an almost obsessive concentration on details thrown up by the environment.

This analysis has of necessity also introduced ethical issues. If creativity is to develop new relations rather than repeat terms, it must follow an ethology of behaviour rather than a code of conduct. So in the third and final part, I positioned Deleuze’s stance on creativity in this ethical light, with counter-actualisation working as a practice of becoming more ethically worthy of events. Creativity contributes to preparing for a changing world, not just to more cost-effective reproduction, but preparing in this way, we need to remember that the limits of pedagogical problems are not pre-determined. A pedagogy built on genuine problems does not simply repay a debt, but counter-actualises instead a whole creative topology:

[I]t seems to us as if we have, as a reward, a yet undiscovered country before us whose boundaries none has ever seen, a land beyond all known lands and corners of the ideal, a world so overfull of the beautiful, strange, questionable, terrible and divine that our curiosity and our thirst for possession are both beside themselves so that nothing can satisfy us!

(Nietzsche, 1992, p. 71)

...End...

Annexe 1: Identifying LLL

A striking feature of LLL is the elusive nature of the term. But thinking of this elusiveness as a feature of an event exemplifies how phenomena might be best thought of in relational terms. The sector's relational identity can be expressed in terms of its spaces, purposes even the time scheme these imply. These terms are most helpful in sketching out the sector as an event with a mobile set of connections, forming a problem without identity as such.

A1.1 Identity

There have of course been many attempts to define LLL. Basil Yeaxlee and Eduard Lindeman's early work in the early 1920s is often accredited with providing the foundations of lifelong education as a continuing aspect of everyday life (Smith, 2001). The recognition of the importance of "permanent education" received further impetus by Edgar Faure's report "Learning to Be" (1972), which declared a need for radical systemic change and the reinvention of knowledge for a modern, dynamic "learning society". Influential early thinkers of this learning society included Torsten Husén (1974; 1986), Donald Schön (1973), and particularly Robert. M. Hutchins, who argued that two convergent facts imply the need for a learning society. Rapid change requires continuous education, he believed, while the increase in the availability of free time makes such education possible (Hutchins, 1970, p.130 in Smith, 2011).

A second influential moment in the development of LLL can be traced to The "Great Education Debate" of 1976-79. The then Labour Prime Minister, James Callaghan, spoke of the need to equip children for a "lively constructive place in society" as well as "fit them to do a job of work" (in Thorley, 2004, p.126). This view continues to echo through LLL, and as these ideas have entered the political mainstream, the term "lifelong learning" has come to imply a right to some form of education throughout the life cycle (Hillier and Jameson, 2003, p.19; Schuller and Watson, 2009, p.2). At the centre of this trend is the belief that continuous training, often provided by the state, is a desirable aspect of a "knowledge economy" where "everyone is well educated and able to learn throughout their lives" (DFES, 2002, p.2). Calls for Initial Teacher Education (ITE) to play its part in this economy are relayed by widely disseminated documents with a clear agenda and, often, a lobbying tone (e.g. Skills Commission, 2009; IfL 2013) as well as in official political discourse (BIS, 2011; BIS, 2012d, p.1). Defenders of a more liberal tradition have traditionally argued that education should not be commodified, an issue which is clearly linked to the problem of a knowledge economy where the former only exists at the behest of the latter. As knowledge

becomes the key commodity for such an economy, change and exchange become interchangeable through the medium of creativity.

The critique of such commodification is long-standing and certainly sheds some light on the ways in which learning in LLL can at times seem reduced to a simple economic transaction. For John Field (2006, p. 9) the new socio-economic order of lifelong learning “is the new educational reality”. It has been argued however that even experienced practitioners in the sector would find it hard to identify the precise scope of this singular reality (Huckfield, 2012).¹⁴² The recent Lingfield report, whose focus is restricted to FE, comments on the “widespread complexity” of an FE sector which itself is more complex than secondary or HE (BIS, 2012d, p. 18). The report also pinpoints the diversity and scale of the sector as a threat to professional identity and “a matter for concern” (BIS, 2012d, p. 2) because they are unlikely to help the development of an identity which “might always prove elusive” (BIS, 2012d, p. 21).¹⁴³

A connected point concerns the way in which, for Field (2006, p. 32), the sector is so sprawling as to seem “promiscuous” in the way in which it embraces such a wide range of education, training and human resource objectives and organisations. For Macdonald (1991 in Wilson and Wilson, 2011) such promiscuity can be attributed to poor funding, lack of public support and short-term political instrumentalisation. A 5-year electoral cycle has introduced so much change that even naming the sector is a matter of indecision. The sector has been variously referred to as “lifelong learning” (e.g. UKCES, 2010; Avis et al, 2010; Ecclestone, 2010; Gravells, 2012; Armitage et al, 2012; Crawley, 2012; NIACE 2013); “L & S” sector (Wilson and Wilson, 2011) or “system” (BIS, 2011); “post compulsory” sector (Armitage et al,

¹⁴² Schuller and Watson (2009, p.4) assert that “[f]inding a way through the [LLL] system is complex, opaque and demotivating for too many”. Huckfield also questions the transparency of its “baffling” TEd qualifications. Lingfield (BIS, 2012d, p.6) agrees that teaching qualifications need to be reconsidered, simplified and renamed and that the current range of qualifications in the sector fuels the “bewilderment” of employers (BIS, 2012d, p.29). There is a belief among the latter that qualification-led training is “ritualistic, rote and meaningless” compared with its more “relevant” work-based counterpart (Fuller et al, 2004, p.7). The question arises as to what extent current forms of teacher education, while physically based in the workplace, are actually following a qualification-based ethos, even where qualifications are no longer compulsory.

¹⁴³ This elusiveness might be partly explained by the existence of a virtual economy in education: excessive micro-management has led to the “fabrication” of a “version of an organisation which does not exist” (Ball, 2003, p.224) to satisfy the demands of a managerialist inspection regime. Ball’s analysis may seem overly negative, but it returns in recent official discourse. The influential Wolf report (2011) made a similar point, and the recent Lingfield report also criticizes the apparent inefficacy of the “detailed oversight” and excessive governance of a “command and control” approach (BIS, 2012d, p.1). Lingfield officially accepts that this has prevented organisations maturing fully and professionals from developing the desired autonomy (BIS, 2012d, p.31).

2007); “learning and skills sector” (DFES, 2002; DFES, 2003; Edward et al, 2007; Keeley-Brown, 2007) or “learning and/or skills sector” (Hillier and Thompson, 2005, p. 1). Lingfield referred to the complex “organism” of FE in relation to near counterparts or “systems of technical and vocational education and training (TVET)” (BIS, 2012d, p. 1) and the Learning and Skills Improvement Service (LSIS, 2013) uses “Further Education and Skills Sector” to cover its particular zone of influence.¹⁴⁴ None of these definitions pin the sector down, and indeed further change is to be expected if, as some expect, the different parts of the sector move into a wider “post-compulsory” sector, possibly merging with HE and marking its distinction from secondary (BIS, 2012d, p. 27) and underlining its complex fluidity. Seeing LLL as an event would in principle explain this difficulty of naming the sector, since as an event we would expect it to be constantly changing. But defining the relations between its parts can also be difficult, as the following example shows.

Perhaps the most influential practical definition for many organisations in LLL is that given in the important Self Evaluation Document used by ITE providers to prepare for Ofsted inspections. According to this document:

[i]nitial teacher education in the further education system covers all settings in the learning and skills/lifelong learning sector that include provision for learners aged 14 years or over; for example, further education, sixth form and specialist colleges, adult community learning, work-based learning, personal and community development learning, voluntary and community learning, offender learning and the armed forces

(Ofsted, 2011, p. 2)

Interestingly, while many argue the reverse (see UKCES, above), Ofsted situates lifelong learning within FE, exemplifying the difficulty that bodies find in identifying the sector unambiguously.

The issue of definition is just one example of the way the sector is subjected to change. It is true that the last twenty years in particular have been marked by “waves of change and turbulence” for Edward and Coffield (2007, p.123), and Minton (2005, p.334) argues that policy changes in LLL have brought transformations of a revolutionary, not evolutionary sort.

¹⁴⁴ “The further education and skills sector includes further education colleges, independent training providers, local authorities, the third sector, armed services, uniformed services, young offender institutions, the probation service and prison education.” (LSIS, 2013, p.3)

It is possible that some parts of the sector may “thrive” on such change (Parsons, Avis and Bathmaker, 2001), but another common professional response has been a turn to learning communities bounded by “formulaic, frequently prescribed learning routines” (Sugrue, 2004 in Sachs, 2007, p.10). This retreat has led to distortions in learning and lives as the former impinges on the latter. For example, confronted with “endless change”, college teachers feel under pressure from both internal and external management and monitoring, with retention and achievement being the key targets (TLRP, 2009, p.14). This may help explain why research on the demonstrable impact of teacher education is weak, contradictory and inconclusive (Smedley, in IfL, 2013, p.32). But for Stronach and Clark (2011, p.4) these changes can best be understood on a discursive level:

Similarly, in a metonymic extension of that faith, discourses such as education, health, medicine, and their associated methodologies became populated by all sorts of economic metaphors and assumptions – league tables, ‘added-value’, ‘delivery’, ‘output’, ‘knowledge economy’, ‘measurement science’ and so on.

Does the adoption of such terms represent a material change, or does it rather signal the continuity of a sector’s exclusive links with employability? Keep (2011, p.26) points out that of all the education and training agencies inherited by New Labour in 1997, all but two (Ofsted and HEFCE) had been abolished or replaced by 2010. But he also detects a “relatively unchanging, central story” which provides policy with continuity over time despite a loss of collective memory generated by “frenetic changes”.¹⁴⁵

The issue of change in LLL is therefore, at least in part, a discursive question of the ways in which stasis is considered unacceptable. This narrative has been expressed by powerful state organs which articulate a widespread belief that, in its current form (whatever that may be), the sector is unable to either recruit suitably effective staff or train them in a satisfactory manner. Indeed, the view that there has been much recent activity but insufficient change seems set to influence policy. The recent Lingfield interim report into teacher education provision (BIS, 2012b, p.14) for example categorically stated that the substantial reforms of

¹⁴⁵ A certain abstraction from the past may accompany the view that reactive managerialism is the only response available to learning organisations. This forgetting of the present’s necessary links with the past may well involve both a wider and deeper diagnosis than one of “collective amnesia”. For Pratt (2009, p.35-40), the incapacity of certain modes of educational management to learn even from their past successes can be understood in terms of a range of pathologies. Some learning organisations in HE, he argues, have contracted “congenital diseases”, “paranoia”, and “obesity”, and suffer more than the mere inability to learn from their mistakes.

the last decade have had “very little impact” on exactly those faults in FE teacher training delivery that were identified by Ofsted in 2003. The report also claimed that “[n]o sound, causal link can be made between regulatory enforcement of teaching qualification and CPD in the sector and improvements in practice” (BIS, 2012b, p.16), implying that more heat than light has been generated by recent attempts to change the sector. Continuity can also be detected in the way LLL has been consistently instrumentalised to meet fleeting political purposes. Just as the rhetoric of “the learning age” as a “new renaissance” (sic) for example sat well with the interventionist ambitions of New Labour (DFEE, p. 1988), the doubt cast on such measures by Lingfield can also be understood as a reflection of a similar political preoccupation with how best to regulate the sector.

A1.2 Time

To compound these issues of definition, attempts to define the sector in temporal terms raise further questions. LLL is often referred to as a “middle child”, doing everything that is not done by secondary and HE, but this is as unfortunate as it is inaccurate. Despite working on a deficit model of the sector which makes up for the failures of secondary and HE (BIS, 2012d, p. 17), attempts to identify LLL in temporal terms stumble because the “cradle to grave” sector cannot be defined by the age of its learners. Understood broadly, these range from 14-year-olds following vocational training, to 3rd even 4th age learners following U3A programmes. More specifically, this “vast” sector covers Further Education (FE) colleges; sixth form colleges; adult work-based and community learning organisations and learning opportunities for people aged “14 to 100” (Hillier and Thompson, 2005, p. 1). Schuller and Watson’s (2009, p. 3) top recommendation for the sector is a new segmentation of LLL into four stages: “up to 25, 25–50, 50–75, 75+”. This segmentation may increase coherence in the system and help from an administrative viewpoint, but it exemplifies the assumption that learners and learning can be organised in batches and annihilates difference not related to age.

This, it has been argued, is no more than a hangover from an inappropriate and outdated industrial model of education, of which learning is merely an offshoot (Robinson, 2010). I have criticised a discourse of immaturity for the sector as a whole and its tendency to infantilise practitioners and justify intervention. It is perhaps in response to this type of argument that calls have been made for LLL TEd qualifications (currently under review) to be recognised in secondary education, again trying to identify the sector from a temporal perspective. A number of features suggest that traditional boundaries between sectors are shifting: HE courses are frequently and increasingly delivered through FE (Further

Education) colleges,¹⁴⁶ as are traditional GCSE-type qualifications; qualifications and practices which take place in HE increasingly reflect those of the FE world: Higher Education's predominant role as a producer and consumer of knowledge is strong but increasingly fragile (Fisher and Webb, 2006, p. 339) Indeed, for Boxall, (2012), as learning and work become increasingly interdependent, distinctions between Higher and Further Education seem artificial and outdated. Boxall argues that, with FE colleges being designated private-sector institutions, the next legislative step would be to bring all post-compulsory education and learning under a single regulatory and funding system. Lingfield also foresees a need to develop towards a single "post-compulsory sector of education" where FE and HE could be "united" by a new Charter and Guild for FE (BIS, 2012d, p. 26).¹⁴⁷ LLL as event can perhaps only be understood as the cutting edge of a phenomenon in constant development.

A1.3 Speculation

The cutting edge of a link between LLL the demands of market economy have often been pointed out. For critics such as Tett (2002), Taylor (2007), Newman and Jahdi (2009) and Boxall (2012), the trend towards a market model of learning implies an impoverishment of the goal of lifelong education as part of a democratic system. Irresponsibility is a structural feature of industrial society and modernist logic (Adam, 2003, p. 59), and Coffield (2008) ridicules LLL's emulation of a business model discredited by so many recent cases of gross mismanagement and corruption. The criticism of such scandals is a common one (e.g. Parsons, Avis and Bathmaker, 2001), and is partly justified by research findings. Conolly et al (2007, p. 168) for instance found that teaching and management staff in FE needed little convincing of the benefits of collaboration with HE, but that they saw the advantages of such collaboration largely in the material terms of improved resources for teachers and enhanced legitimacy for managers rather than any genuine improvement for learners. Similarly, some

¹⁴⁶ Following the Dearing report (NCIHE, 1997) and its requirement for the expansion of HE, the White Paper *The Future of HE* (DfES, 2003) stressed a commitment to increase the participation of 18–30-year-olds in Higher Education (HE). Further Education (FE) was seen as a particularly important part of the necessary restructuring of the pattern of expansion demanded by this commitment (Harwood and Harwood, 2004, p.153). This has not so far prevented issues such as the continued mismatch of certain expectations, which clearly has an impact on learning in these new contexts (Murtaugh, 2010).

¹⁴⁷ The report has been welcomed by key sector organisations, including the Learning and Skills Improvement Service (LSIS) which stated: "[Lingfield's] recommendations incorporate two of LSIS's key priorities, which are to equip the sector to achieve outstanding teaching and learning, and to ensure the sector has excellent leadership, management and governance" (LSIS, 2012). Needless to say, LSIS is keen to assert that "as greater freedom is given to the sector, there will be a need for governance to be further improved" and that LSIS "drives this agenda forward within the sector" (Ibid).

see a decrease in thoughtful engagement with practice in some areas as a result of a culture of compliance (Thomas, 2009), suggesting that an alignment of LLL with employability and the workplace is incompatible with the development of healthy democracy. Many critics (e.g. Fraser et al, 2007; UCU 2012)¹⁴⁸ have underlined the narrowness of the sector's educational offer.

There is a new “grammar “ of training, curriculum and assessment in which practice is parsed into component parts and recombined into inflexible, linear syntax that allows only one route through bounded area of knowledge

(Maclure, 2006, p. 10-11)

The narrowness concerns a view of working life in which “the only value of human work is the exchange or use value identified in Marxist economics” (Hyland and Merrill, 2003, p. 167). Here, knowledge is commodified and translated into quantities of information (Fisher and Webb, 2006, p. 348) placing learning within the purview of financial speculation which replaces the exchange of actual physical commodities. While other parts of the sector (adult and community learning for example) may contest these views, funding arrangements certainly tend to homogenise the offer along certain lines, sometimes in perverse ways which fail to recognise economic need effectively (Wolf, 2011).

One result of this discourse of human capital has been a “new managerialism” which has occupied many commentators (e.g. Randle and Brady, 1997; McGrath, 2003; Briggs, 2005). A “fandango” of growing regulation (Lucas, 2004a), or the “quango tango” of ephemeral management bodies and organisations (Kingston, 2008), have contributed both to the sector's “promiscuity” and to a target-driven culture of governmentality whose taste for micro-management has, arguably, eclipsed its core business. This trend is often traced to the autonomy which accompanied the incorporation of FE colleges in 1993. Taking a longer view, however, it is possible to see its roots in the socio-political changes of the 1980s, if not actually earlier. Plowright and Barr (2012,p.4) for example argue that culture of marketisation and managerialism has infected the education sector to become “the dominant meta-narrative of government since the Thatcher years”. On this analysis an increasingly common

¹⁴⁸ For the University and College Union (UCU) there has been “an ideological shift towards a narrowly instrumentalist view of the purposes of education, focusing on education for employability and viewing learners as 'consumers'” (UCU, 2012). Fuller and Unwin also equate “narrowness” with “restrictive” learning environments (2004, p.130).

feature of much LLL provision is its adoption of the structures and practices of privately-funded organisations (trainers, employers, unions) in response to a political discourse of the “market for education” promoted by a range of policy documents (Newman and Jahdi, 2009).

We might debate Plowright and Barr’s genealogy – many others exist (e.g. Ranson, 1998; Lucas, 2004; Armitage et al 2012). But their point is really much broader, suggesting that the sector might at least partly be defined by an endemic problem which recent “changes” may reproduce. For example, do recent turns to deregulation represent a change of identity or continuity of the same goals by different methods?

A1.4 Space

Questions of purpose and links with capital are not the only issues for a sector which covers a “very diverse area of work” (Wilson, 2009, p. 414). What has been said so far about identity also applies to the spaces in which the sector operates and which often serve as defining tropes. The activity of lifelong learning is often described as a “journey” (Dawson, 2001; Harrison, 2003; Ward 2005), a metaphor which is often criticised on the grounds that LLL sector is not a road or path but an “ecology” (Hodgson and Spours, 2009) or terrain with “a huge biodiversity of perspectives and positions” (Edwards, 2010, p. 146). For Edwards, those who define the sector in precise terms fail to capture its essential complexity as “moorland” (Edwards, 1997). Our “non-traditional” learners just as frequently learn in the workplace or online as in colleges, although institutions have also made use of, for instance, secondary school spaces to deliver evening classes or building sites and care homes to deliver ESOL (English for Speakers of Other languages). These organico-spatial metaphors are significant because, although LLL is currently dominated by physically large public sector organisations (FE colleges, adult education providers, universities), this predominance may not be its most important feature. Biodiversity implies a dynamic multiplicity of connected phenomena whose territory and relations outlive the individuals which occupy them.

Treating LLL as an event draws our attention to these less conspicuous relations between objects and hence to the forms of learning which are developed in liminal spaces beyond traditional provision. It underlies the way in which movement is not necessarily a linear journey from one point to its neighbour, and can involve complex trajectories instead in a “folding” terrain. For example, Curtis and Pettigrew argue (2009, p. 133), the expansion of “informal” or “alternative” educational models (e.g. through the development of employers as awarding bodies and calls for deregulation in official discourse) recalls the contesting of institutionalised schooling from influential theorists such as Illich (1971; 1973). Amongst other things, Illich argued that learning should escape traditional settings and what he saw

as their embodiment of oppressive hidden curricula. As Curtis and Pettigrew argue, these views may well have influenced the rafts of New Labour policy¹⁴⁹ which raised the profile of the sector in the 1990s (Pykett, 2009). Pykett recognises this “echo” of the past in recent policy, but suggests that a profound contradiction lies in its inspiration from both emancipatory and conservative discourses of (adult) learning.

Manifestations of this trend range from the formal training provided by private sector organisations to tacit learning in the workplace (e.g. Field, 2006). But it also includes more informal and non-formal education (e.g. Taylor, 2010; Springgay, 2011), as well as “leisure” learning in various contexts (e.g. Sargant, 1996; Worpole, 1996) and of course the growth in online teaching and learning. The latter in particular offers the advantage of developing learning ecologies since they facilitate the development of collective forms of education. In principle, the democratisation of knowledge through online learning means that it primarily exists for the benefit of a group,¹⁵⁰ and online institutions for example are theoretically much more accessible to developing nations than their concrete counterparts can hope to be. The realism of such hopes is highly debatable, but an ecological trend, on this view, introduces the idea of learning as differential. In principle a differential system is capable of dynamically reproducing itself in new contexts, and it sees contestation such as Pykett’s as a constituent part of the open system of LLL, not an opposition to it.

This emergent aspect of LLL may well indicate its direction of travel as minor aspects of the sector impact on its dominant features: a spatial shift towards an ever-present “outside” of LLL seems in train. The last twenty years have undoubtedly seen a significant shift away from the assumption that learning is best designed and delivered by large centralised providers in LLL. The development of new spaces and techniques of social control no longer need traditional spaces to operate,¹⁵¹ and the dissolution of boundaries between sites such

¹⁴⁹ While it is of course striking and perhaps characteristic of “New Labour” that previously radical ideas were adopted during this period of active reform, it is also unclear that Illich’s ideas themselves (such as his autonomous “learning webs”), despite appearances, would genuinely provide radical educational change.

¹⁵⁰ See, for example, Rainbird et al (2004) for a series of arguments which links empirical evidence to the claim that learning, particularly in professional contexts, cannot be an individual phenomenon.

¹⁵¹ Exemplifying the extent of this shift, Malingre (2010) draws an explicit link between the development of antiterrorist legislation in the UK and a society of disclosure and surveillance. The understandable desire to legislate in order to protect the UK population from terrorism has led directly to less welcome consequences: the systematic use of espionage techniques such as the tracing of genetic fingerprints may be a necessary implication of the need for security, but the same powers, Malingre asserts, are being used to track down trivial offences in education. Examples of the

as education and work is an important phenomenon. In particular, it plays a key part in the discourse of a sector which prides itself on its economic usefulness and its training for employability. Disciplinary practices of normalisation can be associated with this move, and a disturbing sense of ubiquity appears alongside its penetration of so much social space. For Smith (2001), there is no doubt that “[l]ifelong learning is now a mechanism for exclusion and control” in direct contrast to the supposedly emancipatory discourse of specialism, qualification and professionalism.

This controlling role can be linked to the way LLL can be understood for what it does *not* do. A “double deficit” applies to the FE sector’s *ratio essendi*, which, some have argued, works on a deficit model in order to compensate for the perceived deficit of wider social problems (Jephcote and Salisbury, 2009), according to what Ecclestone (2002, p. 17) calls its “welfare” role. The difficulty here, Ecclestone asserts, is that positioning the sector as welfare makes it hard to be critical of it, effectively engineering consent in a moral or political programme with tenuous actual links to either economic or workplace reality. For Deleuze (1990/2003, p. 237), this has signalled a shift towards the deployment of professional training as a form of über-surveillance by normalisation on a bureaucratic model:

One can predict that education will become less and less a closed site differentiated from the workplace as another closed site, but that both will disappear and give way to frightful continual training, to continuous monitoring of worker-schoolkids or bureaucrat-students. They would have us believe that it is a reform of the school system, but it’s really its destruction.¹⁵²

The continuous monitoring of staff and its professionalism is an increasing facet of education management generally ¹⁵³ (Krejsler, 2007) and supports the view that it is the field of visibility which imbricates the act of surveillance with that of those of control, assessment and subjectification (Hier and Greenberg, 2009, pp. 23-25). On this view, the reforms which are

latter include circumnavigations of the rules around school catchment areas, or school absences due to spurious illnesses.

¹⁵² Translation modified

¹⁵³ To Krejsler’s examples of CVs and appraisal interviews, we might add professional development activities of various sorts and the extensive use of web technology to establish and maintain profiles and presence online. These become “data doubles” at the service of a system of surveillance (Haggerty and Ericson, 2000).

accepted as improvements are actually anti-educational developments which indicate a step change in the discourse of surveillance (Genosko and Bryx, 2005, p. 110). For critics such as Agamben (2007, p. 48), acts of anthropometric scrutiny are justified only by the assumption that individuals are potential terrorists, requiring that whole cities are transformed into the equivalent of prisons by hi-tech surveillance methods. However, rather than seeking to control individuals, these techniques embody the development of a sophisticated regime of mass control. Reforms act to guarantee the effectiveness of social sorting processes which go beyond the simple necessity to maintain structures of power or deliver a service. On this analysis, LLL's keen interest in the continuous assessment and categorisation of its participants might be understood as a telling example of a wider social issue. Here, continuous training becomes a "total institution" where the individual's extra-professional activity is absorbed by a professional role with few temporal or spatial boundaries (Deulceux and Hess, 2009, p. 14). Here, it is no longer spaces which enclose and constrain but practices and flows, especially of communication and data.

Examples in LLL can be identified in the regulation of literacy, where practices such as systematic testing and record-keeping aim to "purify" learners (Edwards, 2008) just as they "plan, record, control and influence" (Barton, 2007, p. 41) through what has been compared to a tournament of qualification rounds (Cook-Gumperz, 1995).¹⁵⁴ This may reflect what critical theorists have long identified as a key problem in formal education, namely that it is inseparable from a wider institutional system whose purpose is to foster and reinforce the belief that citizens' role in society is to accept their place within it as consumer and producer of consumables. This reinforcement works through a rhetoric of meritocracy, testing, tracking, and vocational training (Burbules and Berk, 1992), underlining the tendency of LLL to operate as a mechanism of surveillance.

This criticism is to a certain extent justified when the micro-practices of testing, streaming and categorisation in the sector are examined (Beighton, 2013). On one hand critics suggest that learning risks being eclipsed by an instrumental use of assessment (Torrance, 2007; Jones, 2010), arguing that the minutiae of assessment approaches are inspired and controlled by a desire to infantilise and thereby control the masses. Hence, Ecclestone

¹⁵⁴ Although of recent interest in LLL, the instrumental relations between literacy and power have been of long-standing interest; cf. Levi-Strauss (1955, p. 355), for whom the struggle against illiteracy is inseparable from the reinforcement of the control of citizens. For Spenceley, the VET curriculum is a "legacy of behaviourism" (2006, p.291), while Doll (2008) criticises the view that curricula should constitute a controlled, linear race from start to finish. Many continue to identify a culture of control in various forms in LLL (cf. Fox (1996), Hayes (1996), Armitage (1999), Coffield (1999), Lawson et al (2004), Tuomisto (2005), Hamilton (2009) and Nuffield (2009)).

(2011, p. 8) argues that learning may be reduced, as a result, to a training in a “hunting and gathering” of information to meet criteria (Ecclestone, 2011, p. 8). She echoes the critics above and suspects that practices in LLL reflect and reinforce a wider risk-averse culture of surveillance, anxiety and self-regulation of a “well managed dystopia of the brave new world” (Cilliers, 2005, p. 265). This has also been seen as infantilisation by political discourse (e.g. BIS, 2012d, p. 13) because it reduces learning to dependency and performance. If recent policy has been guilty of attempting to infantilise professionals, it is not hard to see why this might be a judicious choice from an electoral perspective, singling out the weak link in the British education system(s) to be alternately vilified and professionalised for purposes which themselves are often unclear.

A1.5 Purpose

Although this seems to position LLL as the handmaiden to a society of control, some would agree with Edwards (2011) that LLL, whatever we choose to call it, is simply a mess, albeit necessarily so. The LLL teacher workforce is indeed “wide and diverse” (Duckworth and Tummons, 2012, p. 4), and includes staff in FE colleges, 6th forms, adult and community learning, personal learning, community development, offender learning, and work-based learning.

For teacher educators, this is exemplified by the role of vocational programmes and training. Vocational training has always played a significant part in LLL, and many of its learners are indeed engaged in training courses with a direct focus on employment and employability skills (IfL 2012a; CAVTL, 2013). This vocational focus is noticeable in TE classes, where trainees’ professional backgrounds reflect the sector’s diversity.¹⁵⁵ But the sector also provides employability skills, including for those who, until recently, were rather unfortunately labelled “NEETs” (Not in Education, Employment or Training) as well as bachelor’s degrees and master’s level qualifications. As HE becomes a business for FE, boundaries between their respective goals are set to blur further, for example to facilitate competition and student choice. Teacher education compounds this mess by introducing further layers of “messiness” which result from “the complexity, unpredictability and difficulty in monitoring and management when teachers work and research together” (Adamson and Walker, 2001, p. 29).

¹⁵⁵ Many trainees are based in FE colleges in traditional and vocational areas (ICT, construction, service industries) but fire officers, care workers, police firearms officers, florists and animal care workers are just a few examples of the breadth of subject areas dealt with by Teacher Educators.

However, the view of LLL as a “passport to (social) mobility” can provide a link between the different strands above. Promoted by the G8 in 1999, mobility has remained one of the defining goals of the sector if, by mobility, we mean the ability to respond flexibly to shifting economic demands. It could be argued that this “mobility” has always characterised the sector, for example from the early references by the Ministry of Reconstruction to the necessity of continuous or permanent learning in 1919:

(A)dult education must not be regarded as a luxury for a few exceptional persons here and there, nor as a thing which concerns only a short span of early manhood, but that adult education is a permanent national necessity, an inseparable aspect of citizenship, and therefore should be both universal and lifelong.

(cited in Smith, 2001)

These criticisms introduce a discourse of professionalisation (see above) which might be seen as a key purpose for LLL. “Dual professionalism” of subject specialism and pedagogical skill is deemed crucial to practitioner identity (CAVTL, 2013; LSIS, 2013) and to their training needs. However, the criticisms of narrowness mentioned above clearly apply not just to the sector’s offer as a whole but also to the demands of a more flexible form of professionalism more in tune with the sector’s vocational mission. For some, these developments include a challenge to traditional approaches to professionalism and working patterns. New, multi-skilled learning professionals are defined by their commitment to the updating of transferable skills through CPD, building a workforce which is better suited to these “new diverse [FE] environments” (Wilson and Wilson, 2011, p. 467).

Such aspects however are necessarily linked to a longer-term evolution which they express in the event of LLL. Formal teacher education in LLL has been a growing feature of the sector, reaching new levels of importance with the introduction of mandatory teacher education and the creation of the IfL (Institute for Learning) in 2002. However, a discourse of opprobrium has accompanied this development, as we have seen, and the drive to professionalise the sector follows criticisms of teacher education provision (e.g. Ofsted, 2003; DFES, 2003; DFES, 2004). Here, the unsatisfactory foundations of professional development in FE were attacked, along with the lack of mentoring and support for trainees in the workplace and, in particular, specialisation (Fisher and Webb, 2006, p. 340). Ofsted (2003) identified inadequate initial assessment and its consequence, poor differentiation of training programmes as a key defect. As a consequence, Ofsted concluded, many trainees make “insufficient progress” and numerous reports, papers and declarations have followed

to increasingly regulate a sector deemed insufficiently professional. Experience suggests this alternation may continue for the foreseeable future, pushing teacher educators into questions of survival and morpholepsy (“change fatigue”) ahead of less obviously pragmatic issues such as creativity.

This approach continues to inform recent challenges to the effectiveness of the current arrangements for teacher education (DFES 2006c; Edge, 2009; BIS, 2012a; BIS 2012d). These challenges are increasingly stressed by policymakers, who remain keen to review teacher education provision (BIS, 2012a; BIS, 2012b). Although responses to this revision are mixed (e.g. IfL, 2012), government has expressed its desire to reduce the costs of what it calls “deadweight” training, i.e. which colleges would provide even if training were not mandatory (BIS; 2012c, p. 62). Significantly, this position has also informed attitudes to creativity. James and Ashcroft (1999, p. 2) for example argue that creativity exists not just to raise standards but also to rebuild confidence and rediscover autonomy, implying that inadequate standards, low confidence and a state of dependency were widespread among education professionals at the time of writing. Creativity, it would seem, is a way of restoring a lost ideal, but in the light of criticisms of the economic focus of LLL, it is at least possible that the goals such as higher standards, greater confidence and stronger autonomy are valued only insofar as they bolster a symbiotic discourse of economic competitiveness dependent on the denunciation of current practices.

Notwithstanding this, the influential Lingfield reports ¹⁵⁶ (BIS, 2012b & 2012d) are part of a shift in policy towards deregulation. Implementing their findings, LSIS (2013, p. 4) states that this change involves a move from a dependence on government regulation to a situation where “the sector is empowered to decide the best way to maintain and raise standards”. Taking up the economic argument, it is suggested that these changes come about partly as a result of poor investment and ineffective reform in the recent past. Among other recommendations, for example Lingfield asked that the sector’s professional body, the Institute for Learning (IfL), refund fees paid by members for the training they were until recently obliged to undertake by the organisation. This was justified on the grounds that it has failed to professionalise the sector:

Over the past decade, government has attempted to impose by statute a form of professionalism on the further education sector through the

¹⁵⁶ Published 27th March, 2012 and followed by the Final report in October 2012.

development of national occupational standards for teaching staff. As successive reports by Ofsted and academic research have shown, this endeavour has failed to achieve consistency in the diverse provision for acquiring vocational knowledge and skills

(BIS, 2012b, p. 2)

The professional body itself responded by declaring the necessity of its own role as guarantor of training. Such declarations are worth quoting at length because they exemplify the sector's idiom and rhetoric:

It is vital that young people have access to excellent vocational teaching, in schools as well as in further education settings, to help them prepare for good careers or create successful enterprises in an increasingly globalised and competitive economy. Teachers and trainers with the high-level professional status of QTLS will be able to teach flexibly across schools and colleges, and schools will be able to recruit specialists whose expertise and experience in their subject area is combined with expert teaching and a commitment to staying up to date through continuing professional development.

(IfL, 2012a)

It would seem that this training is "vital" (i.e. necessary) and must be both "excellent" and "vocational" (i.e. norm-referenced to existing work-based practices). It must prepare an unspecified group of "young people" from a beguilingly wide range of "settings", to either find "good careers" or "create successful enterprises", even though "an increasingly globalised and competitive economy" might seem to preclude the possibility of planning for either in the longer term. Despite (or because of) this apparently chronic instability, teachers and trainers will have "high-level professional status" and be able to "teach flexibly" across all of these settings as their professional status is recognised by employers in secondary and tertiary institutions. These "specialists" will be recruited according not just to their "expertise and experience" in both their subject and teaching but also to their "commitment" to "staying up to date" by doing continuing professional development (CPD). In policy circles, the sector is treated as a child which must grow up:

[W]e expect the FE and skills sector to demonstrate its maturity and capacity for increased autonomy, by taking greater responsibility for its

own performance and reputation, and by engaging with stakeholders about its plans and record on delivery.

(BIS, 2011, p. 18)

BIS's criticisms clearly support its own discourse of improved quality in education. However, it is possible to see the organisation as part of the regulation inherent in a wider form of identity politics at the heart of "neoliberalism". Identity politics, some argue, comes from the need to control chaos (Davies, 2009, pp. 627-629) and introduces a "newly individualised subject" in a field where rigid structures determine what is possible and desirable. Rather than produce change and creativity, this individualisation works to avoid risk, and seek the safety of predictability within the constraints of government (ibid).

For Fenwick (2008, p. 1), this individualised model of CPD relies on a set of problematic assumptions, namely that learning is an individual affair of acquiring new knowledge and skills; that participation in special CPD activities will produce it; that we can and should predetermine what knowledge a professional should learn; and that in these changing contexts the emergence of this knowledge can and should be regulated. Nonetheless, teachers who do not do so are at risk of moral sanction for incompetence and unprofessional conduct. This view is complicit with the discourse which describes the sector as the engine room of the economy (Leitch in DFES 2006a), and according to which its trainers should be the cutting edge of industrial progress (Skills Commission, 2010). A theory of events for LLL would imply that moral positions are effects, not causes, of the regimes in which we find them. On this view, a moral discourse is produced for LLL as an integral part of shifts to deregulation and decentralisation which demand a humanising argument to be accepted by an otherwise disruptive and unruly population. Recommended by Wolf and Lingfield, the changes are promoted on the grounds of enhanced quality and a better student experience, but are inseparable from to a continued desire for LLL to guarantee economic effectiveness and institutional accountability through increasingly detailed measurement of its own output.

This can seem dehumanising or even nihilistic, but the related development of a compulsive data-collection economy in education confirms the purpose of the sector as a cultivator and manager of data rather than of learning. Arguably a feature of a "society of the spectacle" where representations and simulacra have dislodged real experience as the stuff of everyday life, the collection of large amounts of data for the purposes of surveillance ("dataveillance" for Genosko and Bryx, 2005) is clearly a growing aspect of LLL. These

practices are at least congenial to the cultivation and subsequent farming of data facilitated by a burgeoning virtual world of easy data collection, storage and retrieval:

[T]his has led to a rapid growth in data production by various actors, further demands for data, and changing modes of gathering and translating information in a relentless process of “breeding” and integrating data

(Fenwick and Edwards, 2011, p. 718)

This view would tend to corroborate Deleuze’s observation, referred to above, that control increasingly depends on the manipulation of flows of information rather than the enclosure of material bodies behind concrete structures. While situating LLL purely in terms of its data or population-management role may be overstating the case, clearly questions about its exact purpose persist. But these questions must be seen alongside the other questions about identity and locus, pointing to a complex web of relations with its own dynamism.

Annexe 2: Positivistic approaches to research

Despite their simplifications, the distinctions between “positivistic” and “interpretivist” philosophical stances implied above can provide a methodological framework in which more nuanced approaches can be developed.

Usually associated with the “philosophie positive” of Auguste Comte (1798-1857), positivism is an influential but complex philosophical position (Kolakowski, 1993, p. 1). A basic tenet of positivism is that it does not distinguish between different “types” of knowledge. This is because all knowledge results from the same source (sense data) collected from the “observation of past events” (Crowther, 2005, p. 174).

Positivism also reflects the view that rational assertions can be proven logically by testing (Walliman, 2005, p. 16). It is grounded in Comte’s belief in progress and “the advancement of knowledge and wisdom” (Bassey, 1999, p. 38). Frequently linked to scientific methods of enquiry, it evokes notions of “hard science” (Newby, 2010, p. 34) and the pursuit of methodological objectivity (Hoy, 2010, p. 4). Accordingly, positivism does not claim to provide “depth”. It sees no difference between essence and phenomenon, and does not therefore claim to reveal metaphysical causes behind observed events (Kolakowski, 1993, p. 3).

This objectivity aims to remain “true” to data. Subjective interference and bias are therefore considered risks to be avoided. This has sometimes been taken to imply a very specific relation between observer and observed in the research process:

According to this school of thought, educational researchers should eliminate their biases, remain emotionally detached and uninvolved with the objects of study, and test or empirically justify their stated hypotheses

(Burke Johnson and Onwuegbuzie, 2004, p. 14)

The objectivity which follows this “elimination” of “bias” allows the validity of findings to be established by repeating the circumstances experimentally. A key claim of this cumulative approach is that it can build a “strong body of evidence” (LSRC, 2002 in Hillier and Thompson, 2005, p. 3). This can in turn be used to make predictions based on “creative, critical and innovative thinking” (ibid).

Obtaining enough detail to be able to do this means that research must understand the variables in question. In the case of positivism, this often implies the use of quantitative methods of data collection. These methods are defined as “empirical research where the

data are in the form of numbers” (Punch, 1998, p. 4) and can include observations, surveys, experiments and controlled trials. For Hoy (op.cit) such research is synonymous with scientific investigation which emphasises control and performance measurement. Echoing Taylor’s (2005) definition, its goal is to develop and test hypotheses in order to build models and theories which can explain behaviour. These explanations are “generalisable” in that they can be applied to other situations.

These assertions may only be true in principle, however. Korner (1955) argues that the kind of scientific research often linked to positivism has long recognised that its laws relate only to a small part of reality. If science is mechanistic, its mechanisms do not claim to apply beyond certain general traits. Yet, despite being general, these traits can justify a useful degree of predictability, in principle because they have been rigorously and repeatedly shown to yield the same results over time.

A2.1 Drawbacks

Despite the apparent usefulness of such a rational approach to enquiry, positivistic approaches have attracted many other criticisms. These range from the relatively benign (some claim that it has been misapplied or that its pretensions are unjustified) to the criticism that its motivation can seem questionable.

A2.2 Misapplication

The misapplication of positivistic approaches involves the use of methods which are frequently “imported” into other areas without question (Morgan and Drury, 2003). These methods may be valid in one area (e.g. health), but are not necessarily appropriate for another (e.g. LLL) it is claimed (Biesta, 2007). For this reason, positivistic approaches have sometimes been treated disparagingly or acrimoniously by critics in the field of social science (Hammersley, 1993) and education: St. Pierre (2008, p. 186) asserts that positivism has “marginalised subjugated knowledges”, doing “material harm at all levels of education”. This acrimony may be partly explained by the view that some “scientific” research has been accused of abusing its authority by falsifying evidence and promoting ethically unacceptable practices (cf. Gould, 1981; Willis, 2008, p. 4).

A2.3 Pretension

Apart from such questions of misapplication, influential critics have questioned some of positivism’s basic claims. For example, it is no longer possible, Ray argues (1991, p. 46) to depend on “some vast cosmic time-slice” which provides a plane of simultaneity for all

observers, and partial, subjective judgments seem, on this view, unavoidable. Perhaps the best known critic of such objectivism is Thomas Kuhn, (1970), who argues that the nature of scientific progress has been misconceived and that science's pretension to the status of arbiter of truth claims can be challenged. "Normal science" he claims "does not aim at novelties of fact or theory" (Kuhn, 1970, p. 52). Instead, the characteristics of "discovery" include:

the previous awareness of anomaly, the gradual and simultaneous emergence of both observational and conceptual recognition, and the consequent change of paradigm categories and procedures often accompanied by resistance

(Kuhn, op.cit, p. 62)

Kuhn believes that science concerns the shifts in these sets of rules ("paradigms") rather than the search for objective facts. The scientific researcher "knows what he (sic) wants to achieve, and he designs his instruments and directs his thoughts accordingly" (op.cit, p. 92). The "discovery" process takes time (op. cit, p. 55) but the problems which science solves are also bounded by the questions which it poses itself at a given moment (Newby, 2010, p. 37). On this view any research philosophy, including positivism, must recognise its own basic contingency in the tendency to "shift" along with its paradigm.

Kuhn's "paradigm shift" tries to explain therefore how theoretical statements can, by the deductive process, lead to new laws and new paradigms (Walliman, 2005, p. 112). Indeed, without commitment to such a paradigm "there could be no normal science" (Kuhn, op.cit, p. 100). Crucially, this process does not allow us to make qualitative statements about progress. Kuhn argues that the progress of science across paradigms is hard to establish because the findings under one paradigm are "incommensurable" with those of its predecessor. Indeed, it is implausible, on his analysis, that theories which succeed each other should remain compatible (op.cit, p. 92). This is because the new paradigms are so different to the old ones that their theories and findings cannot actually be compared with each other. New paradigms cannot be compared with the old ones and so cannot be considered "better" than them.

On this view, matters of scientific fact become matters of social, historical and political fact falsifiable by the next paradigm shift. They are part of a “map” of what can be achieved, and this map is subject to change. It is also a warning to researchers to recognise the difference between the activity of enquiry and the activity of paradigm building:

Through the theories they embody, paradigms prove to be constitutive of the research activity. They are also, however, constitutive of science in other respects, [and] our most recent examples show that paradigms provide scientists not only with a map but also with some of the directions essential for map-making

(Kuhn, *op.cit.*, p. 109)

One implication of this distinction is the unavoidably performative nature of research which Denzin and Lincoln (2011) recognise in qualitative approaches. Systematic enquiry and dissemination contribute both to the development of paradigms and their replacement.

A2.4 Validity

Kuhn’s ideas also challenge the view that a particular scientific theory can lay claim to greater validity than another. On the contrary, they can even be used to support the controversial view that validity itself is a problem. Vagle for example (2009, p. 586) argues that validity can only be grasped in a “fleeting” way and that it moves with our intentional relationship with research objects. Kvale (1996) has claimed that validity itself is based on “positivist assumptions” and that “the validity of the validity question” can be contested. For example Scheurich suggests that validity can be “imperial” in the way it colonises subjects by deciding what counts as acceptable (in Honan, 2007, p. 544). Hence validity cannot be addressed by technical solutions, for Mishler (1990) and can be ignored altogether for Maxwell (1992). Instead, issues such as the credibility, transparency and the methodical nature of the approach may take precedence (Morgan and Drury, 2003; Yin, 2011). On this view, validity seems less important in a field (education) whose basic concern is for diverse interpretations instead (Richardson and St Pierre, 2005).

This recognition of diversity suggests that what is believed to be true in one context may not be true elsewhere. It is sometimes referred to as the Duhem-Quine thesis. According to this “idea of auxiliary assumptions”, individual hypotheses can never be fully refuted because they cannot be tested in isolation from the various assumptions which make up their context.

A scientist, Duhem claimed, can only ever test a group of hypotheses and can never isolate a single phenomenon (Harding, 1976) because “[a]n a holistic network of beliefs and alternative explanations will continue to exist” (Burke Johnson and Onwuegbuzie, 2004, p. 15). Jorgenson, Joshi, and Monroe (1996 in Vrasidas, 2001) echo this view that quantitative approaches cannot account for complex interactive environments. On this view, these approaches ignore the fact that reality is produced by “complex and contingent causal mechanisms which may not be directly accessible to us” (Bhaskar, 2010, p. 37). Research situations are a complex “maze of interactions” which, it has been claimed, cannot actually be solved by the “naïve” assumptions of methodological positivism (Feyerabend, 1993, p. 9).

However, it may be that this overstates the case. Complexity *per se* does not rule out the possibility of a scientific analysis (cf. Byrne, 1998), especially as increasingly sophisticated technology becomes available to researchers. While the Duhem-Quine thesis may inform the belief that cultural analyses are necessarily incomplete (Geertz, 1993), it does not undermine the whole of post-Cartesian rationalism, as some have claimed (Harding, 1976, p. ix).

A2.5 Motivation

A further criticism of positivistic approaches regards the “naïve realism” of the assumption that the observer “sees” the world as it is (Cupchik, 2001). Even when used appropriately, positivism does not always recognise the fact that observers construct rather than reflect the world, it is argued (Farran, 1990).

For some, this raises questions about why such approaches should be so widely promoted. Positivistic approaches express a “narrow scientism” for Lather (2006, p. 47) and a powerful “chorus” for Crowther (2005, p. 174). They may seek “domination” of the education research world (Denzin and Lincoln, 2011, p.1), yet the false neutrality of such approaches demonstrates a lack of commitment to political or social influences at work in social contexts (Willis, 2008, p. 10; Newby, 2010, pp. 34-35). These approaches may even dehumanise the researcher (Walliman, 2005, p.16), and deny agency by treating humans as “dupes” or “puppets” (Cohen et al, 2007, p. 18).

These criticisms of positivistic philosophy therefore imply the need for an ethically-oriented alternative. A self-consciously critical and reflexive approach is demanded, which uses methods of collation and analysis which may be more concerned with diversity than validity and which supports a focus on ethics.

Annexe 3: Cognitive film theory

A “cognitive” view to film theory involves first and foremost a re-appraisal of the role of “theory” in film study. As such it provides a useful critique of the school-building which has characterised some responses to film. Indeed, for Bordwell (1990, p. 108) there is a need to avoid the “melodramatic clashes” of theory which characterise work from the 1970s and 1980s. The standards of “sound sociological reasons” should pertain (Carroll, 1996, p. 67), instead of those of “Grand Theory”, in particular psychoanalysis.

A3.1 Psychoanalysis

For some (e.g. Colon, 2007), psychoanalysis remains an indispensable tool in film theory, but cognitivism criticises the ideas of “master thinkers” heavily influenced by (Lacanian) psychoanalysis or approaches related to it. Freeland (1996, pp. 195-201) for example argues that referring to psychoanalytic theory as if it were a necessary corner stone or rite of passage for any sort of theoretical appraisal is not only highly questionable in itself, but it also introduces a raft of negative consequences. At a basic level, Freeland suggests, psychoanalysis *per se* lacks the sort of credibility – even in its own psychological field - to justify this elevation and is “far from achieving anything like general acceptance as a psychological theory” (Freeland, 1996, p. 195). Vociferous critics (e.g. Eysenck, 1953, p. 228) have found it unscientific, although its proponents have been quick to deflect the criticism. Lacan for example claims that, despite titles such as *The Science of Dreams*, Freudian psychoanalysis “hardly merits the name of science”, being more akin to the skill of a good chef (Lacan, 1975, p. 10).¹⁵⁷

More pointedly, however, critics have found psychoanalysis ineffectual except as a vehicle for preconceived notions. The implication from this point of view is not that as a theory it must be challenged, but rather that it struggles to constitute a theory at all. Some would go so far as to dismiss it entirely as confused and pernicious (e.g. Masson, 1993; Onfray, 2010), existing to bolster mechanisms of patriarchal or social control (Goodley, 2009, p. 259). More generously perhaps, for Ventzislavov (2011, p. 349), it seems clear that psychoanalysis fails to sufficiently explain or justify its determinism and “built-up normative charge”, a danger recognised by Kristeva (2002, p. 103). Accepting that his “naturalistic enquiry” finds parallels in Freud’s (Bordwell, 1990, p. 109), Bordwell criticises over-reliance on it, arguing for an alternative.

¹⁵⁷ Lacan adds (op.cit, p. 37) defines science as the search for objectivity, which, he claims, objectivizes and ignores the truth of a subject.

Bordwell's approach constitutes therefore an ambitious quasi-political gesture to "introduce new approaches to cinema" (Bordwell, 1996, p. xvii) which he is careful to distance from an overarching Theory. He argues that cognitivism is particular in eschewing allegorical references (Bordwell, 1990, p. 111) and indeed is keen to explore the "representational dimension of film narrative" (Bordwell, 1985, p. xii) rather than seeing the film as a closed text representative of nothing outside itself. The goal of this representational capacity is to identify and actually predict responses even to challenging cinema (Peterson, 1996, p. 118). However, if an analogous relationship pertains, Bordwell argues, between thought and (cinematic) perception, it does so to the extent that the former resembles the latter rather than the other way round (1990, p. 110). The theory, he suggests, should not be misconstrued as making reductive claims about perception and cognition per se.

A3.2 Intention

Noel Carroll (1996) holds a similar position to Bordwell's, and his view that monolithic conceptions of film theory need to be dismantled seems hard to contest. Moreover, Carroll makes the interesting argument that if a given film were to be plausibly shown to explicate a particular phenomenon, it would be the film's director, not the theorist who was doing the work (Carroll, 1996, p. 43). This implies that authorial intentions should take priority in analysis, and to justify this, Carroll argues that film theory should concern itself with conscious rather than unconscious responses to the largely formulaic properties of film. Hence, rather than interpretation, such an approach involves basic comprehension (Peterson, op.cit) and as such sees film as a vehicle for information. Consistent narrative frames deploy a limited number of technical devices, and schematically all film is the product the same cognitive tendencies.

Like Bordwell (1990), Carroll refuses to side-line emotional response to film, but goes on to define a position which affirms that many (emotive) reactions to film are best understood cognitively. Being startled, for example, is a reflex reaction to loud noises rather than a politically or ideologically conditioned response (Carroll, 1996, p. 50). He argues that his own approach is more technically or formally neutral than ideologically-oriented approaches such as film theory or criticism. "Theory" and "criticism", he argues, fail to grasp the difference between the *study* of film (Carroll's agenda) and its interpretation, implying that the latter involves severe misrecognition both of the film as object and of study as practice. For Carroll, such interpretation might as well be "skywriting" (Carroll, 1996, p. 44) because it has little to do with the actual film itself.

What is in question here is the fictional “intention” of the author, or what the author “intends” the audience to imagine (Gendler, 2011). Of course, identifying this “intention” demands moving beyond “semantic meaning”, defined by Currie as the meanings of words and phrases in a “common language” (Currie, 2006, pp. 92-93). Here, meaning (in film) depends not on convention but on its variations in context and cotext, neither of which, in principle, can truly be predicted. This is important to the issue of authorial intention because, for Currie, understanding intention implies that we assume the rationality and awareness of the speaker when we deduce their intention in uttering a given statement. Our “best hypothesis” about this intention, Currie claims, is what we take it to mean, and this rationality “is not an assumption to which we have any *alternative*” (2006, pp. 93-94). If we do not make this assumption, we have no way of choosing between many possible interpretations, it is argued. Reason exists to facilitate choice between contenders in a marketplace of competing ideas, and the choices that are made in this marketplace will be considered both rational and necessary rather than strange and contingent. Thus for Currie the crucial fictionalising activity of imagination is a cognitive move, rather than the result of a shock or disturbance (Mullarkey, 2007, p. 60).

These positions situate fictionality as a relational property which depends on its correspondence to an outside which is itself understood to be true or false (Currie, 1980, p. 4). Currie admits and explores the difficulties in this position – a traditional correspondence theory of truth:

Surely the reader of Sherlock Holmes is *supposed to understand* that “London” as it occurs in the stories refers to London. Someone who did not have the slightest idea what city London was, or who thought the location of the characters in the story was as fictional as the characters within it, *would not properly understand* the story

(Currie, 1980, p. 5, my emphasis)

This view of proper understanding reflects aesthetic choices based on a naturalism which evaluates fiction according to its ability to represent the real. Unlike the stuttering above (which requires an explicit engagement with a chaotic real which induces it) the cognitive aesthetic becomes evidence of a capacity to disengage from one’s present surroundings as author of representative fiction (Currie, 2005).

A3.3 Naturalism

This indicates a form of naturalism which is openly espoused by the cognitive approach: certain reactions to film are likely to be shared because they represent biologically innate ways of seeing the world. Bordwell, like Carroll, bases his own critical approach in this evolutionary perspective. Bordwell is careful to present a nuanced view of the empirical nature of his work (1990, p. 109), but on this view our evolved capacity to detect objects and perceive them in certain ways allows us to draw certain conclusions about the “poetics of film” as a predictive science:

If poetics is concerned with how filmmakers use the film medium to achieve effects on spectators, we ought to have some idea of how those effects might be registered

(Bordwell, 2008, p. 44)

On this view, “normal” sequences in film are believed to represent the state of a given culture, and result from historical development in the shape of narrative forms deemed to be “natural” in that culture (e.g. Bordwell, 1985; 1995). Similarly, for Carroll, the success of Hollywood can be explained by its appeal to “natural” cognitive structures: we act euphorically to certain narratives, and dysphorically to others (Carroll, 2006, p. 224). Not only, therefore, is film seen as a vehicle for the delivery of information, but it does so through recourse to the “innate biological capacity” of the viewer, particularly their attention (Choi, 2006, p. 149). Film is repetition of the biological given, linking experience to formal traits rather than their interpretation (Lefebvre, 2006, p. 51). This is possible because perception, for Bordwell, is “not terribly plastic” (2008, p. 47). If we have the innate capacity to follow the narrative of Jackie Chan films (Bordwell’s choice of example) this has less to do with the latter’s narrative properties and more to do with our own cognitive ones as products of evolution.

A3.4 Property

This form of biological naturalism has also been promoted, among others, by Gregory Currie’s semantic counterpart (1980; 1996) where the role of theory is to relate directly to the real whose “proper meanings” exist to be uncovered by those entitled to act as arbiters of what is and is not. On this view, the basic building-blocks and sequences of classical narrative are determined rather than conditioned: they are spatially and temporally closed, often in stylised ways, and cinema is an effective reflection of a certain cultural moment. Building blocks such as the impossible mission as a race against time with the ticking clock,

pressing deadline or threat of imminent catastrophe are familiar to audiences. Causal sequences are also just as highly codified and also imputable to authorial intention: we know what the director and the film want us to do. Accordingly, these features segment a given film and can and should be identified on the grounds that it can be better understood when it is reduced to its component parts.

This segmentation permits a further categorisation which is particularly helpful in understanding the relationship of cinema such as Antonioni's to more mainstream film. The similarity of response in the viewer, rather than whatever singular response they might have or indeed what might happen to that response itself, is privileged as a source of information about the film's representative capacity. Films which diverge from the classical formulae approved by audiences are considered authorial aberrations, and they remain for this reason within the basic paradigm. This allows us to situate a film according to how far it aberrantly either obeys or breaks these rules of segmentation. Consequently, on this view, a process of pragmatic dialectical argument is the necessary future, where film study undergoes trial by survival of the fittest. Discourse will weed out the weaker interpretations in favour of the stronger analyses of the real subject of film.

A3.5 Simplification

This position provides a convenient system of categorisation, but introduces several problems. Whether the arguments of cognitivists such as Carroll are as dismissive, ill-theorised or exaggerated as some critics suggest (e.g. Buckland, 2000, p. 147n27) is debatable. But the approach does seem at times to risk distorting complex problems and introducing contestable hierarchies. Peterson for example (1996, p. 117) argues that, even as a move up from "basic levels of comprehension" of the most apparent structures towards the "less evident" levels of interpretation, we still find systematic consistencies in responses. This is the case, it is argued, even of avant garde films, but the argument seems fragile when the film is understood as more than a vehicle for information. When the film operates beyond this as a performative vehicle for sensations (Boljkovac, 2011, p. 210) rather than a field for the rational working out of cognitive problems, a cognitivist approach risks reducing its complexity to a simple cypher.

A second issue arises from the use of data and the belief that a propensity to react in certain ways to certain narratives is the product of evolution rather than social convention. This seems reductive when applied to a complex social field, and indeed for Choi (2006), the view that innate preferences have dictated cinematic change certainly fails to explain the continued (but admittedly limited) popularity of aberrant forms of art cinema. The social

conditions of a film's availability, public access to it and indeed media reception play an important, even predominant, role in its popularity. Trends in cinema might actually be better explained by mass socio-economic changes such as those described by Ellis (2000) than (arguably rather basic) evolutionary ones. The cognitive approach therefore downplays the dynamic relation of so-called aberrant filmmakers with media more widely and risks situating film as a closed system incapable of change.

Thirdly, cognitivism's naturalism implies a determinism which is at best questionable. Montage, for example, does not have to be understood as the product of innate narrative, and can just as easily generate it in original ways: "[n]arrativity flows from a certain way of deploying images", not the other way round (Marrati, 2007, p. 98). The power of thought does not depend on such an internal content.¹⁵⁸ The authorial intentions of a director like Antonioni sometimes only become clear in retrospect (Cameron, 1962, p. 2), and it is limiting to suggest that a film's meaning(s) can be bounded by them. Moreover, as Cavell argues (1980, p. 31), the aesthetic possibilities of a medium are not givens and the system in question is essentially open rather than closed. While it is clear that thinkers are routinely (and, often, abusively) reduced to their concepts, it is not obvious that the film as object can be reduced to its director. Cinema may be most interesting when it levels the relation between ourselves and the world:

First, movie performers cannot project, but are projected. Second, photographs are of their world, in which human beings are not ontologically favoured over the rest of nature, in which objects are not props but natural allies (or enemies) of the human character

(Cavell, 1980, p. 37)

Rather than a fixed or even reductive view of cognitive reaction to film, this levelling raises the possibility that people and world are bodies which are genuinely and creatively changed by an encounter at the level of a common materiality. This has implications for emergent forms of pedagogical and ethical practice examined in the main part of my thesis.

¹⁵⁸ Some research (Ramsden et al, 2011) into (teenage) IQ clearly suggests that cerebral plasticity is greater than previously thought from the point of view both of cognitive and material functioning. And yet while this is important, the issue may lie elsewhere: although cognitive function is undeniably related to neurological structure, it cannot be reduced to it in straightforward ways (Brassier, 2007b, p.10-14). This is perhaps why we need a more refined model of cognitive functioning than the commonly-vehicled "folk psychological" notions of intention, desire and agency to explain things such as creativity.

Bibliography

1. Texts by Deleuze

Deleuze, G. (1953) *Empirisme et Subjectivité: essai sur la nature humaine selon Hume*, Paris: PUF / (1991) *Empiricism and Subjectivity*, trans. Constantin Boundas, New York: Columbia University Press.

Deleuze, G. (1962) *Nietzsche et la Philosophie*. 5th ed., Paris: PUF/ (1983) *Nietzsche and Philosophy*. Trans. H. Tomlinson, London: Althone Press.

Deleuze, G. (1963/2004) *La Philosophie Critique de Kant*, Paris: PUF / (1983). *Kant's Critical Philosophy*, trans. H. Tomlinson and B. Habberjam, Althone Press: London.

Deleuze, G. (1964/2007) *Proust et les Signes*, Paris: PUF/ (1972) *Proust and Signs*, trans. R. Howard, New York: George Braziller.

Deleuze, G. (1965) *Nietzsche*, Paris: PUF

Deleuze, G. (1966) *Le Bergsonisme*, Paris: PUF. / (1998) *Bergsonism*, trans. H. Tomlinson and B. Habberjam, New York: Zone Books.

Deleuze, G. (1967/2007) *Présentation de Sacher Masoch: Le Froid et le Cruel*, Paris: Minuit / (1989) *"Coldness and Cruelty" in Masochism*, trans. C. Stivale, New York: Zone Books.

Deleuze, G. (1968a) *Différence et Répétition*. PUF/ (2004a). *Difference and Repetition*. trans. P. Patton, London: Continuum.

Deleuze, G. (1968b) *Spinoza et le Problème de l'Expression*, Paris: Minuit.

Deleuze, G. (1969) *Logique du Sens*, Paris: Minuit./ (2004b). *The Logic of Sense*, trans M. Lester and Ch. Stivale, London: Continuum.

Deleuze, G. (1971) *Spinoza: Philosophie pratique*, Paris: PUF / (1988a) *Spinoza: Practical Philosophy*, San Francisco: City Lights.

Deleuze, G. (1978) *Lecture transcripts on Spinoza's Concept of Affect, Cours Vincennes 24.1.1978* © Emilie and Julien Deleuze. Available online at webdeleuze.com Last accessed 13.11.11.

Deleuze, G. (1980a) Leibniz, Cours Vincennes - 15/04/1980 – accessed online at <http://www.webdeleuze.com/php/texte.php?cle=48&groupe=Leibniz&langue=1> Last accessed: 30.11.11.

Deleuze, G. (1980b) *Des vitesses de la pensée* - 02.12.80 . Available online at http://www2.univ-paris8.fr/deleuze/article.php3?id_article=131 Last accessed 17.12.12.

Deleuze, G. (1980c) Ontologie-Ethique – cours à Vincennes 21.12.1980 . Available online at <http://www.webdeleuze.com/php/texte.php?cle=26&groupe=Spinoza&langue=1> Last accessed 29.04.13

Deleuze, G. (1981b/2004c). *Francis Bacon: Logique de la Sensation*, Paris: Éditions de la Différence./ (2004c) *Francis Bacon: Logic of Sensation*, trans. D. Smith, London: Continuum

Deleuze, G. (1983). *Cinema 1: L'Image-Mouvement*, Paris: Minuit / (2005a) *Cinema 1: The Movement Image*, Trans. H. Tomlinson and B. Habberjam, London: Continuum.

Deleuze, G. (1984) *Gilles Deleuze - vérité et temps cours 64 du 29/05/1984*, available online at http://www2.univ-paris8.fr/deleuze/article.php3?id_article=355 last accessed 17.10.13

Deleuze, G. (1985). *Cinema 2: L'Image-Temps*, Paris: Minuit. / (2005b). *Cinema 2: The Time Image*, trans. H. Tomlinson and B. Habberjam, London: Continuum.

Deleuze, G. (1986/2004). *Foucault*, Paris: Minuit. / (1986a). *Foucault*, trans. S. Hand, London: Continuum.

Deleuze, G. (1988b) *Le Pli: Leibniz et le Baroque*, Paris: Minuit. / (1993) *The Fold: Leibniz and the Baroque*, trans. T. Conley, London: Continuum

Deleuze, G. (1990/2003) *Pourparlers 1972-1990*, Paris:Minuit. /. (1995) *Negotiations*, trans M. Joughin, New York: Columbia University Press.

Deleuze, G (1993) *Critique et Clinique*. Paris: Minuit/ *Essays Critical and Clinical* trans. D. Smith and M. A. Greco (1997), Minneapolis: University of Minnesota Press.

Deleuze, G. (1996) *Postface* in Tournier, M. (1996) *Vendredi ou les Limbes du Pacifique*, Paris, Gallimard.

Deleuze, G. (2001) *Pure Immanence: Essays on a Life*, trans. A. Boyman, New York: Zone Books.

Deleuze, G. (2002a) *L'Île Déserte: Textes et Entretiens 1953-1974*, ed. David Lapoujade, Paris: Minuit. / Deleuze, G. (2004d) *Desert Islands and Other Texts, 1953-1974*. Trans. M. Taormina. New York: Semiotext(e).

Deleuze, G. (2003). *Deux Régimes de Fous: Textes et Entretiens 1975-1995*. ed. David Lapoujade, Paris: Minuit.

Deleuze, G. (2004e) *L'Abécédaire de Gilles Deleuze*, Paris: Editions Montparnasse.

2. Texts by Deleuze and Guattari

Deleuze, G. & Guattari, F. (1975) *Kafka: Pour une Littérature Mineure*, Paris: Minuit./ (1986). *Kafka: Towards a Minor Literature*, trans. D. Polan. Minnesota: University of Minnesota Press.

Deleuze, G. & Guattari, F. (1972) *L'Anti-OEdipe*, Paris: Editions de Minuit, / (2004a). *Anti Oedipus*, trans. R.Hurley, M.Seem, H.R.Lane, London: Continuum.

Deleuze, G. & Guattari, F. (2004b). *A Thousand Plateaus*, trans. B. Massumi, London:Continuum.

Deleuze, G. and Guattari, F. (1991). *Qu'est-ce que la Philosophie?* Paris: Minuit. / (1994). *What is Philosophy?* trans. H. Tomlinson and G. Burchell, New York: Verso.

3. Other collaborations

Deleuze, G. and Bene, C. (1979) *Superpositions*, Paris: Minuit,

Deleuze, G. & Parnet, C. (1996) *Dialogues*, Paris: Flammarion (expanded ed.) / (1987) *Dialogues*, trans. H. Tomlinson and B. Habberjam (Minneapolis: Minnesota University Press.

Deleuze, G. and Foucault, M. (2002) « Les intellectuels et le pouvoir » in Deleuze, G. (2002) *L'Île Déserte: textes et entretiens 1953-1974*, Paris: Minuit, pp. 288-298.

4. General bibliographic references

A

Abbs, P. (2003) *Against the Flow: Education, the arts and postmodern culture*, London: RoutledgeFalmer.

Adair, N. (2006) *Tell me your life story: the freedom to speak, the fear to say*, part of *The significance of agency in lifelong learning* Biesta, G.J.J.; Adair, N.; Field, J; Malcolm, I; Tedder, M., Symposium presented at the 36th Annual SCUTREA Conference, 4-6 July 2006, Trinity and All Saints College, Leeds.

Adam, B. (2003) "Reflexive Modernisation Temporalised" in *Theory, culture and Society*, Vol.20 920, pp. 59-78.

Adam, B. (2006) "Time" in *Theory, Culture Society*, Vol. 23 92-3, pp.119-138.

Adamson, B. and Walker, E. (2011) "Messy collaboration: Learning from a Learning Study" in *Teaching and Teacher Education*, 27 (2011), pp. 29-36

Adkins, B. (2012) "Deleuze and Badiou on the Nature of Events" in *Philosophy Compass* 7/8 (2012), pp. 507–516.

Adorno, T.W. (1970/2004) *Aesthetic Theory*, trans. R, Hullot -Kentor, London: Continuum.

Adorno, T.W. (1981/1991) *The Culture Industry*, London: Routledge.

Agamben, G. (2007) *Qu'est-ce qu'un dispositif?* Paris: Payot Rivages.

Albrecht-Crane, C. and Daryl-Slack, J. (2007) "Towards a Pedagogy of affect" in Hicky-Moody, A. and Malins, P. *Deleuzian Encounters*, Basingstoke: Palgrave Macmillan, pp. 99-110.

Alhadeff-Jones, M. (2008) "Three Generations of Complexity Theorists" in *Educational Philosophy and Theory*, pp. 66–82.

Alheit, P. (2005) "Challenges of the Postmodern Learning Society: A critical Approach" in Bron, A.; Kurantowicz, E; Olesen H; West, L. (eds) *"Old" and "New" worlds of Adult learning*. Wroclaw, Wydawnictwo Naukowe, pp. 389-407.

Alheit, P. and Dausien, B. (2002) "Lifelong learning and "biographicity" – Two theoretical views on current educational change" in Bron, A. and Schemmann, M. (eds) *Social science theories in Adult Education research*, BSIAE, Munich: LIT, pp. 211 – 241.

Alheit, P. and Dausien, B. (2007) 'Lifelong Learning and biography: A Competitive Dynamic between the Macro and the Micro level of education", in West, L., Alheit, P.; Andersen, A.S., and Merrill, B. (2007) *Using biographical and life history approaches in the study of adult and lifelong learning*. Frankfurt am Main: Peter Lang, pp. 57-70.

Allen, M. and Ainley, P. (2007) *Education make you fick innit: What's Gone Wrong with England's Schools, Colleges and Universities and How to Start Putting It Right*, 2nd ed., London: Tufnell

Alliez, Eric. (1996) *Deleuze: philosophie virtuelle*. Paris: Synthélabo.

Althusser, L. (2000) "Ideology interpellates individuals as subjects" in Du Gay, P., Evans, J., and Redman, P. (eds) *Identity: A Reader*, London: Sage, pp. 31-38.

Ambrose, D. (2006) "Deleuze, philosophy, and the materiality of painting" in *Symposium: Canadian Journal of Continental Philosophy*, 10 (1), pp.191-211.

Ambrose, D. (2007) "Gilles Deleuze" in Costello & Vickery (eds) *Art: Key Contemporary Thinkers*, Berg.

Amorim, A.C. and Ryan, C. (2005) "Deleuze, Action Research and Rhizomatic Growth" in *Educational Action Research*, Volume 13, Number 4, 2005, pp. 581-92.

Ansell Pearson, K. (ed.) (1997a) *Deleuze and philosophy: the difference engineer*, London and New York: Routledge.

Ansell-Pearson, K. (1997b) "Deleuze Outside/Outside Deleuze", in: K. Ansell-Pearson (ed.), *Deleuze and Philosophy: The Difference Engineer*, London: Routledge, pp. 1-22.

Ansell-Pearson, K. (1999) *Germinal Life: the Difference and Repetition of Deleuze*, London: Routledge.

Ansell Pearson, K. (2004) "Nietzsche's philosophy" in *Pli, The Warwick Journal of philosophy: Lives of the real: Bergsonian perspectives*, vol 15, pp. 233-250.

Ansell Pearson, K. (2007) "Beyond the Human Condition: An Introduction to Deleuze's Lecture Course" in *SubStance* #114, Vol. 36, no. 3, 2007, pp1-15

Antonioni, M. (1999) *Deleuze et l'histoire de la philosophie*, Paris: Kimé.

Antonioni, M. (1958) « Colloquio con Michelangelo Antonioni » from *Blanco e nero*, June 1958. Available online at <http://home.comcast.net/~rogerdeforest/antonioni/int05.html>. Last accessed 16.09.12.

Antonioni, M. (1960a) *Interview* in *Cahiers du Cinema*, Oct, 1960. Available online at http://www.industrycentral.net/director_interviews/MA01.HTM. Last accessed 17.09.12.

Antonioni, M. (1960b) « Un extrait du texte de présentation du film lors du festival de Cannes: Pourquoi j'ai fait, L'Avventura ». Available online at http://www2.cndp.fr/TICE/teledoc/dossiers/dossier_avventura. Last accessed 10.10.12.

Antonioni, M. (1962) "Interview" in *Film Culture*, Spring 1962. Available online at <http://home.comcast.net/~rogerdeforest/antonioni/int07.html>. Last accessed 16.09.12.

Antonioni, M. (1969a) Interview with R. Ebert, June 19, 1969. Available online at <http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19690619/PEOPLE/906190301>. Last accessed 17.09.12.

Antonioni, M. (1969b) Interview with C. Samuels in Rome, 1969. Available online at http://zakka.dk/euroscreenwriters/interviews/michelangelo_antonioni_02.htm Last accessed 18.09.12.

Antonioni, M. (1972) *Interview with J-L. Godard* in Bazin, A. (1972) *La Politique des auteurs*, Paris: Champ Libre, pp. 320-331.

Antonioni, M. (2003) *Ecrits; Fare un Film e per me Vivere*, Paris: Editions Images Modernes.

Apple, M. (2004) *Ideology and Curriculum*, London: RoutledgeFalmer.

Apra, A. (2000) "Rossellini's Historical Encyclopaedia" in Forgacs, D.; Lutton, S; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.126-148.

Archer, M.S (1982) "Morphogenesis versus Structuration: On Combining Structure and Action" in *The British Journal of Sociology* Vol. 33, No. 4 (Dec., 1982), pp. 455-483.

Argyris, C. (1994) *On organisational Learning*, London: Blackwell.

Armitage, A. (1996) "Brave new Millennium" in Hayes, D. (ed.) *Debating education - Issues for the New Millennium?* Dept. of Education, Canterbury Christ Church College, pp. 181-184.

Armitage, A.; Bryant, R.; Dunnill, R.; Renwick, M.; Hayes, D.; Hudson, A.; Kent, J.; Lawes, S.; (2003) *Teaching and Training in Post Compulsory Education*. (2nd ed.), Maidenhead: Open University Press.

Armitage, A.; Evershed, J; Hayes, D.; Hudson, A. ; Kent, J.; Lawes, S.; Poma, S.; Renwick, M. (2012) *Teaching and Training in Lifelong Learning*. (4th ed.), Maidenhead: Open University Press.

Arrowsmith, W. (1995) *The Poet of Images*, New York: Oxford University Press.

Arsic, B. (2005) "Thinking leaving" in Buchanan, I. & Lambert, G. (eds) (2005) *Deleuze and Space*, Edinburgh: Edinburgh University Press, pp. 126-143.

Arthur, J.; Waring, M.; Coe, R. and Hedges, V. L. (2012) *Research methods and methodologies in Education*, London: Sage

Ashcroft, K. (1999) "Enquiry and the creative professional" in Ashcroft, K. and James, D. (eds) (1999) *The Creative Professional: Learning to teach 14-19 year olds*, London: Falmer, pp. 176-195.

Aspin, D. (2009) "Introduction to a 'Round-Table Review' of Gavin Kitching's *The Trouble with Theory*" in *Educational Philosophy and Theory*, Volume 41, Number 3, June 2009, pp. 233-240.

Avis, J. (2002) "Really useful knowledge? Evidence-informed practice, research for the real world" in *Post 16 Educator* (8), pp. 22-24.

Avis, J.; Fisher, R; Thompson, R. (2010) *Teaching in Lifelong Learning*, Maidenhead: Open University press.

Avis, J.; Canning, R.; Fisher, R.; Morgan-Klein, B. and Simmons, R. (2012) "State intervention and teacher education for vocational educators in England and Scotland" in *Educational Research*, 54 (2), pp.187-197.

B

Badiou, A. (1993) *L'Ethique: Essai sur la conscience du mal*, Paris: Nous.

- Badiou, A. (1997) *Deleuze: La Clameur de l'Être*, Paris: Hachette.
- Badiou, A. (2007) "The Event in Deleuze" in *Parrhesia*, No.2. trans. J. Roffe, pp. 37-44.
- Badiou, A. (2010) "L'Hypothèse Communiste" in *Le Monde*, 14-15 February, p15.
- Bailey, J. and Browne, L. (2009) "The role of Middle Managers in the enhancement of staff professionalism for the Further Education System" in *Teaching in Lifelong learning: A Journal to Inform and Improve practice*, 1 (2), pp. 54-63.
- Ball, S. (2003) "The teacher's soul and terrors of performativity", in *Journal of Education Policy*, 18 (2), pp. 215-228.
- Ball, S. (2008) *The Education Debate*. (2nd ed). Bristol: The Policy Press.
- Banaji, S.; Burn, A; and Buckingham, D; (2006) *The Rhetorics of Creativity: a review of the literature- A report for Creative Partnerships*, Centre for the Study of Children, Youth and Media, Institute of Education, University of London.
- Barton, D. (2007) *Literacy: An Introduction to the Ecology of Written Language*. (2nd ed.), Oxford: Blackwell Publishing.
- Bassey, M. (1999) *Case Study research in Educational Settings*, Milton Keynes: OUP.
- Batey, M.; Furnham, A. and Safiullina, X. (2010) "Intelligence, general knowledge and personality as predictors of creativity" in *Learning and Individual Differences*, 20 (5), October 2010, pp.532-535.
- Bathmaker, A-M. and Avis, J. (2005) "Becoming a lecturer in further education in England: the construction of professional identity and the role of communities of practice" in *Journal of Education and Teaching*, Vol. 31.issue.1, pp.47-62.
- Bathmaker, A-M. (2006) "Alternative futures: professional identity formation in English Further Education" in Satterthwaite, J., Martin, W., and Roberts, L. (eds) (2006) *Discourse, resistance and identity formation*, Stoke on Trent: Trentham books, pp.127-142.
- Bauman, Z. (2003) "Educational Challenges of the Liquid-Modern Era" in *Diogenes* vol. 50 no. 1, pp. 15-26.
- Bauman, Z. (2004) *Identity: Conversations with Benedetto Vecchi*, Cambridge: Polity Press.
- Bauman, Z. (2007) *Consuming Life*, Cambridge, Polity Press

Bayliss, P. (2009) "Against Interpretosis: Deleuze, Disability, and Difference" in *Journal of Literary & Cultural Disability Studies*, Volume 3, Number 3, 2009, pp. 281-294.

Bazin, A. (2002) *Qu'est-ce que le Cinéma?*, Paris: Cerf.

Beaulieu, A. (2005) *Gilles Deleuze, L'Héritage Philosophique*, Paris: PUF.

Beaulieu, A. (2011) "The Status of Animality in Deleuze's Thought" in *Journal for Critical Animal Studies*, Volume IX, Issue 1/2, 2011, pp.69-88.

Beaulieu, J. (2002) « De l'image-temps chez Duras, Resnais et Robbe-Grillet » in *Cadrage.net*. Available online at <http://www.cadrage.net/dossier/imagetemps/image-temps.html> . Last accessed 15.08.12

Beighton, C. (2010) *A Review of Hughes, Joe (2008) Deleuze and the Genesis of Representation*, New York: Continuum, in *Deleuze Studies* 4 (2010), pp. 437–450

Beighton, C. (2011) « Qu'en est –il de la subversion en 2011 ? Que faire d'un(e) air(e) du temps? » . Available online at <http://www.t-pas-net.com/libr-critique/?p=3887#respond> Last accessed 03.10.13.

Beighton, C. (2012a) "Review of Gilles Deleuze, Félix Guattari - Biographie Croisée by F. Dosse" in *Pli, Warwick Journal of Philosophy, Special Volume. Deleuze and Simondon* (2012)

Beighton, C. (2012b) "Assessing the mess: assemblage theory and professional practice in education" in *Journal of Qualitative studies in Education*, pp.1-16

Beighton, C. (2013) "Beyond the panopticon: changing gazes in ESOL" in *Language Issues*, winter 2013, pp. 19-31.

Beighton, C. and Poma, S. (2013) *Professionalism inside-out: Expanding the interface between Professionalism and Learning*. Conference paper published online 19th June 2013 <http://www.leeds.ac.uk/medicine/meu/events/cppl/Beighton.pdf>. Last accessed 17.09.2013.

Bell, J. (2001) *Doing your research project: A guide for First time researchers in education and social welfare*. 3rd ed., Buckingham: OUP.

Bell, J. (2003). "Between Individualism and Socialism: Deleuze's Micropolitics of Desire." Association for Political Theory Inaugural Conference. Calvin College, Grand Rapids. 17

Oct. 2003. Paper. Available online at <http://www2.selu.edu/Academics/Faculty/jbell/micropolitics.pdf>. Last accessed 31.08.12.

Bell, J. (2011) "Between realism and Anti-realism: Deleuze and the Spinozist tradition in Philosophy" in *Deleuze Studies*, vol.5 no.1, pp.1-17.

Benade, L. (2012) "Challenging the Domestication of Critical Reflection and Practitioner Reflectivity" in *Educational Philosophy and Theory*, Vol. 44, No. 4, 2012, pp. 337-342.

Bergen-Aurand, B. (2004) "Seeing and the seen": Post-phenomenological Ethics and the cinema" Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, US. Available online at <http://drum.lib.umd.edu/handle/1903/1950>. Last accessed 11.09.2013.

Bergson, H. (1939/2010) *Matière et mémoire : essai sur la relation du corps a l'Esprit*, Paris: PUF.

Bergson, H. (1907/2013) *L'Evolution créatrice*, Paris: PUF.

Bernardi, S. (2000) "Rossellini's Landscapes: Nature, Myth, History" in Forgacs, D.; Lutton, S; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.50-63.

Berry, R.S.Y. (1999) "Collecting data by in-depth interviewing", paper presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2 - 5 1999 . Available online at <http://www.leeds.ac.uk/educol/documents/000001172.htm> . Last accessed 27.06.12.

Bhaskar, R. (2010) *Plato etc.: the problems of philosophy and their Resolution*, London: Routledge.

Biesta, G.J.J (2001) "Preparing for the incalculable - Deconstruction, justice and the question of education", in Biesta, G.J.J and Egea – Kuehne, D. (eds) *Derrida and Education*: London and New York: Routledge Falmer, pp.32-54.

Biesta, G.J.J. (2007) "Why What works won't work", in *Educational Theory*, 57,no.1 (2007), pp.1-22.

Biesta G.J.J. (2010) "Why 'What Works' Still Won't Work: From Evidence-Based Education to Value-Based Education", *Studies in Philosophy and Education*, 29 (5), pp. 491-503.

Biesta, G.J.J. and Burbules, N.C. (2003) *Pragmatism and Educational research Education*, Mayland: Rowman and Littlefield.

Biesta, G.J.J. and Egea – Kuehne, D. (eds) (2001) *Derrida and Education*, London and New York: Routledge Falmer.

Biesta, G; Lawy, R. (2006) “From Teaching Citizenship to Learning Democracy: Overcoming Individualism in Research, Policy and Practice” in *Cambridge Journal of Education*, Vol. 36 no1, pp. 63-79.

Billett, S. (2004) “Learning through work: workplace participatory practices” in Rainbird, H ; Fuller, A. and Munro, A. (eds) *Workplace learning in Context*, London: Routledge, pp. 109-125.

Bingham, C. and Biesta, G.J.J. with Rancière, J. (2010) *Education, Truth, Emancipation*, London: Continuum International.

BIS (2011) *New Challenges, New Chances: Further Education and Skills System Reform Plan: Building a World Class Skills System*, <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/f/11-1380-further-education-skills-system-reform-plan.pdf>

BIS (2012a) *Further education and skills*. Available online at <http://www.bis.gov.uk/policies/further-education-skills>. Last accessed 30.02.12.

BIS (2012b) *Professionalism in Further Education - Interim Report of the Independent Review Panel* Available online at <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/p/12-670-professionalism-in-further-education-interim.pdf> Last accessed 30.03.2012 . Last accessed 28.10.12.

BIS (2012c) “BIS Research Paper Number 66, Evaluation of FE Teachers' Qualifications (England) Regulations 2007”. Available online at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32302/12-693-evaluation-fe-teachers-qualifications-regulations.pdf. Last accessed 30.07.12.

BIS (2012d) *Professionalism in Further Education - Final Report of the Independent Review Panel*. Available online at <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/p/12-1198-professionalism-in-further-education-final> . Last accessed 28.10.12.

BIS (2012e) *Continuous Improvement Strategy* . Available online at <https://www.gov.uk/government/publications/bis-continuous-improvement-strategy>. Last accessed 01.05.13.

Black, P.; Harrison, C.; Lee, C.; Marshall, B. and Wiliam, D. (2003) *Assessment for learning: Putting it into practice*, Oxford; OUP.

Blaikie, N. (2010) *Designing Social Research*, Cambridge: Polity.

Bleakley, A. (2004) “Your creativity or mine?’ A typology of creativities in higher education and the value of a pluralistic approach” in *Teaching in Higher Education*, 9(4), pp. 463-475.

Bogue, R. (2001) “Difference and Repetition in Deleuze’s Proustian Sign and Time Machine” in *Concentric: Studies in English Literature and Linguistic* 27.1 (January 2001), pp. 1-28.

Bogue, R. (2003) *Deleuze on Cinema*, London: Routledge.

Bogue, R. (2004) “Search, Swim and see: Deleuze’s apprenticeship in signs and pedagogy of images”, in: Semetsky, I. (ed.), *Educational Philosophy and Theory*, special issue *Deleuze and Education*, 36:3, pp. 327-342.

Bogue, R. (2011) “Deleuze and Guattari and the future of Politics: Science fiction, protocols and the people to come” in *Deleuzian futures: special edition of Deleuze Studies*, Volume 5: 2011 supplement:1-6, pp. 77-97.

Boljkovac, N. (2011) “Signs without name” in *Deleuze Studies: Schizoanalysis and visual culture*, vol.5:2, pp. 209-240.

Bondanella, P. (2007) *Italian cinema: From neorealism to the present*, 3rd Ed, London: Continuum.

Bordwell (1990) “A Case for Cognitivism: Further considerations” in *IRIS* No11. Summer 1990, pp. 107 – 112.

Bordwell, D. (1985) *Narrative in the fiction film*, University of Wisconsin press: Wisconsin USA.

Bordwell, D. (2006) *The Way Hollywood tells it: story and style in modern movies*, Berkeley and Los Angeles: University of California press.

Bordwell, D. and Carroll, N. (eds) (1996) *Post-Theory: Reconstructing Film Studies*, University of Wisconsin press: Wisconsin USA.

- Bouaniche, A. (2007) *Gilles Deleuze – Une Introduction*, Paris: Poche.
- Bouaniche, A. (2012) « Deleuze and Simondon: Community and Transindividuality » in *Pli, Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp. 23-32.
- Boud, D. and Feletti G. (1998) *The Challenge of Problem Based Learning*, 2nd ed., London: Kogan Page.
- Boundas, C. (2011) “A Criminal intrigue: an interview with Jean-Clet Martin” in *Deleuzian futures, special edition of Deleuze Studies*, Volume 5:2011 supplement:1-6, pp.116-147.
- Bourdieu, P. (1979) *La Distinction: Critique sociale du jugement*, Paris: Minuit.
- Bourdieu, P. (2000) “The Biographical illusion” in Du Gay, P., Evans, J., and Redman, P. (eds.) *Identity: A Reader*, London: Sage, pp. 299-305.
- Bousted, M. and Ozturk, A. (2004) “It came alive outside my head.” Developing literacies through comparison: the reading of classic text and moving image” in *Literacy*, pp. 52–57.
- Boxall, M. (2012) “The divide between colleges and universities is outdated” in *The Guardian*, Monday 9th April 2012. Available online at <http://www.theguardian.com/education/2012/apr/09/further-higher-regulatory-funding-divide> . Last accessed 10.09.13.
- Braidotti, R. (1991) *Patterns of Dissonance*, Cambridge: Polity Press.
- Bramming, P. (2007) “An Argument for Strong Learning in Higher Education” in *Quality in Higher Education*, Vol.13, no.1, pp. 45-56.
- Brassier, R. (2007a) “Presentation” in *Collapse III: Speculative Realism*- Ray Brassier, Iain Hamilton Grant, Graham Harman, Quentin Meillassoux, pp. 308-321.
- Brassier, R. (2007b) *Nihil Unbound. Enlightenment and Extinction*, London: Palgrave Macmillan.
- Brassier, R. (2011) “Bergson, Lived Experience, and the Myth of the Given”, presentation at To Have Done With Life - Vitalism and Antivitalism in Contemporary Philosophy, conference at MaMa, Zagreb [June 17-19, 2011]. Available online at <http://www.youtube.com/watch?v=Z6lsBwEiMj0&feature=related> Last accessed 10.09.13.
- Brewer, J.D. (2000) *Ethnography*, Buckingham: Open University Press.

- Briggs, A. (2005) "Modelling the Muddle: Making sense through research." in Hillier, Y. and Thompson, A. (2005) *Readings in Post Compulsory Education: research in the learning and skills sector*, London: Continuum, pp. 109-125.
- Brighenti, A.M. (2010) "Tarde, Canetti, and Deleuze on crowds and packs" in *Journal of Classical Sociology* (10(4)), pp. 291-314.
- Bron, A. and Schemmann, M. (eds) *Social science theories in Adult Education research*, BSIAE, Munich: LIT
- Brookfield, S.D. (1987) *Developing Critical thinkers: challenging Adults to explore Alternative ways of Thinking and acting*. Buckingham, UK: OUP and SF. Cal, US: Jossey Bass.
- Brookfield, S. (1993) "Through the lens of learning: How the visceral experience of learning reframes teaching" in D. Boud, R. Cohen, & D. Walker (Eds.), *Using experience for learning*. Buckingham: The Society for Research into Higher Education & Open University Press, pp. 21-32.
- Brookfield, S. (1995) *Becoming a Critically Reflective Teacher*, San Francisco: Jossey-Bass
- Brookfield, S. (2010) "Leading Democratically", *New directions for adult and continuing education*, no. 128, Winter 2010, pp. 5-13.
- Brossat, A. and Rogozinski (2009) "La grève universitaire: une ronde plus qu'une révolution" in *Chimères: revue des schizanalyses*, no70 - 2009 / Dedans-Dehors 1, pp. 15-40.
- Brown, J. (2002) "Michelangelo Antonioni" in *Senses of Cinema*, Issue 20. Available online at <http://sensesofcinema.com/2002/great-directors/antonioni/> . Last accessed 07.09.12.
- Brown, M. (2003) "Survival at work: flexibility and adaptability in American Corporate culture" in *Cultural Studies*, Vol. 17.issue.5, pp. 713-733.
- Bruner, J. S. (1996) *The Culture of education*, Harvard University Press.
- Brunette, P. (1985) "Rossellini and Cinematic Realism" in *Cinema Journal* 25, No 1, Fall 1985, pp. 34-49.
- Brunette, P. (1998) *The films of Michelangelo Antonioni*, Cambridge: Cambridge University Press.

Bryant, L. (2011c) "Deleuze's Transcendental Aesthetics and Empiricism: The Interior of Objects". Blog entry. Available online at: <http://larvalsubjects.wordpress.com/> Last accessed. 20.04.12

Bryant, L. (2009) "The Thermodynamics of being". Blog entry . Available online at: <http://larvalsubjects.wordpress.com/2009/02/10/the-thermodynamics-of-being/>. Last accessed 02.12.11.

Bryant, L. (2010) "Questions About the Possibility of Non-Correlationist Ethics". Blog entry . Available online at <http://larvalsubjects.wordpress.com/2010/01/28/questions-about-the-possibility-of-non-correlationist-ethics/>. Last accessed 05.04.13.

Bryant, L. (2011b) "Of Quasi-Objects and the Construction of Collectives". Blog entry . Available online at: <http://larvalsubjects.wordpress.com/> . Last accessed. 09.12.11.

Bryant, L. (2011d) "Deleuze and ethics". Blog entry. Available online at <http://larvalsubjects.wordpress.com/2011/06/20/deleuze-and-ethics/> . Last accessed 30.04.13.

Bryant, L. (2011a) "Onticology and Politics". Blog entry. Available online at: <http://larvalsubjects.wordpress.com/> . Last accessed 02.12.11.

Buchanan, I. (2000) *Deleuzism - A metacommentary*, Edinburgh: Edinburgh University Press.

Buchanan, I. (2008) *Deleuze and Guattari's Anti Oedipus*, London: Continuum.

Buchanan, I. (2011) "Desire and ethics" in *Deleuzian futures, special edition of Deleuze Studies*, Volume 5:2011 supplement:1-6, pp.7-20

Buchanan, I. (ed.) (1997) *A Deleuzian Century?* South Atlantic quarterly special issue 96, no3.

Buchanan, I. and Colebrook, C. (eds) (2000) *Deleuze and feminist Theory*, Edinburgh: Edinburgh University Press.

Buchanan, I. & Lambert, G. (eds) (2005) *Deleuze and Space*, Edinburgh: Edinburgh University Press.

Buchanan, I. and Thoburn, N., (eds) (2008) *Deleuze and Politics*, Edinburgh: Edinburgh University Press.

Buckland, W. (2000) *The Cognitive Semiotics of Film*, Cambridge: Cambridge University Press.

Burbules, N.C and Berk, R. (1999) "Critical Thinking and Critical Pedagogy: Relations, Differences, and Limits" in Popkewitz, T.S. and Fendler, L. (eds) *Critical Theories in Education*, New York: Routledge. Available online at <http://faculty.education.illinois.edu/burbules/papers/critical.html>. Last accessed 15.03.13.

Burke Johnson, R. and Onwuegbuzie. A. J. (2004) "Mixed Methods Research: A Research Paradigm Whose Time Has Come" in *Educational Researcher*, Vol. 33, No. 7 (Oct., 2004), pp. 14-26.

Burns, R. (1995). *The adult learner at work*, Sydney: Business and Professional Publishing.

Byrne, D. (1998) *Complexity Theory and the Social Sciences – an Introduction*, London: Routledge.

C

Cameron I., and Wood, R. (1970) *Antonioni*, 2nd Ed., London: Studio Vista.

Cameron, I. (1962) "Michaelangelo Antonioni" in *Film Quarterly*, Vol. 16, No. 1 (Autumn, 1962), pp.1-58.

Carlile, O. and Jordan, A. (2012) *Approaches to Creativity: a handbook for teachers*, Maidenhead, UK: OUP.

Carr, J. (2010) "Setting Significance in the Early Films of Michelangelo Antonioni" in *Studies in Cinema*. Available online at <http://studiesincinema.blogspot.co.uk/2010/02/setting-significance-in-early-films-of.html>. Last accessed 19.09.12

Carr. W. and Kemmis, S. (1986) *Becoming critical: education, knowledge and action research*, Melbourne: Deakin University Press.

Carrier, R. (1998) "The Ontological Significance of Deleuze and Guattari's Concept of the Body without Organs" in *Journal of the British society for Phenomenology*, vol.29,No.2, pp.189-206.

Carroll, N. (1996) "Prospects for film theory: a Personal Assessment" in Bordwell, D. and Carroll, N. (eds) (1996) *Post-Theory: Reconstructing Film Studies*, University of

Wisconsin press: Wisconsin USA, pp.37-68.

Carroll, N. (2006) "Film, Emotion and Genre", in Carroll, N and Choi, J. (eds) (2006) *Philosophy of Film and Motion Pictures: an anthology* Oxford, Blackwell.

Carroll, N. and Choi, J. (eds) (2006) *Philosophy of film and motion pictures: an anthology* Oxford, Blackwell.

Carver, D. (2012) "Book Review - Learning Theory and Online Technologies" in *International Review of Open and Distance Learning*, 13(4) 2012. Available online at <http://www.irrodl.org/index.php/irrodl/article/view/1340/2287> Last accessed 13.05.13

Cavell, S. (1979) *The world Viewed: reflections on the ontology of film*, Harvard University Press.

Chaney, R.P. (1973/2009) "Comparative Analysis and Retroductive Reasoning or Conclusions in Search of a Premise" in *American Anthropologist* , pp. 1358–1375.

Chatman, S. (1985) *Antonioni, or, the surface of the world*, Berkeley and LA, University of California Press.

Chatman, S. and Duncan, P. (2008) *Michelangelo Antonioni: The complete films*, London: Taschen.

Chion, M. (2010) "What a time it was! An essay on Antonioni's L'Eclisse" in *The Soundtrack*, Vol. 3. no.1, pp.5-9.

Choi, J. (2006) "Naturalising Hollywood? Against the Naturalistic Account of Filmic Communication" in *Film Studies*, Issue 8, Summer 2006, pp.149-153.

Cilliers, P. (1998) *Complexity and Postmodernism*, London: Routledge.

Cilliers, P. (2005) "Complexity, Deconstruction and relativism" in *Theory, Culture & Society*, 2005; 22; pp.255-267.

Clark, K. (2010) "At the movies with Don Draper". Available online at <http://matineeidle.wordpress.com/2010/03/21/at-the-movies-with-don-draper/> Last accessed 28.09.12.

Clark, S.R.I. (1999) *The Political Animal: Biology, Ethics and Politics*, London: Routledge.

Clarke, D.B and Doel, M.A. (2006) "From Flatland to vernacular relativity – the genesis of

early English screenscapes” in Lefebvre, M. (ed.) *Landscape and film*, London: Routledge, pp.213 - 243

Clark/Keefe, K. (2012) “Becoming artist, becoming educated, becoming undone: toward a nomadic perspective of college student identity development” in *International Journal of Qualitative Studies in Education*, pp.1-25.

Clegg, S. (2001) “Theorising the Machine: gender, education and computing” in *Gender and Education*, Vol. 13, No. 3, pp. 307–324.

Clow, R. (2001) Further Education teachers’ construction of professionalism. *Journal of Vocational education and Training*, 53, pp. 407-419.

Cochran-Smith, M. and Lytle, S. L. (2011) “Commentary: Changing Perspectives on Practitioner Research” in *LEARNING landscapes: Inquiry: perspectives, process possibilities*, Spring 2011 Vol. 4 No. 2, pp. 17-24.

Coffield, F. (1999) ‘Breaking the Consensus: lifelong learning as social control’ in *British Journal of Educational Research*, 25(4), pp. 479-499.

Coffield, F. (2006) “Running Ever Faster Down the Wrong Road: An Alternative Future for Education and Skills”. Available online at <http://www.s7colleges.com/learning-innovation/pdf/FrankCoffieldInauguralLectureDec06%203.pdf>. Last accessed 11.09.13.

Coffield, F. (2008a) “*Just suppose teaching and learning became the first priority*”.., London: Learning and Skills Network. (. Available on line at www.LSNeducation.org.uk)

Coffield, F. (2008b) “*When the solution is the problem*”.. in “UCU newsletter”, October 2008, Pp.8-10.

Coffield F.; Moseley, D.; Hall, E. and Ecclestone, K. (2004) *Should we be using Learning Styles? What Research has to say to Practice*, London; Learning and Skills Development Agency. Accessed online at: http://www.learningandteaching.info/learning/learning_styles.htm . Last accessed 01.07.09.

Coffield, F. and Edward, S. (2009) ‘Rolling out 'good', 'best' and 'excellent' practice. What next? perfect practice?’ *British Educational Research Journal* 35, no. 3: pp. 371-390

Coffield, F. and Williamson, W. (2012) *From Exam Factories to Communities of Discovery* in *Educational Developments* Volume 23, Issue 2, pp. 172-190

Cohen, L., Manion, L. and Morrison, K. (2007) *Research Methods in Education*, 6th ed., London: Routledge

Cole, D. R. (2008) "Deleuze and narrative forms of educational Otherness" Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.17-34.

Cole, D.R. (2009) "Deleuzian Affective Literacy for teaching Literature: A Literary perspective on Multiple Literacies Theory" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 63-78.

Cole, D.R. (2009) "Indexing the multiple: An autobiographic account of education through the lens of Deleuze and Guattari" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 119-132

Cole, D.R. (2009) "MLT as a minor Poststructuralism of Education" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 167-180

Cole, D.R. (2011) "The Actions of Affect in Deleuze: Others using language and the language that we make..." in *Educational Philosophy and Theory*, Vol. 43, No. 6, 2011, pp. 549-561.

Colebrook, C. (2000) "Introduction" in Buchanan, I. and Colebrook, C. (eds) (2000) *Deleuze and Feminist Theory*, Edinburgh: Edinburgh University press, pp.1-17.

Colebrook, C. (2003) *Understanding Deleuze*, London: Allen and Unwin.

Colebrook, C. (2005) *Philosophy and Post-Structuralist Theory – From Kant to Deleuze*. Edinburgh: Edinburgh University Press.

Colebrook, C. (2008a) "Review of Lambert, G. 'Who's Afraid of Deleuze and Guattari?'" Available online at <http://ndpr.nd.edu/review.cfm?id=12605> Last accessed 05.09.09

Colebrook, C. (2008b) "Bourgeois thermodynamics" in Buchanan, I. and Thoburn, N. (eds) *Deleuze and Politics*. Edinburgh: Edinburgh University Press, pp.121-138

Colebrook, C. (2008c) "Leading out, leading On: the soul of education" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*,

Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.35-42

Colley, H.; James, D.; and Diment, K. (2007) "Unbecoming teachers: towards a more dynamic notion of professional participation", *Journal of Education Policy*,22:2, pp. 173 - 193.

Colliver, J.A. (2000) "Effectiveness of problem-based learning curricula: research and theory." in *Acad Med*. 2000 Mar;75 (3), pp. 259-66.

Colman, F. (2005) "'Deleuze's Kiss: the sensory pause of screen affect'" in *Pli: The Warwick Journal of Philosophy*, Vol 16, pp. 101-113.

Colman, F. (2006a) "'Affective entropy: Art as Differential Form'" in *Angelaki: Journal of the Theoretical Humanities*, 11: 1 April, pp. 169 – 178.

Colman, F. (2006b) "'Painting Film with Velvet Sounds: David Lynch's Lost Highway'", *Senses of Cinema*, <http://www.sensesofcinema.com/contents/cteq/06/40/lost-highway.htm>

Colman, F. (2007) "In search of anxious time: Deleuze, Cinema and National Identity: Narrative Time in National Contexts by David Martin-Jones" in *Senses of Cinema*, <http://www.sensesofcinema.com/contents/books/07/44/deleuze-cinema-identity.html>

Colman, F. (2009). "'Introduction: What is Film-philosophy?'" in F.Colman (eds.) *Film, Theory and Philosophy*, Acumen Publishing: Durham, UK,pp.1-15.

Colman, F. (2011) *Deleuze And Cinema*, Oxford: Berg Publishers.

Colman, F. and McCrea, C. (2005) "'The Digital Maypole'" in *Fibreculture Journal*, Issue 6, pp. 1-5

Colón, P.S. (2007) "Films from the Couch: Film Theory and Psychoanalysis" in *Journal of Medicine and Movies*, Volume 4 (2008) Number 1. Available online at http://campus.usal.es/~revistamedicinacine/Indice_2008/OBRA/PRINCIPAL21.htm. Last accessed 11.09.13.

CAVTL (Commission on Adult Vocational Teaching and Learning) (2013) *It's about work...Excellent Adult Vocational Teaching and Learning*. Available online at <http://www.excellencegateway.org.uk/cavtl> Last accessed 07.04.13

- Comolli, J-L. and Narboni, J. (1969) "Cinema/Ideology Criticism" in Easthope, A. (ed.) (1993) *Contemporary Film Theory*, New York: Longman, pp. 43-51
- Compton, A. (2007) *What does creativity mean in English education?* in *Education* 3-13, 35(2), pp. 109-116.
- Compton, A. (2010) "The rise and fall of creativity in English education" in *Educational futures*, Vol.2(2) January 2010, pp. 26-40. Available online at <http://www.educationstudies.org.uk/materials/comptonf4.pdf> . Last accessed 11.09.13
- Conley, T. (2006) "Foreword and introduction" to Deleuze, G. *The Fold*, London: Continuum, pp. ix-xxi.
- Conley, T. (2006) "Landscape and Perception: On Anthony Mann" in Lefebvre, M. (ed.) *Landscape and film*, London: Routledge, pp.291- 313.
- Conley, T. (2011) "Deleuze and the filmic diagram" in *Deleuze Studies: Schizoanalysis and visual culture*, vol.5:2, pp.163-177.
- Connolly, M.; Jones, C. and Jones, N. (2007) "Managing collaboration across further and higher education: a case in practice" in *Journal of Further and Higher Education*, 31: 2, pp. 159-169.
- Cook-Gumperz, J. (1995) *The social construction of Literacy*, Cambridge: Cambridge University Press.
- Cooper, A. (2004) "The social subject in biographical interpretive methods: emotional, mute, creative, divided" in Chamberlayne, P., Bornat, J., and Aritzsch, U., (2004) *Biographical Methods and Professional Practice*. Bristol: The Polity Press, pp. 93-100.
- Cordeiro, P. (2011) "Inquiry in the classroom: the role of puzzlement" in *LEARNIng landscapes: Inquiry: perspectives, process possibilities*, Spring 2011 Vol. 4 No. 2, pp.111-124.
- Cottino-Jones, M. (ed.) (1996) *Michelangelo Antonioni. The Architecture of Vision*. Writings and Interviews on Cinema, American edition, Chicago, The University of Chicago Press.
- Craft, A. (2001) *An analysis of research and Literature on creativity in education*. Report prepared for the Qualifications and Curriculum Authority (London, QCA). Available online at http://www.euvonal.hu/images/creativity_report.pdf. Last accessed 11.09.13.

- Craft, A. (2006) "Fostering creativity with wisdom" in *Cambridge Journal of Education*, 36(3), pp. 337-350.
- Crawley, J. (2012) 'On the brink' or 'designing the future'? Where next for Lifelong Learning Initial Teacher Education? In *Teaching in lifelong learning: a journal to inform and improve practice*, 4 (1), pp. 2-12.
- Creswell, J. and Plano Clark, V.L (2011) *Designing and Conducting Mixed Methods Research* (2nd ed.), London: Sage.
- Creswell, J.W (1994) *Research design: qualitative and quantitative Approaches*: Thousand Oaks, CA. Sage
- Cronin, A.M. (2008) "Gender in the making of commercial worlds: Creativity, Vitalism and the Practices of Marketing" in *Feminist Theory* 2008; 9, pp. 293-312.
- Cropley, A. J. (2001) *Creativity in education and learning: a guide for teachers and educators*, London: RoutledgeFalmer.
- Crowley, M. (2013) *Deleuze on Painting* Vol 67, issue1. First published online: April 21, 2013 at <http://fs.oxfordjournals.org/content/early/2013/04/21/fs.knt073.abstract>. Last accessed 11.09.13.
- Crowther, N. (2005) "The Potential for Realism as a best Methodological Option: or, What works best and for whom?" in Hillier, Y. and Thompson, A. (2005) *Readings in Post Compulsory Education: Research in the Learning and Skills Sector*, London: Continuum, pp.172-188.
- Cumming, S.C. (2011) *Enhancing Professional Learning through Aspects of Creativity*. Available online at <http://www.icsei.net/icsei2011/Full%20Papers/0001.pdf>. Last accessed 20.07.2011.
- Cupchik, G. (2001) "Constructivist Realism: An Ontology That Encompasses Positivist and Constructivist Approaches to the Social Sciences" in *Forum: Qualitative Social Research*, Volume 2, No. 1, Art. 7 – February 2001. Available online at <http://www.qualitative-research.net/index.php/fqs/article/view/968/2112>. Last accessed 11.09.13.
- Currie, G. (1980) *The nature of fiction*, Cambridge: Cambridge University Press.

Currie, G. (1996) "Film, Reality and Illusion", in Bordwell, D. and Carroll, N. (eds) (1996) *Post-Theory: Reconstructing Film Studies*, University of Wisconsin press, Wisconsin USA, pp. 325-344.

Currie, G. (2005) "Imagination and make believe" in Gaut, B.N. and Lopes, D. *The Routledge companion to aesthetics*, London: Psychology Press, pp. 335-346.

Currie, G. (2006) "The Long Goodbye: the Imaginary Language of film" in Carroll, N and Choi, J. (eds) (2006) *Philosophy of film and motion pictures: an anthology* Oxford, Blackwell, pp. 91-99.

Currie, M. (2004) *Difference*, London: Routledge.

Curtis, W. & Pettigrew, A. (2009) *Learning in Contemporary Culture, Exeter: LearningMatters*

D

Daignault, J. (2008) "Pedagogy and Deleuze's concept of the virtual" (trans. B. Buchanan) in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari, Educational futures: Rethinking Theory and Practice*, vol 18, Rotterdam: Sense, pp. 43-60.

Davis, B. (2008) "Complexity and Education: Vital simultaneities" in *Educational Philosophy and Theory*, Volume 40, Number 1, February 2008, pp. 50-65.

Davies, B. (2009) "Deleuze and the Arts of Teaching and learning" in *International Journal of Qualitative Studies in Education*: 22:5, pp. 625-630.

Davies, B., & Gannon, S. (2006). *Doing collective biography: Investigating the production of subjectivity*. Maidenhead: Open University Press.

Davies, J. and Pahl, K. (2007) "Blending Voices, Blending learning: Lessons in pedagogy from a post-16 classroom" in Bearne, E. and Marsh, J. *Literacy and Social Inclusion – closing the Gap*. Stoke on Trent. Trentham Books, pp.89-102

Dawkins, R. (2006) *The selfish gene*, Oxford: OUP

Dawkins, R. (1982) *The Extended Phenotype - the Gene as Unit of Selection*, Oxford: Oxford University Press.

Dawson, J. (2001) "Lifelong learning and T.S. Eliot's *Four Quartets*" Paper presented at SCUTREA, 31st Annual Conference, 3-5 July 2001, University of East London.

- Debaise, D. (2012) "The subjects of Nature: a speculative Interpretation of the Subject" in *Pli, Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp.41-56.
- De Landa, M. (2002) *Intensive science and Virtual Philosophy*, London: Continuum.
- De Landa, M. (2006) *A New Philosophy of Society: Assemblage Theory and Social Complexity*, London: Continuum.
- De Freitas, E. (2012) "The Classroom as Rhizome: New Strategies for Diagramming Knotted Interactions" in *Qualitative Inquiry* 18(7), pp. 557–570.
- Dell'Era, C.; Buganza, T.; Fecchio, C. and Verganti, R. (2011) "Language Brokering: Stimulating Creativity during the Concept Development Phase" in *Innovation Management*, Volume 20 Number 1 2011, pp.36-48
- Del Rio, E. (2005a) "Alchemies of thought in Godard's cinema: Deleuze and Merleau-Ponty" in *Substance*, 34.3 (2005), pp.62-78.
- Del Rio, E. (2005b) "Antonioni's *Blowup*: Freeing the Imaginary from Metaphysical Ground" in *Film-Philosophy, International Salon-Journal* Vol. 9 No. 32. Available online at <http://www.film-philosophy.com/vol9-2005/n32delrio>. Last accessed 11.09.13.
- Denzin, N. (2006a) "Foreword" in Satterthwaite, J.; Martin, W. and Roberts, L. (eds) (2006) *Discourse, resistance and identity formation*, Stoke on Trent: Trentham books, pp. vii-xii
- Denzin, (2006b) "Analytic Autoethnography, or Déjà Vu all Over Again" in *Journal of Contemporary Ethnography*, Volume 35 Number 4, pp. 419-428
- Denzin, N and Lincoln, Y.S (eds) (2011) *The Sage handbook of Qualitative Research* (4th edn), London: Sage.
- DES (2000) *White paper on Adult Education 2000*. Available online at <http://www.aontas.com/pubsandlinks/publications/white-paper-on-adult-education-2000/>. Last accessed 20/08/2010.
- Deuchars, R. (2011) "Creating Lines of Flight and Activating Resistance: Deleuze and Guattari's War Machine", in *AntePodium*, Victoria University Wellington. Available online at <http://www.victoria.ac.nz/atp/articles/pdf/Deuchars-2011.pdf> . Last accessed 07.01.13

DIUS (2007) *The Further Education Teachers' Continuing Professional Development and Registration (England) Regulations 2007*. Available online at <http://www.legislation.gov.uk/ukxi/2007/2116/contents/made> . Last accessed 30.07.12

DES (2000) *White paper on Adult Education 2000*. Available online at <http://www.aontas.com/pubsandlinks/publications/white-paper-on-adult-education-2000/> Last accessed 20.08.2010

DES (2000) *White Paper on Adult Education 2000*. Available online at <http://www.aontas.com/pubsandlinks/publications/white-paper-on-adult-education-2000/> last accessed 20.08.2010.

Derrida, J. (2000) "Where a Teaching Body begins and how it ends" in Trifonas, P. (ed.) *Revolutionary Pedagogies – Cultural Politics, Instituting Education, and the Discourse of Theory*, London: Routledge, pp. 83-112.

Deulceux, S. and Hess, R. (2009) "Sur la théorie des moments" in *Chimères: revue des schizanalyses*, no71 - 2009 / Dedans-Dehors 2, pp.13-26.

Dewey, J. (1916/1966) *Democracy and education*, New York: Macmillan/ The free press

Dewey, J. (1938/ 1997) *Experience and Education*, New York: Touchstone.

DFEE (2002) *Learning to succeed: a new framework for Post-16 learning*. Available online at <http://dera.ioe.ac.uk/15120/> Last accessed 11.09.13.

DFEE (1998) *The Learning Age: A new renaissance for a New Britain*. The Stationery Office. Available online at: <http://www.lifelonglearnina.co.uk/greenpaper/summarv.pdf> Last accessed 12.02.10.

DFES (2000) *Tackling the adult skills gap: Upskilling adults and the role of work-place learning*. Third report of the National Skills Task Force. The Stationery Office: London. Available online at <http://dera.ioe.ac.uk/15165/> Last accessed 11.09.13.

DFES (2002) *Success for all. Reforming further education and training*, London: Department of Education and Skills. Available online at <http://dera.ioe.ac.uk/4568/1/success-for-all-reforming-further-education-and-training.pdf>. Last accessed 11.09.13.

DFES (2003) *The future of Initial teacher education for the learning and skills sector: an agenda for reform*, London: Department of Education and Skills. Available online at <http://dera.ioe.ac.uk/8997/1/ACF4240.pdf> Last accessed 11.09.13.

DFES (2004) *Equipping our teachers for the future: Reforming initial teacher training for the earning and skill sector*, London: Department of Education and Skills. Available online at <http://dera.ioe.ac.uk/5933/> Last accessed 11.09.13.

DFES (2005) *Realising the Potential: review of the future role of further education colleges*, Sir Andrew Foster - . Available online at <http://www.dfes.gov.uk/furthereducation/index.cfm?fuseaction=content.view&CategoryID=20&ContentID=18> Last accessed 11.09.13.

DFES (2006a) *The Leitch Review of skills: Prosperity For all in the global economy – world class skills* - . Available online at <http://www.official-documents.gov.uk/document/other/0118404792/0118404792.pdf> Last accessed 11.09.13.

DFES (2006b) *Personalising Further Education: Developing a Vision*. Available online at <https://www.education.gov.uk/consultations/downloadableDocs/DfES%20Personalisation.pdf> Last accessed 11.09.13

DFES (2006c) *Further education: raising skills, improving life chances* (London, HMSO). Available online at <http://www.official-documents.gov.uk/document/cm67/6768/6768.pdf> . Last accessed 11.09.13.

DFES (2007) *Success for all, Initial teacher training-making the reform happen*, London: Learning and Skills Council. Available online at <http://dera.ioe.ac.uk/5934/1/initialteachertraining-makingthereformshappen-229-355.pdf> Last accessed 11.09.13.

DIUS (2008) *Innovation nation*. Available online at <http://webarchive.nationalarchives.gov.uk/+http://www.bis.gov.uk/Policies/>. Last accessed 11.09.13.

Doll, W.E (2008) "Complexity and the Culture of Curriculum" in Mason, M. (ed.) (2008) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell, pp.181-203.

Dominice, P. (2000) *Learning from our lives*. San Francisco: Jossey Bass

Dominice, P. (2007) "Educational Biography as a reflective approach to the training of adult educators" in West, L., Alheit., Andersen, A.S., and Merrill, B (2007) *Using Biographical and*

Life History Approaches in the Study of Adult and Lifelong Learning. Frankfurt am Main: Peter Lang, pp.241-253.

Done, E.J. and Knowler, H. (2011) "(Re)writing reflective practice with Deleuze, Guattari and feminist poststructuralism" in *Reflective Practice*, 12 (6), pp. 841-852.

Dosse, F. (2007) *Gilles Deleuze, Félix Guattari – Biographie Croisée*, Paris: La Découverte.

Drummond, J.S and Themessl-Huber, M. (2007) "The cyclical process of action research: The contribution of Gilles Deleuze" in *Action Research* 2007: 5, pp. 430-448.

Duckworth, V. and Tummons, J. (2010) *Contemporary Issues in Lifelong Learning*, Maidenhead, Open University Press.

Dufresne, T. (2009) "When worlds collide: reading of self through a lens of difference" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 105-118.

Durrant, J. and Holden, G. (2006) *Teachers leading Change: doing research for school improvement*. London, Paul Chapman Publishing,

E

Easthope, A. (ed.) (1993) *Contemporary Film Theory*, London: Longman

Ebert, R. (1997) "Review of L'Avventura". Available online at: <http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19970119/REVIEWS08/401010338/1023>. Last accessed 19.09.12

Ecclestone, K. (2002) *Learning Autonomy in Post 16 education – The Politics and Practice of Formative Assessment*, London: Routledge.

Ecclestone, K.; Hayes, D.; Furedi, F. (2005) "Knowing me, Knowing You: The rise of therapeutic Professionalism in the Education of adults" in *Studies of the Education of Adults*, 37;2, pp. 182-198.

Ecclestone, K. (2008) *The Rise of the Fragile learner: Why Assessing Emotional well being undermines Education*, Inaugural lecture, Oxford Brookes University, 20.02.08. Available online at: www.brookes.ac.uk/schools/education/staff/ecclestone_INAUGURAL_LECTURE_Feb08.doc Last accessed 22.02.09.

Ecclestone, K (2009) *Rethinking therapy culture*. Available online at <http://www.battleofideas.org.uk/index.php/2009/battles/3435/> Last accessed 1.01.2010.

Ecclestone, K. (2010) *Transforming formative assessment in Lifelong learning*, Maidenhead, Open University Press.

Ecclestone, K. (2011) "Coaching to the criteria or educationally- worthwhile feedback?: tensions and dilemmas in vocational education teachers' assessment", Paper presented to Oxford Centre for Educational Assessment Seminar on 'Teacher Assessment', University of Oxford, 20-22 June 2011.

Hodkinson, P. (2005) *Education: a new, cultural approach: Teaching and Learning Research Briefing*, TLRP. Available online at http://www.tlrp.org/pub/documents/no12_hodkinsonl.pdf Last accessed 11.09.13. 2010.

Ednie-Brown, P. (2000) "The Texture of Diagrams" in *Daidalos; Diagrammania*, issue 74, January 2000, Pp.72-79

Edward, S.; Coffield, F; Steer, R. and Gregson, M. (2007) "Endless change in the learning and skills sector: the impact on teaching staff " in *Journal of Vocational Education and Training* Vol. 59, No. 2, June 2007, pp. 155–173.

Edwards, R. (1997) *Changing places? Flexibility, lifelong learning and a learning society?* London: Routledge.

Edwards, R. (2008) *The Scrumpled Geography of literacy, SCUTREA 2008 34th annual conference proceedings* Pp.182-189.

Edwards, R (2005) "Contexts, boundary zones and boundary objects in lifelong learning" (Paper presented at the *British Educational Research Association Annual Conference*, University of Glamorgan, 14-17 September 2005). Available online at <http://www.leeds.ac.uk/educol/documents/143404.htm> Last accessed 11.09.13.

Edwards, R.; Nicoll, K; Solomon, N. and Usher, R. (2004) *Rhetoric and educational discourse – Persuasive texts?* London: RoutledgeFalmer.

Edwards, R. (2010) 'Lifelong learning: emergent enactments', in *Pedagogy, Culture & Society*, 18: 2, pp.145 — 157.

Elder, R. B. (1991) "Antonioni's Tragic Vision: Style, Form and Idea in the Films of Michelangelo Antonioni, with Especial Emphasis on His Masterpiece, *Il deserto rosso*" in *Canadian Journal of Film Studies* Vol I No 2, pp.1-18

Ellis, J. (1992) *Visible Fictions: Cinema, television, video* (revised ed.) Abingdon, Routledge.

Ellis, J. (2000) "British cinema as performance art: *Brief encounter, Radio parade of 1935* and the circumstances of film projection" in Ashby, J. and Higson, A. (eds) (2000) *British Cinema, Past and Present*, London: Routledge, pp. 95-109.

Engeström, Y. (2006) "From well-Bounded ethnographies to Intervening in Mycorrhizae Activities, in *Organisation studies* 2006; 27, pp.1783-1793.

Ennis, R.H. (1987). "A taxonomy of critical thinking dispositions and abilities" in Baron, J.B & Sternberg, R.J (eds.), *Teaching thinking skills*, New York: W.H. Freeman, pp. 9–26

Eraut, M. (2008) *How Professionals learn through work*, SCEPTRE working paper. Available online at <http://surreyprofessionaltraining.pbworks.com/f/How+Professionals+Learn+through+Work.pdf> Last accessed 11.09.13.

Evans, L. (2008) "Professionalism, professionalism and the development of education professionals" in *British Journal of Educational Studies*, Vol.56, No.1, March 2008, Pp. 20–38.

Evens, A.; Haghigi, M.; Johnson, S.; Ocana, K. and Thompson, G. (1998) "Another always thinks in me" in Kaufman, E. and Heller, K. (eds) (1998) *Deleuze and Guattari: New Mappings in Politics, Philosophy, and Culture*, University of Minnesota Press: Minneapolis, pp. 270-280.

Eysenck, H. (1953) *Uses and Abuses of Psychology*, London: Penguin.

F

Falzon, C. (1999) *Foucault and social dialogue – Beyond Fragmentation*, London and New York: Routledge.

Farran, D. (1990) 'Seeking Susan': Producing statistical information on young people's leisure, in: L. Stanley (Ed.) *Feminist praxis: Research, theory and epistemology in feminist sociology*, London: Routledge.

Faulkner, K. (2005). "Deleuze and essence" in *Pli, the Warwick Journal of Philosophy: vol 16: Diagrams of Sensation: Deleuze and Aesthetics*, Pp.129-148.

Faure, E. et al (1972) *Learning to Be*, Paris: UNESCO

Fawns, M. and Ivanic, R. (2001) "Form filling as a social practice: taking power into our own hands" in Crowther, J., Hamilton, M., and Tett, L. (2001) *Powerful Literacies*. Leicester NIACE, pp. 80-113.

Fearn, N. (2001) *Zeno and the tortoise: How to think like a philosopher*, London: Atlantic

Feather, D. (2010) "A whisper of academic identity: an HE in FE perspective" in *Research in Post-Compulsory Education*, 15, Pp. 189-204.

Feather, D. (2011) Culture of HE in FE, exclave or enclave? *Research in Post-Compulsory Education*, 16, Pp. 15-30.

Feather, D. (2012) "Oh to be a scholar – an HE in FE perspective" in *Journal of Further and Higher Education*, 36, pp. 243-261

Fejes, A. (2008) "What's the use of Foucault in research on lifelong learning and post-compulsory education? A review of four academic journals" in *Studies in the Education of Adults*, Vol. 40, No. 1. (2008), Pp. 7-23.

Fejes, A. and Nicoll, K. (2008) *Foucault and Lifelong Learning*, London: Routledge.

Fendler, L. (2008) "New and Improved educationalising: faster, more powerful and longer lasting" in *Ethics and education*, vol. 3 no1, pp.15-26

Fenwick, T. and Edwards, R. (2010) *Actor Network Theory and education*, London: Routledge

Fenwick, T. and Edwards, R. (2011) "Considering materiality in educational policy: Messy objects and multiple reals" in *Educational Theory*. 61 (6), pp. 709-726

Fenwick, T (2008) *Making to Measure? Professional lifelong learning and the problem of assessment*. Available online at http://www.leeds.ac.uk/medicine/meu/lifelong08/Tara_Fenwick.pdf Last accessed 18.03.13

Fenwick, T. (2012a). "Complexity science and professional learning for collaboration: a critical reconsideration of possibilities and limitations" in *Journal of Education and Work*, 25 (1), 141-162

Fenwick, T. (2012b) "*Professional learning in complexity: Rethinking knowledge, practice and responsibility.*" Keynote address for the International Professional Development Association, Birmingham UK, November 30, 2012.

Fenwick, T. (2013) "Understanding transitions in professional practice and learning: towards new questions for research" in *Journal of Workplace Learning*, Vol. 25 Iss:6.

Feyerabend, P. (1993) *Against Method*, 3rd ed., London: Verso.

Field, J. (1996) "Open learning and the consumer culture", in Edwards, R. Hanson, A., Raggatt, P. *Boundaries of Adult Learning*, London: Routledge, pp.136-149.

Field J. (2006) *Lifelong learning and the New Educational Order*. 2nd ed.. Stoke on Trent: Trentham books.

Field, J. and Malcolm, I. (2006) "Learning, identity and agency in the new economy: social and cultural change and the long arm of the job". Available online at <http://www.learninglives.org/> Last accessed 13.09.13

Field, J. (2007) "Learning Society, relations of learning: civic engagement and widening participation in the work of Veronica McGivney" in *Participation and the pursuit of equality: essays in adult learning, widening participation and achievement*, Tuckett, A. (ed.). Leicester: National Institute of Adult Continuing Education, pp.-171

Fisher, R. And Webb, K. (2006) "Subject specialist pedagogy and initial teacher training for the learning and skills sector in England; the context, a response and some critical issues" in *Journal of Further and Higher Education*, Vol. 30,No.4, pp.337-349.

Flyvbjerg, B. (2011) "Case Study" in Denzin, N., K., & Lincoln, Y., S., (eds.) *The Sage Handbook of Qualitative Research*. 4th ed. Thousand Oaks, CA: Sage.

Ford, H. (2004) "Must see Antonioni" in *RealTime*, Issue #61 June-July 2004 pg. 16. Available online at <http://www.realttimearts.net/article/61/7449>. Last accessed 05.10.12

Ford, H. (2010)"Antonioni's *L'avventura* and Deleuze's Time-image" in *Senses of Cinema*, issue 60. Available online at http://www.sensesofcinema.com/2003/feature-articles/l_avventura_deleuze/ Last accessed 08.12.11

Ford, R. (2005) "Deleuze's Dick" in *Philosophy and Rhetoric* 38.1, pp. 41-71

Forgacs, D. (2000) "Introduction: Rossellini and the critics" in Forgas, D.; Lutton, S; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.1-6.

Forgacs, D. (2011) "Face, Body, Voice, Movement: Antonioni and Actors" in Rascaroli, L. and Rhodes, J.D. (eds) (2011) *Antonioni: Centenary Essays*, London: Palgrave Macmillan London: Palgrave Macmillan, pp. 167-184.

Fosnot, C,T (1996) *Constructivism Theory, Perspectives and Practice*, New York, London: Teachers College Press.

Foucault, M. (1966) *Les Mots et les Choses – Une Archéologie des Sciences Humaines*, Paris: Gallimard./ Foucault, M. (1970) *The Order of Things: An archaeology of the human sciences*, Bristol, Tavistock

Foucault, M. (1975) *Surveiller et Punir – Naissance de la Prison*, Paris: Gallimard/. (1991) Foucault, M. *Discipline and Punish: the Birth of the Prison*, London: Penguin.

Foucault, M. (1976a) *Histoire de la Sexualité I: La Volonté de savoir*, Paris: Gallimard/ (1978) *History of Sexuality: Volume I: An introduction*, trans. R. Hurley, New York: Pantheon.

Foucault, M. (1976b/1997) *Il faut défendre la Société: Cours au Collège de France 1975-76*: Paris: Gallimard.

Foucault, M. (1984a) *Histoire de la Sexualité II: L'usage des Plaisirs*, Paris: Gallimard./ *The History of Sexuality, II: The Use of Pleasure*, trans. R. Hurley, (1990) New York : Vintage.

Foucault, M. (1984b) *Histoire de la Sexualité III: Le Souci de Soi*, Paris: Gallimard. Foucault, M. (1997) *Ethics, the Essential works, Volume I*, London: Penguin.

Foucault, M. (2003c) *Abnormal: lectures at the College de France 1974-75*, trans. G. Burchill, London: Verso.

Fournier, V. (1999) "The Appeal to 'Professionalism' as a Disciplinary Mechanism", *The Sociological Review*, 47, pp. 280–307.

Fox, C. (1996) "Lifetime Learning" in Hayes, D (ed.) *Debating education - Issues for the New Millennium?* Dept. of Education, Canterbury Christ Church College, pp.49-57.

Fox, C. (2004) "The Philosophy Gap" in Hayes, D. (ed.) *The RoutledgeFalmer Guide to Key Debates in Education*, London: RoutledgeFalmer, pp.23-24.

Frank, F. (2005) "Researching workplace basic skills Policy in the united Kingdom: Towards a comprehensive model of research Methodologies – Ways, and Means, to an end" in Hillier, Y. and Thompson, A. (eds) (2005) *Readings in Post Compulsory Education: research in the learning and skills sector*, London: Continuum, pp.17-38.

Fraser, W. (1995) *Learning from Experience: Empowerment or incorporation?* Leicester: NIACE.

Fraser, W; Scarlett, C. and Winner, A. (2007) "A gift in their hands" in." in *Participation and the pursuit of equality: essays in adult learning, widening participation and achievement*, Tuckett, A. (ed.). Leicester: National Institute of Adult Continuing Education, pp. 65-79.

Freeland, C.A. (1996) "Feminist Frameworks for Horror Films" in Bordwell, D. and Carroll, N. (eds) (1996) *Post-Theory: Reconstructing Film Studies*, Wisconsin USA: University of Wisconsin Press, pp.195-218.

Freire, P. (1970) "Cultural Action and Conscientisation". *Harvard Educational Review*.40(2), pp. 205-225.

Freire, P. (1972) *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Freire, P. (2001) *Pedagogy of Freedom - Ethics, Democracy, and Civic courage*, Oxford: Rowman and Littlefield.

Freire, P. and Macedo, D. (1987) *Literacy: Reading the word and the world*, London: Routledge.

Friedrich, D.; Bryn Jaastad, B; & Popkewitz, T.S.;(2010) "Democratic Education: An (im)possibility that yet remains to come" in *Educational Philosophy and Theory*, Vol. 42, Nos. 5–6, 2010, pp.571-587.

Fulford, A. (2012) "Conversations: risk, passion and frank speaking in education" in *Ethics and Education*, 7:1, pp. 75-90.

Fuller, A, Munro, A. and Rainbird, H. (2004) "Introduction and overview" in Rainbird, H. ; Fuller, A. and Munro, A. (eds) *Workplace learning in Context*, London: Routledge, pp. 1-18.

Fuller, A. and Unwin, L. (2003-2004) *Project 3: The workplace as a site for learning: opportunities and barriers in small and medium sized enterprises*. Available online at http://www.tlrp.org/project%20sites/IILW/project_3_hr.htm

Fuller, A. and Unwin, L. (2004) *Expansive learning environments: integrating organisational and personal development* in Rainbird, H.; Fuller, A. and Munro, A. (eds) *Workplace learning in Context*, London: Routledge, pp. 126-144.

Furedi, F. (2004) *Therapy Culture*, London: Routledge

G

Gagné, R. (1968) "Contributions of Learning to Human Development," in *Psychological Review*, 75, pp. 177-191.

Gagné, R. (1985) *The Conditions of Learning* (4th.ed.), New York: Holt, Rinehart & Winston.

Gale, K. (2007) "Teacher education in the university: working with policy, practice and Deleuze" in *Teaching in Higher Education*, 12:4, pp. 471 – 483.

Gale, K. (2010) "An Inquiry in to the Ethical Nature of a Deleuzian Creative Educational Practice" in *Qualitative Inquiry*, 2010:16, pp. 303.

Gale, K., & Wyatt, J. (2009). *Between the two: A nomadic inquiry into collaborative writing and subjectivity*. Newcastle-upon- Tyne, UK: Cambridge Scholars.

Wyatt, J.; Gale, K.; Gannon, S. and Davies, B. (2010) "Deleuzian Thought and Collaborative Writing: A Play in Four Acts" in *Qualitative Inquiry* 2010:16, pp. 730-741.

Gale, K., Turner, R. and McKenzie, L.M (2011) "Communities of praxis? Scholarship and practice styles of the HE in FE professional" in *Journal of Vocational Education & Training*, 63, pp.159-169.

Gale, T. and Densmore, K. (2001) "Questions of (re)production and legitimation: a second screening of three films on teacher-student relations" in *Journal of Curriculum Studies*, Volume 33, Number 5, 1 September 2001, pp. 601-619.

Gallas, K. (2011) "Inquiry: Doing What Comes Naturally" in *LEARNing landscapes: Inquiry: perspectives, process possibilities*, Spring 2011 Vol. 4 No. 2, pp.33-40.

Gandy, M. (2003) "Landscapes of Deliquescence in Michelangelo Antonioni's "Red Desert" in *Transactions of the Institute of British Geographers*, New Series, Vol. 28, No. 2 (Jun.,2003), pp. 218-237.

Gandy, M. (2006) "The cinematic Void: Desert iconographies in Michelangelo Antonioni's Zabriskie Point" in Lefebvre, M. (ed.) *Landscape and film*, London: Routledge, pp.315- 332.

Gannon, S. (2006) "The (Im)Possibilities of Writing the Self-Writing: French Poststructural Theory and Autoethnography" in *Cultural Studies <=> Critical Methodologies* 2006 6: pp. 474-495.

Gannon, S. (2009) "Rewriting 'the Road to Nowhere': Place Pedagogies in Western Sydney" in *Urban Education* 2009 44: pp. 608-624.

Gatens, M. & Lloyd, G. (1999) *Collective Imaginings: Spinoza, Past and Present*, London: Routledge.

Geertz, C. (1973) "Thick description" in C. Geertz (Ed.), *The interpretation of cultures* New York: Basic Books, pp. 3-30.

Gendler, T. (2011) "Imagination" in Stanford Encyclopaedia of Philosophy. Available online at <http://plato.stanford.edu/entries/imagination> Last accessed 10.11.11.

Genosko G. and Bryx, A. (2005) "After Informatic striation: The resignification of disc numbers in contemporary Inuit popular Culture" in Buchanan, I. and Lambert, G. (eds) *Deleuze and Space*, Edinburgh, Edinburgh University Press, pp.109-125.

Gibson, H. (2005) "What creativity isn't: the presumptions of instrumental and individual justifications for creativity in education" in *British Journal of Educational Studies*, 53(2), pp. 148-167.

Giddens, A (1991) *Modernity and Self Identity: Self and Society in the late Modern Age*, Cambridge, Polity Press.

Giddens, A. (1999) *Runaway world: How globalisation is reshaping our lives*, London: Profile.

Gilman, R. (1962) "About Nothing - With precision" in *Theater Arts*, 46, no.7, pp.10-12

Giroux, H. (1994) *Disturbing Pleasures – Learning Popular Culture*, London and New York: Routledge.

- Giroux, H. (2000) "Postmodern Education and Disposable Youth" in Trifonas, P. (ed.) (2000) *Revolutionary Pedagogies – Cultural Politics, Instituting Education, and the Discourse of Theory*, London: Routledge, pp. 174-195
- Giroux, H. (2009) "The Spectacle of Illiteracy and the Crisis of Democracy". Available online at <http://www.zmag.org/znet/viewArticle/22605>
- Gleeson, D. and James, D. (2007) 'The paradox of professionalism in English Further Education: a TLC project perspective', in *Educational Review*, 59, pp. 451- 467.
- Goddard, G. (2005) "The Surface, the Fold and the Subversion of Form: Towards a Deleuzian Aesthetic of Sobriety" in *Pli, the Warwick Journal of Philosophy, vol 16: Diagrams of Sensation: Deleuze and Aesthetics*, pp. 1-27.
- Gonick, M; Walsh, S and Brown, M. (2011) "Collective Biography and the Question of Difference" in *Qualitative Inquiry* 2011 17: pp. 741-749.
- Goodchild, P. (1996) *Deleuze and Guattari: an Introduction to the Politics of Desire*, London: Sage.
- Goodley, D. (2009) "Bringing the Psyche back into Disability Studies: The Case of the Body with/out Organs" in *Journal of Literary & Cultural Disability Studies*, Volume 3, Number 3, 2009, pp. 257-272
- Goodrham, M. (2006) *Using research to enhance professionalism in FE (further education) – what conditions of labour are conducive to practitioner research: the case of FE*, Paper presented at the 8th seminar of the ESRC Teaching and Learning Research Programme thematic seminar series 'Changing Teacher roles, Identities and Professionalism': the impact of research on professional practice and identity, King's College, London, 26th April 2006
- Goodson, I.F. (2003) *Professional Knowledge, Professional Lives – studies in education and change*, Maidenhead and Philadelphia: Open University Press.
- Goodson, I. Biesta, GJJ. Tedder, M. and Adair, N. (2010) *Narrative Learning*. London: Routledge.
- Gough, N. (2008) "Becoming-Cyborg: A RhizomANTic assemblage" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.77-90.
- Gould, S.J. (1981) *The Mismeasure of Man*, New York and London: Norton.

- Gould, E. (2006) "Dancing composition: pedagogy and philosophy as experience" in *International Journal of Music Education* 2006:24, pp. 197-207.
- Gracieuse, M. (2012) "Deleuze: Desiring Bodies versus organic judgment in *Pli*, *Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp.119-136.
- Gravells, A. (2006) *Delivering Adult Learning*, Exeter, Learning Matters Ltd.
- Gravells, A. (2011) *Preparing to teach in the Lifelong Learning sector* (4th ed.) Exeter, Learning Matters Ltd.
- Gravells, A. (2012) *What is Teaching in the Lifelong Learning Sector?* London: Learning Matters.
- Gravells, J. and Wallace, S. (2013) *The A-Z Guide to working in Further Education*, Northwich: Critical Publishing
- Gray, J. (2002) *False dawn: The Delusions of Global Capitalism*, London: Granta.
- Green, A. and Lucas, N eds. (1999) *Further Education and Lifelong Learning: realigning the sector for the 21st Century*, London: Institute of Education of the University of London.
- Gregoriou, Z. (2008) "Commencing the Rhizome: Towards a minor theory of education" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.91-110.
- Griggers, C. (2000) "Goodbye America (the bride is walking...)" in Buchanan, I. and Colebrook, C. (eds.) *Deleuze and Feminist Theory*, Edinburgh: Edinburgh University press,, pp. 173-214.
- Gruber, H.E. (2000) *Foreword* in Raina, M.K. (2000) *The Creativity passion: E. Paul Torrance's voyages of discovering creativity*, Stamford (USA) Ablex publishing Corp, pp.11-14.
- Guttorm, H. E. (2012) "Becoming-(a)-Paper, or an Article Undone: (Post-)Knowing and Writing (Again), Nomadic and so Messy" in *Qualitative Inquiry* 2012 18: Pp. 595-605.

H

- Hagar, P. (2004) "The conceptualisation and measurement of learning at work" in Rainbird, H, ; Fuller, A. and Munro, A. (eds) *Workplace Learning in Context*, London: Routledge, pp.242-258.
- Haggerty, K.D. and Ericson, R.V. (2000) "The Surveillant assemblage" in *British Journal of Sociology*, Vol.51.Issue 4, pp.605-622.
- Hallward, P. (2000) "The Limits of Individuation, or how to distinguish Deleuze and Foucault" in *Angelaki, Journal of the Theoretical Humanities*, Vol.5.no2, pp. 93-111.
- Hallward, P. (2006) *Out of This World: Deleuze and the Philosophy of Creation*, London: Verso.
- Hamera, J. (2011) "Performance ethnography", in Denzin, N and Lincoln, Y.S (eds) (2011) *The Sage Handbook of Qualitative Research* (4th edn), London: Sage, pp. 317-330
- Hamilton, M. (2009) "Putting Words in Their Mouths: The Alignment of Identities with System Goals Through the Use of Individual Learning Plans," *British Educational Research Journal* 35, no. 2 (2009), pp. 221–242.
- Hammersley, M. (1989) *The Qualitative dilemma: Herbert Blumer and the Chicago Tradition*, London: Routledge.
- Hammersley, M. (1993) *Social research: Philosophy, Politics and Practice*, Oxford: OUP.
- Hammersley, M. (1999) *What's wrong with ethnography?* London: Routledge
- Hammersley, M. and Atkinson, P. (2007) *Ethnography: principles in Practice* (3rd edn.) London: Routledge.
- Hanna, R. (2011) "Beyond the Myth of the Myth: A Kantian Theory of Non-Conceptual Content" in *International Journal of Philosophical Studies* Vol. 19(3), pp. 323–398
- Hardt, M. (1993) *Gilles Deleuze: An Apprenticeship in Philosophy*, London: Free Association Books.
- Hardt, M. (2001) "The Art of organisation: ontological assemblages and political assemblages in Spinoza" in Genosko, G. (2001) *Deleuze and Guattari: Critical assessments of Leading Philosophers: volume 1*, London: Routledge, pp. 376-393
- Harding, S.R (ed.) (1976) *Can Theories be refuted? Essays on the Duhem-Quine Thesis* , Dordrecht: Reidel.

- Hargreaves, D. H. (1996). *Teaching as a research based profession: possibilities and prospects*, London, Teacher Training Agency.
- Harkin, J., Turner G and Dawn, T. (2001) *Teaching Young Adults*, London: Routledge
- Harrison, R. (2003) "Language learners: Constructions of identity through discourses of lifelong learning", in proceedings of SCUTREA annual conference, Bangor, 2003, pp. 95-99.
- Hart, M. (2010) "Radically Democratic Learning in the Grounded In-Between" in *New Directions for Adult and Continuing Education*, no. 128, Winter 2010, pp.37-45.
- Harvey, D. (2010) *A Companion to Marx's Capital*, London: Verso.
- Harwood, J and Harwood, D. (2004) "Higher Education in Further Education: Delivering higher education in a further education context—a study of five South West colleges" in *Journal of Further and Higher Education* Vol. 28, No. 2, May 2004, pp. 153-164.
- Hayes, D. (1996) "Wasted Youth" in Hayes, D (ed.) (1996) *Debating education - Issues for the New Millennium?* Dept. of education, Canterbury Christ Church College, pp. 43-49.
- Hayles, K.N. (2001) "Desiring Agency: Limiting Metaphors and Enabling Constraints in Dawkins and Deleuze/Guattari" in *SubStance*, Issue 94/95 (Volume 30, Number 1&2), 2001, pp. 144-159.
- Hem de Lacotte Gilles, S. (2003) "Deleuze et la critique", in *Mouvements* n°27/28 mai-juin-juillet-août 2003, pp. 125-131.
- Hendricks, C. (2002) "A review of the work of Lawrence Stenhouse: Ambiguities, questions and Possibilities" in *Journal of research in Education*, Fall 2002. Vol 12 no1, pp. 117-122
- Hess, C. and Paltrinieri, L. (2009) "Orbis Tertius #1" in *Chimères: revue des schizanalyses*, no70 - 2009 / Dedans-Dehors 1, pp.55-74.
- Hier, S.P. & Greenberg, J. (2009) *Surveillance: Power, Problems and Politics*, Vancouver and Toronto: UBC Press.
- Hillage, J.; Pearson, R.; Anderson, A. and Tamkin, P. (1998) *Excellence in Research on Schools*, Research Report RR74, Department for Education and Employment, August 1998. Available online at <http://www.employment-studies.co.uk/pubs/summary.php?id=exceled>. Last accessed 02.07.12.

- Hillier, J. (2008) "Plan(e) Speaking: a Multiplanar Theory of Spatial Planning" in *Planning Theory*, 2008 7, pp. 24-50.
- Hillier, Y and Figgis, J. (2011) "Innovation in VT, niggles and squiggles" in *Studies in Continuing Education*, 33 (3), pp. 1 – 21.
- Hillier, Y and Jameson, J. (2003) *Empowering Researchers in Further Education*, Stoke on Trent: Trentham books.
- Hillier, Y. and Thompson, A. (2005) *Readings in Post Compulsory Education: research in the learning and skills sector*, London: Continuum.
- Hodgson, A. and Spours, K. (2000) 'Building a lifelong learning system for the future' in Hodgson, A. and Spours, K (2009) *Collaborative Local Learning Ecologies: Reflections on the Governance of Lifelong Learning in England*, IFLL paper 6 for NIACE, Leicester . Available online at <http://www.niace.org.uk/lifelonglearninginquiry/docs/IFLL-Sector-Paper6.pdf> Last accessed 18.03.13
- Hodgson, A. and Spours, K. (2012) "Understanding and supporting school-to-work transitions: an ecological model", paper for the European Conference of Education Research (Cadiz, September 2012). Available online at <http://vetnet.mixxt.org/networks/files/download.110541> Last accessed 18.03.13.
- Hodgson, A. (2011) "IFL speaks to Professors Ann Hodgson" in *InTuition*, Issue 6. Autumn 2011, p5.
- Hodgson, N. & Standish, P. (2009) 'Uses and misuses of poststructuralism in educational research', *International Journal of Research & Method in Education*, 32: 3, pp. 309 — 326.
- Hodkinson, P. and Hodkinson, H. (2004) The complexities of workplace learning: problems and dangers in trying to measure attainment" in Rainbird, H.; Fuller, A. and Munro, A. (eds) *Workplace Learning in Context*, London: Routledge, pp. 259-276.
- Holland, E. (1999) *Deleuze and Guattari's Anti-Oedipus: Introduction to Schizoanalysis*, London and New York: Routledge.
- Holliday, A (2002) *Doing and Writing Qualitative Research*, London: Sage
- Holme, R. (2004) *Literacy: An Introduction*. Edinburgh: Edinburgh University Press

Holquist, M. (2002) *Dialogism - Bakhtin and his world*, 2nd ed., London and New York: Routledge.

Hollway, W. and Jefferson, T. (2000) *Doing qualitative research differently – free association, narrative and the interview method*, London: Sage.

Honan, E. (2007) "Writing a rhizome: an (im)plausible methodology" in *International Journal of Qualitative Studies in Education*, Vol 20. No.5, pp. 531-546.

Honan, E. and Sellars, M. (2008) "(E) merging Methodologies: Putting Rhizomes to work" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari, Educational futures: Rethinking Theory and Practice*, vol 18, Rotterdam: Sense, pp.111-158

hooks, b. (1992) "Eating the other" in hooks, b. (ed.) *Black Looks: Race and Representation*, London: Turnaround, pp. 21-39.

Hoppe, R, (2010) *The Governance of Problems* Bristol: Policy Press

Horsdal, M. (2007) "Therapy and Narratives of Self" in West, L., Alheit., Andersen, A.S., and Merrill, B (2007) *Using biographical and life history approaches in the study of adult and lifelong learning*. Frankfurt am Mam: Peter Lang, pp. 91-108.

Howard, J. S. (1998) "Subjectivity and Space" in Kaufman, E. and, Heller, K. (eds) (1998) *Deleuze and Guattari: New Mappings in Politics, Philosophy, and Culture*, University of Minnesota Press: Minneapolis, pp.112-126.

Howard-Jones, P (2011) "A Multiperspective Approach to Neuroeducational Research" in *Educational Philosophy and Theory, Special Issue: Educational Neuroscience*. Volume 43, Issue 1, pp. 24-30.

Howard-Jones, P. (2007) "Introduction to educational "neuromyths"", part of Transcript of keynote seminar of the all party Parliamentary group on scientific research in learning and education: "*Brain Science in the Classroom*", Portcullis House, May 2007. Available online at http://www.futuremind.ox.ac.uk/downloads/2007_brain-science_transcript.pdf Last accessed 11.09.13.

Hoy, W. (2010) *Quantitative research in education: a primer*, London: Sage

Huberman, A.M and Miles M.B. (eds.) (2002) *The Qualitative Researcher's Companion*, London: Sage.

Huckfield (2012) *FE Professionalism – You couldn't make it up if you tried!* . Available online at <http://www.huckfield.com/blog/fe-professionalism-you-couldnt-make-it-up-if-you-tried/> posted in: Further Education, In Depth Reports on 01/04/2012

Hughes, C. and Tight, M. (1995) "The myth of the learning society" in *British Journal of Educational Studies* 43(3), pp. 290-304.

Hughes, J (2008) *Deleuze and the Genesis of Representation*, New York: Continuum.

Hunt, C. (2000) *Therapeutic Dimensions of Autobiography in Creative Writing*, London: Jessica Kingsley.

Hunt, C. (2001) Climbing out of the Void: moving from chaos to concepts in the presentation of a thesis" in *Teaching in Higher Education*, Vol.6.no.3, pp.351-367.

Hunt, C. and West, L. (2007) "Learning in a border country: Using psychodynamic ideas in teaching and research" in *Studies in the Education of Adults* Vol. 38, No.2, Autumn 2006, pp. 160-177.

Husén, T. (1974) *The Learning Society*, London: Methuen.

Husén, T. (1986) *The Learning Society Revisited*, Oxford: Pergamon.

Hutchins, R. M. (1970) *The Learning Society*, Harmondsworth: Penguin.

Hyland, K. (2009). "Constraint vs. Creativity: identity in academic writing" in M. Gotti (Ed.) *Commonality and Individuality in Academic Discourse*. Frankfurt: Peter Lang, pp. 25-52.

Hyland, T. (2002). "Theory, practice and performance in teaching: professionalism, intuition and jazz." (2002). *Education: JournalArticles*. Paper 4.http://digitalcommons.bolton.ac.uk/ed_journals/4

Hyland T. & Merrill B. (2003) *The changing face of further education: lifelong learning, inclusion and community values in FE*, London: Routledge Falmer.

Hyvärinen, M. (2008) "Life as Narrative" Revisited" in *Partial Answers: Journal of Literature and the History of Ideas*, Volume 6, Number 2, June 2008, pp. 261-277.

IfL (2009) *CPD guidelines*. Available online at: http://www.ifl.ac.uk/_data/assets/pdf_file/0011/5501/J11734-IfL-CPD-Guidelines-08.09-web-v3.pdf Last accessed 15.10.10.

IfL (2012a) "IfL members with QTLS qualified to teach in schools" Monday 2 April 2012 . Available online at <http://www.ifl.ac.uk/newsandevents/press-releases/ifl-members-with-qtls-qualified-to-teach-in-schools> Last accessed 03.04.2012

IfL (2012b) "Leading learning and letting go: building expansive learning environments in FE". Available online at www.ifl.ac.uk/leadingandlettinggo Last accessed 11.09.13

IfL (2013) "Should teaching qualifications be left to chance?". Available online at www.ifl.ac.uk Last accessed 22.08.13

Illeris, K. (2004) *The Three dimensions of learning - Contemporary learning theory in the tension field between the cognitive, the Emotional and the Social*, Frederiksberg / Leicester: Roskilde university press/NIACE.

Illeris, K. (2007) *How We Learn: Learning and Non-learning in Schools and Beyond*, London/ New York: Routledge.

Illeris, K. (2009) *Contemporary Theories of Learning*, London: Routledge.

Illich, I. (1971) *Deschooling society*. Harmondsworth: Penguin.

Illich, I. (1976) *After Deschooling, what?* London: Writers and Readers' Publishing cooperative.

Inglis, F. and Aers, L. (2008) *Key Concepts in Education*, London: Sage.

Ingold, T. (2008) Bringing things to life: creative entanglements in a World of materials Available online at <http://www.reallifemethods.ac.uk/events/vitalsigns/programme/documents/vital-signs-ingold-bringing-things-to-life.pdf> Last accessed 11.9.13.

Ingold, T. (2010) "To learn is to improvise a movement along a way of life" presentation at LSE on 9th January 2010. Available online at <http://www.cognitionandculture.net/the-study-of-cognition-and-culture-today/578-to-learn-is-to-improvise-a-movement-along-a-way-of-life> Last accessed on 03.05.2013.

Ishii-Gonzales, S. (2012) "Suspended meaning: On Bergson and Cinematic perception" in *World Picture* 7, Autumn 2012 . Available online at http://www.worldpicturejournal.com/WP_7/Ishii-Gonzales.html Last accessed 11.09.13.

J

James, D. and Biesta, G.J.J. (2007) *Improving Learning Cultures in Further Education*, London: Routledge.

James, D. and Ashcroft, K. (1999) "Introduction" in: Ashcroft, K and James, D. (eds) (1999) *The creative professional: learning to teach 14-19 year olds*, London: Falmer, pp. 1-7.

James, D. (1999) "What does it mean to be creative" in Ashcroft, K and James, D. (eds) (1999) *The creative professional: learning to teach 14-19 year olds*, London: Falmer, pp. 8-27.

Jameson, F. (1992) *Signatures of the Visible*, London: Routledge

Jeanes, E.L and De Cock, C. (2005) "Making the familiar strange: A Deleuzian perspective on creativity" *Paper for the Creativity and Innovation Management Community Workshop*, 23-24 March 2005, Oxford. Available online at http://www.iacat.com/Revista/recreate/recreate03/familiar_strange.pdf Last accessed 11.09.13.

Jenkins, A; Healey, M. and Zetter, R. (2007) *Linking teaching and research in disciplines and departments*, York: Higher Education Academy Publications.

Jensen, K. (2007) "The Desire to learn: an analysis of knowledge-seeking practices among professionals" in *Oxford review of Education*, Vol.33.no.4, pp.498-502.

Johnston, C. ([1978]1993) "Double Indemnity" in Easthope, A. (ed.) *Contemporary Film Theory*, London: Longman, pp. 135-147.

Jones, K. (2009) *Culture and Creative learning: a literature review*, *Creativity, Culture, Education*: Available online at [https:// www.creativitycultureeducation.org/ research-impact/](https://www.creativitycultureeducation.org/research-impact/)

Jones, S. (2010) "Assessment criteria has made a McNugget of students' education" Published in *FE Focus* on 26 February, 2010. Available online at <http://www.tes.co.uk/article.aspx?storycode=6037044> Last accessed 11.09.13.

Joyce, C. (1985) "Bacon, Deleuze and the Way of All Flesh" in *Circa*, No. 24 (Sep. - Oct., 1985), pp. 23-27.

Jupp, V. (2006) *The Sage Dictionary of Social Research Methods*: Available online at <http://srmo.sagepub.com/view/the-sage-dictionary-of-social-research-methods/n152.xml> Last accessed 11.09.13.

K

Kant, I. (1781/ 2007) *Critique of Pure Reason*, trans. M. Miller, London: Penguin Classics.

Kaufman, E. and, Heller, K. (eds) (1998) *Deleuze and Guattari: New Mappings in Politics, Philosophy, and Culture*, University of Minnesota Press: Minneapolis

Kaufmann, E. (1998) "Introduction" in Kaufman, E. and, Heller, K. (eds) (1998) *Deleuze and Guattari: New Mappings in Politics, Philosophy, and Culture*, University of Minnesota Press: Minneapolis Pp. 3-13.

Keeley-Brown, L. (2007) *Training to teach in the Learning and Skills sector: from Threshold award to QTLS*, London: Pearson.

Keep, E. (2011) "The English Policy Narrative", in A. Hodgson, K. Spours and M. Waring (eds.), *Post Compulsory Education and Lifelong Learning across the United Kingdom – Policy, organisation and governance*, London: Institute of Education, Bedford Way Papers.

Kendall, A. and Herrington, M (2009) "Properly equipping our teachers for the future: re-reading research in practice as an everyday habit of professional practice", in *Teaching in Lifelong Learning*, University of Huddersfield Press. Vol 1, iss.2, pp.45-53.

Keroes, J. (1999) *Tales out of school: gender, longing, and the teacher in fiction and film*, Southern Illinois University Press.

Kilianska-Przybylo. G. (2012) "Are Creative EFL Teachers Born or Can They Be Grown? Some Reflections and Implications for Teacher Training" in *International Online Journal of Educational Sciences*, 2012, 4(1), pp. 71-80.

Kingston, P. (2008) "Efficient erosion of expertise" in *The Guardian*, 02.09.08 . Available online at <http://www.guardian.co.uk/education/2008/sep/02/furthereducation> Last accessed 07.10.12

Kolakowski, L (1993) "An overall view of positivism" in Hammersley, M. (1993) *Social research: Philosophy, Politics and Practice*, Oxford:OUP, pp.1- 8.

Korner, S. (1955) *Kant*, London: Penguin.

Kozin, A. (2009) "The appearing memory: Gilles Deleuze and Andrey Tarkovsky on `crystal-image'" in *Memory Studies*, 2009: 2: p.103.

Krejsler, J. (2007) "Discursive strategies that individualise: CVs and appraisal interviews" in *International Journal of Qualitative Studies in Education*, Vol.20.no.4, pp. 473-490.

Kress, G. (2003) *Literacy in the new media age*, London: Routledge

Kristeva, J. (2002) *Revolt, she said*, Los Angeles, CA: Semiotexte

Kuhn, T. (1970) *The Structure of Scientific Revolutions*, 2nd ed. Chicago: University of Chicago Press. Available online at <http://insitu.lri.fr/~mbl/Stanford/CS477/papers/Kuhn-SSR-2ndEd.pdf> Last accessed 16.07.12

Kumar R. (2005) *Research Methodology: A step by step guide for beginners*. 2nd Ed. London: Sage.

Kuppers, P. (2009) "Toward a Rhizomatic Model of Disability: Poetry, Performance, and Touch" in *Journal of Literary & Cultural Disability Studies*, Volume 3, Number 3, 2009, pp. 221-240.

Kuppers, P. and Overboe, J. (2009) "Introduction: Deleuze, Disability, and Difference" in *Journal of Literary & Cultural Disability Studies*, Volume 3, Number 3, 2009, pp. 217-220.

Kvale, S. (1996) *InterViews*, Sage: Thousand Oaks, CA.

L

Lacan, J. (1975) *Le Séminaire:1- les Ecrits techniques de Freud*, Paris:Seuil.

Lafontaine, C. (2007) "The Cybernetic matrix of 'French Theory'" in *Theory, Culture, & Society*, Vol. 24 (50), pp.27-46.

Lambert, D. and Lines, D. (2000) *Understanding Assessment: Purposes, Perceptions Practice*, London: Routledge.

Lambert, G. (2002) *The Non-Philosophy of Gilles Deleuze*, London: Continuum.

Lambert, G. (2007) *Who's Afraid of Deleuze and Guattari?*, London: Continuum,

Langlois, C. (2012) "Cease to exist in order to be": *Worstward Ho between Badiou and Deleuze* Mosaic 45/3 (September 2012), pp.17-32.

Lapsley, R. and Westlake, M. ([1992]1993) "From Casablanca to Pretty Woman: the politics of Romance" in Easthope, A. (ed.) *Contemporary Film Theory*, London: Longman, pp.179-205.

- Lapsley, R. and Westlake, M. (1988) *Film Theory: An Introduction*, Manchester: Manchester University Press.
- Lash, S. (2007) "Capitalism and metaphysics" in *Theory, Culture, & Society*, Vol. 24 (5), pp.1-26.
- Lather, P. (2006) *Paradigm proliferation as a good thing to think with: teaching research in education as a wild profusion*. *International journal of qualitative studies in education*, 19 (1), pp. 35-57.
- Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-network-theory* Oxford: OUP.
- Lave, J. & Wenger, E. (1991). *Situated learning-Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lawlor, L. (2008) "Following the rats: Becoming-animal in Deleuze and Guattari" in *SubStance* 117, Vol.37,no.3.
- Lawlor, L. (2011) "A Note on Souriau's *L'instauration philosophique* and Deleuze and Guattari's *What is Philosophy*" in *Deleuze studies*, Volume 5 No.3, pp.400-406.
- Lawson, T.; Harrison, J. and Cavendish, S. (2004) "Individual action planning: a case of self-surveillance?" *British Journal of Sociology of Education*, 25: 1, pp. 81 — 94.
- Lawy, R. and Armstrong, P. (2009) "The myth of meeting needs revisited: the case of educational research", *International Journal of Lifelong Education*, 28:1, pp.3-17.
- Lazzarato, M. (2006) "The Concepts of Life and the Living in Societies of Control" in Fuglsang, M. and Sorensen, B.M. (eds) *Deleuze and the Social*, Edinburgh: Edinburgh University Press, pp.171-190.
- Lazzarato, M. (2009) "La crise des subprimes est une crise de la gouvernamentalité néo-libérale, et non une incapacité à réguler la monnaie" in *Chimères: revue des schizanalyses*, no70 - 2009 / Dedans-Dehors 1, pp.77-88.
- Lea, J, Hayes, D; Armitage, A; Lomas, L; Markless, S. (2003) *Working in Post-compulsory Education*, Maidenhead: Open University Press

Leach, M. and. Boler, M. (1998) Gilles Deleuze: practicing education through flight and gossip” in Peters, M. (ed.) (1998a) *Naming the Multiple: Poststructuralism and Education*, London, Bergin and Garvey, pp.149-172.

Lim, W.K (2012) “Dysfunctional problem-based learning curricula: resolving the problem” in *BMC Medical Education* 2012, 12:89.

LSIS (Learning and Skills Improvement Service) (2012) “LSIS welcomes final Lingfield report and proposed FE Guild”. Available online at <http://www.lsis.org.uk/news/lsis-welcomes-final-lingfield-report-and-proposed-fe-guild> Last accessed 22.04.13

LSIS (Learning and Skills Improvement Service) (2013) *Teaching and Training Qualifications for the Further Education and Skills Sector in England (2013): Guidance for initial teacher education providers*.

Lefebvre, M. (2006) “Between setting and landscape in the cinema” in Lefebvre, M. (ed.) *Landscape and film*, London: Routledge, pp.19-61.

Le Colombat, A-P. (1990) « Le Voyant et les "enragés": Rimbaud, Deleuze et Mai 1968 » in *The French Review*, Vol. 63, No. 5 (Apr., 1990), pp. 838-848

Lemieux, R. (2007) *Essai sur la Pensée Ethique de Gilles Deleuze*. Available online at <http://www.archipel.uqam.ca/837/1/M10115.pdf> Last accessed 29.04.13.

Lévi-Strauss, C. (1955) *Tristes tropiques*, Paris: Plon.

Lilley, M; Twigg, E. and Keane, M. (2005) “My time: widening and increasing participation of hard-to-reach learners through provision at the interface of education and Primary health Care” in Hillier, Y. and Thompson, A. *Readings in Post Compulsory Education*, London, Continuum, pp. 54-73.

Lincoln, Y.S and Guba, E.G. (1985) *Naturalistic enquiry*, Beverley Hills, CA: Sage.

Lines, D. (2008) “Deleuze, Education and the Creative Economy” in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.129-142

Linstead, S. and Pullen, A (2006) “Gender as multiplicity: Desire, displacement, difference and dispersion” in *Human Relations*, 2006:59, pp.1287-1310.

Linstead, S. and Mullarkey, J. (2003) "Time, Creativity and Culture: Introducing Bergson" in *Culture and Organisation*, 2003, Vol. 9 (1) March, pp.3-13.

Liukkonen, P. (2008) *Michelangelo Antonioni*. Available online at <http://www.kirjasto.sci.fi/antonion.htm> Last accessed 05.10.12.

Lloyd, G. (1996) *Spinoza and the Ethics*, London: Routledge.

Lodico, M.G.; Spaulding, D.T. and Voegtle, K.H (2010) *Methods in Educational Research: From Theory to Practice*, Oxford: John Wiley and Sons

Lonergan, J. (1984) *Video in Language Teaching*, Cambridge: CUP

Lucas, N. (2002) 'The introduction of national standards and compulsory teacher education for further education college teachers in England: issues and challenge'. *Teacher development*, 6, pp. 459-473.

Lucas, N. (2004a) The 'FENTO Fandango': national standards, compulsory teaching qualifications and the growing regulation of FE college teachers, *Journal of Further and Higher Education*, 28, pp. 35-51.

Lucas, N. (2004b) *Teaching in Further Education: New perspectives for a changing context*, Bedford Way Papers, Institute of Education.

Lucas, N. and Unwin, L. (2009) "Developing teacher expertise at work: in-service trainee teachers in colleges of further education in England". *Journal of Further and Higher Education*, 33, pp. 423-433.

Luzzi, J. (2011) "Red desert (il deserto rosso)." in *Modernism/Modernity*, 18(1) (2011), pp. 205-209.

Lyman, R. (2007) Obituary: Michelangelo Antonioni, filmmaker Published: Tuesday, July 31, 2007 in *New York Times*. Available online at http://www.nytimes.com/2007/07/31/arts/31iht-antonioni.1.6915052.html?_r=0. Last accessed 05.10.12

M

MacCabe, C. ([1974]1993) *Realism and the cinema - notes on some Brechtian theses*, in Easthope, A. (ed.) *Contemporary Film Theory*, London: Longman

Macfarlane, B. and Gourlay, L. (2009) 'The reflection game: enacting the penitent self', *Teaching in Higher Education*, 14:4, pp. 455- 459.

Malingre, V. (2010) « Fouilles, fichiers ADN, photographes suspects: les lois antiterroristes ont mis le Royaume-Uni sous surveillance » in *Le Monde*, 18-19.04.2013, p8.

McGee, A. and Lawrence, A. (2009) "Teacher educators inquiring into their own practice", in *Professional Development in Education*, 35:1, pp.139-157.

MacGregor Wise, J. (2000) "Home: Territory and identity" in *Cultural Studies*, Vol.14. issue 2, pp.295-310.

Mackenzie, A. (2005) "The Problem of the Attractor: A singular generality between sciences and Social Theory" in *Theory, Culture and Society*, Vol.22(5), pp.45-65.

MacLure, M. (1994) "Talking in Class: Four rationales for the rise of Oracy in the UK" in Stierer, B. and Maybin, J. (eds) (1994) *Language, Literacy and Learning in Educational Practice*. Clevedon: Multilingual Matters, pp.139-156.

MacLure, M. (2006a) "Entertaining doubts: on frivolity as resistance" in Satterthwaite, J., Martin, W., and Roberts, L. (eds) (2006) *Discourse, Resistance and Identity Formation*, Stoke on Trent: Trentham books, pp. 5-21.

MacLure, M. (2006b) "The bone in the throat: some thoughts on baroque method" *Keynote Presentation to the Australian Association for Research in Education Adelaide, November 2006*. Available online at <http://www.esri.mmu.ac.uk/respapers/bone.php> Last accessed 14.11.11.

MacLure, M. (2010) "Qualitative inquiry: where are the ruins?" Conference, University of Auckland, 6-9 December 2010. Available online at <http://www.esri.mmu.ac.uk/respapers/nzareRuins.pdf> Last accessed 11.09.13.

MacLure, M. (2011) "Where Are the Ruins?" in *Qualitative Inquiry* 2011 17, pp. 997-1005.

MacLure, M; Holmes, R; MacRae, C; and Jones, L. (2010) "Animating classroom ethnography: overcoming video-fear" in *International Journal of Qualitative Studies in Education*, 23: 5, pp. 543 — 556.

MacMath, S. (2009) "Interrogating paradigmatic and narrative analysis against a backdrop of teacher professionalism" in *International Journal of Research and Method in Education*, Vol.32, no2, pp.137-150.

MacNiff, J and Whitehead, J. (2005) *Action Research for teachers: A practical Guide*, London: David Fulton.

Major, C.H and Palmer, B. (2001) "Assessing the Effectiveness of Problem-Based Learning in Higher Education: Lessons from the Literature" in *Academic Exchange Quarterly* Spring 2001: Volume 5, Issue 1. Available online at <http://www.rapidintellect.com/AEQweb/mop4spr01.htm> Last accessed 03.06.13.

Manning, E. (2010) "Always More than One: The Collectivity of a Life" in *Body & Society* 2010: 16, pp. 117-127.

Marcus, A. (2010) *Teaching history with film: strategies for secondary social studies*, London: Routledge.

Marcus, G. & Saka. E. (2006) "Assemblage" in *Theory, Culture & Society* 2006 (23). pp. 101-107.

Marcus, L. (2012) "The trainee teachers who are paying to work for nothing". Available online at <http://www.guardian.co.uk/education/2012/mar/26/colleges-unpaid-trainee-lecturers> Last accessed 12.09.13.

Marcus, M. (1986) *Italian Film in the Light of Neorealism*. Princeton: Princeton University Press.

Mariani, M. and Barron, P. (2011) "Cinematic Space in Rome's *Disabitato*: Between Metropolis and Terrain Vague in the Films of Fellini, Antonioni, and Pasolini" in: *Modernism/modernity*, Volume 18, Number 2, pp. 309-333.

Marks, L.U. (1994) "A Deleuzian Politics of Hybrid Cinema," in *Screen*, 35.3, pp. 244-264

Marks, L.U. (2006) "Asphalt Nomadism – the new desert in Arab independent cinema" in Lefebvre, M. (ed.) *Landscape and film*, London: Routledge, pp.125- 147.

Marrati, P. (2008) *Gilles Deleuze: Cinema and philosophy*. trans. A. Hartz. Johns Hopkins University Press.

Marshall, J.D. (1998) "Michel Foucault: Philosophy, education and freedom as an exercise upon the self" in Peters, M. (ed.) (1998a) *Naming the Multiple: Poststructuralism and Education*, London, Bergin and Garvey, pp.65-84.

Martin, J-C. (1993) *La philosophie de Gilles Deleuze*. Paris: Payot.

Martin, J.C. (2012) *Gilles Deleuze: Notre contemporain*, Hors-Champs, France Culture 22.11.12 . Available online at <http://www.franceculture.fr/emission-hors-champs-gilles-deleuze-notre-contemporain-15-2012-11-19>. Last accessed 17.12.12

Masny, D. (2010) "Multiple Literacies Theory: how it functions, what it produces" in PERSPECTIVA, Florianópolis, v. 28, n. 2, pp. 337-352.

Masny, D. & Cole, D.R. (eds) (2009a) *Multiple Literacies Theory*, Rotterdam: Sense Publishers.

Masny, D. & Cole, D.R. (2009b) *Introduction To Multiple Literacies Theory: A Deleuzian Perspective*, in Masny, D. & Cole, D.R. (eds) (2009a) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp.1-12

Mason, J. (2006) *Six strategies for mixing methods and linking data in social science research*, ESRC Working Paper. Available online at: http://eprints.ncrm.ac.uk/482/1/0406_six%2520strategies%2520for%2520mixing%2520methods.pdf Last accessed 08.07.12

Mason, M. (ed.) (2008a) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell

Mason, M. (2008b) "What is complexity theory and what are its implications for educational change?" in Mason, M. (ed.) (2008) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell, pp. 32-45.

Masson, J. (1993) *Against Therapy*, London: HarperCollins

Massumi, B. (1992) *A user's guide to capitalism and schizophrenia: deviations from Deleuze and Guattari*, Swerve/ MIT press.

Matheson, C. & Matheson, D. (eds) (2000) *Educational Issues in the Learning Age*, New York, Continuum

Matz, J. (2011) "The Art of Time, Theory to Practice" in *Narrative*, Vol 19, No. 3 (October 2011), pp. 273-294.

Maxwell, J.A. (1992) "Understanding and validity in Qualitative Research" in Huberman, A.M and Miles M.B. (eds) (2002) *The Qualitative Researcher's Companion*, London: Sage, pp.37-64.

May, T. (2005) *Gilles Deleuze: an Introduction*, Cambridge: CUP.

May, T. and Semetsky, I. (2008) "Deleuze, ethical education and the Unconscious" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.143-258.

Mazzei, L. (2011) "Desiring silence: gender, race and pedagogy in education" in *British Educational Research Journal*, Vol. 37, No. 4, August 2011, pp. 657–669.

Mazzei, L. and McCoy, K. (2010) "Thinking with Deleuze in Qualitative research" in *International Journal of Qualitative studies in Education*, 23:5, pp. 503 – 509.

McCarthy, C. and Dimitriadis, G. (2001) "All-consuming identities: race, the pedagogy of resentment in the age of difference" in Trifonas, P (ed.) *Revolutionary Pedagogies – Cultural Politics, Instituting Education, and the Discourse of Theory*. Routledge: London pp.47-60.

McGrath, J.J. (2003) *Leading in a managerialist paradigm: a survey of Perceptions*, Birmingham University Press.

McGuire, W. J. (1997). "Creative hypothesis generating in psychology: some useful heuristics" in *Annual review of psychology*, 48(30), pp.1-26.

McLellan, R., Galton, M., Steward, S. and Page, C. (2012). *The impact of creative initiatives on wellbeing: a literature review*. Newcastle: CCE

Meinhof, U. (1994) "Double Talk in News Broadcasts" in Graddol, D; Maybin, J. and Stierer, B. and (eds) *Researching Language and Literacy in Social Context*. Clevedon: Multilingual Matters, pp. 212-223.

Meirieu, P. (2011) "L'expérience artistique au centre de l'école: Une alternative à la distraction compulsive" in *Le Monde*, 9.7.2011. p.19.

Melzer, Z. (2010) "Michelangelo Antonioni and the "Reality" of the Modern" in *Offscreen*, 14:4 Available online at: http://www.offscreen.com/index.php/pages/essays/reality_of_the_modern/ Last accessed 10.09.12

Memmert, D. (2011) "Creativity, expertise, and attention: Exploring their development and their relationships", *Journal of Sports Sciences*, 29: 1, pp. 93 — 102.

- Mengue, P. (1994) *Gilles Deleuze ou le système du multiple*. Paris: Kimé.
- Mercieca, D. (2011) "Becoming-Teachers: Desiring students" in *Educational Philosophy and Theory*, Vol. 44, No. S1, 2012, pp.43-56
- Merleau-Ponty, M. (1962) *Phenomenology of Perception*, London: Routledge.
- Merrill, B. and West, L. (2009) *Using Biographical Methods in Social Research*, London: Sage.
- Merriam, S., and Brockett, R. (1997) *The Profession and Practice of Adult Education*. San Francisco: Jossey-Bass.
- Merriam, S. and Caffarella, R. (1991) *Learning in Adulthood*, San Francisco: Jossey Bass.
- Mezirow, J. and Associates (2000) *Transformative Learning: Critical perspectives on a Theory in progress*. San Francisco: Jossey Bass.
- Middleton, S. (1998) *Disciplining Sexuality – Foucault, Life Histories and Education*, New York: Teachers' College Press, University of California
- Miles, M.B. and Huberman A.M. (1984) *Qualitative data analysis: A Sourcebook of New Methods*, Beverley Hills, Sage.
- Ministry of Reconstruction (1919) *Final Report of the Adult Education Committee*, London: HMSO
- Minton, D. (2005) *Teaching Skills in Further and Adult Education* 3rd ed., London: Thomson Learning.
- Mishler, E. (1990) *Validation in inquiry-guided research: the role of exemplars in narrative studies*, Harvard Educational Review, 60(4), pp. 415–442.
- Misra, P.K (2011) "VET teachers in Europe: policies, practices and challenges" in *Journal of Vocational Education & Training* 63:1, pp. 27-45
- Montebello, P. (2008) *Deleuze, philosophie et cinéma*, Paris: Vrin.
- Montebello, P. (2012) « Deleuze, and anti-phenomenology » in *Pli, Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon* pp.33-40.
- Moody, A. and Malins, P. (2007) *Deleuzian Encounters*. Basingstoke: Palgrave Macmillan.

- Moon, J. (1999) *Reflection in Learning and Professional Development*, London: Kogan Page.
- Moore, K.Z. (1995) "Eclipsing the Commonplace: The Logic of Alienation in Antonioni's Cinema" in *Film Quarterly*, Vol. 48, No. 4 (Summer, 1995), pp. 22-34.
- Morgan, A.K and Drury, V.B. (2003) "Legitimising the Subjectivity of Human Reality Through Qualitative Research Method" in *The Qualitative Report*, Volume 8, Number 1 March 2003.
- Morris, A. (2005) "Foreword" in Hillier, Y. and Thompson, A. (2005) *Readings in Post Compulsory Education: Research in the Learning and Skills sector*, London: Continuum.
- Moss, W. (2000) *Response to the Consultation Paper on Compulsory Teaching Qualifications for Teachers in Further Education*, RaPAL, City Lit Training Unit, - . Available online at. <http://www.literacy.lancs.ac.uk/rapal/archive/policy/teachqual.htm> Last accessed. 22.01.08.
- Moulard-Leonard, V. (2012) "Moving Beyond Us and Them? Marginality, Rhizomes, and Immanent Forgiveness" in *Hypatia* vol. 27, no. 4 (Fall 2012), pp. 828-846.
- Munday, I. (2012) "Roots and Rhizomes—Some Reflections on Contemporary Pedagogy" in *Journal of Philosophy of Education*, Vol. 46, No. 1, pp. 42-59.
- Mullarkey, J. (2007) "Life, movement and the Fabulation of the Event" in *Theory, Culture, & Society*, Vol. 24 (6), pp. 53-70.
- Mulvey, L. ([1975]1993a) "Visual Pleasure and Narrative Cinema" in Easthope, A. (ed.) *Contemporary Film Theory*, London: Longman, pp.111-123.
- Mulvey, L. ([1981]1993b) "Afterthoughts on Visual Pleasure and Narrative Cinema inspired by King Vidor's *Duel in the Sun* (1946)" in Easthope, A. (ed.) *Contemporary Film Theory*, London: Longman, pp.124-134.
- Mulvey, L. (2000) "Vesuvian topographies: The eruption of the past in *Journey to Italy*" in Forgacs, D.; Lutton, S; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp. 95-111.
- Murphie, A. (2010) *Deleuze, Guattari, and Neuroscience* in Gaffney, Peter (ed.) (2010) *Deleuze, Science and the Force of the Virtual* Minneapolis: University of Minnesota Press: 330-367.

Murray, R. Caulier-Grice J. and Mulgan, G. (2009) *The Open Book of Social innovation*. Available online at http://www.nesta.org.uk/library/documents/Social_Innovator_020310.pdf
Last accessed 08.03.2013

N

Nardelli, M. (2010) "Some reflections on Antonioni, sound and la Notte" in *Soundtrack*, Vol.3.no1, pp.11-23.

Nash, I; Jones, S; Ecclestone, K. and Brown, A. (eds) (2008) Teaching and Learning Research Programme (TLRP) (2008) *Challenge and change in further education: A Commentary by the Teaching and Learning Research Programme*. Available online at: <http://www.esrc.ac.uk/my-esrc/grants/RES-139-34-1003/outputs/read/4f22c30d-c5d3-4fda-bd60-d70bd30a8872> Last accessed 12.09.13.

National Advisory Committee on Creative and Cultural Education (NACCCE) (1999) *All our futures: culture, creativity and education* (London, Department for Education and Employment/Department for, Culture, Media and Sport).

National Association of Teachers in Further and Higher education (NATFHE) (2000) *Response to the Consultation Paper on Compulsory Teaching Qualifications for Teachers in Further Education*. Available online at <http://centrallobby.politicshome.com/Resources/epolitix/Forum%20Microsites/NATFHE/cpfe.pdf> Last accessed 12.09.13.

National Committee for Enquiry into Higher Education (NCIHE), (1997) *Dearing report of the National Committee for Enquiry into Higher Education*. Available online at <http://www.leeds.ac.uk/educol/ncihe/> Last accessed 19.02.13

National Institute of Adult and Continuing Learning (NIACE) (2013) *Lifelong learning: the story of change: the facts and figures*. Available online at <http://www.niace.org.uk/story-of-change>, Last accessed 16.09.13.

Neary, M. (2002) *Curriculum Studies in Post-compulsory and Adult Education*, Cheltenham, Nelson Thornes.

Newby, P. (2010) *Research Methods for Education*, Harlow: Pearson.

Newman, N. (2012) "A Closer Look at Michelangelo Antonioni's Red Desert", available online <http://thefilmstage.com/features/a-closer-look-at-michelangelo-antonionis-red-desert/> Last accessed 29.10.12.

Newman, S. and Jahdi, K. (2009) "Marketisation of education: Marketing, rhetoric and reality" in *Journal of Further and Higher education*, 33:1, pp.1-11.

Nicoll, K. & Edwards, R. (2012) Positioning adult educators in discourses of professional development. *Studies in Continuing Education*, 34:3, pp. 233-249.

Nietzsche, F. (1983) *Ainsi Parlait Zarathoustra*, trans. G-A. Goldschmidt, Paris: Poche.

Nietzsche, F. (1990) *Beyond Good and Evil: a Prelude to a philosophy of the Future*, trans. R.J. Hollingdale, London: Penguin Classics.

Nietzsche, F. (1992) *Ecce Homo: How one becomes what one is*, trans. R.J. Hollingdale, London: Penguin Classics.

Nietzsche, F. (1996) *On the Genealogy of Morals*, trans. D. Smith, Oxford: Oxford World Classics.

Nietzsche, F. (1998) *Twilight of the idols; or how to Philosophise with a Hammer*, Trans. D. Large, Oxford: OUP

Norris, C. (1993) *The Truth about Postmodernism*, Oxford: Blackwell.

Nuffield Review (2009) "Education for All: The Future of Education and Training for 14-19 year olds": *Nuffield Review of 14-19 Education and Training, England and Wales, Summary, Implications and Recommendations*. Available online at (www.nuffield14-19review.org.uk/) Last accessed 11.09.13.

Nowell-Smith, G. (1991) *Eisenstein on Montage*, in Glenny, M. and Taylor, R. (eds.), trans. M. Glenny, *S.M. Eisenstein Selected Work Volume II, Towards a Theory of Montage*. Available online at http://www.mrclement.com/jjj2/essay_montage.pdf Last accessed 15.09.12.

Nowell-Smith, G. (2000) "North and South, East and West: Rossellini and Politics" in Forgacs, D.; Lutton, S. and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.7-19.

Nowell-Smith, G. (2001) "L'Avventura" in *The Criterion Collection*. Available online at <http://www.criterion.com/current/posts/99-l-avventura> Last accessed 10.10.12.

Nowell-Smith, G. (2008) *Making Waves: New Cinemas of the 1960s*, London: Continuum: London

O

Oancea, A. (2005) "Criticisms of Educational Research: Key Topics and Levels of Analysis" in *British Educational Research Journal*, Vol. 31, No. 2, Apr., 2005, pp.157-183.

Oberg, C.M. (2008) "Performance Ethnography: Scholarly inquiry in the here and now" in *Transformative Dialogues: Teaching & Learning Journal* Volume 2, Issue 1 August 2008, pp.1-4.

OFSTED (2003) *Initial Training of Further Education Teachers* (November 2003) . Available online at <http://www.ofsted.gov.uk/resources/initial-training-of-further-education-teachers-2003> Last accessed 19.04.12

OFSTED (2008) *The Inspection of Initial teacher education 2008-2011 – A guide for inspectors on the management and organisation of initial teacher education inspections*. Available online at <http://www.ofsted.gov.uk/resources/inspection-of-initial-teacher-education-2008-2011> Last accessed 12.09.13.

OFSTED (2010) "Creative approaches that raise standards" . Available online at <http://www.ofsted.gov.uk/resources/learning-creative-approaches-raise-standards> Last accessed 29.02.13.

OFSTED (2011) "Self-evaluation for initial teacher education providers for the further education system" October 2011, No. 080192. Available online at <http://www.ofsted.gov.uk/resources/self-evaluation-for-initial-teacher-education-providers> Last accessed 01.03.13

OFSTED (2012) "The common inspection Framework for FE and skills" . Available on line at; <http://www.ofsted.gov.uk/resources/common-inspection-framework-for-further-education-and-skills-2012> Last accessed 28.02.13

- Ofsted (2013) *Handbook for the inspection of further education and skills*, July 2013, No. 120061. Available online at www.ofsted.gov.uk/resources/120061. Last accessed 27.08.13
- Olkowski D, (2008) "Deleuze and the Limits of Mathematical Time" in *Deleuze Studies*. Volume 2, pp. 1-17.
- Olkowski, D. (2011) The Interesting, the remarkable, the Unusual: Deleuze's Grand style" in *Deleuze Studies*, Vol 5. No.1, pp. 118-139.
- Olma, S. and Koukouvelis, K. (2009) "Introduction: Life's (re-)Emergences" in *Theory, Culture, & Society*, Vol. 24 (6), pp.1-17.
- Onfray, M. (2010) *Le crepuscule d'une idole*, Paris: Grasset
- O' Rawe, D. (2006) "The great secret: silence, cinema and modernism" in *Screen* 47:4 Winter 2006, pp.395-405
- Orban, C. (2001) "Antonioni's women, Lost in the City" in *Modern Language Studies*, Vol. 32, No.2, pp. 11-27.
- Orr, K. and Simmons, R. (2011) "Restrictive Practice: The Work-Based Learning Experience of Trainee Teachers in English Further Education Colleges" in *Journal of Workplace Learning*, 23 (4), pp. 243-257.
- Osberg, D.; Biesta, G.J.J.; & Cilliers, P. (2008) "From representation to emergence: Complexity's challenge to the epistemology of schooling" in Mason, M. (ed.) (2008) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell, pp.204-218
- O'Sullivan, S. (2005) "From Geophilosophy to Geoaesthetics: The Virtual and the Plane of Immanence vs. Mirror Travel and The Spiral Jetty" in *Pli, Warwick Journal of Philosophy Diagrams of sensation: Deleuze and aesthetics*: vol16 (2005), pp.27-55.
- O'Sullivan, S. and Stahl, O. (2006) "Contours and Case Studies for a Dissenting Subjectivity (or, How to Live Creatively in a Fearful World)" in *Angelaki: Journal of the theoretical humanities*, vol. 11: 1, special issue on Creativity, May 2006, pp. 147-56.
- O'Sullivan, S. (2008) "The Production of the New and the Care of the Self" in O'Sullivan, S. and Zepke, S. (eds) *Deleuze, Guattari and the Production of the New*, London: Continuum. pp. 91-103.

O'Sullivan, S. (2009) "From Stuttering and Stammering to the Diagram: Deleuze, Bacon and Contemporary Art Practice", in *Deleuze Studies*, vol. 3, no. 2, December 2009, pp. 247-5

O'Sullivan, S. (2010) "From Aesthetics to the Abstract Machine: Deleuze, Guattari, and Contemporary Art Practice" in O'Sullivan, S. and Zepke, S. (eds) *Deleuze and Contemporary Art*, Edinburgh: Edinburgh University Press, pp. 189-207.

P

Parker, N. (2009) "From Borders to Margins: A Deleuzian Ontology for Identities in the Postinternational Environment" in *Alternatives* 34 (2009), pp.17-39.

Parikka, J. (2011) *On borrowed Time: Larazzo and debt*. Available online at <http://jussiparikka.net/2011/11/29/on-borrowed-time-lazarato-and-debt/> Last accessed 19.03.13.

Parr, A. (ed.) (2005) *The Deleuze Dictionary*. Edinburgh: Edinburgh University Press.

Parsons, J; Avis, J. and Bathmaker, A-M. (2001) "Now we look through a Glass darkly: a comparative study of the perceptions of those working with FE trainee teachers", paper presented at Fourth International Conference: 'Vocational Education and Training Research' University of Wolverhampton, 16-18 July 2001.

Patton, P. (2007) "Political Normativity and Poststructuralism: The Case of Gilles Deleuze". Available online at http://www.uu.nl/sitecollectiondocuments/gw/gwcentre_humanities/political-normativity-deleuze.pdf Last accessed 12.09.13.

Pearce, C. and MacLure, M. (2009) 'The wonder of method', *International Journal of Research & Method in Education*, 32: 3, pp. 249-265.

Pecore, J. L. (2012). "Beyond Beliefs: Teachers Adapting Problem-based Learning to Preexisting Systems of Practice" in *Interdisciplinary Journal of Problem-based Learning*, 7(2), pp. 7-33.

Perez, G. (1991) "The Point of View of a Stranger: An Essay on Antonioni's 'Eclipse'" in *The Hudson Review*, Vol. 44, No. 2 (Summer, 1991), pp. 234-262.

Peters, R.S. (1970) *Ethics and Education*, London: George Allen and Unwin.

Peters, M. (2004) "Geophilosophy, Education and the Pedagogy of the Concept" in *Educational Philosophy and Theory*, Volume 36, Number 3, July 2004, pp. 217-226

Peterson, J. (1996) "Is a cognitive approach to the avant garde perverse?" in Bordwell, D. and Carroll, N. (eds) (1996) *Post-Theory: Reconstructing Film Studies*, University of Wisconsin press: Wisconsin USA, pp.108-129.

Petty, G (2004) *Teaching today: a practical guide*, Cheltenham: Nelson Thornes.

Petty, G. (2006) *Evidence based teaching - A practical approach*, Cheltenham: Nelson Thornes.

Phelan, J. (2005). "Who's Here? Thoughts on Narrative Identity and Narrative Imperialism." *Narrative* 13.3, pp. 205–10.

Phillips, A. and Taylor, B. (1980) "Sex and Skill: Notes towards a Feminist Economics" in *Feminist Review*, No. 6 (1980), pp. 79-88.

Phillips, J. (2006) "Agencement/ Assemblage" in *Theory, Culture and Society* 13 (2-3) pp.108-109.

Pisters, P. (2001a) "Synaptic signals: time travelling through the brain in the Neuro image" in *Deleuze Studies: Schizoanalysis and visual culture*, vol.5:2, pp.261-274.

Pisters, P. (2011b) "Flashforward: the future is now" in *Deleuzian futures, special edition of Deleuze Studies*, Volume 5:2011 supplement:1-6, pp.98-115.

Plotnitsky, A. (2006) "Chaosmologies: Quantum Field Theory, Chaos and thought in Deleuze and Guattari's 'What is Philosophy?'" in *Paragraph* 29:2, pp.40-56.

Plowright, D. and Barr, G. (2012) "An integrated professionalism in further education: a time for phronesis?" in *Journal of Further and Higher Education*, 36:1, pp.1-16.

Plumb, D. (2008) "Learning as dwelling" in *Studies in the Education of Adults*, vol.40,No1. 2008, pp. 62-79.

Pottage, A. (1998) "Power as an art of contingency: Luhmann, Deleuze, Foucault" in *Economy and Society*, Vol.27.no1, pp.1-27.

Powell, A. (2005). "'The face is a horror story': the affective face of Horror". *Pli, the Warwick journal of Philosophy*, pp. 56-78.

Pratt, J. (2009) "Institutional memory in Higher education" in *R.Ed: Research in Education*, December 2009, vol 2; no1, pp.34-37

Prigogine, I. & Stengers, I. (1986). *La Nouvelle Alliance - Métamorphose de la Science*, Paris: Gallimard.

Prigogine, I. (1986). *Les Lois du Chaos*, Paris: Flammarion.

Pring, R. (2000) *Philosophy of Educational Research*, London: Continuum.

Protevi, J. (2012) Review of Nathan Jun and Daniel W. Smith (eds.), *Deleuze and Ethics*, Edinburgh University Press, 2011. Available online at <http://ndpr.nd.edu/news/28517-deleuze-and-ethics/> Last accessed 30.04.13.

Punch, K. (1998) *Introduction to Social Research: Quantitative and Qualitative Approaches*, London, Sage.

Pykett, Jessica (2009) "Personalisation and de-schooling: Uncommon trajectories in contemporary education policy" in *Critical Social Policy*, Vol. 29, No. 3, pp.374-397.

Q

Quart, L. (2011) "The Intricacy and Beauty of *The Red Desert*" in *Dissent* October 7, 2011. Available online at <http://dissentmagazine.org/online.php?id=545> last accessed 09.10.13

R

Race, P. (2005) *Making Learning Happen: A guide for Post Compulsory Education*, London Sage.

Radford, M. (2007) 'Action research and the challenge of Complexity', in *Cambridge Journal of Education*, 37:2, pp.263 – 278.

Radford, M. (2008) "Complexity and truth in educational research" in Mason, M. (ed.) (2008) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell, pp.137-149.

Radjabi, R. (2008) *Deleuze on Bacon*. Available online at <http://r-rhizome.blogspot.co.uk/2008/02/deleuze-on-bacon-rouzbeh-radjabi-daniel.html>. Last accessed 02.10.12

Raggatt, P. Edwards, R. and Small, N. (eds) (1996) *The Learning Society: Challenges and Trends*, London: Routledge.

Rainbird, H., Fuller, A. and Munro, A (eds) (2004) *Workplace learning in Context*, London: Routledge

- Ramond, C. (2001) *le Vocabulaire de Jacques Derrida*, Paris: Ellipses
- Ramsden, S.; Richardson, F.; Josse, G.; Thomas, M.; Ellis, C; Shakeshaft, C.; Seghier, M. and Price, C. (2011) "Verbal and non-verbal intelligence changes in the teenage brain" in *Nature*, Volume:479, pp.113–116.
- Rancière, J. (2004a) *Le maître ignorant: Cinq leçons sur l'émancipation intellectuelle*, Paris, Poche 10/18.
- Rancière, J. (2004b) *The Politics of Aesthetics: The Distribution of the Sensible*, trans. G. Rockhill, London: Continuum.
- Randle, K., and Brady, N. (1997) "Managerialism and Professionalism in the 'Cinderella Service'" in *Journal of Vocational Education and Training*, Vol. 49, No. 1, 1997, pp. 121-139.
- Rankin, J. (2002) "What is Narrative? Ricoeur, Bakhtin and Process Approaches" in *Concrescence*, vol.3, pp.1-12.
- Ranson, S. (ed.) (1998) *Inside the Learning Society*, London: Cassell.
- Rascaroli, L. and Rhodes, J.D. (2008) "Antonioni and the place of modernity: A tribute." in *Framework*, No1, Spring 2008, pp.42-47.
- Rascaroli L. and Rhodes, J.D (2011) "Interstitial, Pretentious, Alienated, Dead: Antonioni at 100" in Rascaroli, L. and Rhodes, J.D. (eds) (2011) *Antonioni: Centenary Essays*, London: Palgrave Macmillan, pp.1-20.
- Ray, C. (1991) *Time, Space and Philosophy*, London: Routledge.
- Razvan, S. (2010) 'Conceptualising teacher immediacy through the 'companion' metaphor' in *Teaching in Higher Education*, 15: 5, pp. 531-542.
- Reece, I. and Walker, S. (2007) *Teaching, Training and Learning: a practical guide* (6th ed.), Tyne and Wear: Business Education Publishers.
- Reed, M.; Evely, A. C.; Cundill, G.; Fazey, I. R. A.; Glass, J.; Laing, A.; Newig, J.; Parrish, B.; Prell, C.; Raymond, C. and Stringer, L. (2010) "What is social learning?" in *Ecology and Society*, vol 15, no. 4, Pp. r1 . Available online at <http://www.ecologyandsociety.org/vol15/iss4/resp1/> Last accessed 12.09.13.

Reichardt C.S and Cook T.D (1979) "Beyond qualitative versus quantitative methods" in Reichardt C.S and Cook T.D (eds) *Qualitative and Quantitative Methods in Evaluation research*. Beverley Hills, Sage, pp.7-32.

Restivo, A. (2002) *The Cinema of Economic Miracles*, Durham: Duke University Press.

Reynolds, J. (2006) "Dreyfus and Deleuze on *L'habitude*, Coping and Trauma in Skill Acquisition" in *International journal of Philosophical studies*, Vol.14.issue 4, pp.539-559.

Reynolds, J. (2008) "Deleuze's Other-Structure: Beyond the Master-Slave Dialectic, but at What Cost?" in *Symposium (Canadian Journal of Continental Philosophy / Revue Canadienne de Philosophie Continentale*: Vol. 12: Iss. 1, Article 6, pp.67-88.

Richardson, B. (2000) "Recent Concepts of Narrative and the Narratives of Narrative Theory" in *Style DeKal*, Volume: 34, Issue: 2, pp. 168-175.

Richardson, L. and St. Pierre, E.A. (2005). "Writing: A method of inquiry "n *Handbook of Qualitative Research*, 3rd ed., ed. N. K. Denzin and Y. S. Lincoln Thousand Oaks, CA: Sage, pp. 959-78.

Robert (1979) *Dictionnaire Etymologique du Français*, Robert: Paris.

Robert (1993) *Le Nouveau Petit Robert*, Robert: Paris.

Roberts, J.M. (2012) "Poststructuralism against poststructuralism: Actor-network theory organisations and economic markets" in *European Journal of Social Theory* 2012 15, pp. 35-53.

Robinson, D. & Rennie, S. (2012) "Volunteer teachers: Testing the professionalisation agenda in the lifelong learning sector" in *Journal of Further and Higher Education*. pp.1-22.

Robinson, K (2006) "School kills Creativity" . Available on line at, http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html Last accessed 27.02.13

Robinson, K. (2010) *Changing educational Paradigms*. Available online at <http://comment.rsablogs.org.uk/2010/10/14/rsa-animate-changing-education-paradigms/> Last accessed 24. 03.12.

Robson, J. (1998) "A Profession in Crisis: status, culture and identity in the further education college" in *Journal of Vocational Education and Training*, Vol. 50, No. 4, 1998, pp. 585-607.

Rodowick, D. (1991) *The Difficulty of Difference: Psychoanalysis, Sexual Difference and Film Theory*, London and New York: Routledge.

Rodowick, D. (1995) "Audiovisual Culture and Interdisciplinary knowledge" in *New Literary History*, Vol.26.1, pp.111-121.

Rodowick, D. (1997) *Gilles Deleuze's Time Machine*. Durham: Duke UP.

Roffe, J. (2007) "The Revolutionary Dividual" in Hicky - Moody, A. and Malins, P. *Deleuzian Encounters*. Basingstoke: Palgrave Macmillan, pp. 40-49.

Roffe, J. (2007) "The Revolutionary Dividual" in Hicky - Moody, A. and Malins, P. *Deleuzian encounters*. Basingstoke: Palgrave Macmillan, pp. 40-49.

Rogers, C. and Freiberg, H.J. (1994) *Freedom to learn*, New York; MacMillan. 3rd ed..

Rohdie, S. (1990) *Antonioni*, London: BFI

Rohdie, S. (2000) "India" in Forgacs, D.; Lutton, S.; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.112-125

Rohdie, S. (2006) *Montage*, Manchester: University of Manchester press.

Romein, E. and Schuilenburg, M. (2008) "Are You On the Fast Track? The Rise of Surveillant Assemblages in a Post Industrial Age" in *Architectural Theory Review* 20081201 13(3):12

Roodhouse, S, (2 February 2010) *The days of plenty are gone, so let's embrace the employer-led degree*. Available at: <http://www.guardian.co.uk/education/2010/feb/09/employer-led-degree-new-university> (Accessed 5 May 2010)

Roraback, E. (2005), « The Colors and the Spinozist Bodies of Michelangelo Antonioni's *L'Avventura* », *E-rea* [Enligne], 3.1 | 2005. Available at <http://erea.revues.org/620> Last accessed 11.02.12

Rosenbaum, J. (2005) « A Vigilance of Desire: Antonioni's *L'Eclisse* » in *The Criterion Collection*. Available online at <http://www.criterion.com/current/posts/359-a-vigilance-of-desire-antonioni-s-l-eclisse>. Last accessed 16.09.12.

Rossellini, R. (1972) « Interview with Maurice Scherer and François Truffaut » in Bazin, A. (1972) *La Politique des auteurs*, Paris : Champ Libre, pp.74-85

Rowe, J.E (2012) "The case for employing Deleuzian philosophical concepts for understanding local economic development" in *Applied Geography* Volume 32, Issue 1, January 2012, pp. 73-79

Roth, W-M. and Lee, Y-J. (2007) "Vygotsky's Neglected Legacy": Cultural-Historical Activity Theory" in *Review of Educational Research*, June 2007, Vol.77. no.2, pp.186-232.

Roy, K. (2004) "Overcoming Nihilism: From communication to Deleuzian expression" in *Educational Philosophy and Theory*, Volume 36, Number 3, July 2004, pp. 297-312.

Roy, K. (2008) "Deleuzian Murmurs: Education and Communication" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.159-170.

Rozzoni, C. (2012) "The Deepest is the Skin': Deleuze and Simondon as Superficial philosophers" in *Pli - Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp.137-154.

Ruddick, S (2010) "The Politics of Affect: Spinoza in the Work of Negri and Deleuze" in *Theory, Culture and Society*, 2010 27, pp. 21-45.

Ruddock, J. (1991) *Innovation and change*. Buckingham, UK: Open University Press.

Runco, M. A. (2007) *Creativity: Theories and Themes: Research, Development, and Practice*, London: Elsevier

Ryan, M. & Bourke, T. (2013) The teacher as reflexive professional: making visible the excluded discourse in teacher standards. *Discourse: Studies in the Cultural Politics of Education*, 34:3, pp. 411-423.

S

Sachs, J. (2000) "The Activist Professional" in *Journal of educational Change*, 1 (1) pp. 77-94.

Sachs, J (2003) "Teacher professional standards: controlling or developing teaching?" in *Teachers & Teaching: Theory and Practice*, 9 (2), pp. 175-86

Sachs, J. (2007) "Learning to improve or improving to learn: the dilemma of teacher continuing professional development": Keynote, 20th Annual Congress for School Effectiveness and Improvement. Available online at <http://www.fm-kp.si/zalozba/ISBN/978-961-6573-65-8/009-020.pdf> . Last accessed 25.03.13

Salehi, S. (2008) *Teaching Contingencies: Deleuze, Creativity Discourses, and Art*, A thesis submitted to the Faculty of Education in conformity with the requirements for the degree of Doctor of Philosophy Queen's University, Kingston, Ontario, Canada

Sánchez-Ruiz, M.J.; Hernández - Torrano, D.; Pérez-González, J.C. Batey, M. and Petrides, K. V. (2011) "The relationship between trait emotional intelligence and creativity across subject domains" in *Motivation and Emotion*, 35 (4), pp. 461-473.

Sapiro, G. (2012) "Une féconde révolution symbolique: Entraîneur plus que maître à penser" in *Le Monde*, 24.01.2012 .p.18.

Sargant, A. (1996) "Learning and 'Leisure'" in Edwards, R. Hanson, A., Raggatt, P., (eds) *Boundaries of Adult Learning*, London: Routledge, pp.196-210.

Sarnel, R. (2007) « Lieux de passages et transversalités: Pour une dynamique deleuzienne » in *le Portique: Philosophie et Sciences Humaines: Gilles Deleuze et Félix Guattari: territoires et devenirs*. No. 20, pp.99-110

Sarris, A. (2007) "Arrivederci Michelangelo! The Antonioni Adventure Winds Up" in *New York Observer*, 08.07.07. Available online at <http://observer.com/2007/08/arrivederci-michelangelo-the-antonioni-adventure-winds-up/> last accessed 15.09.12

Satter, T.J. (2012) "Tearing Real Images from Clichés through Edward Burtynsky's Manufactured Landscapes". Available online at <http://www.rhizomes.net/issue23/satter/index.htm>Last accessed: 13.10.12

Satterthwaite, J.; Martin, W. and Roberts, L. (eds) (2006) *Discourse, Resistance and Identity Formation*, Stoke on Trent: Trentham books.

Satterthwaite, J. (2006) "Introduction" in Satterthwaite, J.; Martin, W. and Roberts, L. (eds) (2006) *Discourse, Resistance and Identity Formation*, Stoke on Trent: Trentham books, pp.1-2

Sauvagnargues, A. (2012) "Simondon, Deleuze and the Construction of Transcendental Empiricism" in *Plj, Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp.1-22.

Sawkut, R.; Seetanah, B.; Sanassee, V. and Lamport, M. (2010) "Learning theories: a review" paper presented at 2010 Oxford Business & Economics Conference, 28th June 2010.

Scaife, T. (2004) "The culture of the now: barriers to research in FE", paper presented at the *Annual Conference of the Yorkshire and Humberside Learning and Skills Network*, Leeds, 20 July, Pp. 1–9. Available online at: education.exeter.ac.uk/tlc/docs/.../LE_TS_PUB_LSRNCONF_07.04.doc

Scales, P. (2011/2012) "The end of Sheep-Dip CPD?" in *CPD Matters*, Issue 2, Winter 2011-2012, pp.3-5.

Schauwer, E. and van Hove, G. (2011) "Swimming is Never Without Risk: Opening Up on Learning Through Activism and Research" in *Qualitative Inquiry* February 2011 17, pp. 224-232.

Schérer, R. (2007) « Visions croisées » in *le Portique: Philosophie et Sciences Humaines: Gilles Deleuze et Félix Guattari: territoires et devenirs*. No. 20, pp. 17-32.

Schérer, R. and Polack, J.C. (2009) "La crise à l'épreuve de l'utopie" in *Chimères: revue des schizanalyses*, no70 - 2009 / Dedans-Dehors 1, pp. 195-208.

Schmidt, A. (2010) "The battle for creativity: Frontiers in science and science education" in *BioEssays*, Volume 32, Issue 12 , pp. 1016–1019.

Schön, D. A. (1973) *Beyond the Stable State. Public and private learning in a changing society*, Harmondsworth: Penguin.

Schön, D. (2001) "The Crisis of Professional Knowledge and the Pursuit of an Epistemology of Practice" in Raven, J. and Stephenson, J (eds) *Competence in the Learning Society*, in by Peter Lang, New York, pp. 185-207.

Schön, D. (1983) *The Reflective Practitioner. How professionals think in action*, London: Temple Smith

Schuller, T. and Watson, D. (2009) *Learning Through Life: Inquiry into the Future for Lifelong Learning*, Leicester, NIACE. Available online at

<http://www.niace.org.uk/lifelonglearninginquiry/docs/IFLL-summary-english.pdf> Last accessed 13.09.13

Schwartz, L.G. (2005) "Typewriter: Free Indirect Discourse in Deleuze's Cinema" in *SubStance*, Issue 108 (Volume 34, Number 3), 2005, pp. 107-135.

Scott, C. E. (1998) "Practices of Repetition" in *Symploke* 6.1 (1998). pp.118-134.

Sermijn, J.; Devlieger, P. and Gerrit, L. (2008) "The Narrative Construction of the Self: Selfhood as a Rhizomatic Story" in *Qualitative Inquiry* 2008.14, pp. 632-650

Semetsky, I. (2006) *Deleuze, Education and Becoming*, Rotterdam: Sense.

Semetsky, I (2003) "Philosophy of education as a process-philosophy: Eros and Communication", *Concrescence: The Australasian Journal of Process Thought*. 2003.Vol. 4. Available at: <http://www.concrescence.org/index.php/ajpt/article/view/115> Last accessed 12.009.13.

Semetsky, I. (2005) "Not by breadth alone: imagining a self-organised classroom", *COMPLICITY: An International Journal of Complexity and Education*, Vol. 2 No. 1, pp. 19-36.

Semetsky, I (2007) *Educating for 3C: Critical, Clinical, Creative*, Conference Presentation, Philosophy of Education Society of Australasia, *Research Institute of Advanced Study for Humanity, The University of Newcastle*

Semetsky, I. (2008) "Prefacing Deleuze" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp. vii- xxi

Semetsky, I. (2008) "Re-reading Dewey through the lens of complexity Science, or; On the creative logic of education" in Mason, M. (ed.) (2008) *Complexity theory and the Philosophy of Education*, Oxford: Wiley-Blackwell, pp.79-90

Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense.

Semetsky, I. (2009) "Deleuze Pure and Applied: Becoming-Ethical" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 93-104

Semetsky, I. and Lovat, T. (2008) "Knowledge in education: towards a Deleuze-Habermasian critique in/ for Education" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.171-182.

Shacklock, G. and Smyth, J. (1998) *Being Reflexive in Critical and Social research*, London: Falmer.

Shapshay, S. (2012) "Schopenhauer's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Summer 2012 Ed.), Available online at <<http://plato.stanford.edu/archives/sum2012/entries/schopenhauer-aesthetics/>>. Last accessed 13.04.2013

Sharp, J. (2009) *Success with your Education Research Project*, Exeter: Learning Matters.

Sharratt, C. (2012) "L'Eclisse", in *Senses of Cinema*. Cinemathèque Annotations on film, Issue 62. Available online <http://sensesofcinema.com/2012/cteq/leclisse/> Last accessed 10.10.12

Sheerin, D. (2009) *Deleuze and Ricoeur: Disavowed Affinities and the Narrative Self*, New York: Continuum International.

Shiel, M. (2006) *Italian Neo-realism: rebuilding the cinematic city*, London: Wallflower.

Shomoossi, N. (2004) "The effect of teachers' questioning behavior on EFL classroom interaction: a classroom research study" in *The Reading Matrix* Vol. 4, No. 2, pp.96-104.

Shores, C. (2009) "Deleuze's Analog and Digital Communication; Isomorphism; and Aesthetic Analogy. Part 5 of Deleuze Posthumanism Paper, "Do Posthumanists Dream of pixelated Sheep?" . Available online at <http://piratesandrevolutionaries.blogspot.com/2009/01/deleuzes-analog-and-digital.html> Last accessed 28.02.13

Simmons, R. and Thompson, R. (2008) "Creativity and performativity: the case of further education" in *British Educational Research Journal*, 34: 5, pp. 601-618.

Simon, R.I. (2001) "The Touch of the past: The Pedagogical significance of a transcendental Sphere of Public memory" in Trifonas, P (ed.) *Revolutionary Pedagogies – Cultural Politics, Instituting Education, and the Discourse of Theory*. Routledge: London, pp.61-82

Simondon, G. (2011) "On the existence of technical objects". trans. N. Mellamphy, D. Mellamphy and N.B. Mellamphy in *Deleuze studies*, Volume 5 No.3, pp. 407-424.

- Sitney, P.A. (1995) *Vital Crises of Italian Cinema*, Austin, US: University of Texas Press.
- Skareus, E, (2009) "Pictorial Analysis in Research on Education: Method and Concepts" in *International Journal of Research and Method in Education*, Vol.32, no2, pp.167-183.
- Skills Commission (2010) *Report into Teacher Training in Vocational subjects*. Available online at www.policyconnect.org Last accessed 12.09.13.
- Smith, D. (1997) "Introduction" in *Essays Critical and Clinical*, trans. D. Smith and M.A. Greco (1997): University of Minnesota Press, Minneapolis, pp. Xi-Liii.
- Smith, D. (1998) "The Place of Ethics in Deleuze's Philosophy: Three Questions of Immanence" in Kaufman, E. and, Heller, K. (eds) (1998) *Deleuze and Guattari: New Mappings in Politics, Philosophy, and Culture*, University of Minnesota Press: Minneapolis, pp. 251-269.
- Smith, D. (2003) "Deleuze and the liberal tradition: normativity, freedom and judgement" in *Economy and Society*, 32:2, pp.299 – 324.
- Smith, D. (2007) Deleuze and the question of desire: Toward an immanent theory of ethics" in *Parrhesia* No. 2.2007, pp. 66–78.
- Smith, D. (2011) Flow, Code and Stock: A Note on Deleuze's Political Philosophy" in *Deleuzian futures, special edition of Deleuze Studies*, Volume 5:2011 supplement:1-6, pp. 36-55.
- Smith, D. (2012) "Concepts, Time, and Truth" in *Pli, Warwick Journal of Philosophy, Special Volume: Deleuze and Simondon*, pp. 69-106.
- Smith, D. (2013a) "On the sources of Normativity: a Deleuzean account", lecture at Purdue University as part of the Illuminations Lecture Series on Thursday April 4th, 2013. Available online at <http://www.youtube.com/watch?v=SPoB99C98BA> Last accessed 13.09.13.
- Smith, D. (2013b) Review of James Williams, *Gilles Deleuze's Philosophy of Time: A Critical Introduction and Guide*, Edinburgh University Press, 2011 available online at <http://ndpr.nd.edu/news/42146-gilles-deleuze-s-philosophy-of-time-a-critical-introduction-and-guide/> last accessed 15.10.13
- Smith, F. (1992) *To think, in language, learning and education*, London, Routledge

- Smith, M. K. (1996; 2001, 2007) "Action research" in *INFED: The encyclopaedia of informal education*, www.infed.org/research/b-actres.htm Last accessed 12.09.13.
- Smith, M. K. (2001) 'Lifelong learning', in *INFED: the encyclopaedia of informal education*, <http://www.infed.org/lifelonglearning/b-life.htm>. Last accessed 12.09.13.
- Smith, M. K. (2011). "Donald Schön: learning, reflection and change" in *INFED: the encyclopaedia of informal education*: Available online at www.infed.org/thinkers/et-schon.htm. Last accessed 12.09.13.
- Somers-Hall, H. (2011) "Time Out of joint: Hamlet and the pure form of time" in *Deleuzian futures, special edition of Deleuze Studies*, Volume 5:2011 supplement:1-6, pp.56-76
- Solman, G. (2004) "L'Avventura" in *Senses of cinema*, issue 64. Available online at http://sensesofcinema.com/2004/cteg/l_avventura/ Last accessed 10.10.12.
- Spenceley, L. (2006) 'Smoke and mirrors': an examination of the concept of professionalism with the FE sector" in *Research in Post Compulsory Education*, 11, pp. 289-302.
- Spencer, E., Lucas, B. and Claxton, G. (2012). *Progression in Creativity: a literature review*. Newcastle: Creativity, Culture and Education.
- Spinoza, B. (1677/2009) *On the Improvement of the Understanding (Treatise on the Emendation of the Intellect*, trans. R.H.M.Elwes: Dodo Press. Available online at <http://www.spinozacsack.net78.net/On%20the%20Improvement%20of%20the%20Understanding,%20Benedict%20de%20Spinoza.pdf> Last accessed 13.11.11
- Spinoza, B. (1996) *Ethics*, trans. E. Curley, London: Penguin Classics.
- Springgay, S.; Irwi, R.L. and Kind, S.W. (2005) "A/r/tography as Living Inquiry Through Art and Text" in *Qualitative Inquiry* 2005 11, pp. 897-912
- Springgay, S. (2008) "An Ethics Of Embodiment, Civic Engagement and A/R/Tography: Ways Of Becoming Nomadic in Art, Research And Teaching in *Educational Insights*, 12(2). Available on-line at http://www.ccfi.educ.ubc.ca/publication/_insights/v12n02/articles/springgay/index.html Last accessed 01.01.13.
- Springgay, S. (2011) "The Chinatown Foray" as Sensational Pedagogy" in *Curriculum Inquiry*, Volume 41, Issue 5, pp.636–656.

- St Pierre, E. (1997) "Nomadic enquiry in the smooth spaces of the field: a preface" in *Qualitative Studies in Education*, 1997:10,3, pp. 365-383.
- St Pierre, E. (2002) "Methodology in the fold and the irruption of transgressive data" in S.B. Merriam & associates (eds) *Qualitative research in practice: examples of discussion and analysis*, San Francisco, Jossey Bass, pp. 399-416.
- St Pierre, E. (2008) "Deleuzian concepts for Education: the subject Undone" in Semetsky, I. (ed.) (2008) *Nomadic education: Variations on a theme by Deleuze and Guattari*, Educational futures: Rethinking Theory and Practice, vol 18, Rotterdam: Sense, pp.183-196.
- St. Pierre, E.A. (2011) "Anything Can Happen and Does" in *Cultural Studies <=> Critical Methodologies*, 2011 11, pp. 386-389.
- Stake, R. E. (1981) "A needed subjectivity in educational research" in *Discourse: Studies in the cultural politics of Education* 1 (2), pp. 1-8.
- Stanley, G. and Stronach, I. (2011) "Raising and doubling 'standards' in professional discourse: a critical bid" Paper for BERA conference, September 2011, London . Available online at [http://www.ljmu.ac.uk/ECL/ECL_docs/standards - bera final.pdf](http://www.ljmu.ac.uk/ECL/ECL_docs/standards_-_bera_final.pdf) Last accessed 17.12.11.
- Stanley, L (1992) *The Autobiographical I*. Manchester: Manchester University Press.
- Stengers, I. (2000) *The Invention of Modern Science, Theory Out of Bounds*, Vol. 19. Minneapolis and London, University of Minnesota press.
- Stenhouse, L. (1981) "What counts as Research?" in *British Journal of Education Studies*, Vol XXIX, No2. June 1981, pp.103-114.
- Stephens, D. (2009) *Qualitative Research in International settings: A practical guide*, London: Routledge.
- Sternberg, R.J. (2003) *Handbook of Creativity*, New York: Cambridge University Press.
- Stevick, E. (1976) *Memory, meaning and Method - some psychological perspectives on language learning*, Cambridge MA: Newbury House.
- Stone, L. (2011) "Outliers, cheese, and rhizomes: variations on a theme of limitation" in *Educational theory*. volume 61, issue 6. pp. 647–658.

Stouffer, W.B; Russell, J.S. and Oliva, M.G. (2004) *Making The Strange Familiar: Creativity and the Future of Engineering Education* in Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition, 2004. Available online at http://www.engr.wisc.edu/cee/faculty/russell_jeffrey/004.pdf Last accessed 16.07.12.

Stout, B. (2011) "Professional Ethics and Academic Integrity in Police Education" in *Policing*, Volume 5, Number 4, pp. 300–309.

Strawson, G. (2004). "Against Narrativity" in *Ratio* 17, pp. 428–52.

Stronach, I. (2009) *Globalising Education, Educating the Local: how method made us mad*, London: Routledge.

Stronach, I (2011) *Microdoctoral modelling: a few thoughts on the 'raw' and the 'cooked' in relation to data*, British Educational Research Association online resource. Available online at: [<http://www.bera.ac.uk/files/2011/11/Microdoctoral-modelling-a-few-thoughts-on-the-raw-and-the-cooked-in-relation-to-data.pdf>]. Last accessed 14.11.11.

Stronach, I., & Clarke, J. (2011) Eight contentions for an educational future: Untimely rules for unruly times. Available at: <http://www.docstoc.com/docs/87622816/Eight-contentions-for-the-educational-present-untimely-rules>.

Stronach, I.; Garratt, D.; Pearce, C., and Piper, H. (2007) "Reflexivity, the Picturing of Selves, the Forging of Method" in *Qualitative Inquiry*, Vol. 13, No. 2, pp. 179-203

Swennen, A. Jones, K. and Volman, M. (2010) Teacher educators: their identities, sub-identities and implications for professional development in *Professional Development in Education*, 36, pp.313-148.

T

Tammi, P. (2006) "Against Narrative ("A Boring Story")" in *Partial Answers* 4/2 2006, pp.19-40.

Tan, A. (ed.) (2007) *Creativity: A Handbook for Teachers*, Singapore: World Scientific Publishing Company.

Tan, A; Law, L; and Wong, S. (2007) "Epilogue: Creativity, Research, Ethics and Health" in Tan, A. (ed.) (2007) *Creativity: A Handbook for Teachers*, Singapore, World Scientific Publishing Company, pp. 551-558.

Takeuchi, H.; Yasuyuki, T.; Hiroshi, H.; Yuko, S.; Tomomi, N.; Rui, N.; Ryuta, K.; (2011) "Failing to deactivate: The association between brain activity during a working memory task and creativity" in *Neuroimage* 55 (2011), pp. 681-687.

Taylor, E. (1998) "The Theory and Practice of Transformative Learning: A Critical Review" *Information Series No. 374*, ERIC Clearinghouse on Adult, Career, and Vocational Education Center on Education and Training for Employment.

Taylor, G. (ed.) (2005) *Integrating Quantitative And Qualitative Methods in Research: 2nd ed.* Maryland, University Press of America.

Taylor, R. (2007) "Social class and widening participation." in *Participation and the pursuit of equality: essays in adult learning, widening participation and achievement*, Tuckett, A. (ed.) National Institute of Adult Continuing Education, pp. 80-89.

Teaching and Learning Research Programme (TLRP) (2004) "The effectiveness of Problem Based Learning 1: a pilot systematic review and meta-analysis" . Available online at <http://www.tlrp.org/pub/documents/NewmanfinalRB8.pdf> Last accessed 03.06.13

Teaching and Learning Research Programme (TLRP) (2009) *Effective learning and Teaching in UK higher Education*. Available online at <http://www.tlrp.org/pub/documents/UKHEfinal.pdf> Last accessed 28.05.13

Tedlock, B. (2011) "Braiding narrative ethnography and creative non-fiction" and Denzin, N and Lincoln, Y.S (eds) (2011) *The Sage Handbook of Qualitative research* (4th edn), London: Sage, pp. 331-340.

Tennant, M. (2009) "Lifelong learning as a Technology of the Self" in Illeris, K. (2009) *Contemporary Theories of Learning*, London: Routledge, pp.147-158.

Tett, L. (2002) *Lifelong Learning Policies: four fallacies and an interrogation*: paper presented at SCUTREA 32nd annual conference, 2-4 July 2002, University of Stirling.

Tett, L. and Maclachlan, K. (2006) *Stakeholders, gatekeepers and power: desperately seeking students' views in adult literacies research*. Paper presented at the 36th Annual SCUTREA Conference, 4-6 July 2006, Trinity and All Saints College, Leeds.

Thagard P. and Stewart, T.C. (2011) "The AHA! Experience: Creativity Through Emergent Binding in Neural Networks" in *Cognitive Science*, Volume 35, Issue 1, pp.1-33, January/February 2011.

- Thomas, G. (2009) "What works as sublinguistic grunt..." in *Research intelligence*, March 2009, issue 106, pp.20-21.
- Thompson, A. (2005) *Readings in Post Compulsory Education: Research in the Learning and Skills Sector*, London: Continuum, pp. 126-147.
- Thomson, A. (2008) "Bullied into IfL membership?" in TES/FE Focus on 28.11.08, available online at: <http://www.tes.co.uk/article.aspx?storycode=6005757>. Last accessed 22.02.09.
- Thorley, W. (2004) "Rhetoric, reality and Risk Further Education – a political concern" in *Research in Cost-Compulsory Education*, Vol. 9, No1, pp. 123-140.
- Thurston, D. (2009) "Widening the net: a review of the CETTnet practitioner research group, in practice" in *Teaching in Lifelong Learning*, University of Huddersfield Press, vol 1, iss.2, pp.24-34.
- Torrance, E. P. (1995) *Why Fly? A creative Philosophy*, Stamford (USA), Ablex publishing Corp.
- Torrance, H. (2007) "Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning", in *Assessment in Education* Vol. 14, No. 3, November 2007, pp. 281–294.
- Toscano, A. (2005) "Phenomenology + Husserl, Edmund (1859-1938)" in Parr, A. (ed.) (2005) *The Deleuze Dictionary*. Edinburgh: Edinburgh University Press. pp.202-204.
- Toscano, A. (2007) "Maurizio Lazzarato and the Metaphysics of contemporary capitalism" in *Theory, culture and Society*, Vol.24, pp.71-91.
- Totaro, D. (1999) "Gilles Deleuze's Bergsonian Film Project" in *Offscreen*. Available online at: http://www.horschamp.qc.ca/9903/offscreen_essays/deleuze1.html Last accessed: 14.10.12
- Totaro, D. (2000) "Art for all 'Time' " in *Film-Philosophy* vol.4.no 4. February 2000.
- Treffinger, DJ.; Young, G.C.; Selby, C.E.; Shepardson, C. (2002) *Assessing Creativity: A Guide for Educators*, The National Research Center on the Gifted and Talented (NRC/GT) . Available online at <http://www.gifted.uconn.edu/nrcgt/reports/rm02170/rm02170.pdf> Last accessed 13.09.13.

Trier, J. (2003) Inquiring into 'techniques of power' with preservice teachers through the 'school film' *The Paper Chase* in *Teaching and Teacher Education* Volume 19, Issue 5, July, pp. 543-557.

Trifonas, P.P. (1998) "Jacques Derrida" in Peters, M. (ed.) (1998a) *Naming the Multiple: Poststructuralism and Education*, London, Bergin and Garvey, pp.103-148

Trifonas, P.P. (2002). Jacques Derrida as a Philosopher of Education. In *Encyclopaedia of Philosophy of Education*, M. Peters, P. Ghiraldelli, B. Žarnić, and A. Gibbons (eds.). Retrieved 6 June, 2013 from [http://www.ffst.hr/ENCYCLOPAEDIA/doku.php?id=derrida and the philosophy of education](http://www.ffst.hr/ENCYCLOPAEDIA/doku.php?id=derrida+and+the+philosophy+of+education). Last accessed 13.09.13.

Trotman, C. and Kop, R. (2009) *Knowledge Economy or Learning Society: Whatever Happened To Radical Adult Education?* Swansea University, Wales, UK. Available at: http://www.ioe.stir.ac.uk/events/documents/Paper_036_RitaKop.pdf Last accessed 13.09.13.

Tuck, E. (2010) "Breaking up with Deleuze: desire and valuing the irreconcilable" in *International Journal of Qualitative Studies in Education*, Volume 23, Issue 5, pp. 635-650.

Tuomisto, J. (2005) "The Janus face of Self-directedness: towards Emancipation or Tighter Control" in Bron, A, Kurantowicz, E; Olesen H; West, L; (eds) *"Old" and "New" Worlds of Adult Learning*. Wroclaw, Wydawnictwo Naukowe, pp.188-206.

Twining, P. (2001) "ICT and the nature of learning: implications for the design of a distance education course" in Paechter, C., Edwards, R. Harrison, R. and Twining, P, (eds) *Learning, Space and identity*, London: Sage, pp. 102-120.

U

UCET (2005) *DfES consultation: Equipping our teachers for the future, UCET response*. Available online at: www.ucet.ac.uk Last accessed 21.7.10.

UCU (2012) *Towards a UCU Policy on Professionalism*. Available online at <http://www.ucu.org.uk/professionalism> Last accessed 13.02.13.

UK Commission for Employment and Skills (UKCES) (2010) *Lifelong learning sector: sector qualifications strategy*. Available online at <http://dera.ioe.ac.uk/1289/> Last accessed 01.09.13.

Unwin, A. Felstead, A. and Fuller, A. (2008) Learning at work: towards more "expansive" opportunities" Paper prepared for the NIACE Commission of Inquiry into 'The Future for Lifelong Learning' . Available online at <http://www.niace.org.uk/lifelonglearninginquiry/docs/Workplace-Lorna-Unwin.pdf> Last accessed 07.06.12.

Urry, J. (2005a) "The Complexity Turn" in *Theory, Culture & Society*, 2005; 22, pp.1-14.

Urry, J. (2005b) "The Complexities of the Global" in *Theory, Culture & Society*, 2005; 22, pp.235-254.

V

Vagle, M.D. (2009) "Validity as Intended: 'bursting forth toward' bridling in phenomenological research" in *International Journal of Qualitative Studies in Education*, Vol.22, No.5, September –October 2009, pp.585-605.

Van Maanen, J. ([1979] 2002) "The Fact of fiction in organisational Ethnography" in Huberman, A.M and Miles M.B (eds) (2002) *The Qualitative Researcher's Companion*, London: Sage, pp.101-118.

Van Wezemael, J.V. (2008) "The Contribution of Assemblage Theory and minor politics for Democratic network governance" in *Planning Theory* 2008; 7; pp. 165-185.

Ventzislavov, R. (2011) "One of Deleuze's Bergsonisms" in *Deleuze Studies*, Volume 5 No.3. pp.3 40-357.

Verstraten, P. (2012) 'A Cinema of Modernist Poetic Prose: On Antonioni and Malick' in *Image [and] Narrative*, 13.2, 2012, pp.117-132.

Vogel, A. (1975) *Film as a Subversive Art*, New York: Random House.

Vrasidas, C. (2001). Interpretivism and Symbolic Interactionism: "Making the Familiar Strange and Interesting Again" in Educational Technology Research" in Heinecke, W., & Willis, J. (Eds.), *Research Methods in Educational Technology*, Greenwich, CT: Information Age Publishing, Inc, pp.81-99.

W

Wagstaff, C. (2000) "Rossellini and Neo-realism" in Forgacs, D.; Lutton, S; and Nowell-Smith, G. (eds) *Roberto Rossellini: Magician of the Real*, London: BFI publishing, pp.36-49.

Walsh, M. (1975) "The Passenger: Antonioni's narrative design" in *Jump Cut*, no. 8, Pp. 7-10. Available online at <http://www.ejumpcut.org/archive/onlinessays/JC08folder/PassengerWalsh.html> Last accessed 21.09.12.

Wallace, S. (2002) *Managing behaviour and Motivating students in Further Education*, Exeter: Learning Matters.

Wallace, S (2007) *Teaching, Tutoring and Training in the Lifelong Learning Sector*. 3rd edn. Exeter: Learning Matters Ltd.

Wallace, S. (2013) *Understanding the Further Education Sector: A critical guide to policies and practices*, Northwich: Critical Publishing.

Wallin, J.J. (2012) "Representation and the Straightjacketing of Curriculum's Complicated Conversation: The pedagogy of *Pontypool's* minor language" in *Educational Philosophy and Theory*, Vol. 44, No. 4, 2012, pp. 366-385.

Ward, J. (2005) "Research journeys: Collaborative Qualitative research into learners' Views on Progress and Achievement in Literacy and Numeracy" in Hillier, Y. and Thompson, A. *Readings in Post Compulsory Education*, London, Continuum, pp. 109-125.

Ward, S. & Eden, C. (2009) *Key Issues in Education Policy*, London: Sage.

Warhurst, C. (2011) Review of Ducey, A,: "Never Good Enough: Health Care Workers and the False Promise of Job Training" in *Contemporary Sociology: A Journal of Reviews* 2011 40, pp. 576-577.

Waterhouse, M. (2009) "Reading peace as text: Multiple literacies theory as a lens on Learning LINC" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp. 133-150.

Waterhouse, M. (2011) "Deleuzian Experimentations in Canadian Immigrant Language Education: research, practice, and policy" in *Policy Futures in Education* 2011:08: 01 9(4): pp.505-517.

Watkins, M. (2008) "Teaching bodies/learning desire: rethinking the role of desire in the pedagogic process." in *Pedagogy, Culture and Society*, vol 16:no2. July 2008, pp.113-124

Watkins, M. (2009) "Deleuze, Habit and the Literate Body" in Masny, D. & Cole, D.R. (eds) *Multiple Literacies Theory*, Rotterdam: Sense Publishers, pp.31-50.

Watson, C. (2013) "Identification and desire: Lacan and Althusser versus Deleuze and Guattari? A short note with an intercession from Slavoj Žižek" in *International Journal of Žižek Studies*, Vol.7 (2), pp.1-16.

Wenger, E. (1998) *Communities of Practice: learning, meaning and identity*. Cambridge: Cambridge University Press.

West, L. (1996) *Beyond Fragments, adults, motivation and higher education; a biographical analysis*, London: Taylor and Francis.

West, L., Alheit., Andersen, A.S., and Merrill, B (2007) *Using Biographical and Life History Approaches in the Study of Adult and Lifelong Learning*. Frankfurt am Main: Peter Lang.

West, L. (2004) 'Re-generating our stories: psychoanalytic perspectives, learning and the subject called the learner' in Hunt, C (ed.) *Whose story now? (Re)generating research in adult learning and teaching, Proceedings of the 34th SCUTREA Conference*. Exeter, pp. 303-310.

White, H. (1995). "Creating problems' for PBL." Available on-line at: <http://www.udel.edu/pbl/cte/jan95-chem.html> Last accessed 21.01.13

Williams, I. A. (2010) "Cultural differences in academic discourse: Evidence from first-person verb use in the methods sections of medical research articles" in: International Journal of Corpus Linguistics, Volume 15, Number 2, 2010, pp. 214-239, Last accessed 05.12.11

Williams, J. (1997) *Deleuze on J.M.W. Turner: Catastrophism in Philosophy?* in Ansell Pearson, K. (ed.) (1997) *Deleuze and philosophy: the difference engineer*, London and New York: Routledge

Williams, J. (2000) "Deleuze's Ontology and Creativity: Becoming in Architecture" in *Pli – Warwick Journal of Philosophy* 9 (2000), pp.200-219.

Williams, J. (2003) *Gilles Deleuze's Difference and Repetition: a Critical Introduction and Guide*. Edinburgh: University of Edinburgh Press.

Williams, J. (2004) "Architectural philosophy" in *Pli, The Warwick Journal of philosophy: Vol 15: Lives of the real: Bergsonian perspectives*, pp.229-232.

Williams, J. (2005a). "How radical is the new? Deleuze and Bachelard on the problems of completeness and continuity in Dialectics". *Pli, the Warwick Journal of Philosophy, vol 16: Diagrams of Sensation; Deleuze and Aesthetics*, pp.149-170.

Williams, J. (2005b) *The Transversal Thought of Gilles Deleuze: Encounters and Influences*, Manchester: Clinamen.

Williams, J. (2006) "Science and Dialectics in the Philosophies of Deleuze, Bachelard and Delanda" in *Paragraph* 29:2, pp.98-114.

Williams, J. (2007) "Lifelong, life-wide learning: A Commission of Inquiry into an adult learning strategy for economic success, social justice and fulfilment *Cover Paper for the first Commission Meeting September 2007* A summary of the issues raised in NIACE policy responses in the last decade," . Available online at <http://www.niace.org.uk/lifelonglearninginquiry/docs/Summary-of-policy-issues.pdf> Last accessed 13.12.12

Williams, J. (2008) *Gilles Deleuze's Logic of Sense: a Critical Introduction and Guide*. Edinburgh: University of Edinburgh Press.

Williams, J. (2011a) "Objects in manifold times: Deleuze and the speculative philosophy of objects as processes" in *Cosmos and History: The Journal of Natural and Social Philosophy*, vol. 7, no. 1, 2011, pp. 62-75.

Williams, J. (2011b) *Gilles Deleuze's Philosophy of time: a Critical Introduction and Guide*. Edinburgh: University of Edinburgh Press.

Williams, J. (2013) *Courir encore plus vite ? Economie libidinale et synthèses du temps Colloque international de philosophie : "Deleuze et Lyotard: deux lignes de fuite pour la philosophie du vingtième siècle"* Mardi 2 juillet / Université Toulouse 2 Published on 23 Jul 2013. Available online at <http://www.youtube.com/watch?v=sngydHVSRKU> last accessed 20.10.13

Williams, J.S. (2008) "The Rhythms of Life: An Appreciation of Michelangelo Antonioni, Extreme Aesthete of the Real" in *Film Quarterly*, Vol. 62, No. 1 (Fall 2008), pp. 46-57.

Williams, R. (1989) *The Politics of Modernism: Against the New Conformists*, London: Verso.

Williams, R. (2005) "Politics and Self in the Age of Digital Re(pro)ducibility" in *Fast capitalism 1:1*. Available online at http://www.uta.edu/huma/agger/fastcapitalism/1_1/williams.html Last accessed 12.09.13.

Williams, R. and Said, E. (1989) "Media, margins and Modernity" in Williams, R. *The Politics of Modernism- Against the New conformists*, ed. T. Pinkney, London: Verso, pp. 177-198.

Willis, J. (1996) *A Framework for Task based learning*, Harlow, Longman handbooks for teachers.

Willis, J. (2008) *Qualitative Research Methods in Education and Educational Technology*, Information Age Publishing, US.

Wilson, L. (2009) *Practical Teaching: a Guide to PTLLS and DTLLS*, Andover: Cengage Learning EMEA.

Wilson, A. and Wilson, B. (2011) "Pedagogy of the repressed: research and professionalism within HE in FE" in *Research in Post-Compulsory Education*, 16, pp. 465-478.

Wolf, A. (2011) *Review of Vocational Education – . Available online at <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00031-2011>*. Last accessed 13.09.13.

Wood, D. F (2003) "Problem based learning" in *British Medical Journal*, 2003;326, pp. 328-330.

Woodhouse, D. (2012) "Navigating Crisis and Desire: Pedagogies of Presence in Absence" in *Liminalities: A Journal of Performance Studies*, Vol. 8, No. 5, November 2012. pp.138-151.

Worpole, K. (1996) "The age of leisure" in Edwards, R.; Hanson, A.; Raggatt, P. (Eds) *Boundaries of Adult Learning*, London: Routledge, pp.112-121.

Wyatt, J. and Gale, K. (2011) "The Textor, the Nomads, and a Labyrinth: A Response to Graham Badley" in *Qualitative Inquiry* 2011 17, pp. 493-497.

Y

Youngblood, G. (1999) "L'Avventura" in *The Criterion Collection*. Available online at <http://www.criterion.com/current/posts/828-l-avventura> Last accessed 10.11.12.

Yin, R.K. (2011) *Qualitative Research from Start to Finish*, New York: Gilford press.

Z

- Zahn, M. (2011) " 'Pedagogy of Perception': notes on Film-Bildung with Deleuze" in *Policy Futures in Education* 2011.08.01: 9(4): pp.465-473.
- Zarifian, P. (2001) « Evènement et le sens donne au travail » in Gilles Jeannot, G. and Veltz, P. *Le travail, entre l'entreprise et la cité*, Paris: PUF, pp. 109-124.
- Zembylas, M. (2007a) 'Risks and pleasures: a Deleuzo-Guattarian pedagogy of desire in education', in *British Educational Research Journal*, 33: 3, pp. 331 — 347.
- Zembylas, M. (2007b) "The specters of bodies and affects in the classroom: a rhizo-ethological approach" in *Pedagogy, Culture & Society*, 15:1, pp.19-35.
- Zepke, S. (2007) "Towards an Ecology of Institutional Critique" . Available online at <http://eipcp.net/transversal/0106/zepke/en> Last accessed 24.6.10
- Zepke, S (2011a) "The Sublime Conditions of Contemporary Art" in *Deleuze Studies*, Vol 5. No1, pp.73-83.
- Zepke, S. (2011b) "Rules of Play – The Pleasures and Pitfalls of Contemporary Practice" . Available online at http://www.likely.net.au/Rules_files/RulesTextSZ.pdf Last accessed 19.12.11.
- Zhao, K. & Biesta, G.J.J. (2012). "The moral dimension of lifelong learning: Giddens, Taylor and the reflexive project of the self" in *Adult Education Quarterly* 62(4), pp. 332-350.
- Žižek, S. (2004) *Organs Without Bodies: Deleuze and Consequences*, London: Routledge,
- Žižek, S. (2009) *First as Tragedy, Then as Farce*, London: Verso.
- Zourabichvili, F. (2003) *Le Vocabulaire de Deleuze*, Paris: Ellipses.
- Zourabichvili, F. (2005) "Deleuze and the question of literality" in *Educ. Soc.*, Sept./Dec. 2005, vol.26, no.93, pp.1309-1321.
- Zucker, C. (1996) "Review of Antonioni: The Poet of Images by William Arrowsmith; Ted Perry" in *Film Quarterly*, Vol. 50, no. 1 (Autumn, 1996), pp. 38-39.

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