

CHAPTER 16

Working Life Learning: Learning-in-Practise

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Introduction

If learning is an integral part of living; if working life demands learning as a condition of survival; if learning is an essential human condition, why is it that we have such difficulty engaging with the phenomenon? The intimate relationship between learning, working and living is one that does not easily lend itself to analysis partly because it is embedded in the dynamics of our human engagement with the challenges of living and working. Learning is both a process and product, a cause, a consequence and context in which emerging life and work patterns co-evolve and in turn organise learning. Therefore, learning is immensely rich and no one perspective is sufficient to capture fully the multiple connections and possibilities that it creates and from which it emerges. Yet, if we seek to move the learning debate forward we must learn to work with and live with the complexity of learning in ways that we can usefully engage and employ it as a driving force helping us address many of the challenges working and living present us with. Only then can learning become a central feature to our life's journey. Only then can working be lived as a learning journey too.

This final chapter explores these complex interconnections and paves the way for a repositioning of learning, working and living in the context of organisational complexity. This is intended to provide a coherent framework for summarising the discussion in the previous chapters and at the same time pave the way forward for future research into learning, working and living in work organisations. The discussion begins with a brief overview of our current approaches in engaging with the dynamics of learning, working and living. Attention is drawn to our tendency to look for outcomes like change as evidence of the ongoing co-evolution of learning, working and living. The discussion however, shows how these modes of thinking are limiting our capacity to fully engage with the complexity of learning as an integral part of living and working. The section, which follows introduces a more dynamic way of engaging with learning complexity highlighting inter-connectivity, diversity self-organisation and politics as key neglected dimensions in the learning debate. These dimensions will be analysed drawing on the main principles of complexity science and a new conceptualisation of learning as a complex social system will be provided. Based on this re-conceptualisation, the notion of *learning-in-practise* will be introduced as a new avenue for future research in learning. The main principles of *practise* and *practising* are discussed in relation to the way learning is enacted in modes of living and working. The chapter concludes with a review of the main implications for future research in learning as a mode of living and working in complex social arrangements such as organisations.

Learning, Living, Working as Change Routines

Learning, working and living demand change. This is a message echoed by several contributions in this book (see Elmholdt; Laursen; Wärvik & Thang this volume), seeking to capture the dynamic nature of learning as a way of living in work organisations. The need to capture the dynamics of learning is a long-standing challenge in learning research. There has therefore, been a tendency to equate learning with change and to present them as interdependent (Alderfer & Brown, 1975; Friedlander, 1984). For example, Handy (1989:44) states that: “if change is another word for learning, then the theories of learning will also be theories of changing”.

In relation to work organisations, the relationship between change and learning, has attracted a lot of attention particularly with the focus on organisations as learning systems (Nevis et al., 1995; Ulrich et al., 1993; Shrivastava, 1983) and the efforts to respond to an ever changing environment by creating 'learning organisations' (Senge, 1990; Garvin, 1993). Learning is perceived to be important for surviving the challenge of change (Handy, 1989; Heywood, 1989; Clark, 1991; Lessem, 1993; Dixon, 1994; Cunningham, 1994). For effective change to take place organisations and individuals must first learn (Argyris, 1993; Finger and Buerger, 1998; Fiol and Lyles, 1985; Huber, 1991; Srivastva et al., 1995). Commentators presenting the relationship between change and learning in these terms draw from the laws of ecology and some refer specifically to Ross Ashby's law of requisite variety (Lessem, 1993; Dixon, 1994). The law of requisite variety states that for an organism/system to survive its rate of learning must be equal or greater ($L \geq C$) than the rate of change in its environment (Ross Ashby, 1958).

Very few researchers however, see the relationship, the other way round, i.e. learning as leading to change, although some of the definitions of learning do incorporate an element of change (Harris and Schwahn, 1961; Knowles, 1973; McLagan, 1978; Klatt et al., 1985). For example, Cantor (1961:3) argues that "to learn is to change", while Crow & Crow (1963:1), suggest that "learning involves change. It is concerned with the acquisition of habits, knowledge, and attitudes. It enables the individual to make both personal and social adjustments". David King (1964:6), defines learning as "that which enables the person to adapt to the changing demands of the environment". However, when reference is made to the content of change in relation to learning, the tendency is to look for (permanent) modification in behaviour (Bass and Vaughan, 1969; Argyris, 1982).

Some commentators however, also present a counter argument and suggest that the relationship between learning and change aims to enhance stability rather than transformation (Jones, 1995; Cook & Yanow, 1993; Antonacopoulou, 1998; 1999). Empirical studies by Antonacopoulou (1999; 2004a) confirm this view and show the social, emotional and political forces at play in the process of learning and changing. Maintaining a degree of stability seems to be at the core of learning during turbulent conditions. Interestingly, the tendency to limit learning as a process of preserving than changing the status quo is often dictated by the very organisational systems, which are meant to encourage learning.

These observations would suggest that we have yet a long way to go before we can more fully account for the dynamic nature of learning, living and working. Our modes of thinking about unfolding processes like learning and changing are still restricted in what Ford and Ford (1994) call a 'formal logic'. As Ellström (this volume) rightly points out the two dominant logics of learning (focusing on performance or on development) fundamentally affect the space for learning at work. We therefore, need to embrace alternative modes of thinking that permit us to re-conceptualise unfolding processes like learning and changing. We need to move beyond conceptualisations of learning and changing as stable patterns of routines and practices. We need to embrace more fully the emergent, self-organising practices that shape learning as both a product and process of diverse activities, structures, artefacts in the way these are inter-connected to an equally diverse and disperse group of social actors with multiple identities and agendas.

Orlikowski (1996) argues for the need to approach (organizational) change as ongoing improvisation as people in the organization engage with novel and unexpected situations. Likewise, Feldman (2000) suggests that the potential for change is always present as long as

social agents perform their routines and respond to the outcomes of previous actions. Therefore, rather than a view of change as a programmatic and punctuated process often to unfold as a grandiose event, change can be explored as a necessary biological condition of living which emerges continually and in an unpredictable way out of ongoing interactions between social agents and their structures.

Tsoukas and Chia (2002), reflect a similar view in relation to organisational change and argue that rather than viewing change as a property of organization, as something that happens inside or in relation to it, our analysis of change should start with the assumption that change is ontologically prior to organization as it is the very condition of possibility for organization to happen. Hence, as Tsoukas and Chia (2002) point out, organization is a secondary accomplishment, in a double sense: organization results from attempting to dominate or order that flux, and is a pattern that comes out of change. As Chia and King (1998: 466 original emphasis) put it, “reality *is* change”, there exists a never-ending process of assembling, disassembling and reassembling, through which ‘entities’ are continually made and re-made.

Therefore, accounting for this ongoing process of emergence and evolution is perhaps where our attention in learning research needs to be refocusing. For if changing is an integral part of learning, living and working we need to develop both conceptual and methodological tools for engaging with these unfolding happenings we call learning and change. This also means that our attention needs to move beyond concrete evidence of learning and changing which focus on behaviour or other action outcomes. Instead, we need to find ways of engaging with changing routines as the emerging patterns of connection between different dimensions of learning that create the possibility for learning. In this context, one way of repositioning change in relation to learning is by suggesting that it is in change that changing is possible. The change process enables us to remain open to the multiplicity of possibilities in change and in changing. One could say that a similar view could be applied to our re-conceptualisation of learning.

In pursuing this challenge we need to first carefully reflect on the range of disciplinary backgrounds which inform the learning debate and take stock of their fundamental epistemological and ontological assumptions about learning. A multiplicity of disciplinary perspectives have been documented as informing the learning debate (Easterby-Smith, 1997) drawing predominantly on traditions of psychology, sociology, philosophy and anthropology. These different disciplinary perspectives have coloured and represented learning in different ways drawing attention to different aspects of learning including: behaviour (Pavlov, 1927; Skinner, 1971), cognition (Ausubel, 1985), motivation (Rogers, 1969; Hilgard & Bower, 1975); experience (Kolb, 1984) and action (Revans, 1982; Marsick, & O’Neil, 1999).

If we are to come closer to capturing and representing the richness of the learning phenomenon we need to make a concerted effort to integrate these diverse perspectives as they reveal different aspects of learning. Several chapters in this book show the possibilities of connecting diverse perspectives (see Elkjaer & Wahlgreen; Miettinen & Virkkunen; this volume).

If we are to integrate various perspectives of learning and to fully embrace learning complexity we need to engage with different modes of thinking that enable us to make the necessary connections. Cooper and Law’s (1995) ‘distal’ and ‘proximal’ thinking modes, provide a useful means of organising these different perspectives. These modes of thinking

explore the implications of emphasizing substance or process and sensitise us to the tensions embedded in processes that seek to connect potentially opposing dimensions.

‘Distal’ thinking emphasises outcomes of thought and action and assumes the existence of clear and unambiguous boundaries between perspectives and positions. This logic of differentiation distinguishes process from outcome, learning from working and assumes a hierarchy between the separated categories. Being epistemologically realist, this mode of thinking un-problematically considers that such locatable structures or categories can be measured and represented, provided the ‘right’ methodologies are used so as to let the facts ‘speak out’ for themselves.

‘Proximal’ thinking, on the other hand, emphasizes integration and connectivity. It focuses on the unfolding and ‘unfinished’ nature of events and does not seek closure but strives for the never ending, always partial and precarious process of learning in search of the unknown. Therefore, instead of boundaries or categories there are different possibilities. Antonacopoulou et al. (2004) point out that organisational change and renewal conceptualised using a proximal logic can be conceptualised as a process of interpenetrating, interlocking, mobile and non-locatable associations. Proximal modes of thinking therefore, encourage us to explore interconnections and interdependencies rather than tensions, divisions and differences. Even oppositional dimensions meet in this mode of thinking.

This mode of thinking is consistent with ‘trialectic logic’ (Ichazo, 1976; Horn, 1983; Soja, 1997). Trialectics is an alternative logic beyond formal and dialectic logic, which proposes that learning occurs through attraction to different possibilities. Learning, therefore, does not only result from a synthesis of potentially opposing perspectives as suggested in dialectics or formal logics of change. Instead, learning can also emerge as different connections and possibilities are explored. Learning therefore, emerges as a space/context where these possibilities can be contained and it is also a process and product of a multiplicity of connections (Antonacopoulou, 2000a; 2002; Antonacopoulou & Chiva, 2005). Ford and Ford (1994) understand that trialectics as a logic is strongly related to the science of complexity. The science of complexity might provide a new avenue for rethinking learning. We explore this possibility in the section which follows by identifying the key dimensions of learning as a complex social system.

Learning as a Complex Social System

Although complexity science has its roots in the physical sciences it is increasingly employed to understand social phenomena, including organizations (Dooley et al., 2003; Ofori-Dankwa & Julian, 2001) and their social complexity (Antonacopoulou & Chiva, 2005) as well as specific management issues such as: strategic management (Stacey, 1993), strategic change (Stacey, 1995; Brown and Eisenhardt, 1997) innovation management (Cheng & Van de Ven, 1996) and design management (Chiva, 2004). It is also penetrating into adult education debates (Fenwick, 2003) and more recently organisational learning debates (Antonacopoulou & Chiva, 2005).

It is beyond the scope of this discussion to provide a review of the main principles of complexity science (for such reviews see Antonacopoulou & Chiva, 2005; Mitleton-Kelly, 2003; Tsoukas, 1998). It is important to clarify however, that complexity science sets out to devise mechanisms to create and maintain complexity, and to produce tools for its description

and analysis (Simon, 1996). Complexity science covers many fields of scientific research including chaos theory, the study of fractals and the idea of complex adaptive systems (CAS). The ideas of CAS enable us to understand system behaviour in relation to simple actions that may create multiple effects as interacting 'agents' follow rules and influence their local and global environments (Sherman & Schultz 1998). One of the most important characteristics of CAS systems is their capacity to learn (Gell-Mann, 1994; Stacey, 1995, 1996). Previous research also shows that CAS ideas are relevant in identifying the essential factors that facilitate organisational learning (Chiva, 2003).

Three key principles of complexity science will be employed here to illustrate dimensions of learning that the current learning debate does not fully account for; Inter-connectivity, Diversity and Self-organisation. A fourth and equally neglected element in both complexity and learning debates is politics. The re-conceptualisation of learning as a complex social system demands that we also pay attention to the socio-political dimension of complexity.

Inter-connectivity

Appreciating the complexity of learning implies a need to understand the inter-connections among parts of the system that constitute learning (Kauffman, 1995; Axelrod and Cohen, 1999). Inter-connections reflect the fractal nature of learning and demonstrate that a number of elements combine to create what we understand learning to be. Learning is clearly not only a cognitive process due to the neural connections it creates as information is connected to create meaning. By the very process of developing meaning, learning is also a highly emotional process that influences how we re-act and respond to experiences we encounter. These very responses generate different psychological states that combined with related actions in turn are contained within structures and systems defined and negotiated by social actors. These very social structures by extension provide meaning to social interactions and at the same time provide an understanding that defines one's identity in the context of one's role in different settings. Therefore, learning as a system is embedded within biological, psychological, social, cultural, emotional and other viable systems all of which co-exist and co-evolve in relation to internal and external conditions within an ecosystem.

This point suggests that the institutionalisation of learning processes within any (social) system are subject to the ongoing institutional transformations which are caused by learning practices that are instituted by social structures. These very social structures however, are also constantly negotiated as diverse social forces (agents and structures) interact in embracing the heterogeneous nature of self-organization. Therefore, if learning is about connecting, inter-connectivity implies the co-existence of heterogeneous forces (Gell-Mann, 1994).

Diversity

Heterogeneity and diversity are key dimensions of learning. Diversity is what feeds learning in the way conditions that underpin interactions and connections between systems create tensions. That multiple dimensions exist in tension is to reflect the multiplicity of possibilities each dimension can create by being attracted to different possibilities. Tensions dissolve into the space of possibility and become *ex-tensions* of current reality. These *ex-tensions* reflect the elasticity of processes like learning as multiple possibilities emerge in the way inter-connections are explored. Inter-connections are reflective of the *in-tension* to learn which brings *at-tension* to some specific possibilities, which are more relevant at different moments in time. This ultimately suggests that tensions are not only born out of conflict, power and political differences privileging one mode of reality over another. Instead, tensions are also attractions to different possibilities. It is the way learning space expands to embrace the new

space learning creates. Therefore, learning is “the edge of chaos” in the way the tensions between competing forces drives the possible connections that can be productively created as a result of their interaction. Engaged interaction as opposed to instrumental transaction challenges conditions of power and control in heterogeneous forces. This perspective implies that the learning space embraces different perspectives and engages actants in a reflective and reflexive process of learning. In other words, the inherent diversity need not lead to a synthesis of conflicting perspectives, as per the dialectic logic would suggest. Instead, the diversity needs to be maintained as this is a source of dynamism driving self-organisation, which is a basic cause, consequence and context for learning, we frequently refer to as ‘understanding’.

Self-organisation/emergence

That learning connects heterogeneous forces reflects the ultimate quality of learning; surprise. Learning is not a matter of chance. Learning is part of the stream of practices that constitute organization. Such practices are reflected in routines (Axelrod and Cohen, 1999; Bechky, 2003); models (Stacey, 1996); strategies (Gell-Mann, 1994); culture (Gell-Mann, 1994); or the dominant logic (Bettis and Prahalad, 1995). Regularities in practices enables a system to determine the nature of further experience and make sense of it (Stacey, 1996). Reconfigurations in practices are a consequence of a process of self-organization and co-evolution. Learning practice therefore, can be re-conceptualised as a process and product of the on-going mutations in relation to the governing practices and the way these co-evolve in time and space in response to endogenous and exogenous forces. Learning does not only arise as a result of noticeable shifts (formal logic) in practices or re-integration of otherwise conflicting perspectives (dialectic logic). Learning emerges from multiple possibilities previously not explored. Such possibilities may be interpreted as *surprise* or *serendipity* depending on whether they are considered relevant or attainable. No single experience determines learning practice, which is unpredictable and uncontrollable (Goodwin, 1994) due to its social nature (Elkjaer, 1999).

Learning therefore, emerge as a natural condition of creating new order and self-organization as diverse elements within a system co-evolve and provide both negative and positive feedback to support single loop learning (negative feedback) and double loop learning (positive feedback) (Argyris and Schön, 1978; Stacey, 1996). Essentially, self-organisation is the process of re-ordering different aspects of learning such that new learning can emerge in a cyclical process of ongoing evolution. Learning is therefore, not only a mode of connecting, it is not only an expanse of diverse elements and forces. Learning is also the very foundation of learning. Learning provides the energy for connections to be made and highlights the gaps that exist while it also provides the scope for bridging these gaps. Moreover, learning shapes the emerging models that define the boundaries of action while it also opens up multiple modes of interaction. Modes of interaction are not only the emerging patterns of thinking and action, they are also the very social structures that are constantly evolving as social actors become sensitised to new possibilities for learning. These new possibilities are also central to self-organization the inherent nature of social systems to renew themselves. This process of renewal, and on-going transformation is made possible because learning, like change is endemic to organizing.

Moreover, learning is central to the systemic nature of social evolution because, it highlights the complex (symplogma – fusion) of connecting forces and the conditions that support their interaction. This perspective not only captures the fluidity that is so central to social systems, it also challenges us to explore learning as an integral part of what it means to be a viable

system (see Beer, 1972). In other words, self-organization is an inherent mechanism for reaching internal consistency in relation to external forces. This point is critical as it reaffirms the political nature of learning.

Politics and Power

The political nature of learning remains one of the biggest challenges in learning research. Researchers who focus on the political nature of learning (Coopey, 1995; Antonacopoulou, 2000b 2001; Lawrence et al., 2005) highlight mainly the inequalities of power and control, the tensions between individual and organisational priorities in learning or the different perspectives and motives underlying learning and knowledge. The politics of learning clearly illustrate that learning does not take place in a vacuum. Learning is a connection of possibilities stimulated by the signals received within the context in which learning takes place. These signals however, are subject to multiple interpretations which define the actions one takes to make life and work more meaningful. This point however, reveals a key dimension of the political nature of learning that we have so far neglected partly because we have paid insufficient attention to the power of learning. The power of learning is at the core of what makes knowing political, hence the common phrase ‘I know enough to be dangerous’¹. Learning entails responsibility and accountability. It is rather common that social actors tend to negate the responsibility learning entails by proposing sad excuses about their inability to learn. These defensive routines as Argyris (2004a) clearly demonstrates in his research reflect the tendency to be reluctant to learn even when the need to learn is obvious. This learning state is what Antonacopoulou (1998) describes as ‘mathophobia’, which is reflective of the power of learning to steer a whole host of emotions. It is also the powerful connection between learning and what people do in the name of learning.

To learn therefore, is to make viable connections between a diverse set of emerging dimensions that affect action and interaction with others. To be accountable for one’s actions is one of the defining characteristics of those who chose to lead a life of learning (Antonacopoulou & Bento, 2003; Antonacopoulou, 2004b). Responsible action reinforces that learning only gains meaning in the process of interacting with others. This point reasserts the social and political significance of learning which reminds us that learning is not a controllable entity. Rather, learning is better understood as a dynamic complex process, which is embedded in the ways social forces within systems define the conditions of their interaction. Therefore, to say learning is social and political is to appreciate the multiple ways in which learning is manifested in action. How and why people act in relation to their work is defined by their learning and in turn defines their understanding that subsequently guides their actions. In short, political learning is reflective of the emerging tensions as different learning opportunities in life are explored.

All these aspects illustrate the complexity of learning and reinforce the need to explore learning as a complex social system. It is also these dimensions of learning that we can usefully draw from as we develop further our understanding of the patterns, practices and routines that give life to learning-in-practise.

¹ My thanks are due to Mr Neil Paterson, Divisional General Manager at Hay Management Consulting Group for reminding me of this powerful point.

Learning-in-practise

The characteristics of learning as a complex social system renew the importance of embeddedness and situatedness of learning. This is consistent with a growing shift towards a practice-based view which has been marked in recent years in many different parts of social science (Schatzki, et al. 2001). In management, this has been reflected in an increasing concern with what do people actually do as a necessary pre-amble to theorise about organisations and organising (Barley & Kunda, 2001; Whittington, 2003; Nicolini et al. 2003).

The practice-based view, has been particularly prominent in the organizational learning and strategy debates where the focus tends to be on the set of actions or activities (praxis of practitioners) and the mediating objects that constitute part of a practice (Gherardi, 1999; 2000; Johnson et al. 2003). It also emphasises the importance of communities of practitioners as the space where the social dynamics of learning are negotiated, thus reinforcing principles of interconnectedness and interdependence between agency and structure, a point which is central both in structuration theory (Giddens, 1984) and in actor network theory (Law, 1999). This is also of course consistent with much thinking underpinning the pragmatist framework that Dewey (see Elkjaer, 2004) introduced in the way he has helped us understand participation and experience as integral aspects in the learning process. Therefore, these perspectives encourage us to explore 'learning-as-practice' engaging not only actions and activities in relation to learning, but also the role of language and other cultural and material artifacts, the nature of social interactions and not least the tacit, situated and almost instinctive responses of actors in the socially networked worlds in which they live. Conceptualizing learning as practice (Nicolini et al., 2003), reminds us that practices are influenced by forces that are both inside and outside of the organisation (Beckhy, 2003; Gherardi & Nicolini, 2002). The co-existence of multiple adjoining and interlocking practices forms the heart of their evolution. The normal, everyday execution of practice thus, becomes the context of tensions amongst different practices and the groups that embody them. Learning in relation to practice is therefore, conceptualised as an activity but also as a flow, a flexible, ever-changing structure that connects actors, systems and artefacts together. It is from these actions that routines, processes and practices emerge, and thus, it is important to understand the actions themselves if we are to understand learning.

A practice focus is also consistent with (and extending) recent contributions which have stressed that routines (intended as repeated application of a specific practice) can be a source of change and adaptation (Feldman, 2000; Zollo & Winter, 2002; Feldman & Pentland, 2003). This of course adds to their established character as creators of stable order and representations of social truce between different coalitions in the organisation (Nelson & Winter, 1982; Hannan & Freeman, 1984). This clearly only goes to reinforce the socio-political dynamics surrounding these repeated enactments. Modifications of routines have been ascribed to "slippage" or simple adaptation to new and different situations. While both of these rationales are valid, the actual dynamics of change, with the implied renegotiation of practice, has not been shown.

By focusing on self-organization we can become more in tune with the tensions amongst different practices and the groups that embody them. This interlocking of different practices provides scope for engaging with the fluidity of learning as practice and action becomes difficult to separate. This opens the possibility that practices behave fractally.

Therefore, if we are to understand this self-organizing process in the way agents and their practices are interconnected, two issues need to be further developed. One is the definition of practice, which needs to become more 'elastic' and multi-faceted. The existing literature, provides a number of different perspectives on practice as *action* (Bourdieu, 1980); practice as *structure* – language, symbols, tools (Turner, 1994); practice as *activity system* (Engeström, Miettinen & Punamäki, 1999); practice as *social context* (Lave & Wenger, 1991); practice as *knowing* (Nicolini et al., 2003). The literature on organizational routines, as a special kind of practice, becomes relevant here, with their conceptions of routines as sources of efficiency, memory and social order (Nelson & Winter, 1982), flexibility (Adler, Goldoftas & Levine, 1997; Pentland & Rueter, 1994), connections (Feldman & Rafaeli, 2002), change (Feldman & Pentland, 2003) and the creation of resources (Feldman, 2004). A full description of the processes of emergence and self-organization needs simultaneous consideration of many aspects of practice at the same time.

The second issue that needs theoretical development is the dynamics of the practice. Because of the multifaceted nature of practice, the existing conceptualization of institutionalizations (Berger & Luckmann, 1966; Selznick, 1957) are potentially reductive, when talking about practice. Studies of institutionalization processes in fact tend to emphasize the end result, the institutionalized practice. More in keeping with the complex social systems view of learning introduced in the previous section we need to appreciate that there is no end result to this process, only a continuous flow of what could be referred to as *practising*. A trivial but important distinction between practice and practise needs to be made. Whilst practice and practicing refer to the institutionalization of activities and routines, *practise* and *practising* focus on the holistic and emergent nature of practice.

Therefore, practice conceptualized as a dynamic social process that emerges over time entails at its core practising attempts which seek to accommodate endogenous and exogenous forces, brought about by ecological, economic, social and political dynamics. Connections between practices form the core of learning-in-practise as it describes how practices evolve and how learning unfolds through the repeated enactments which configure multiple arenas for negotiations of order, thus involving multiple interdependent stakeholders whose interactions are supported by the degree of learning collaborations they seek to explore (Antonacopoulou & Meric, 2005). By focusing on practise and its emergence, it is possible to map the social network that impacts on the way practices are orchestrated, through practising attempts. By placing learning practise at the centre of the investigation, it is possible to more fully account for the (diverse interests) political forces underpinning learning in time and space. A practise-centred perspective as a new dimension in future learning research can help us potentially develop methodologies for studying fluidity and interconnectivity.

There is a critical need therefore, to refocus attention in future learning research not only on the changes resulting from learning practices, but the *practising* attempts behind those practices and the changes they entail. This view would call for not only a different mode of thinking but a different set of epistemological and ontological positions to engage with such fluidity. Epistemologically this would encourage us to explore the practice of learning and organizing in different working contexts, to pay attention to the dynamics between individual agency, social structures and systems embedded in social systems and the complexity of tasks that shape the focus and orientation of learning and experiences of living in such organized arrangements. Ontologically, in extending process research (Pettigrew, 1989; Langley, 1999; Lewis & Grimes, 1999; Scandura & Williams, 2000), instead of studying processes as objects located in time and space we can embrace the challenge of using the process itself as a

foundation for studying the same process. This could be described as a cosmological approach to studying learning (see Antonacopoulou, 2002).

Therefore, in capturing the dynamic nature in which practices, like learning, emerge, we need to also explore how a *practice* is *practised* i.e. performed, if we are to more fully account for how learning is the condition for learning in the same way as change is a condition for changing. The underlying ethos of practise (i.e. the values, beliefs and interpretations surrounding a practice) is just as critical as understanding the behaviours, activities and actions that constitute a practice. This view implies that learning one's practice is not enough, *practising one's practice* is more important (Antonacopoulou, 2004b). One cannot really master one's practice unless one is prepared to practise it. In other words, by practising one's practice one refines, improves, changes elements of this practice, elements of one's praxis and ultimately elements of one's self (e.g. identity).

In the context of this analysis, practice is not only what one does, what actions they take, but also how one learns to discover the intricate aspects and meanings of one's practice, with the socialisation aspects that are implicit in that. Therefore, learning like practice is a constant flow of action, that never reaches the stability and rigidity implicit in some of the institutionally oriented interpretations of practice (e.g. Gherardi, 2000). Instead, as the analysis in this chapter has sought to suggest, learning-in-practise reflects learning as a foundation for learning because at the core of practice is practise. This only goes to reinforce the power of learning as part of living and working and as an extension of learning so that living is purposeful and working can be meaningful.

Conclusions

This chapter outlined the unfinished and ever evolving relationship between learning, living and working. As the concluding chapter to this book the objective was to both provide a summary and integration of the main themes of this edited collection, but more important through this integration to provide a platform for creating new connections and possibilities for linking learning with living and working. This latter point set the foundation for re-conceptualising learning extending the view of learning as practice to embrace the co-existence of multiple adjoining and interlocking practices which forms the heart of learning as part of a co-evolving process of living and working. Learning is therefore, conceptualised as a complex social system where multiple and heterogeneous actants attract each other and create inter-connections that define the emerging purpose of learning in different contexts as self-organising attempts expose different political agendas. Therefore, learning is not only a practice. It is also a practise; a flow, a flexible ever-changing mode of connecting different practices in ways that enrich learning practice.

This view has several implications for future learning research. For one, the study of learning needs to advance by recognizing the value of viewing and researching the phenomenon as a connecting force between people, systems and other processes that define social complexity it seeks to engage with and represent. Therefore, learning is not only the institutionalisation of practices but also a reflection of the self-organizing nature of learning routines, processes and practices. These issues raise a number of methodological implications for future research in learning, particularly in relation to capturing and social complexity underpinning learning. As others (Argyris, 2004b; Easterby-Smith et al., 2004) have recently pointed out in outlining future research directions in learning research, learning needs to describe the universe as

completely as possible. For that it is critical that learning scholars reflect on their learning scholarship and constantly renew their learning practices as they practise with their emerging ideas about learning. Unless, learning scholars learn how to learn, learning research will not progress. Hopefully, this edited collection signals the enormity of the task ahead as learning research is driven by its own efforts to support learning about learning.

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