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### **Autonomy in the Time of Complexity: Lessons from Beyond the Classroom**

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## **Autonomy in the Time of Complexity: Lessons from Beyond the Classroom**

Garold Murray, Okayama University, Japan

### Abstract

Learner autonomy is a construct in motion, unfolding in step with our academic imaginary. Over the past forty years, it has demonstrated its capacity to adapt to changing times. Introduced in the late 1970s during an era characterized by the teacher-dominated language classroom, learner autonomy provided a much-needed focus on learners as potentially independent individuals capable of taking charge of their learning. Later, as the so-called ‘social turn’ gained prominence in the field of applied linguistics, autonomy revealed itself to be a social construct developed through interdependence. Now, as applied linguists turn their attention to complexity science, what facets of learner autonomy can be revealed by examining the construct from the perspective of complex dynamic systems theory?

This paper addresses this question by drawing on the findings of three studies – a five-year ethnography, a longitudinal multiple-case study and a narrative inquiry – all of which explored a social space for language learning located on the campus of a large national university in Japan. The aim of these studies was to explore the ways in which learners experienced the facility and how it supported their linguistic and personal development. Adopting an ecological approach enabled the author and fellow researchers to focus on the affordances that emerged through learners’ engagement with the environment. Gradually, as these studies were carried out over the past eight years, the thinking on how to view this space, the learners and their learning has expanded from a community of practice perspective to one embracing complex dynamic systems theory. This article will examine how this shift in theoretical focus has offered lessons on learner autonomy in this out-of-class context.

*Keywords:* autonomy, affordances, complexity, imagination, space and place

*If you change the way you look at things, the things you look at change.*

– Dr. Wayne Dyer

While the notion that learner autonomy may have changed over the years is debatable, certainly the way educators have looked at the construct has changed. When learner autonomy was introduced to language learning in the late 1970s, Henri Holec defined it as “the ability to take charge of one’s learning” (Holec, 1981, p. 3). The focus was on individual learners and their potential to be responsible for all aspects of their learning from goal setting to assessment. To support independent,

self-directed learners, self-access centres were being developed in various parts of the world. Later, as Vygotsky's (1978) work caught the imagination of western academics, the idea that we learn through social interaction gained acceptance. Educators working in the area of learner autonomy expanded the definition to include learners' capacity and willingness to cooperate with others as socially responsible beings (Dam, Eriksson, Little, Miliander, & Trebbi, 1990). Reflecting on learner autonomy a decade later, Little (2000) wrote that "the growth of learner independence is supported by learner interdependence" (p. 22). Van Lier (2004), following suit, claimed that autonomy is "socially produced, but appropriated and made one's own" (p. 59). Gradually, learner autonomy came to be seen as "a social capacity that develops through 'interdependence' rather than 'independence'" (Benson & Cooker, 2013, p. 8).

Clearly, the way of looking at learner autonomy has changed over the years, and this has enabled educators to see different facets of the construct (Lamb, 2015). Currently, in the field of Applied Linguistics, complexity thinking is gaining recognition. This shift in theoretical orientation raises the following question: what can be learned about learner autonomy by looking at it from the perspective of complex dynamic systems theory?

In order to address this question, this article discusses the findings of three research projects carried out in a social learning space by the author and two colleagues<sup>1</sup> over the past eight years. This series of projects includes a longitudinal ethnography, a multiple case study, and a narrative inquiry. The learning space under investigation, the L-café, is located on the campus of a large national university in Japan. The term social learning space is used to refer to a place where learners can come together in order to learn with and from each other. While this particular social learning space, the L-café, may look like a self-access centre, the emphasis is on learning through informal social interaction. The original aim of the research, when started eight years ago, was to investigate the opportunities for language learning available in this out-of-class environment. After briefly describing this learning space, outlining the studies, and providing a theoretical overview, the article will shift its focus to what has been learned about learner autonomy over the course of these inquiries.

### **The Social Learning Space**

The L-café is a multilingual space for international students and local Japanese students to come together. They gather to relax, chat with friends, have lunch, or just ‘to hang out’. Some students come to work on laptops, which are available in the facility, and others come to study. Although there are materials for language learning, the L-café seems to be primarily a social place.

When the L-café started out in 2009 as the English Café, the original idea was to create a facility where Japanese students could practice their English skills. This meant welcoming international students. International students wanted to improve their Japanese and brought with them other languages: German, French, Korean, Chinese, Thai and Serbian. Gradually, the English Café evolved into the L-café.<sup>2</sup>

A key feature of the L-café is the small, non-credit-bearing language classes, which are mostly offered in the late afternoons and early evenings. These classes, which are taught by both Japanese and international students, focus on conversation and test preparation. In addition to the classes, special events are held throughout the year: a welcome party for the new international students, a Halloween party, a Christmas party, a Cherry-blossom viewing party, and so on. In addition to these, other events are often suggested, planned and carried out by the students. The classes, special events and day-to-day operation are overseen by a full-time manager with two administrative assistants, aided by students hired on a part-time basis.

### **The Studies**

Not long after the English Café opened, two colleagues and the author began an exploratory research project with the aim of identifying the opportunities the English Café offered for language learning. With a mix of nine international and Japanese students as well as two administrators as participants, the study combined narrative inquiry and ethnography (Murray & Fujishima, 2013). At the outset, the students wrote language learning histories and all of the participants were interviewed at the end of each semester. The researchers also carried out participant observation. As it turned out, the first year of the study was actually a pilot study.

At the beginning of the second year, a grant was received from the Japanese Ministry of Education, which enabled the study to be extended for an additional four

years. The four-year study which followed had 13 Japanese participants and used the same research methodology as the pilot study with the exception that the participants took the TOEIC test once a year. Another change was that senior students could be hired as research assistants (RAs) whose principal task was to do participant observation and write up field notes. The RAs were also interviewed at the end of each semester.

The intention in the four-year study was to track the language learning trajectories of these 13 Japanese students from their first year at the university to graduation, through their participation in the L-café. However, there was an unanticipated problem. Around the end of the second year, most of the participants stopped coming to the L-café. The reasons they cited included an increase in workload in their faculties, pressures of part-time jobs, and responsibilities related to club activities. Interestingly, however, only one participant withdrew from the study. As the study continued, it became apparent that two studies were emerging: 1) a multiple case study tracking the language learning trajectories of 13 Japanese EFL learners from their 1<sup>st</sup> year to 4<sup>th</sup> year, and possibly graduation; and 2), an ethnographic inquiry investigating the social learning space.

Analysis of the data from these studies was an on-going process, which commenced very early on. Once the first round of interviews had been carried out in the pilot study, a thematic content analysis of the transcripts was begun. At the end of the four years there was a huge amount of data including 125 interview transcripts and reports chronicling over 1000 hours of observation. As the interview transcripts and observation reports were read, re-read, coded and re-coded, and the codes gradually grouped into categories, two things became clear: first, there was a large number of people involved in the L-café on many different levels; and, secondly, all of these people had their own stories about how they experienced the English Café, L-café or both.

This realization prompted the author to propose doing a narrative inquiry (Murray & Fujishima, 2016). Stories were collected from seven Japanese and two international students, four teachers who were assigned to work in the L-café as language learning support people, and three administrators – one at the university level and two on the management level of the L-café. The discussion, which follows, draws on the thematic analysis of these stories, the case studies and the ethnography as the author reflects on what has been learnt about learner autonomy. However,

before this, it will be helpful to trace the evolving theoretical orientation that informed the interpretation of the data.

### **Evolving Theoretical Orientation**

As principal researcher in these three inquiries over the past eight years, the author's thinking has undergone a major transformation or phase shift, from a focus on communities of practice to complex dynamic systems. In the early days of the study not long after the English Café opened, while doing participant observation, it seemed quite obvious that a community of learners had formed. At this point interpretation of the data was guided by the community of practice construct.

Wenger, McDermott, and Snyder (2002) define communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). At the English Café and later at the L-Café there were groups of students who shared a common goal, learning a foreign language – as well as other interests – and who deepened their knowledge and expertise as they interacted and participated in everyday activities and special events.

During the first round of interviews approximately four months into the pilot study, the researchers wanted to confirm the impression that a community of learners had developed so the participants were asked how they would describe the English Café. They began their answers with “It’s a place...It’s a place where....” The frequent references to “place” in response to various questions eventually led to an exploration of the literature on space and place in the field of human geography.

Places are created through action, ‘by people doing things’ in a particular space (Carter, Donald, & Squires, 1993; Cresswell, 2004). This space is then identified or defined as a place where these actions or activities are carried out. Therefore, a space is transformed into a place by talking about it as an environment in which certain activities occur. In other words, places are the products of action and discourse.

Because the focus of the inquiry was a place, a specific learning space, as opposed to individual learners, very early on an ecological approach was adopted (Kramsch, 2002; van Lier, 2004). This meant looking at the English Café as an “ecosocial system” (Lemke, 2002, p. 69) comprised of the students and their

interactions. However, the shift in focus from a community of practice perspective to a complex dynamic systems approach did not happen from one day to the next, nor was it a case of linear progression. A more apt metaphor might be osmosis. Ideas and constructs from complexity theory seeped in and gradually became prevalent in the researchers' thinking. Terms such as affordance, emergence and ecosocial system were being used without fully embracing complex dynamic systems theory as a theoretical orientation to guide interpretation of the data.

However, over the five years of data collection for the ethnography, the more the social learning space was studied, the more it revealed itself to be a complex dynamic system. If one were to pinpoint a turning point for both the L-café and research project, it would be just after the English Café was moved to a much larger location and became the L-café. The change in space engendered a change in the social structure – as Oblinger (2006) notes, when the space changes, everything changes. In this case, what seemed to be one fairly homogenous community of practice divided into several, which all worked together as part of a larger complex system, the L-café.

What was being observed at the L-café corresponded well with the basic tenets of complexity thinking (Larsen-Freeman & Cameron, 2008; Larsen-Freeman, 2015). In the first place, a defining feature of complex dynamic systems is that they are made up of many components, which interact with each other. As the components of a system interact, they can self-organize to produce new phenomena all on their own without outside direction. On this point, there is a parallel to learner autonomy. Certainly, autonomy has to be present for elements to self-organize. This process, in which the components self-organize to produce something new, without external direction, is referred to as emergence.

It is important to note that emergence is possible due to the fact that complex dynamic systems are comprised of different levels of organization. Elements on one level self-organize to produce something new on a different level. This phenomenon coincided with what was being observed at the English Café. Once the physical space had been made available, the students started coming and through their interaction, they created a kind of learning space that the university administration and the English Café management had not foreseen.

Management could not have predicted what the English Café would become. This illustrates another feature of complex dynamic systems: they do not always

follow a linear progression. In other words, it is very difficult to predict which direction a system is going to take or what it is going to become. One of the reasons that complex systems defy prediction is that they are open; in other words, they draw on energy and resources from outside the system. Again, this is what has been observed at the L-café. It draws on the resources of everybody who comes there: the international students, the Japanese students, the teachers, the administrators and researchers. As an open system, the L-café is in a state of continuous change – another key feature of complex dynamic systems.

However, as mentioned at the outset, getting to the point of embracing complexity thinking as the principal theoretical orientation to guide the interpretation of the data was a gradual process, which occurred over a period of many months, even years. In the interim, key steps in that process were; taking an ecological approach and eventually, interpreting the data from the perspective of space and place.

### **Lessons Learned**

This shift in theoretical orientation has provided seven lessons on learner autonomy in this out-of-class environment. To begin with, a major turning point was the following realization: “How learners imagine a space to be, perceive it, define it, and articulate their understandings transforms a space into a place, determines what they do there, and influences their autonomy” (Murray, Fujishima & Uzuka, 2014, p. 85). Imagination plays a crucial role in the transformation of space into place. Imagination also plays an important role in learners’ perceptions of possibilities, or affordances, for language learning in that place.

With the shift in focus to an ecological perspective, the initial aim of the research – to identify opportunities for language learning available in this environment – transformed into a quest for affordances. A crucial feature of affordances is that they are not opportunities already present in the environment (Menezes, 2011). Rather, they emerge as learners interact with the environment (Gibson, 1986). As an emergent phenomenon, affordances are reliant upon a number of factors. For one thing, affordances depend on learners’ perceptions. Learners have to be able to see the potential in the environment. Affordances also rely on the discourses surrounding an environment and how these discourses serve to define the

learning space (Murray, Fujishima & Uzuka, 2014). Students' perceptions and discourses pertaining to the L-café illustrate this point.

Over the five years of the study into the social learning space, the interviews consistently revealed that the number one affordance for students was the potential to make friends (Murray & Fujishima, 2013, 2016; Murray, Fujishima & Uzuka, 2014). Through discourse the L-café became defined as a place to make friends, and especially as a place to make friends with international students. This affordance, the possibility to make friends, transformed into any number of learning opportunities on a daily basis. It also brought with it nested affordances; such as the potential for intercultural exchange and the possibility to receive and give support and encouragement. Within these affordances students had any number of learning opportunities; for example, to practice speaking, to get help with homework, to receive advice about language learning and study abroad, and to explore cultural values and practices.

The second major turning point was coming to realize that within this environment autonomy acted as an affordance. In retrospect, this started to become apparent as the interview transcripts from the pilot study were being analysed. The presence of autonomy in the environment and the importance it had for the participants became increasingly evident. In the first round of interviews, all of the students were asked what was the best thing about the English Café. Rick, a Chinese student from Hong Kong, answered, "You can go at any time and leave whenever you want." The students were also asked how they would describe the English Café. In response to this question, Eri, a Japanese student said, "Whenever you want to go, you can go in there so...it means that English Café is like liberal...it's really informal facility... so we can follow our feeling." Another question probed what the English Café offered students in addition to the courses they could take at the university. Lena, an international graduate student and worker at the English Café, replied, "If you enter English Café, you can exit anytime.... You can do whatever you want, you can stay the whole day... You decide – you set your own time and your rules, in a way." In three different contexts, the idea came up that the English Café was a place where the learners could exercise their autonomy. Clearly this was a very important issue for the students.

At the English Café and now at the L-café, autonomy mediates the students' interaction with the environment (Murray & Fujishima, 2013). Autonomy enables the

students to act upon the affordances they perceive in ways that suit their sense of self. On the other hand, autonomy enables learners to interact in the environment as they see fit and, in doing so, to actively participate in the emergence of affordances that otherwise would not have existed for them. Through this dual role, autonomy retroacts or feeds back on itself (Morin, 2008). In other words, autonomy produces more autonomy. An important lesson for the researchers was coming to see autonomy as an emergent phenomenon arising from the learner's interaction with the environment.

Another lesson was the realization that autonomy is inextricably linked to space and place (Paiva & Braga, 2008). The elements of space and place have a role to play in the emergence of autonomy. This became even more apparent when the English Café went through a major phase shift. About halfway through the study, the university made funding available to move the English Café to a much larger location, occasioning its transformation into the L-café.

In the first round of interviews after the move, the conversation began in the usual way with the interviewer asking the participants what was new or different since the last time they met. All the participants remarked that the size of the English Café had changed. Their response was not surprising – the change in size was fairly obvious. What was surprising was that the participants associated the change in space with a greater sense of freedom. The participants were then asked, “What difference has the change in space made?” Shinpei, a research assistant and an L-café worker, answered, “There are like huge space, people can do more freely.... There's more freedom.” People had more space to exercise their autonomy.

The manager echoed Shinpei's comments when asked how the L-café was different from the English Café: “Space-wise it's a huge difference. Huge progress. I heard many students saying, ‘Now we have freedom, more freedom. We can walk around.’ They can have their own place...make up their own territory, like a regular spot.” Students can appropriate a space, make it their own and transform it into a place. Autonomy mediates this transformation of a space into a place – their place. On the other hand, elements of space and place play a role in producing autonomy; for example, in this case, physical size appeared to play a key role. However, it is also important to note that people need to have a sense of well-being in that space in order to feel safe and comfortable to exercise their autonomy. All these elements which create place – the physical elements of the space, feelings and emotions, and

autonomy – are interrelated. The L-café is a complex dynamic system comprised not only of the spatial elements but also the learners. As one of the managers noted in her story for the narrative inquiry, “With no students, there is no English Café” (Uzuka, 2016, p. 25).

Fostering the notion that learners are part of the environment, complexity thinking has led to seeing the learners and their learning from a new perspective. Learners and their learning can be viewed as open, self-organizing learning systems moving across time and space. For years, the author’s work in self-directed learning courses (Murray, 2009a, 2011a) and self-access centres (Murray 2009b; 2011b), has focused on helping learners plan their learning – to develop their own personal learning plans. The first step in the planning process is to help learners identify their goals. However, whenever the participants and research assistants were queried concerning their goals, the response was either a confused look, or “I don’t have goals”.

The learners in these studies were not guided by pedagogical concerns. They were not thinking in terms of learning plans; or, even planning learning. Nonetheless, they did have goals: life goals (Palfreyman, 2014). Their goals seemed to be related to a vision of the person they hoped to become. This observation led to the realization that autonomy – taking responsibility for one’s learning – is about change, the desire to effect change in one’s life.

One of the case studies illustrates this point. Mutsuo is a highly autonomous, successful language learner. Actually, when he entered the university, Mutsuo spoke fluent English. He attributed his foreign language competency to his avid interest in gaming during his high school years (Chik, 2014). Mutsuo was adamant that he did not have goals, or a learning plan. In an interview at the end of his third year as a participant in the study, he was asked how students who come to the L-café were different from other students. He said, “I think students who come to L-café are those who are not passive, who try to change something about themselves or something about their future.”

Later, in an interview near the end of the study, the participants were asked how they felt in general about their language learning experiences at the university over the four years. Mutsuo had this to say: “I’m really satisfied with the English education here, but I think I made effort for myself... like 70 or 80% is me who

developed my English. So even if the university provides students with good classes, super good classes, it is students who do something.”

The point to emphasize here is that although these learners might not be a perfect fit for a model of what an autonomous learner is or should be, they were nonetheless highly autonomous, self-directed learners. Actually, instead of self-directed, they could be more accurately characterized as ‘self-organizing’. They were self-organizing learners.

As open systems, these learners were drawing on any number of outside resources and organizing elements into a learning system. Recognizing the potential for learning opportunities, they were integrating a combination of the following activities into their learning systems:

- participating in social groups and events at L-café
- socializing with L2-speakers outside of the L-café
- enrolling in various language courses
- using commercial self-study materials
- engaging with social media
- volunteering to help newly arrived exchange students
- watching movies
- listening to English music
- studying abroad

In summary, autonomous learners and their learning can be viewed as open, self-organizing systems that are driven by their visions of the person they want become or the changes they want to make in their lives.

### **Implications**

So, what are the implications of what has been learned from adopting a complexity perspective for theory, practice and future research? In terms of theory, it can be argued that reflecting, on the possibility that learners, their learning and learner autonomy are comprised of multiple nested complex dynamic systems, can provide insights into learner autonomy as well as language learning (de Bot, 2008; Larsen-Freeman, 2015).

### ***Theory***

In regard to theory, complexity thinking offers a different perspective on issues related to control – the kingpin of Benson’s (2011) definition of learner autonomy. One way it does this is by providing insight into the relationship between learner autonomy and change, a key feature of complex dynamic systems. Learners in these studies exhibited behaviours associated with learner autonomy because they wanted to make changes in their lives. The changes they wanted to make were closely tied to their vision of a future self, the person they wanted to become. Future selves are related to the imagination. In order to change, people need to be able to imagine themselves as being otherwise. In this way, autonomy is related to imagination. For imagination to do its work, autonomy has to be present. Conversely, for autonomy to manifest, imagination needs to be present. Autonomy is related to learners’ hopes and dreams for the future. Taking responsibility for one’s learning involves imagination and change, which both engage feelings and emotions.

Currently, researchers are exploring emotions in relation to learner autonomy. Feelings also need to be looked at (Tassinari, 2016). Hope, confidence, belonging, acceptance – that it is acceptable to be the person we are or want to become – these are all feelings that are very much a part of the experience of an autonomous learner (Miyake, 2016; Nakamoto, 2016). Furthermore, learners in these studies talked about how they felt in the learning space. How learners feel in a learning space is important.

Through feelings, emotions and imagination, autonomy is linked to space and place. The learning space emerges as a certain kind of place because of the interaction of all the elements – the physical elements of the environment as well as the learners with their cognitive and emotional systems. Learners are part of the learning space and play a role in determining the kind of place it becomes. What autonomy does is open up a metaphorical or a metaphysical space which gives the elements room to move around and self-organize.

Ultimately, constructs, like self-organization, emergence, and phase shifts, require a change in the way of thinking. Complexity theorists urge researchers to move beyond thinking in terms of binary opposites (Larsen-Freeman & Cameron, 2008); for example, control vs. freedom, dependence vs. independence, the individual vs. the social. Autonomy thinking seems to be replete with binary opposites. This is arguably not a coincidence. Looking at freedom and control, for example, these phenomena emerge side-by-side in the learning space. Neither construct can exist or

have meaning without the other. Elsewhere, Morin (2008) makes the case that independence is gained through a continuous series of dependencies, making independence and dependence complementarities rather than binary opposites. One can argue that future theoretical work in the area of learner autonomy, informed by complexity thinking, has the potential to help educators and researchers see beyond these binary opposites. The following section presents an example of insights that might be gained by engaging in complexity thinking as a means to reflect on these sets of constructs common to autonomy in language learning.

### ***Practice***

In terms of practice, there are at least two points to make. First and foremost, learner autonomy is supported by the distribution of control and the encouragement of neighbour interactions – both of which are conditions for complex emergence (Davis & Sumara, 2006). In the L-café, the manager distributed control (Murray & Fujishima, 2013, 2016; Uzuka, 2016). She gave student workers a management role and involved them in decision-making. Distributed control is a form of freedom. (This idea supports the discussion above concerning the potential of complexity thinking to help theorists look beyond the binary opposites that characterize learner autonomy.) Distributed control opens up a space for possibilities. For example, it supports neighbour interactions or social networking. What was evident at the L-café was that when control was distributed, there was a tendency for ideas to be shared, for people to help each other and to learn from each other. The learning possibilities seemed to multiply. For one thing, distributed control and neighbour interactions support open learning systems by enabling learners to draw on resources from outside the system.

The second point to make in relation to practice is that educators need to start thinking in terms of learners' personal learning systems. The author has spent many years helping learners develop personal learning plans in self-directed learning courses and in self-access centres and will continue to encourage learners to identify goals and develop learning plans in these contexts. What has changed is the realization that these contexts comprise one level of organization nested within learners' personal learning systems.

The data from these studies suggest there are a number of advantages to adopting a learning system perspective. First, it can enable students to see the bigger picture and how any number of elements can work together and self-organize into a

learning system that is appropriate for them. For example, it can help students see how their love of cinema, which they viewed uniquely as a pleasurable leisure activity, can become a legitimate means to support the development of their listening skills, vocabulary acquisition and cultural awareness. Secondly, it opens up a space for possibilities – it makes advisors and teachers open to the possibilities the learners bring to the learning space. It can point to ways to integrate out-of-class learning into what teachers are trying to achieve in the classroom. Conversely, it can help students see how what teachers are trying to do in the classroom fits into their learning as an integrated whole. Thirdly, a learning system perspective can help advisors as well as teachers see that learners and their learning are part of other systems, which can influence them and even impose constraints. In other words, the learning systems concept can keep educators mindful that learners have lives. Undoubtedly, most teachers have witnessed that, at times, life intervenes and sets the student and the learning system off in unanticipated and unpredictable directions. A learning system perspective offers the potential to see teaching and language advising practices in new ways.

### ***Research***

Gradually coming to see the research into learner autonomy from the perspective of complex dynamic systems theory has provided an awareness of the following three points. First of all, complex dynamic systems are about change. Researchers, therefore, need methods which enable them to document change. Ethnography (Murray & Fujishima, 2013; Murray, Fujishima & Uzuka, 2014, forthcoming) and narrative inquiry (Murray & Fujishima, 2016) are well-suited to meeting this challenge. Secondly, rather than focusing on prediction, researchers need to engage in retrodiction (Dörnyei, 2014). The researchers on these projects were working backwards from what was seen as the L-café in order to determine which elements had self-organized to create it and the community or communities it encompasses (Murray & Fujishima, 2013). Thirdly, engaging in retrodiction can enable researchers to create provisional models that help understand what is happening (Murray & Fujishima, 2016). While complex dynamic systems cannot be created per se, their emergence can be supported. Provisional models can guide educators in this endeavour.

As for areas of further inquiry, the ideas outlined in this paper raise any number of research questions. It is important to note here that the research methodologies for the three studies were not designed with complex dynamic systems theory in mind. Future studies need to be carried out which investigate social learning spaces and self-access centres as complex dynamic systems. Auxiliary notions, such as the role of space and place in relation to learner autonomy, will also need to be explored. Further inquiries should examine the claims that autonomy is an emergent phenomenon, and that learners and their learning comprise complex dynamic systems. While work has explored the role of imagination in education (Egan, 2005, 2007; Liu & Noppe-Brandon, 2009), research is required to better understand this construct and the part it plays in the emergence of autonomy and learners' personal learning systems (Murray, 2013). Adopting a complex dynamic systems approach can refresh the way researchers look at the various dimensions of autonomy, learners and their learning.

### **Conclusion**

The aim of this paper has been to address the following question: What can be learned by looking at learner autonomy from a complex dynamic systems perspective? An examination of the data from the ethnography of the social learning space, the multiple case study and the narrative inquiry suggests that autonomy is an emergent phenomenon, which can act as an affordance in learning environments. As such, autonomy is linked to space and place. It draws on learners' feelings, emotions and imagination in addition to their cognitive capacities. Furthermore, autonomy is about change. Learners engage in behaviours that researchers have identified as manifestations of autonomy because of changes they want to make in their lives. In the final analysis, autonomy enables learners and their learning as open, self-organizing complex dynamic systems.

### **Notes on the Contributor**

Garold Murray is associate professor in the Center for Liberal Arts at Okayama University, Japan. His research interests focus on learner autonomy, social learning spaces, imagination, and semiotics of place. He is editor of the book *The Social Dimensions of Learner Autonomy* (2014), and co-editor of *Identity, Motivation, and*

*Autonomy in Language Learning* (2011), *Social Spaces for Language Learning: Stories from the L-café* (2016) and *Space, Place and Autonomy in Language Learning* (in press).

### References

- Benson, P. (2011). *Teaching and researching autonomy* (2<sup>nd</sup> ed.). London, UK: Longman.
- Benson, P., & Cooker, L. (2013). The social and the individual in Applied Linguistics research. In P. Benson & L. Cooker (Eds.), *The applied linguistic individual: Sociocultural approaches to identity, agency and autonomy* (pp. 1-16). Sheffield, UK: Equinox.
- Carter, E., Donald, J., & Squires, J. (1993). *Space and place: Theories of identity and location*. London, UK: Lawrence and Wishart.
- Chik, A. (2014). Digital gaming and language learning: Autonomy and community. *Language Learning and Technology*, 18(2), 85-100. Retrieved from <http://llt.msu.edu/issues/june2014/chik.pdf>
- Cresswell, T. (2004). *Place: A short introduction*. Malden, MA: Blackwell.
- Dam, L., Eriksson, R., Little, D., Miliander, J., & Trebbi, T. (1990). Towards a definition of autonomy. In T. Trebbi (Ed.), *Third Nordic workshop on developing autonomous learning in the FL classroom*. Bergen: University of Bergen, Norway. Retrieved from [https://www2.warwick.ac.uk/fac/soc/al/research/groups/llta/research/past\\_projects/dahla/archive/trebbi-1990.pdf](https://www2.warwick.ac.uk/fac/soc/al/research/groups/llta/research/past_projects/dahla/archive/trebbi-1990.pdf)
- Davis, B., & Sumara, D. (2006). *Complexity and education: Inquiries into learning, teaching, and research*. New York, NY: Routledge.
- de Bot, K. (2008). Introduction: Second language development as a dynamic process. *The Modern Language Journal*, 92, 166-178. doi: 0026-7902/08/166-178
- Dörnyei, Z. (2014). Researching complex dynamic systems: 'Retrospective qualitative modelling' in the language classroom. *Language Teaching*, 47(1) 80-91. doi:10.1017/s0261444811000516
- Egan, K. (2005). *An imaginative approach to teaching*. San Francisco, CA: Jossey-Bass.
- Egan, K. (2007). Imagination, past and present. In K. Egan, M. Stout, & Takaya, K. (Eds.), *Teaching and learning outside the box: Inspiring Imagination across the curriculum* (pp. 3-20). New York, NY: Teachers College Press.

- Gibson, J. J. (1986). *The Ecological approach to visual perception*. New York, NY: Psychology Press.
- Holec, H. (1981). *Autonomy and foreign language learning*. Oxford, UK: Pergamon.
- Kramsch, C. (2002). *Language acquisition and language socialization: Ecological perspectives*. London, UK: Continuum.
- Lamb, T. (2015). Knowledge about language and learner autonomy. In J. Cenoz, D. Gorter, & S. May (Eds.), *Language awareness and multilingualism: Encyclopedia of language and education* (pp. 1-14). Switzerland: Springer International. doi:10.1007/978-3-319-02325-0\_14-1
- Larsen-Freeman, D. (2015). Ten 'lessons' from complex dynamic systems theory: What is on offer. In Z. Dörnyei, P.D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 83-94). Bristol, UK: Multilingual Matters.
- Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford, UK: Oxford University Press.
- Lemke, J. L. (2002). Language development and identity: Multiple timescales in the social ecology of learning. In C. Kramsch (Ed.), *Language acquisition and language socialization: Ecological perspectives* (pp. 68-87). London, UK: Continuum.
- Little, D. (2000). Learner autonomy and human interdependence: Some theoretical and practical consequences of a social interactive view of cognition, learning, and language. In B. Sinclair, I. McGrath, & T. Lamb (Eds.), *Learner autonomy, teacher autonomy: Future directions* (pp. 15-23). Harlow, UK: Pearson.
- Liu, E., & Noppe-Brandon, S. (2009). *Imagination first: Unlocking the power of possibility*. San Francisco, CA: Jossey-Bass.
- Menezes, V. (2011). Affordances for language learning beyond the classroom. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom* (pp. 59-71). Basingstoke, UK: Palgrave Macmillan.
- Miyake, K. (2016). My life in the L-café from different angles. In G. Murray & N. Fujishima (Eds.), *Social spaces for language learning: Stories from the L-café* (pp. 86-90). Basingstoke, UK: Palgrave. doi: 10.1057/978113730103.0015
- Morin, E. (2008). *On complexity*. Cresskill, NJ: Hampton Press.
- Murray, G. (2009a). A self-directed learning course. In A. Smith & G. Strong (Eds.), *Adult learners: Content, context, and innovation* (pp. 61-70). Alexandria, VA: TESOL.
- Murray, G. (2009b). Self-access language learning: Structure, control and

- responsibility. In F. Kjisik, F., P. Voller, N. Aoki, & Y. Nakata (Eds.), *Mapping the terrain of learner autonomy: Learning environments, learning communities and identities* (pp. 118-142). Tampere, Finland: Tampere University Press.
- Murray, G. (2011a). Imagination, metacognition and the L2 Self in a self-access learning environment. In G. Murray, X. Gao, & T. Lamb (Eds.), *Identity, motivation and autonomy in language learning* (pp. 75-91). Bristol, UK: Multilingual Matters.
- Murray, G. (2011b). Older language learners, social learning spaces, and community. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom* (pp.132-145). Basingstoke, UK: Palgrave Macmillan.
- Murray, G. (2013). Pedagogy of the possible: Imagination, autonomy, and space. *Studies in Second Language Learning and Teaching*, 3(3), 377-396.
- Murray, G., & Fujishima, N. (2013). Social language learning spaces: Affordances in a community of learners. *Chinese Journal of Applied Linguistics*, 36(1), 141-157. doi:10.1515/cjal-2013-0009
- 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* (pp. 124-146). Basingstoke, UK: Palgrave. doi: 10.1057/978113730103.0023
- Murray, G., Fujishima, N., & Uzuka. M. (2014). Semiotics of place: Autonomy and space. In G. Murray (Ed.), *Social dimensions of autonomy in language learning* (pp. 81-99). Basingstoke, UK: Palgrave.
- Murray, G., Fujishima, N., & Uzuka. M. (forthcoming). Social learning spaces and the invisible fence. In G. Murray & T. Lamb (Eds.), *Space, place and autonomy in language learning*. London, UK: Routledge.
- Nakamoto, N. (2016). The door to the L-café, the door to the world. In G. Murray & N. Fujishima (Eds.), *Social spaces for language learning: Stories from the L-café* (pp. 80-85). Basingstoke, UK: Palgrave. doi:10.1057/978113730103.0014
- Oblinger, D. G. (2006). Space as a change agent. In D. G. Oblinger (Ed.), *Learning spaces*. Washington, DC: Educause. Retrieved from <http://www.educause.edu/LearningSpaces>
- Paiva, V. L. M. de O., & Braga, J. C. F. (2008). The complex nature of autonomy. *DELTA*, 24, 441-468. doi:10.1590/S0102-44502008000300004
- Palfreyman, D. (2014). The ecology of learner autonomy. In G. Murray (Ed.), *Social dimensions of autonomy in language learning* (pp. 175-191). Basingstoke, UK: Palgrave.

Tassinari, M. G. (2016). Emotions and feelings in language advising discourse. In C. Gkonou, D. Tatzl, & S. Mercer (Eds.), *New Directions in Language Learning Psychology* (pp. 71-96). Basel, Switzerland: Springer.

Uzuka, M. (2016). Five years at the L-café: The secret of its success. In G. Murray & N. Fujishima (Eds.), *Social spaces for language learning: Stories from the L-café* (pp. 21-30). Basingstoke, UK: Palgrave.  
doi:10.1057/978113730103.0006

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

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Cambridge University Press.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.

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<sup>2</sup> For more information and photographs of the English Café, the L-café, people and events, visit the L-café homepage and Facebook page: <http://l-cafe.ccsv.okayama-u.ac.jp/english/activities.html>; and on Facebook, type 'L-café Okayama University' into the search window, or type the full address into your search engine: <https://www.facebook.com/lcafeokayamauniversity/>