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Towards a learner-based theory of distance language learning: the concept of the learner-context interface

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Introduction

The developments in new technologies, the emergence of virtual learning environments and the demand for lifelong flexible learning opportunities have given rise to a marked increase in language learning through distance education – both in terms of new providers and new participants. While at one time distance education struggled for recognition, the viability of distance environments for language learning is now well established. A number of important avenues for research into distance language learning have been pursued, focusing on such issues as the development of interactive competence (Kötter 2001), knowledge gain of distance language learners (Baumann and Shelley 2003), social presence in mediated learning environments (Tammelin 1999), and learner strategies (White 1995, 1997). More recently a number of research projects relating to distance language learning in specific contexts have been documented (see for example Catterick, 2001, Curtis, Duchastel and Radic 1999, Fox 1998, Garing 2002, Grosse 2001, Hauck and Haezewindt 1999). These have played an important role in contributing to the professional background of language teachers and knowledge development within the field. What is still lacking, however, is a central theoretical framework to inform both research and practice in the broad range of contexts and experiences for distance language learning.

The need for further theory building reflects the wider situation within the field of distance education as a whole and is a recurrent theme in recent writings (McIsaac and Gunawardena 1996, Chu 1999, Garrison 2000). The situation is all the more since innovations in technology and practice have outstripped theory development in distance learning. As a result, the use of technology in learning environments has tended to be technology- rather than theory-led (Ravenscroft 2001). At the same time, a degree of conceptual confusion exists ‘with the advent of new technology (virtual, open, distributed and distance education), new technologies, new program demands, new audiences, and new commercially competitive providers’ (Garrison 2000:1). The absence of a central theoretical framework limits the extent to which it is possible to inform, explain and shape new practices, and its existence would contribute to research and debate concerning virtual learning environments in the larger educational community.

Theory development is well advanced within the field of second language learning; in recent years the focus has been on such areas as the role of input and interaction, cognitive approaches to second language learning and socio-cultural perspectives informed the main by research carried out in face-to-face classrooms. Important contributions to the mainstream literature on second language learning have been made by from distance education researchers mainly in relation to learner autonomy (e.g. Hurd, Beaven and Ortega 2001), online critical reflection (e.g. Lamy and Goodfellow 1999) and the development of learner beliefs (e.g. White 1999). However, these contributions remain limited and there has been relatively little theory building in relation to distance language learning. This chapter aims, first of all, to trace the evolution of different theories within distance education, and then to propose a learner-based theory of distance language learning which centres on the notion of the learner-context interface.

Evolution of theory in distance education

The earliest form of theory development involved attempts to define the important and unique attributes of distance education as part of a wider search for recognition and credibility for what was a less conventional form of learning. McIsaac and Gunawardena (1996) identify the following as three key contributions: the distance learner is someone

- who is physically separated from the teacher (Rumble 1986),
- who has a planned and guided learning experience (Holmberg 1986),
- who participates in a two-way structured form of education which is distinct from the traditional form of classroom instruction (Keegan 1988).

The limitations of a specific focus on issues of definition were recognised as attempts to articulate a theory were being made. The following extract from Keegan (1983:3) reflects this position:

A theory is something that eventually can be reduced to a phrase, a sentence or a paragraph and which, while subsuming all the practical research, gives the foundation on which the structures of need, purpose and administration can be erected. A firmly based theory of distance education will be one which can provide the touchstone against which decisions—political, financial, educational, social—when they have to be taken, can be taken with confidence. This would replace the ad hoc response to a set of conditions that arises in some ‘crisis’ situation of problem solving, which normally characterizes this field of education.

Four of the most influential theories – to be found in the work of Holmberg, Peters, Moore and Garrison - are reviewed here. While distinctions can be drawn between distance education and distance learning – with distance learning perceived as a more learner-centred term – for the purposes of this chapter they can be considered as synonyms.

Holmberg: the conversational model of distance education

Börje Holmberg a pioneering theorist in distance education and in distance language learning (Holmberg 1986, 1989a, 1989b) developed a philosophy about the field which was influenced by humanism and andragogical theory. He called for theory development to be around the notions of independence, learning and teaching (Holmberg 1989a), and argued that distance learners should be *helped* to achieve independence. While learner independence was seen as a key characteristic of distance education, Holmberg challenged the position adopted by many distance institutions who 'base their work on the assumed prevalence of students' capacity to work independently' (Holmberg 1986:88). Holmberg places his view of learner independence within a context of ongoing conversation between the teacher and the learner, underpinned by various support mechanisms. Independence is seen as an ideal, which needs to be deliberately fostered by the institution, through support which should be present in, and central to all forms of provision.

The emphasis in his work is on the content and conversational character of course materials as a means of fostering learner independence. He argues that *guided pedagogic conversation* can be fostered by well-developed self-instructional materials; it is the responsibility of the course developer to create a simulated conversation with the learner through the materials. Holmberg's theory drew attention to the importance of learner support and encouragement within clearly organised instructional programmes. He was the first theorist to focus on the importance of interpersonal aspects within distance education, and the role of empathy as an essential ingredient in teacher-learner interactions (Holmberg 1986, 1989a). The teaching style of distance education should, he argued, be informed by an empathetic approach on the part of the teacher to the context, situation and characteristics of each student. The guided conversational model of distance education and the importance of an empathetic approach have been highly influential [you have highly influential twice in quick succession – change one of them?] in the design of courses and in guiding teacher-learner interactions.

Moore: transactional distance theory

Michael Moore's theory of transactional distance, introduced in the early 1970s, marks one of the earliest moves away from a concern with the physical separation of the teacher and the learner. He focuses on the nature of 'distance' within distance education, and its effect on the teaching-learning relationship; transactional distance refers to the communicative and psychological distance between learners and teachers – and this is seen as more significant than the physical separation of teacher and learner. Transactional distance is a function of two variables: dialogue (purposeful, constructive interaction, valued by each party, towards improved understanding), and structure (the rigidity or flexibility of course objectives, strategies and forms of evaluation or assessment). In any teaching-learning relationship, the degree of transactional distance depends on whether students are left alone with their materials or whether they can communicate with their teacher (dialogue) and on the degree to which the programme is pre-planned and prescribed (structure).

Moore also relates transactional distance to the dimension of learner autonomy (Moore 1993, Moore and Kearsley 1996), arguing that autonomy may be enhanced by

both high and low transactional distance, depending on the preferences of the learner. According to Moore's view, learner autonomy is at its greatest when learners determine their own aims, and learning paths, and where they are not restricted when learning either by dialogue or a prescribed structure. Moore also argues that the autonomous learner is in no way 'an intellectual Robinson Crusoe' (Moore 1972:81), but someone who is constantly challenged to adapt to influences within his/her learning environment. In an editorial written in 1994 entitled 'Autonomy and Interdependence' Moore emphasises the importance of the educational transaction between the learner and the teacher within distance education, as a means of developing individual autonomy:

Distance educators still face the important challenge of engaging with individual students in ways that build on and develop personal learning autonomy.... Equally exciting is the process of developing and engaging interdependence among individuals in distant groups, developing group interdependence within a total system, and developing distant-group autonomy. (Moore 1994:2)

Moore's comments reflect a shift in the debate on autonomy towards a focus on educational relationships. In his view, autonomy is part of the potential for distance education to be both personalised and to encompass many forms of interdependence (tutor-learner, learner-learner, learner-learning group).

Peters: the industrial model of distance education

Otto Peters' main theoretical contribution was the representation of distance education as an industrialised form of teaching and learning (see for example Peters 1967, 1989). Here he emphasised that distance education was characterised by the division of labour and the development of instructional units which could be mass produced and distributed with standardised delivery, thus achieving economies of scale. Distance education processes were conceptualised, developed, delivered and supported by an entire team of specialists; the end product was an educated student. This was thought by some to be a controversial, and somewhat reductionist view of distance education which was essentially limited in that it does not address important issues relating to communication and interaction within educational experiences. A number of critical evaluations and responses to this theory have been advanced, showing how the advantages of these structures, from the point of view of educational policy and organization, are also connected with important educational disadvantages. Garrison (2000) for example notes that the theory was not a theory of teaching or learning, but an insightful contribution to ideas about the organisation of distance education. The focus on structural and organisational issues within distance education has had a major impact on further research and theory and the way distance education is conceptualised.

Peters has subsequently addressed the issue of the role of distance education in post-industrial society (Peters 1993, 1998, 2000). He argues that distance education is in line with post-industrial tendencies in terms of the dislocation from the classroom, self-direction, social interactions among students, and an affinity with electronic media. According to this view the dominating goal in education will be self-realization, and autonomous groups will become the main constituent of the learning

process. Peters extends this argument when he envisages that all universities will be transformed into institutions of self-study and distance teaching (Peters 2000) in response to the possibilities offered by the new technologies and the demands of lifelong learning.

Garrison: the theory of collaborative control

The theory of control put forward by Garrison and Baynton (1987) challenged the conception and practice of distance education as a private form of learning based upon self-instructional texts. An excessive concern with independence as a desirable goal for distance education, it was argued, has seldom been balanced against a concern for support and recognition of the demands placed on the learner. Garrison's approach reflected an emerging emphasis on direct communication between teachers and students, and interaction between groups of learners and the teacher. Interaction is the means by which control is developed and maintained by the learner. Control does not require a form of self-reliance which excludes all external interaction and resources. Rather, through communication the learner and the teacher can negotiate the degree of control each has over the learning process; control is essentially *collaborative*, in that it is dependent on both the teacher and the learner, though it exists separately from either of them:

Control is not transferred automatically to a student solely by giving freedom of choice as to time and place of learning without consideration of the student's abilities and resources. Control is *negotiated* continuously through sustained interaction. (Garrison 1989:33)

The aim of this communication is to enable the learner to negotiate and develop control through ongoing collaboration.

The theoretical work of Garrison and his co-researchers marks a watershed in the field. It moves away from a concern with organisational issues to what Garrison (2000) calls 'transactional issues' relating to sustained interactions at a distance which take place within a community of learners. The theoretical work of Garrison also addresses the relationship between the development of theory and different paradigms of distance education. Garrison (1997) notes that alongside the dominant paradigm in distance education which has emphasised independent learning carried out principally through self-instructional materials, there is what can be called an *emerging* paradigm of distance education. This paradigm places much greater emphasis on interaction and the construction of knowledge, and is aligned with constructivist approaches within distance education. Given that in reality programmes of study frequently incorporate elements from both paradigms of distance education, the challenge for theory is to encompass the range of practices which are developing in the wide variety of contexts which exist for distance education.

Developing a theory of distance language learning

Generating theories about distance education necessitates critical evaluation of the basis for theory development. In any search for a theory, a number of fundamental questions arise about the phenomenon under study, including: What is the reality of

distance language learning? Where and how do we investigate it? Is it based on concerns located within the institution and with the teaching staff, or is it a complex, individual, unique phenomenon? How do we gain access to the process?

The essential components of distance learning identified in early theories – namely the physical separation of the teacher from the learner, and of the learner from the learning group, with interpersonal communication mediated by technology – represent a focus on structural and systems-based concerns as the defining hallmarks of distance learning. When wider perspectives are acknowledged, these theoretical explanations appear essentially limited since the students' attitudes to and involvement in the distance learning process has largely been overlooked. In addition, in earlier theories the influence of the individual contexts in which the learning takes place does not figure as a significant variable. Of course, a more contextualised approach to understanding distance language learning is difficult to develop and research since many aspects of the learning context are remote and individual.

A distinction drawn by Tudor (2001) between ecological perspectives and technological perspectives on language learning is useful here. A technological perspective focuses on potentialities, and is based on the idea that the technology of language teaching will 'lead in a neat, deterministic manner to a predictable set of learning outcomes' (Tudor, p. 9); it tends to be positivist in orientation. Ecological perspectives, on the other hand, look at language teaching within the totality of the lives of the participants involved, and focus on the realities of language learning as they are lived out in particular contexts. Such a perspective does not assume 'that the effects of educational technology can be predicted confidently from the inner logic of the technology alone, as this inner logic inevitably interacts with the perceptions and goals of those involved in using it' (ibid.). The ecological/technological distinction is particularly relevant to research into distance language learning where the focus has tended to be on the setting up of systems, since projects are developed on a technology driven basis. With the possibilities offered by the new learning environments, interest has also tended to focus on course development rather than the complexities associated with ongoing, sustained course delivery. Much less research and commentary has been provided focusing on actual learner needs and responses to the new learning environments, and how learning can proceed within these systems.

Part of the critical evaluation of the basis for theory development in distance language learning also involves an acknowledgement of the limitations associated with an approach in which the researcher adopts an 'outside-in' perspective. White (2003) argues that since any understanding of distance education is rooted in experience and our interpretations of experience, it remains partial, not absolute: the learner's experience is different from the teacher's, and the researcher's contribution also reflects his/her particular perspectives. To develop a more complete understanding of the nature of distance learning, we need to explore different concepts of the phenomenon. This argument for a more inclusive approach to understanding distance education is not new. Harris (1987) for example contends that the individual student in distance systems tends to be seen in rather abstract terms was influential in highlighting the need to investigate learner understandings of their experience of distance learning. Jegede (1992) extended this argument by suggesting that the different views of distance education held by researchers, administrators, teachers and students foreground the need for more information in the practice of distance education from different perspectives.

In this chapter I focus on the insider's perspective, that is the learner's perspective, experience and articulation of experience as the starting point for a complementary theory of distance language learning – that is, a user-based perspective of what distance language learning means and what characterises it. Developing a learner-derived theory of distance language learning is particularly appropriate since we know relatively little about the reality of distance language learning from the point of view of those who are most involved, the learners. The importance of insider insights within this overall approach is that it brings us closer to the experience of distance language learning and how it is conceptualised by learners. Such a theory would include the kinds of requirements for any theory of language learning, which are identified by Mitchell and Myles (1998: 2-3) as:

a theory is a more or less abstract set of claims about the units that are significant within the phenomenon under study, the relationships that exist between them, and the processes that bring about change ... Theories may be embryonic and restricted in scope, or more elaborate, explicit and comprehensive.

The theory I propose here is embryonic, and derived from learner conceptualisations of the process of distance language learning; it is further informed by teachers' perspectives on distance language learning and by research findings (see White 2003). It is aligned with an ecological approach to distance language learning which focuses on the perspectives of participants – how they perceive the distance learning process, the affordances within their learning context (that is the opportunities as well as constraints, basically what the context affords them), and their role and identity within it.

The learner-context interface theory

The learner-context interface theory is derived from a detailed longitudinal five-phase study which investigated the conceptions developed by students in relation to distance language learning. For details of the study see White (1999, 2003). Students conceptualised distance language learning as based around the development of an interface which each learner constructs as s/he interacts with the learning context, and which informs future learning. This view formed the basis for the theory. Distance language learning is seen as an individual process in which learners develop and assume control of a personally meaningful and effective interface between themselves and the learning context. The learner-context interface theory is based on the premise that a meaningful theory of distance language learning must view the contribution of the learning context and the contribution of the learner as integral and reciprocal constructs. The importance of developing the learner-context interface which can inform and guide learning experiences is underlined in a number of studies: the research of Barty (1999) and Harris (1995) carried out in diverse contexts for distance language learning provide just two examples.

Karin Barty (1999) worked with high school students of German in a distance programme and noted the extent to which those students were reliant on the mediating role of the teacher to orient them to undertaking language tasks, and to assist them in

responding to the requirements of the learning context. The fact that they were provided with a rich learning environment with many opportunities for interaction did not mean that the students were willing or able to take advantage of the learning opportunities. More specifically, Barty observed that the presence of the teacher had a direct influence on the complexity of the target language material they could access: 'students often reported not understanding what the material was about whereas in linked sessions, with teacher guidance, the same material did not seem especially difficult' (Barty 1999: 30). Affective elements were important too: students reported that they felt 'overwhelmed' and 'uncertain' when working online with no teacher there to structure the session, offer guidance, advice and support. Four months into the course Barty observed that students had made considerable adjustments to the course learning environment: they initiated questions, were positive about continuing on the online course and were more proficient at managing their learning. These adjustments can be seen as cantering no the development of an interface with the learning context which made it possible for the students to participate in the learning opportunities while taking a more independent role as distance learners.

Claire Harris (1995) carried out detailed research with distance learners of English in the Adult Migrant English Programme in Australia, focusing on issues of study inhibition, progression and persistence. The course provided high levels of support, and learners reported a positive response to the materials, but only half completed the course. Harris found that those who managed to remain motivated were able to match features within the course with their own self-supporting strategies. More specifically they were able to match the level of the course, the learning sources within the course and the teacher support with their own learning strategies and needs, and the learning environment they created in their homes. They actively created for themselves a study-nurturing environment - which they saw as similar to the learning environment a teacher would develop within a face-to-face language class. This self-supporting strategy was a crucial element in maintaining study impetus. It is another expression of the importance of the individual distance learner's capacity to establish and maintain an effective interface with the learning context.

In both these cases it was essential for distance language learners to develop an effective interface with what was, initially at least, a new, and relatively inert learning context. We see a pattern of individual learners engaging with the learning context – with teacher support - in an attempt to create or alter an external environment for learning. Learners who are studying at a distance need to be able to develop an interface which will guide their learning, in accordance with their personal characteristics and the affordances of the learning context.

Dimensions of the theory

To return to the Mitchell and Myles (1998) definition of a theory, it is important to ask: What are the 'key units' in the theory of distance language learning? Essentially the theory has three dimensions: the *learner*, the *context* and the *interface* established between each learner and their individual context(s). These are represented in Figure x.

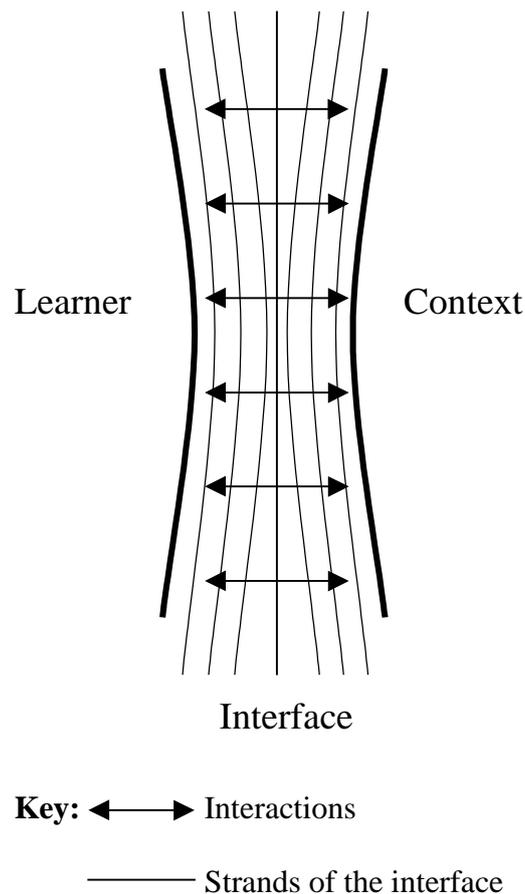


Figure: Model of the interface between learner and context (White 2003: 91)

In order to illustrate features of the theory I have included reports given by learners in the longitudinal study reported by White (1999, 2003).

The *learner* dimension includes individual attributes, conceptualisations, affects, skills and needs, all of which influence how each learner approaches, interprets and experiences distance language learning. Learner factors – including beliefs, motivation, affect – have a bearing on how learners interpret, relate and respond to the learning context and the kind of interface they are able to construct with the learning context. That interface, and how they act at the interface, in turn influences individual learner attributes and affects and the kind of identity s/he develops as a distance language learner. The following comment is from a learner of Spanish after eight weeks experience of distance language learning:

Now I have begun to work more with the video – I relate a lot of what I learn now to the video. It has made me focus more on speaking and I feel more confident than before. I use it in different ways and now the speaking is driving my learning. This has been quite a breakthrough for me.

The learner is thus seen as a dynamic individual who both constructs an interface with the distance learning context and who changes in response to the ongoing learning experiences which take place at that interface.

The *context* dimension comprises both the features of the distance language course (e.g. resources, course work and assessment, and opportunities for interaction, support, and learner control), access to other target language sources and features of the different sites in which learning is carried out. Context includes more than the externally observable features of the course or the learning sites within which they operate; it includes the affordances and constraints which individual learners perceive and respond to in different ways. This report is from the same learner in week eight:

I now see how useful the video is. At the start I couldn't really see how the video could fit in with the way I work. It was there and I used it a bit but it did not really figure as very important for me. Now it is quite central – that and the assessment tasks are really important for me. It is hard for me to get access to the VCR at home – so I get up early and work on the video.

The *interface* is an abstract notion which can be defined both as the place at which and the means whereby learner and context meet and affect each other. The interface is developed as the learner interacts with the learning context, and develops awareness of his/her own requirements, abilities, preferred means of working and so on. The interface is *constructed* – it does not merely represent the overlap between learner attributes and the affordances of the learning context. The quality and effectiveness of the interface developed by each learner then inform each future language learning experience – both in the way in which the individual learner perceives, engages with and respond to that experience, and the way it contributes to the nature and structure of the interface. The following is from a learner of Japanese in week 5:

I have built up a way of studying over the past 5 weeks – it has taken a lot of time and effort. Getting an idea of how best to study, and seeing what works slowed me down a lot at the start. Now I know how to work with the materials – and I guess that may change as the language gets more difficult, and as I learn a lot more about what works best. I'm looking forward to checking things out at the contact course – I'll get some idea of how I'm going, and I might need to change things a bit.

The interface is thus a co-ordinating concept; it is not conceived as a static phenomenon, but as the result of the interplay between personal and contextual influences. The notion of the interface is central to the theory which reflects a belief in the primacy of the unique dynamic established between the learner and the context in the process of distance language learning.

Purposes of the interface

The development of the interface serves three broad purposes. First the interface serves to inform the construction of a learning environment in accordance with the needs, preferences and abilities of the learner, and in response to the affordances of the learning context. In the distance context the learner must take responsibility for this process, since the teacher is by and large remote from the site of much of the learning. Construction of the learning environment requires an ability to identify, select and incorporate meaningful learning experiences into one's learning

environment, which meet one's particular learning needs. This involves a degree of self-awareness on the part of the learner, and an awareness of the affordances and requirements of the context, as well as the ability to match those two dimensions.

Second, the construction of the interface is related to the development of metacognitive knowledge and beliefs. The construction of the interface requires learners to draw on their metacognitive knowledge and skills, which they identify as relevant to the context and experience of distance language learning. As learners identify, select and engage with opportunities for interaction in the distance learning context – including learner-content interaction – those same interactions contribute to the development of the interface and enhance metacognition. When the interface is established and working effectively for an individual learner, external activities within the learning context and the internal reflective dimension are fused, and each supports the other.

Third, the construction of the interface is the means by which learners adjust and adapt themselves to new roles and develop an identity as a distance language learner. As part of this process, it is necessary to establish congruence between individual attributes, the distance learning context, and one's social, personal and work environment. Some learners may struggle to establish a viable interface between themselves and the learning context. A number of barriers – situational, practical or academic - may affect the degree of engagement and involvement in the distance learning environment, both of which are necessary to develop an effective interface.

A dynamic view of the learner

While the idea of the learner being active is not new, the idea of the learner as constructing an interface with the learning context which is then used to inform and develop further learning experiences is new. Learners both construct and operate at the learner-context interface, according to their own needs, preferences and beliefs, and also in response to the demands and requirements of the learning context. The demands and requirements of the distance learning context may be *implicit*, as in the need to assume more control for their learning than they have previously been used to; they may also be *explicit* as in assessment tasks, or requirements for participation in virtual environments. They are also influenced by the affordances of the particular learning environment.

The learner-context interface theory is aligned with constructivism in that it is based on the idea that each learner makes his/her own personal sense of the learning context and of tasks within that context, based on the kind of interface s/he has managed to construct with the context. Each learner is active in constructing an interface with the context which both informs and develops in response to the experiences undertaken by the learner.

Further questions

One way in which the development of theory in distance language learning can be advanced is to pose questions, which may also be a starting point for further research. Important questions to ask of the learner-context interface theory include:

How can the theoretical framework guide research in distance language learning?

What areas of further enquiry are revealed by the theory?

How does the theory fit with current realities of distance language learning?

How do learners experience the construction of the interface?

How does the theory fit with current concerns within the field?

Which factors facilitate or inhibit the development of the interface?

What are the implications of the theory for research and practice?

What challenges to the theory can be identified?

What are the limitations of the theory?

Providing answers to these questions is beyond the scope of this chapter, but the questions themselves suggest a number of ways forward for developing and critically evaluating this learner-derived theory of distance language learning.

Conclusion

Distance language learning contexts make demands of a different order on learners. The learner-context interface theory presented here is concerned with how learners establish their learning environment and negotiate meaning and come to new understandings in the distance context. It points to the fact that distance language learning is a highly complex endeavour requiring the learner to develop an interface with the learning context which can both guide and be informed by meaningful learning experiences which become, in fact, the substance of the course for each individual learner. It places the relationship between the learner and the learning context at the centre of the process of distance language learning. The theory challenges the notion that the learning context is identical for each learner and that it is a fixed entity. Similarly “the course” is realised differently by each learner and changes according to the interface developed by the individual learner. The concept of the interface emphasises the importance of the relationship and interaction between learner and learning context in the process of distance language learning. The aim of this chapter has been to provide a starting point for theory construction in the field – I look forward to further frameworks which can guide us in understanding the essentials of distance language learning.

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