UNIVERSITY OF FORWARD THINKING WESTMINSTER

Space, place, autonomy and the road not yet taken

Murray, G. and Lamb, T.

This is an Accepted Manuscript of a book chapter published by Routledge in Space, Place and Autonomy in Language Learning on 9 November 2017, available online:

http://www.routledge.com/9781138656727

Chapter 16

Space, place, autonomy and the road not yet taken

Garold Murray orcid.org/0000-0002-3812-424X

Terry Lamb orcid.org/0000-0002-6715-0965

In this final chapter, we take a step back in order to get a view of this diverse collection of papers as a whole, and to reflect on what they might tell us about space, place and autonomy in language learning. The contributing authors investigate a wide range of spaces and places encompassing the physical, virtual and metaphorical. In doing so, they bring to the fore themes that revolve around the central notion of learners appropriating and transforming spaces into places for language learning. They cover an array of topics, including multilingualism, feelings, emotions, personal and professional development, inclusion, exclusion, and creativity, amongst others. Yet, perhaps more revealing and poignant are the themes that are only hinted at, but not explicitly treated or developed. These themes raise issues for future inquiries, such as the meaning of autonomy in view of a global shift in focus from classroom-based to out-of-class learning, and the complexity that permeates the interaction of the three central constructs – space, place and autonomy – in relation to language learning both within and beyond the classroom. The papers in this volume provide examples of research methodologies that might be suitable for these explorations. In this concluding chapter, we examine the implications these theoretical and methodological leanings have first for theory development, then for possible future inquiries, and finally for pedagogical practice.

Implications for theory

The theme not discussed

A salient feature of these chapters is a theme that is not discussed, a leitmotif, which threads its way through of most of them – a stream of references and allusions running just beneath the surface. This theme is complexity. Massey (2005: 73) cautions that in the study of space and place ‘there is a need to be wary about the current fascination with complexity theory’ because in the final analysis, as time progresses and ways of seeing the world change, this body of theory may ‘fade or become just a part of the story’. Nonetheless, what is intriguing in this collection of studies is the inescapable suggestion that complexity thinking has already become a part of the story.

The one paper that directly addresses complexity thinking is Magno e Silva’s contribution (Chapter 14) in which she draws on complex adaptive systems theory to examine the experiences of teacher education students improving their English skills through engagement in extracurricular activities made available through a university self-access centre. Informed by the work of Larsen-Freeman and Cameron (2008), among others, she summarizes some of the key characteristics of complex dynamic systems in relation to language learning. Perhaps the most important thing to know about these systems is that they are comprised of many elements which interact. Systems, in turn, are connected to other systems – they encompass other systems and are at the same time part of larger systems. Due to their interconnectedness and ongoing interaction, change is more or less constant. Systems adapt to the changes in other systems with which they are connected. Sometimes a small change can dramatically

alter a system; and, conversely, a big change might have a minimal effect. This phenomenon is referred to as nonlinearity. Nonlinearity makes it practically impossible to predict outcomes or a system's path of development, referred to as its trajectory. To understand systems and their trajectories, researchers rely on retrodiction (see Dörnyei 2014), an analytical process in which they work back from a current state in order to determine how the system developed and arrived at this point.

Emergence plays a central role in the development of complex dynamic systems and the course their trajectories will take. This phenomenon is reliant upon a key characteristic of complex systems: they are comprised of different levels of organization. The elements on one level can self-organize – that is to say, they can reconfigure without outside direction – to create something new on another level. For emergence to occur, autonomy has to be present (Morin 2008). While autonomy might be interpreted as freedom enabling the elements to reorganize, we suggest that autonomy could be viewed as providing a metaphorical space in which the various elements can move around and realign. In other words, autonomy opens up what Lamb (2000) has referred to elsewhere as 'spaces for manoeuvre'. What we find compelling in our analysis of this collection of studies is that constructs and notions from complexity thinking seem to have made a space for themselves in this body of literature.

Without fully embracing complexity thinking as a theoretical orientation to guide the interpretation of the data in their studies, the authors frequently incorporate constructs and notions prevalent in this approach. For example, in their exploration of the role of emotions in the construction of learning spaces, White and Bown (Chapter 3) state that their paper is based on the 'view of the individual and context as one system'. This notion of various elements integrated into a whole, which is often greater than the sum of its parts, is evident in

several other chapters. Kocatepe (Chapter 10), for example, illustrates how students in her study use humour 'to exercise power within the complex network of relations inherent in any class'. Drawing on Bourdieu's (1985) construct of habitus, which refers to the physical embodiment of cultural and social features, Lamb and Vodicka (Chapter 2) contend that it emerges from 'the dynamic webs of dispositions that have been shaped by past and present experiences and practices'. Clearly, the influences of complexity thinking are present in the work of these researchers. We suggest that the time has come for researchers investigating the interrelationships of space, place and autonomy in language learning to engage more directly with complex dynamic systems theory, apply it more explicitly to their work and explore the potential it has to offer insights into some of the theoretical issues that arise from this line of enquiry.

By way of example, one such issue that complexity thinking might serve as a conduit to address is the perplexing, and perhaps even vexatious, relationship between learner autonomy and agency in various learning spaces as well as the role these constructs might play in the creation of such spaces. Educators making reference to autonomy in language learning often cite Benson (2011:58) who defines the construct as 'the capacity to take control of one's own learning', which he sees as encompassing three dimensions: control over learning management (cf. Holec 1981), control over cognitive processing (cf. Little 1991), and control over content. More recently, Murray, Fujishima and Uzuka (2014) proposed that a fourth dimension be added, that of space. However, based on their out-of-class research in a social learning space, they contend that 'autonomy is not about having control over the learning space; rather, autonomy is about having the possibility to exercise one's agency within the space' (Murray et al. 2014: 99). In order to illustrate the potential of complexity thinking to offer insights to researchers exploring autonomy and agency in relation to space and place, in

what follows, we employ complex dynamic systems theory in our analysis of issues surrounding control, as they arise in three of the papers in this volume. Although we do not claim to be able to make a clear distinction between autonomy and agency, our example of how the adoption of a complexity approach can illuminate the issue of control, which is central to both, demonstrates the potential of this body of theory to shed some light on these two constructs and their mutual manifestation within learning spaces.

Despite evidence that educators investigating learner autonomy seem to be increasingly drawn to the construct of agency, no one has succeeded in elucidating the relationship between the two (Benson 2017; Gao 2010; Gao & Zhang 2011; Huang 2011; Huang & Benson 2013). Van Lier (2010: ix), who has considered both agency and learner autonomy from the perspective of sociocultural theory, writes, 'I would be hard put to give a precise delineation of the similarities, and especially the differences, between agency and autonomy.' Later, in the same article, he says 'agency refers to the ways in which, and the extents to which, the person (self, identities and all) is compelled to, motivated to, allowed to and coerced to, *act*' (van Lier 2010: x). Noting that he was writing about agency in the passive voice, van Lier adds that 'agency refers equally to the person deciding to, wanting to, insisting to, agreeing to, and negotiating to, *act*' (ibid. x). For van Lier (2008: 163), 'agency is always a social event that does not take place in a void', but rather it is mediated by sociocultural forces which support or constrain an individual's capacity to act. In regard to agency, control becomes an issue in as much as societal constraints, that is to say controls, which may inhibit action, are imposed on the individual; whereas with autonomy, the emphasis is on the individual taking control – or rather, taking on responsibility for himself or herself in a particular time and space in view of the societal constraints and other factors – and acting and interacting with the environment as an outward manifestation of that decision.

Reflecting on the relationship between autonomy and agency, Huang (2011: 230) contends that agency 'entails action…that arises from deliberation and choice' and cites Benson (2007: 30) who proposes that 'agency can perhaps be viewed as a point of origin for the development of autonomy'.

In this volume, the relationship between autonomy and agency becomes a matter for concern in Hafner and Miller's (Chapter 11) exploration of elements that course designers should take into account in order to ensure the optimal exercise of learners' agency. Their study offers compelling support for the argument that, in order to enable learners to exercise their agency, educators need to offer learning environments that encourage collaborative power relations. According to Hafner and Miller, in their study the sharing of power between the teacher and the students led to the proliferation of various types of learning spaces that the teachers could not have anticipated at the outset. Because of the students' investment in learning and their discovery of learning spaces and opportunities, Hafner and Miller conclude that teachers should not stipulate learning spaces, but rather let them emerge as learners exercise their agency.

Like the learners in Hafner and Miller's enquiry, those in Kocatepe's study (Chapter 10) also exercise their agency in order to generate meaningful personal learning spaces. However, in this case they use humour not only to create these spaces within a classroom environment, but also as a tool to engender shared power relations. Kocatepe's study illustrates how students used humour as a means to exercise control in their learning space and in doing so engage in meaning making that contributed to their learning. Rather than feel threatened and retreat behind her position of authority, the teacher engaged the learners as they exercised their agency and pursued their personal learning agendas. Readers get the impression of an

experienced, confident teacher who is comfortable with having control decentralized in her classroom and who is skilful at recognizing the potential of impromptu exchanges as emergent teaching/learning opportunities.

In contrast to the situation presented in Kocapete's study, in which the learners' exercise of agency leads to a distribution of control contributing to the emergence of constructive learning opportunities, Reis's enquiry (Chapter 12) provides an example of a case in which the learners through their discursive positioning take control of the classroom. Although, as Reis notes, the students are polite and friendly, the teacher's position is challenged to the extent that learning does not take place. The situation seems to be exacerbated by the teacher's apparent lack of classroom management skills. In addition, perhaps because she feels intimidated and threatened by this group of young men, the teacher repeats the content, stagnation sets in, and the lesson does not progress. In this class, rather than have decentralized or distributed control, we have an example of a context in which the students have taken control to the detriment of potential learning opportunities.

These three formal learning contexts provide insights into the construct of control by illustrating the advantages of distributed or decentralized control; that is to say, control that is shared amongst the learners and teacher. In their book, in which they apply complexity thinking to education in general, Davis and Sumara (2006) identify decentralized control as one of the conditions contributing to complex emergence in learning environments. As we explained earlier, in order to understand the notion of emergence, it is important to recognize that in any complex system, there are various levels of organization; emergence occurs when elements on one level self-organize to create something new on another level. In order for the elements to self-organize, they require a degree of autonomy. Davis and Sumara argue that

for learning opportunities to emerge in a classroom or other space, control must be decentralized. While decentralized control is evident in the classroom depicted in Kocapete's study, its potential outcomes are more clearly illustrated in Hafner and Miller's enquiry. They report that the students in their study surpassed expectations and took advantage of learning spaces teachers could not have predicted their students would explore.

However, as Hafner and Miller's study demonstrates, other elements necessary for complex emergence were at work in tandem with decentralized control. These other elements, identified by Davis and Sumara (2006: 135-136), are neighbour interactions, internal diversity, internal redundancy, coherence and randomness. In any classroom context the students provide diversity by bringing their multiple, or fractal, identities (Sade 2014) to the learning environment. They also provide for redundancy, seen as commonalities, such as a shared language, goals, meeting place and responsibilities. These shared features support coherence. In Hafner and Miller's study the clearly delineated task and the bringing together of the various groups in the classroom setting also served to reinforce coherence. In Kocatepe's study the classroom teacher with her adept classroom management skills and commitment to moving the curriculum forward was a source of stability and, hence, coherence. This teacher also provides a good example of randomness at work in the classroom. Randomness refers to an openness to the unstructured, unplanned for and unanticipated occurrences or possibilities that might present themselves. The teacher in this study went with the flow of the students' interventions and transformed them into teachable moments. Similarly, in Hafner and Miller's study, the teachers embraced the unexpected and marvelled at the range of learning spaces the participants were able to co-create.

Finally, in both studies there was one other element, which supported the emergence of spaces for learning, namely neighbour interactions. On an obvious level, there was the interaction of the students. In Hafner and Miller's study, learners were required to work in groups. In Kocatepe's study we see the friendly exchanges and even camaraderie of the classmates. However, while these personal and group interactions are important, Davis and Sumara (2006: 142) stress that '*the neighbors that must interact* with one another are ideas, hunches, queries, and other manners of representation' (italics in original). Although these types of interactions are more readily identifiable in the group work context of Hafner and Miller's study, we can nonetheless see examples in Kocatepe's study, in which the students correct each other's grammar or make allusions to shared features of Middle Eastern cultures. It is noteworthy that while there are abundant examples of neighbour interactions in the classroom described in Reis's study, and although it could be argued that these learners were also exercising their agency, learning opportunities did not emerge. We contend this was due in large measure to the absence of decentralized or distributed control. In other words, for learning opportunities to emerge in these spaces, autonomy in the form of distributed control had to be present.

In our thematic analysis of these studies, adopting a complexity approach has provided insight into the element of control, which has been deemed central to the exercise of both autonomy and agency. Moreover, the language of complexity thinking – including references to emergence, dynamic networks and the word complexity itself – appears with enough frequency to be a motif uniting these chapters, which draw on diverse contexts, spaces and geographical places. We suggest this is further evidence that the time has come for researchers in this area to consider adopting complex dynamic systems theory to guide the interpretation of their data. White and Bown (Chapter 3) call for theoretical approaches that

do not treat the learner and the learning context as separate entities. We believe that complex dynamic systems theory offers great promise as a means of exploring these two as one, and as a way of looking beyond the binary opposites – such as, control versus freedom, independence versus dependence, and the individual versus the social – which have plagued learner autonomy as an area of enquiry. In the following section, we look more closely at autonomy as a construct and the role it plays in the transformation of spaces into places for learning.

Autonomy and the creation of places for learning

The central theme of this book has been the role of autonomy in relation to spaces and places for learning. Exploring this relationship has led the authors to identify various facets of autonomy as well as traits of autonomous learners. For example, Chik (Chapter 4) notes in relation to virtual learning spaces that autonomous learners have to be able to identify digital sources and practices suitable to meet their needs. Envisaging autonomy across a broad urban landscape and drawing on research and scholarship across a wide range of disciplines, Lamb and Vodicka (Chapter 2) look beyond the individual and consider autonomy on other levels of organization as 'a political, collectivist construct, interwoven with space/place and with communities and networks'. Similarly, White and Bown (Chapter 3), in their exploration of emotion and the creation of places for learning, argue that researchers need to consider different scales or levels of organization both spatial and temporal. They call for theoretical approaches that view learners and learning contexts as one, account for constant change, and shift attention to 'the interplay between language, individuals and space, place and opportunity moment by moment'. Kocatepe (Chapter 10) points to one such theoretical

option when she characterizes autonomy as ‘a shifting, complex, dynamic and multifaceted capacity’.

Actually, the suggestion that autonomy is a complex phenomenon, inextricably linked to space and place, is not new (Paiva & Braga 2008). Over a decade ago, Paiva (2006: 88-89) defined autonomy as

> a complex socio-cognitive system, subject to internal and external constraints, which manifests itself in different degrees of independence and control of one's own learning process. It involves capacities, abilities, attitudes, willingness, decision making, choices, planning, actions, and assessment either as a language learner or as a communicator inside or outside the classroom. As a complex system it is dynamic, chaotic, unpredictable, non-linear, adaptive, open, self-organizing, and sensitive to initial conditions and feedback.

As a complex dynamic system, autonomy interacts with and melds with other systems enabling the emergence of places for learning. The distributed control dimension of autonomy, discussed in the previous section, facilitates neighbour interaction, supports the openness of the system that enables it to draw on outside resources, and makes it possible for the various elements to reorganize. Autonomy assists in the self-organization process by opening up ‘spaces for manoeuvre’ (Lamb 2000); thereby playing a vital role in the emergence of places for learning.

Possibility and change

Autonomy opens up a space for possibilities. Possibilities are harbingers of change – another theme running through these chapters. Since places are always in a state of becoming

(Cresswell, 2004), any theory attempting to provide insights into space and place will need to be able to account for change. Larsen-Freeman (2015: 11) notes complex dynamic systems theory 'makes the study of *change* central' (italics in original). Viewed from this theoretical perspective, autonomy opens up a space for possibilities by encouraging randomness, an important element in the process of emergence. It enables learners to benefit from the unexpected, an unanticipated event or a serendipitous discovery, and to draw on resources outside the system. In other words, autonomy supports the elements essential for complex emergence. Through the reconfiguration of elements within the system and/or the addition of new ones, learning spaces are opened up which have the potential to offer unanticipated affordances for language development, as was the case in Hafner and Miller's study (Chapter 11).

Autonomy facilitates the opening of a space for a pedagogy of possibility (Murray 2013). By way of example, three of the papers in this collection that focus on teacher education programmes stress the need for a change in the way these programmes are organised and examine the potential of various possibilities to effect the desired changes – a pedagogy centred on teacher generated case studies (Jiménez Raya & Vieira Chapter 7), an experiential approach in which preservice teachers create online programs for language learners (Kuure Chapter 8), and an immersion approach in which participants engage in a variety of extracurricular activities in the target language (Magno e Silva Chapter 14). Each of these projects draws on the confluence of teacher and learner autonomy. Jiménez Raya and Vieira (Chapter 7) argue that, in order for teacher education programmes to change, an *interspace* needs to be opened up between the reality of work and the ideals of academia – a space in which teachers can reflect on their experience and construct their own professional knowledge. Autonomy as a key player in the emergence process can serve to open up these metaphorical spaces.

Emotions, feelings and autonomy

Other elements that play a role in the creation of learning spaces and places are feelings and emotions. A growing body of evidence suggests that the relationship between autonomy and our emotional, psychological and physical well-being must not be underestimated. In a book summarizing his research into the connection between stress and disease, an internationally known physician writes,

> With an increased capacity for self-regulation in adulthood comes also a heightened need for autonomy – for the freedom to make genuine choices. Whatever undermines autonomy will be experienced as a source of stress. Stress is magnified whenever the power to respond effectively to the social or physical environment is lacking or when the tested animal or human being feels helpless, without meaningful choices – in other words, when autonomy is undermined. (Maté 2003: 179)

Note that the author contends that a lack of well-being can stem from feelings, in this case those of helplessness, which he equates with the lack of meaningful choices. Maté (2003: 206) goes on to say that ‘emotions interpret the world for us,’ informing us about ‘our internal states as they are affected by input from the outside’.

Addressing the distinction between emotions and internal states, or feelings, Damasio (2003: 3), who has explored these constructs in relation to neurological functioning, defines a feeling as ‘some variant of pain or pleasure as it occurs in emotions and related phenomena’. He explains that emotions are related to the body and expressed through actions, body language and voice; whereas, on the other hand, feelings are a form of thought. Damasio

(2003: 86) hypothesizes that '*a feeling is the perception of a certain state of the body along with the perception of a certain mode of thinking and of thoughts with certain themes*' (italics in original). While some work has examined emotions in relation to autonomy in language learning (Hurd 2011), an exploration of feelings has only just begun (Tassinari 2016; Tassinari & Ciekanski 2013). In this volume Kocapete (Chapter 10) concludes that 'autonomy is exercised through embodied practices,' noting that the learners in her study 'authored their worlds of learning through their display of emotions'. White and Bown (Chapter 3) advance this line of enquiry, arguing that not only are emotions a feature of spaces but that they play a key role in the construction of places for learning. While these chapters explicitly address learners' emotions, they also point to the need to explore feelings.

White and Bown and Kocapete are not the only contributors to this collection who draw attention to the role of feelings in relation to space and place. Tracking the learning trajectory of a Japanese woman, Carter (Chapter 9) discusses the potentially devastating feelings of displacement she experienced upon returning to Tokyo after a year of schooling in Australia. Reporting on out-of-class learning in an institutional setting, Magno e Silva (Chapter 14) draws attention to the feelings of pleasure and 'esprit de corps' the learners experienced as they participated in a variety of extracurricular activities offered by a self-access centre on the campus of a Brazilian university. In another out-of-class setting, Murray, Fujishima and Uzuka (Chapter 15) discuss the feelings learners experienced as they tried to make a place for themselves in a social learning space located on the campus of a large national university in Japan. Clearly, how learners feel in a space is important and has an impact on their engagement within that context and their learning. How we experience autonomy and the role our emotions and feelings have in the creation of spaces and places for learning opens up a number of lines of enquiry to be pursued in the future.

Implications for future inquiries

In this section, we examine some of the areas for further enquiry suggested by studies in this volume. We commence with the theme just discussed: the role of feelings and emotions in the emergence of spaces, places and their accompanying affordances for learning. Researchers have only begun to explore the relationship of emotions, feelings and autonomy in language learning. As we come to understand more deeply the relevance of considering learners, comprised of their biological, cognitive and affective systems, as integral elements of the learning spaces under study, researchers will need to pursue this line of enquiry. Investigating feeling and emotions in relation to space, place and autonomy raises any number of research questions. Taking into account the experiences of learners depicted in this volume, one possible example arises from Damasio's (2003) work examining the distinction between feelings and emotions. Clearly, autonomy cannot be classified as an emotion, but can it transform into a feeling? Is it possible to feel autonomous? If so, then how does feeling autonomous in a particular space affect our learning? For example, do people who feel autonomous experience a more enhanced sense of engagement with learning tasks and processes? Are people who feel autonomous more likely to engage with the space and actively participate in the emergence of affordances for learning? And, over the long term what impact might these engrained feelings of autonomy have on their emergent identity as target language speakers and accepted participants in target culture places? This represents just one of many lines of enquiry that might be pursued as researchers consider feelings, emotions and autonomy in relation to the construction of places for learning.

While in this volume ‘construction’ has been used as a metaphor for the development of places for language learning, we propose that future research will also have to focus on the construction of actual physical spaces. In pursuing this line of enquiry, it may be helpful to view physical spaces as entities. Murray, Fujishima and Uzuka (Chapter 15) provide an example of this approach in their longitudinal ethnography examining the potential of the L-café, a social space, as a place for learning. Universities around the world are currently investing huge sums of money into not only the creation of various types of formal learning centres but also informal spaces in which learners can come together in order to learn with and from each other. In their case study of two institutions of higher learning in New Zealand, Hobbs and Dofs (Chapter 13) examine how changing financial circumstances are prompting the refurbishment of existing spaces into multipurpose, polymorphous places for learning. Lamb and Vodicka (Chapter 2) explore the ways in which, in a demonstration of a collective and critical autonomy, language communities persist in their struggle to ensure that their languages continue to be learned and used by their children; this is being achieved to some extent by the construction of semi-formal learning spaces, such as complementary schools run by the community, or the transformation of informal local urban spaces into linguistically superdiverse, even interlingual, places. Carter (Chapter 9) concludes her analysis of one learner’s trajectory as it moves across time and numerous places by noting that while not all spaces are equally conducive to autonomy, autonomous learners have the potential to transform spaces into places for learning. One means of exploring these spaces and places would be to employ retrodiction as a research strategy (see Dörnyei 2014; Murray in press) by working backwards from a context in which learning is occurring in order to examine the elements comprising the space that are conducive to the emergence of places for learning. As institutions and indeed language communities continue to acknowledge the importance of out-of-class learning and invest in the creation of alternative learning venues, there will be a

need to examine the affordances for learning that emerge in these spaces and how all of the various elements work together to produce them. We propose that in pursuing this line of enquiry it will be helpful to view these physical spaces as entities and even as agents for change (Oblinger 2006).

Spaces and the places for learning that emerge within them are subject to constant change; therefore, researchers will need to employ methodologies that make it possible to document change by taking into account time as well as space. We contend that this will mean adopting an ecological or a complex dynamic systems approach. While neither approach comes with prescribed research methodologies for work in the area of applied linguistics, the literature does provide some broad guidelines. For example, writing from an ecological perspective, van Lier (2004: 193) maintains that such studies will need to focus on the networks of relationships within the environment, take space and various time scales into account, adopt an emic perspective, and be interventionist in orientation. Similarly, outlining principles to guide research from a complex dynamic systems perspective, Larsen-Freeman and Cameron (2008: 241-242) offer the following recommendations: view the context as part of the system being studied, examine dynamic processes and changing relationships, look for reciprocal relationships rather than cause and effect sequences, and move beyond thinking in terms of binary opposites, such as ‘language acquisition versus language use’, ‘space versus place’, or in the case of autonomy, ‘dependent versus independent’ or ‘individual versus social or collective’. These theorists suggest researchers might consider case study methodology, action research, ethnography or narrative enquiry.

In this volume, researchers have relied primarily on ethnographic methods and various types of narrative enquiry including case studies to document teachers’ professional experience

(Jiménez Raya & Vieira Chapter 7), longitudinal journals to examine students' study abroad experiences (White & Bown Chapter 3), diaries and public access blogs to record learners' use of creativity in the development of virtual and other out-of-class learning places (Chik Chapter 4), and life history to trace the lifelong learning trajectory of a Japanese woman (Carter Chapter 9). In three instances, the researchers relied on surveys comprised of questions that delved into the learners' experiences over time (Magno e Silva Chapter 14; Wilton & Ludwig Chapter 6); in one of these cases, the questionnaire data was supported by interviews as well as observation (Hafner & Miller Chapter 11). A number of other studies relied on methods associated with ethnography (Bacikanli Chapter 5; Kocatepe Chapter 10; Murray et al. Chapter 15), while Kuure (Chapter 8) employed a specific type called nexus analysis (Scollon & Scollon 2004). Kuure suggests that for future studies video ethnography (Goldman 2014) could be a helpful means of recording the various phases of project work being carried out in institutional settings. As researchers delve more deeply into the practices of educators and learners that lead to the transformation of spaces into places for learning, they will need to rely on established methods as well be innovative in their quest for others conducive to documenting change over time.

Implications for Practice

Today, with the profileration of language learning beyond the classroom, teachers can no longer focus uniquely on the learning that is taking place in their classroom. In addition to theoretical perspectives that enable educators to look beyond learners and contexts as discrete entities, we need practical approaches that acknowledge, value and encompass multiple learning spaces and places. Magno e Silva (Chapter 14) suggests one way forward when she proposes that learners and their learning be viewed as language learning systems (also see

Paiva & Braga 2008; Murray & Fujishima 2016; Murray in press). The language learning system would encompass the learners comprised of their various nested systems (cognitive, biological, affective, etc.), their teachers, the materials, the spaces they move across and the places for learning that emerge as they interact with and within these spaces.

Viewing learners and their learning as learning systems would have a number of advantages (Murray in press). In the first place, it would enable teachers to see how the work that learners do for their classes is a part of a larger picture or mosaic. Adopting a learning system perspective would help teachers see that what happens in their classroom comprises one level of organization nested within learners' personal learning systems. This perspective provides an avenue for integrating individual learners' out-of-class learning into what teachers are trying to achieve in the classroom. On the other hand, it provides learners with a means of seeing how what teachers are trying to achieve in the classroom might fit into their language learning as a whole – teachers, of course, would have a role to play in raising this awareness. Moreover, a learning system approach provides a metaphor for helping learners see how any number of materials, strategies, and spaces can come together and self-organize into a set of learning opportunities that works best for who they are as language learners. Ultimately, viewing learners and their learning as learning systems opens up a space of possibilities.

Creating a pedagogy of possibility has been a recurrent theme throughout this collection of papers. This has been particularly evident in the papers that call for change in teacher education programmes. Jiménez Raya and Vieira (Chapter 7) argue for a pedagogy of experience in which teachers construct their own case studies as resources, while Kuure (Chapter 8) and Magno e Silva (Chapter 14) propose offering would-be teachers a range of learning opportunities designed to promote autonomy and help them develop resources they

can draw on once they are in the profession. Regardless of the tactics educators employ, it is important to keep in mind that learning opportunities are reliant upon the environment or space – be it physical, virtual or metaphorical – and, more importantly, how learners interact with that space.

Affordances and opportunities for learning emerge as learners interact with the environment (Cotterall & Murray 2009; Murray & Fujishima 2013; Paiva 2011; Singleton & Aronin 2007). The challenge for educators is to incorporate into the learning space elements which support complex emergence. As Hafner and Miller (Chapter 11) discovered when they promoted collaborative power relations – or what we refer to as distributed or decentralized control – in their course design, learning spaces opened up making it possible for their students to have affordances for learning that the teachers could not have predicted. This points to another element of emergence: randomness. Teachers need to be open to the unanticipated and embrace the unexpected learning and teaching opportunities that emerge. This will mean keeping an open-mind in regards to the diversity learners bring to the learning environment. Randomness will be fed by the diversity of background, knowledge, skills and interests of the learners. Teachers will need to incorporate pedagogical activities and strategies that facilitate sharing knowledge, skills and interests; in other words, they will need to encourage neighbour interactions. Teachers will also have to support redundancy by building on what the learners have in common and encouraging students to work with and learn from each other. A primary role of the teacher will be to provide coherence – the glue that holds it all together – through pedagogical strategies, classroom management techniques and interpersonal skills. As Davis and Sumara (2006) point out, complex emergence cannot be planned, but it can be occasioned. To do this, teachers need to incorporate elements which

support complex emergence into their practice: distributed control, neighbour interactions, randomness, diversity, and coherence (Davis & Sumara 2006).

Conclusion

The educators contributing to this volume have explored the ways in which language learners, teachers and communities transform spaces into places for learning. In doing so, they have demonstrated the central role that autonomy plays in this transformation. They have also shown learners' identities, including their emotions and feelings, to be key elements in the process of shaping spaces into places with affordances for learning. This body of work points to the need for theoretical and research approaches that do not only consider learners' identities, spaces and places but view them as being mutually constitutive. Learners with their cognitive, affective and physical systems form and are formed by the learning environment. Because learners and the environments they constitute are constantly changing, being shaped and reshaped through their ongoing interaction, the field of language education needs theoretical and research approaches that take embodied experience, space, and time into account. This collection of studies provides ample evidence that future research projects must not ignore the role played by autonomy in these processes. Through the constructs they draw on, including those from a range of disciplines, and the language they use to express their findings, the inquiries collected in this volume suggest that the time has come to explore in a more forthright manner the potential of complex dynamic systems as an approach to guide further study into the interplay of space, place and autonomy in language learning.

References

Benson, P 2011, *Teaching and Researching Autonomy*, 2nd edn, Pearson, Harlow, UK.

Benson, P 2007, Autonomy in language teaching and learning, *Language Teaching*, vol. 40, no. 1, 21-40.

Benson, P 2017, 'Teacher autonomy and teacher agency', in G Barkhuizen (ed.), *Reflections on language teacher identity research*, Routledge, New York.

Bourdieu, P 1985, The social space and the genesis of groups, *Theory and Society*, vol. 14, no. 6, 723-744.

Cotterall, S & Murray, G 2009, 'Enhancing metacognitive knowledge: Structure, affordances and self', *System*, vol. 37, no. 1, 34-45. DOI: 10.1016/j.system.2008.08.003

Cresswell, T 2004, *Place: A short introduction*, Blackwell, Malden, MA.

Damasio, A 2003, *Looking for Spinoza: Joy, sorrow and the feeling brain*, Vintage, London.

Davis, B & Sumara, D 2006, *Complexity and education: Inquiries into learning, teaching, and research*, Routledge, New York.

Dörnyei, Z 2014, 'Researching complex dynamic systems: "Retrodictive qualitative modelling" in the language classroom', *Language Teaching*, vol. 47, pp. 80-91.

Gao, X 2010, *Strategic language learning: The roles of agency and context*, Multilingual Matters, Bristol, UK.

Gao, X & Zhang, LJ 2011, 'Joining forces for synergy: Agency and metacognition as interrelated theoretical perspectives on autonomy' in G Murray, X Gao & T Lamb (eds.), *Identity, motivation and autonomy in language learning*, Multilingual Matters, Bristol, UK.

Goldman, R 2014, 'Frontiers of Digital Video Research in the Learning Sciences: Mapping the Terrain', in RK Sawyer (ed.), *The Cambridge handbook of the learning* sciences, 2nd edn, Cambridge Press, Cambridge. DOI: 10.1017/CBO9781139519526.014

Holec, H 1981, *Autonomy and foreign language learning*, Pergamon, Oxford.

Huang, J 2011, 'A dynamic account of autonomy, agency and identity in (T)EFL learning', in G Murray, X Gao & T Lamb (eds.), *Identity, motivation and autonomy in language learning*, Multilingual Matters, Bristol, UK.

Huang, J & Benson P 2013, 'Autonomy, agency and identity in foreign and second language education', *Chinese Journal of Applied Linguistics*, vol. 36, no. 1, 7–28.

Hurd, S 2008, 'Affect and strategy use in independent language learning', in S Hurd & T Lewis (eds.), *Language Learning Strategies in Independent Settings*, Multilingual Matters, Bristol.

Hurd, S 2011, 'Research methods to investigate emotions in independent language learning: A focus on think-aloud verbal protocols', in B Morrison (ed.), *Independent Language Learning: Building on Experience, Seeking New Perspectives*, Hong Kong University Press, Hong Kong.

Lamb, T 2000, 'Finding a voice – Learner autonomy and teacher education in an urban context', in B Sinclair, I McGrath & T Lamb (eds.), *Learner autonomy, teacher autonomy: Future directions*, Longman, Harlow, UK.

Larsen-Freeman, D 2015, 'Ten "lessons" from complex dynamic systems theory: What is on offer' in Z Dörnyei, PD MacIntyre & A Henry (eds.), *Motivational dynamics in language learning*, Multilingual Matters, Bristol.

Larsen-Freeman, D & Cameron, L 2008, *Complex systems and applied linguistics*, Oxford University Press, Oxford.

Little, D 1991, *Learner autonomy 1: Definitions, issues and problems*, Authentik, Dublin.

Massey, D 2005, *For space*, Sage, London.

Maté, G 2003, *When the body says NO: Exploring the stress-disease connection*, Wiley, Hoboken, NJ.

Morin, E 2008, *On complexity*, Hampton Press, Cresskill, NJ.

Murray, G 2013, 'Pedagogy of the possible: Imagination, autonomy, and space', *Studies in Second Language Learning and Teaching*, vol. 3, no. 3, 377–396.

Murray, G in press, 'Autonomy in the time of complexity: Lessons from beyond the classroom', *SiSAL Journal.*

Murray, G & Fujishima, N 2016), 'Understanding a social space for language learning' in G Murray & N Fujishima (eds.), *Social spaces for language learning: Stories from the L-café*, Palgrave, Basingstoke. Doi: 10.1057/978113730103.0023

Murray, G, Fujushima, N & Uzuka, M 2014, 'Semiotics of Place: Autonomy and Space' in G Murray (ed.), *Social dimensions of autonomy in language learning*, Palgrave, Basingstoke, UK.

Oblinger, DG (ed.) 2006, *Learning Spaces*, Educause, Washington, DC, viewed 1 May 2012, http://www.educause.edu/LearningSpaces

Paiva, VLM de O 2006, 'Autonomia e complexidade', *Linguagem e Ensino*, vol. 9, no. 1, 77-127.

Paiva, VLM de O 2011, 'Affordances for language learning beyond the classroom' in P Benson & H Reinders (eds.), *Beyond the language classroom*, Palgrave, Basingstoke.

Paiva, VLM de O & Braga, JCF 2008, 'The complex nature of autonomy', *Revista D.E.L.T.A.*, vol. 24 (especial), 441–468.

Sade, LA 2014, 'Autonomy, complexity, and networks of learning', in G Murray (ed.), *Social dimensions of autonomy in language learning*, Palgrave, Basingstoke, UK.

Singleton, D & Aronin, L 2007, 'Multiple language learning in the light of the theory of affordances', *Innovation in language learning and teaching*, vol. 1, no. 1, 83-96. DOI: 10.2167/illt44.0

Scollon, R & Wong Scollon, S 2004, *Nexus Analysis: Discourse and the Emerging Internet*,

Routledge, New York.

Tassinari, MG 2016, 'Emotions and feelings in language advising discourse', in C Gkonou, D Tatzl & S Mercer (eds.), *New Directions in Language Learning Psychology*. Springer, Switzerland.

Tassinari, MG & Ciekanski, M 2013, 'Accessing the self in self-access learning: Emotions and feelings in language advising', *Studies in Self-Access Learning Journal*, vol. 4, no. 4, 262-280, viewed 16 April 2015, http://sisaljournal.org/archives/dec13/

van Lier, L 2004, *The ecology and semiotics of language learning: A sociocultural* perspective, Kluwer, Boston.

van Lier, L 2008, 'Agency in the Classroom' in J Lantolf & M Poehner (eds.), *Sociocultural theory and the teaching of second languages*, Equinox, London.

van Lier, L 2010, 'Foreword: Agency, self and identity in language learning', in B O'Rourke & L Carson (eds.), *Language learner autonomy: Policy, curriculum, classroom*, Peter Lang, Oxford.