

# Chapter 6

## The Psychology of Linguaculture Learning



**Abstract** This chapter explores the psychology of deep language and culture learning. Its fundamental premise is that both language and culture learning provoke strong psychological responses in learners. It is argued that this psychological intensity is recognized among language educators, but is not given a great deal of attention. Often, it is described in terms—such as *learner anxiety*—that imply psychological disfunction. A deep learning approach, however, sees these stresses as a natural part of the learning process. Learners are forced to deal with adaptive demands—the need to adjust to foreign elements of their environment. This is seen as an extension of the broad imperative of all living things to adjust to the demands of their environment through *engagement* (approach motivation), and/or *resistance* (avoidance motivation). This chapter argues that the notions of engagement and resistance provide insight into language learning motivation, and the stresses of intercultural adaptation. This dynamic is argued to be fundamentally similar for both language learning and adapting to a foreign cultural environment.

### 6.1 The Psychology of Linguaculture Learning

Language and cultural learning can be psychologically intense experiences. It's common for learners to get nervous or feel stressed when practicing a foreign language. It's easy to feel stupid when you feel inarticulate, don't understand what's being said, or can't follow what's going on. Similarly, adapting to new cultural surroundings is taxing. It's tiring to be surrounded by strange sights and sounds, disorienting to navigate in unfamiliar places, and stressful to interact with foreign people. At the same time, this psychological intensity can be exhilarating. It's fun to use a foreign language when buying carrots in a marketplace abroad. Travel can be an exotic adventure that pulls us out of our daily routines. Seeing how people live in another country can be an eye-opening experience. And mastering a new language as we do this can be satisfying indeed. In ways big and small, language and culture learning is intense, and can have a big psychological impact on us.

This chapter explores the psychology of deep learning. It builds on a foundational assumption found in this work—that language and culture learning are complex,

embodied processes; they involve much more than gaining factual knowledge or individual skills. They are an integral part of our cognitive architecture, and thus are experienced at deep levels of the self. This chapter will propose that language learning and cultural adaptation place similar psychological pressures on learners, and can be seen in similar terms. Both can be seen as an *adaptive process* that involves integrating foreignness into our socio-cognitive systems. That is to say, the psychology of language learning and intercultural adaptation are fundamentally similar.

This is an unconventional view. The terminology used to discuss the stresses of intercultural adaptation (culture shock, culture stress, adaptation, adjustment, acculturation, marginality), differs from the ways we normally discuss the psychology of language learning (motivation, demotivation, learner anxiety, willingness to communicate, L2 self). By looking at language learning from the perspective of intercultural adaptation and adjustment, however, we gain a more integrated view of language and culture learning, as well as insight into overlooked psychological aspects of the language learning experience. The intercultural adjustment perspective sees both language and culture learning in terms of developing a new set of socio-cognitive habits—internalizing a “new normal” into the autopilot of our intuitive mind. In a foreign country, this may involve learning to negotiate with a Jitney driver in Manila, or adapting one’s working style to foreign colleagues. In the language classroom, these new habits are the foreign language itself—its hard-to-enunciate sounds, different words, unfamiliar syntax, and the foreignness found in the cultural worlds of that language’s speakers.

This chapter introduces terminology normally used to talk about intercultural adjustment, and applies it to foreign language learning. This allows descriptions of language learning processes to mirror those of cultural learning processes. This includes the notion of *adaptive demands*—the idea that language and culture learning place psychological pressure on learners. As is true for any organism, facing novel elements in one’s environment provokes either positive engagement or a defensive retreat. These demands are *disruptive*—they interfere with habitual functioning and can thus provoke *resistance*, a psychological defense against unwanted change, as well as *engagement*, the psychological openness toward the foreign elements we encounter. The psychology of intercultural adjustment reminds us that while language and culture learning may provoke psychological resistance, it can also lead to deeply meaningful learning experiences.

## 6.2 The Demands of Language and Culture Learning

Even in today’s globalized world, adapting to foreign cultural environments is psychologically challenging. Despite technological convenience, spending time in foreign surroundings can provoke stress related to the difficulty of meeting everyday needs, but also more generalized feelings of malaise, loneliness and psychological distress (Furnham and Bochner 1986; Ward et al. 2001). This is particularly true for

longer stays. Shaules (2007), for example, describes the “hidden challenges of global living” that come from confronting the deeper, more subtle elements of cultural difference. This is one reason intercultural trainers and educators are needed to help expatriate workers adjust to the demands of living and working abroad (Wederspahn 2000), and it reminds us that migrants who must integrate into a host society face a long, psychologically challenging process of creating a life in their new home (Kim 2001a). Cross-cultural psychologists have analyzed these cross-cultural stresses, and have attempted to identify personality traits that are key to having a positive experience (Matsumoto et al. 2006). Such work reminds us that while foreign experiences, travel, and living abroad can be exotic and exciting, cultural learning is not always experienced in positive ways—it produces stresses as well as excitement.

Language learning is also demanding. Often, this is simply talked about in terms of effort and time spent learning. For example, the American Foreign Service Institute (FSI)—responsible for training the US diplomatic corps—estimates that the “easiest” languages for English speakers—such as Dutch, French, Italian, and Spanish—require 600 hours of training to reach professional-level proficiency. For the most difficult languages, such as Arabic, Mandarin, or Japanese, FSI estimates a total of 2200 hours of training—something like 7 years of study at 6 hours per week. If anything, these numbers may be optimistic, because they are designed with career diplomats in mind, and are not indicative of how people learn in real life. Still, they provide a brute-force reminder of the investment required of language learners.

Yet there is an artificial quality to such estimates. Describing language learning in such terms is highly reductionist—it takes a psychologically demanding process and describes it in simple terms of mental exertion. This is something like counting the number of notes you have to play to become a concert pianist. Learning a language requires personal commitment and psychological engagement. Just as one must love music in order to become a skilled pianist, learning a foreign language is as much a lifestyle as a purely academic pursuit. Successful learners typically go beyond their class assignments or textbook exercises, take an interest in travel, foreign songs, movies, and so on. They are often driven as much by curiosity as by coursework requirements. For most learners, maintaining motivation and finding ways to keep making progress are an ongoing issue.

The psychological demands of language learning receive relatively little attention in the professional literature. The study of affect in language learning, for example, primarily focuses on modeling how affect influences learning outcomes (Schumann 1997, 2004, 2015; Schumann et al. 2004). There is little emphasis on the thoughts, feelings, and personal reactions that make language learning psychologically challenging and rewarding. As Dornyei (2009) points out:

Everybody knows that classrooms are venues for a great deal of emotional turmoil, yet affect has been an almost completely neglected topic in educational psychology. Everybody knows that the study of a second language can be an emotionally taxing experience, yet affect has been an almost completely neglected topic in applied linguistics. And finally, everybody knows that emotions are frequent sources of action—for example, when we act out of fear or anger or happiness—and yet affect has been an almost completely neglected topic in motivation research (p. 219).

There are exceptions. Stevick (1976, 1980) emphasizes the psychological stresses of language learning, pointing out that learners find that “information is being imposed on us from outside ourselves. ... We find ourselves in a position of being ignorant, powerless, and constantly evaluated—a clear denial of our primacy” (Stevick 1980, pp. 9–10). Such an experience, he reminds us, can be traumatic. Similarly, some teaching methodologies, such as *Suggestopedia* or *Community Language Learning*, emphasize the creation of non-threatening and more deeply meaningful learning environments (Curran 1972; Lozanov 2005). Tochon (2010, 2014) has outlined what he calls a *deep approach* to language learning—one that focuses on student-directed projects that integrate language and culture thematically and holistically (Xiao 2015). Such work reflects a humanistic concern with the well-being and personal development of learners, and is concordant with this work.

Other scholarship, however, treats the psychological challenges of language learning largely in terms that imply learner dysfunction. Negative terminology includes *learner anxiety* (Horwitz et al. 1986; Trang et al. 2013) *demotivation* (Kikuchi 2013, 2015; Sugino 2010) or (a lack of) *willingness to communicate* (Yashima 2002). Such terminology subtly implies pathology. Learner anxiety, for example, has been defined as “the fear or apprehension occurring when learners have to perform tasks in a target language in which they are not proficient” (Zhang and Zhong 2012). This implies that learners who feel nervous suffer from a psychological condition—learner anxiety. Likewise, terminology such as *willingness to communicate* implies that learners who hesitate to use a foreign language are *unwilling*, i.e., they lack some normal willingness. Even the term *demotivation* carries with it an assumption of lack or absence—as though motivation were the natural state, and demotivation represents an aberrant condition.

Such terminology overlooks a broader truth. Language learning, due to its fundamentally intercultural nature, requires a great deal of psychological change and adjustment. From the linguaculture perspective, having powerful psychological reactions to the demands of linguaculture learning are not a sign of dysfunction, they are a normal part of the learning process. A more integrated view of language and culture learning encourages us to see language learning—like cultural learning—as an adaptive process that involves change and development, and thus touches us at deep levels of the self. This idea is concordant with a sociocultural view of second-language acquisition (Gardner 1985, 2010; Lantolf 2000), and the idea that “the learning of a second language involves taking on the features of another cultural community” (Gardner 2010, p. 2). Gardner argues that because language is tied so closely to our sense of self, “learning another language in school is unlike learning any other subject” and that “it involves making features of another cultural community part of one’s own repertoire.” He recognizes that for some, “this can be a very positive enriching experience, but for others, it can be a difficult negative one” (Gardner 2010, p. 3).

To be clear, language and culture learning do not require an uncritical absorption of foreign ways of thinking, valuing and relating. Deep learning involves gaining an intuitive understanding of the system, so that we can choose for ourselves how to act. Learning the “rules of the game” of a foreign language or cultural community

doesn't mean we always have to play by the rules. We may be uncomfortable with certain cultural practices, or they may go against our moral values, or personal sense of what's important to us. It is also true that there are limits to the human capacity for flexibility and change. Very few foreign language learners will reach something close to L1 speaker abilities. We cannot—and shouldn't try to—simply transform ourselves into a different cultural person. These limits, however, are a reminder of how deeply rooted language and culture learning can be.

### 6.3 The Psychology of Foreignness

From the socio-cognitive perspective, both language and culture learning entail an *integration of foreign patterns into the intuitive mind*. Arriving in a foreign country, we are confronted with patterns of behavior and thought that are unfamiliar or even threatening. Psychologically speaking, it's no accident that the word "foreign" has negative connotations. Referring to someone as a foreigner emphasizes outsider status or otherness, and implies a lack of acceptance. If we describe music or food as foreign we imply distaste. Common synonyms for foreign include negative-sounding words such as strange, weird, alien, and bizarre. Foreign ideas, ways of thinking, or patterns of behavior can also be experienced as a threat. Above all, foreignness implies something not integrated into normal functioning, with the implication of danger, disruption, or damage to the integrity of the organism. Of course, foreignness can be experienced as positive. It's also what makes visiting another country feel exotic. It's no accident that we speak of getting "hooked" on travel, given the psychic rush it can bring. Ultimately, foreignness is stimulating, but can be tiring and even threatening. For better or worse, our reaction to *foreignness* is at the center of the psychology of intercultural experiences.

The linguaculture perspective reminds us that language learning—even in the classroom—unavoidably involves dealing with foreignness. It requires a long-term willingness to experiment with the unfamiliar—to coax strange sounds from our mouths, search for words, piece together sentences, make countless mistakes, stumble through even simple interactions, and adapt to different modes of thought and communication. Reorganizing our cognitive processes requires effort and change—it involves more than mental manipulation of conceptual symbols (Bergen 2012). Attempting to change these patterns is challenging, and can catch learners off guard if they "forget, or are unaware of, the power that language has over our minds and our lives" (Elgin 2000, p. 239). Integrating new linguacultural patterns involves disruption and the creation of new cognitive structures. This can provoke a defensive reaction by the pattern recognition and threat response functions of the unconscious mind (Klein 1998; Lund 2001).

Foreignness is not, however, counter to learning and development. On the contrary, anything we learn is, by definition, new. Learning of all kinds involves integrating new elements into the self, and we are stimulated by novelty. Many motivated learners talk about their interest in the L2 being sparked by having a foreign neighbor, traveling

abroad, liking foreign music or movies, reading books or manga from another country. The learners we describe as motivated are those for whom foreignness generates curiosity and interest, rather than resistance. The foreign experiences that can create adaptive stress, can also promote growth and transformation. Our goal as educators is to create a learning environment that nurtures the latter while taking into the account the former. From this perspective, foreign language pedagogy is, above all, a process of mediating foreignness.

## 6.4 Adaptive Demands

Experiencing foreignness places *adaptive demands* on the learner. This term is rooted in evolutionary biology, and refers to the interaction between an organism and its environment, in which desirable elements are integrated, and undesirable elements are avoided or expelled. In biology, this is associated with the process of exocytosis—the expelling of foreign matter from within a cell—and endocytosis—the “eating” (taking in) of matter into the cell. On a larger scale, all living organisms mediate their relationship with their environment in ways large and small. We ingest food and reject spoiled or disgusting materials. We retreat from the cold, or soak in the warming sun as necessary. We avoid people who don’t like us, and seek out validation. This process is critical to our well-being when our environment changes, or when we encounter foreign or unexpected phenomena. Put simply, foreignness represents both threat and opportunity, and we have an instinctive tendency to evaluate our situation and respond accordingly.

Kim (2001b) adopts a similar perspective in her integrative theory of intercultural adaptation. She argues for an open-systems view of cultural adaptation—the idea that we are in constant interaction with our social environment, and reflexively adjust our psychological boundaries in response to our perceptions of our situation. Shaules (2007) extends this idea to the psychological challenges of both short and long-term sojourns, and argues that there are three possible adaptive responses to adaptive demands—resistance, acceptance, and adaptation. A similar view can be found in foreign language education. Schumann (2004), for example, argues that second-language acquisition is closely tied to a preference/averse response, evaluating stimuli in terms of maintaining balance within our physiological systems (homeostatic value), seeking successful social interaction (sociostatic value) and preferences we have learned through experience (somatic value). Self-determination theory, which sees learning in terms of an innate human tendency to develop increasingly elaborated self-structures, sees negative reactions to learning challenges as not uncommon (Ryan and Deci 2002).

Despite general recognition of its challenges, there is a broad tendency to see language learning as psychologically neutral. We see this in the term *language acquisition*—which implies that learners are seeking out and acquiring something. The implicit assumption is that learners who learn are *motivated* to do so—they take action to acquire the language, whereas *unmotivated* learners are inert or passive.

This creates a metaphoric understanding of language learning as a form of taking or getting, with the learner's (conscious or unconscious) decision-making at the center of this process. In this view, the difficulty of language learning would seem to simply be the amount of time or effort required to acquire the new language. As any teacher can tell you, however, the ability to make effort and maintain motivation depends on the learner's subjective feelings about the rewards and frustrations of learning. The learner's perception of foreignness—is the language exotic and attractive or off-putting and unpleasant—is central to the view of learning in this work, and to seeing language and culture learning as a fundamentally similar process.

## 6.5 Disruption

This work proposes that just as a foreign environment places adaptive demands on a sojourner, *language learning represents a psychological imposition on the learner*. This is true in at least two ways. Many language learners do not make an independent choice about what to learn, or how to learn it. They are responding to demands that have been imposed by their teacher, their class, their school, and their society—often in the context of foreign language learning requirements. They are told what to do when, and how. Naturally, all classroom learning makes institutional demands of learners—the larger point is that language learners often lack fundamental agency, and their learning activities are often not freely chosen. Such institutional demands are largely taken for granted by both educators and learners. That does not mean, however, that their psychological implications can be discounted. If we accept the idea that language and culture learning are more psychologically demanding than other subjects in school, we must recognize that resistance to such demands is natural.

Beyond this, language learning itself is psychologically *disruptive*—it requires the integration of foreignness into our cognitive and behavioral repertoire. It challenges existing patterns of communicating and thinking. It is qualitatively different from, say, memorizing the digits of pi, or learning about the French Revolution. Memorizing facts or learning difficult concepts may be mentally tiring, but typically requires less recalibration of existing knowledge—it's less of a threat to existing self-structures. Language learners, on the other hand, are expected to express themselves with highly limited linguistic tools—one's normal way of communicating is disrupted and inhibited. Even low-level learners are often expected to greet each other or introduce themselves in the L2, and mid-level learners may need to do role-plays, or exchange opinions, using linguistic structures they still find difficult and unnatural.

At higher levels of learning, learners may need to make unfamiliar sociocultural distinctions. An English speaker learning Japanese finds that words used for counting depend on the shape of the object being counted, and that even simple words such as *eat* vary depending on the hierarchical relationship between speakers. A German speaker learning Kiswahili will find multiple categories of honorific expressions, as well as norms—such as addressing an older woman by saying *shikamo bibi*

(I hold your feet lady)—that contrast sharply with German communicative expectations (Habwe 2010). Adjusting to these differences requires more than intellectual knowledge. We must embody these differences to master a language. This is not just adding new elements to an existing storehouse of knowledge, but creating a new domain of knowledge from the ground up.

## 6.6 Linguaculture Resistance

An intercultural adjustment perspective provides a fresh way to look at issues of motivation. What language teachers describe as a lack of motivation, can, for example, be understood as a form of *resistance*, a term usually applied to negative judgments about cultural difference among sojourners (Shaules 2007, 2010, 2016). Shaules (2014) defines resistance as a “psychological threat response, in which we resist the integration of new patterns” into the cognitive architecture of our minds (p. 88). In this view, encountering cultural difference can easily provoke defensive reactions, negative judgments, or cultural denigration. Shaules (2007, 2010) has argued that negative reactions to encounters with cultural difference are a natural part of the cross-cultural adjustment process. He describes resistance as a “cognitive self-protection reflex” and “a defensive reaction that seeks to maintain the primacy of one’s internal configuration in the face of an environment perceived as threatening” (Shaules 2014, p. 83).

Learning a new language means one’s usual way of expressing oneself must be put aside or suppressed. Within traditional Second-Language Acquisition (SLA), however, such cognitive adjustment is often discussed simply in terms of linguistic “interference” (Ellis 2008). This refers to linguistic patterns in the L1 getting in the way of using the L2. Such a view looks at language learning primarily in terms of the mental processing of grammatical structures—something that presumably takes place in a purely mental space separate from other elements of self. This overlooks the psychological implications of disrupting normal psycho-cognitive states. Larsen-Freeman (2011) refers to these cognitive habits as a “neural commitment” to the L1. She points out that constructing new linguistic knowledge is not easy because “language learning is not just about adding knowledge to an unchanging system. It is about changing the system” (Larsen-Freeman 2011, p. 57).

Psychological resistance to change is deeply rooted in our evolutionary biology, and openness to novelty is not the default setting for most living things (Zajonc 2001). Like any organism confronted with a foreign stimulus, learners must defend themselves against perceived threats and remain open to potential benefits. Yet mental processes tend to be biased toward the familiar, a phenomenon sometimes called the *mere exposure effect* (Zajonc 2001). Research has found that we use different areas of the brain when reasoning about familiar and unfamiliar situations (Goel et al. 2004), and novel tasks use up mental resources, leading to cognitive strain (Baumeister et al. 1998; Kahneman 2011). Our mind also tends to be biased toward familiar in-groups (Amodio and Mendoza 2010; Amodio 2009; Sherif et al. 1961), and respond to

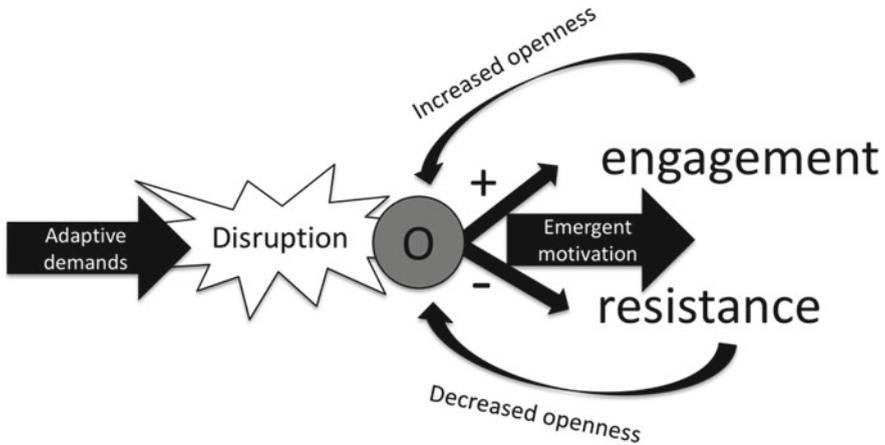
cultural difference in terms of threat (Derks et al. 2008). Research has even shown that we tend to find non-native speakers of our language less credible (Lev-Ari and Keysar 2010).

The notion of resistance is consistent with the idea that language use is intimately tied to deeply rooted cultural values, sense of self, and patterns of cognition (Agar 1994; Diaz 2013; Risager 2015). Learning a new language requires negotiating a new sense of self in intercultural contexts, and gaining awareness of cultural elements of the self and others (Kramsch 1993, 2000, 2015; Byram 2008; Byram et al. 2001). This is also consistent with a developmental view of intercultural understanding (Bennett 1986, 1993; Hammer et al. 2003). In this view, ethnocentrism, as a product of human evolutionary psychology, is the normal starting point for cross-cultural encounters—although it's not desirable, it is natural. Broadly speaking, then, a deep learning approach reminds us that negative attitudes toward language learning don't represent a failure on the part of the students. They are a natural response to the foreignness learners are confronted with.

## 6.7 Resistance, Engagement, and Emergent Motivation

Seeing language learning as a form of intercultural adjustment provides a new perspective on motivation. We commonly think of motivation as internal to learners. We speak of it sometimes as a state of *being*—Hana *is* very motivated—or as a quality that students have or not. We even speak of *losing* motivation—we had it at one time, but no longer do. This internal quality is associated with the energy or desire to take action and learn. Indeed, the etymology of the term motivate is the Latin *movere*—to move; motivation makes us move. An unmotivated learner, in this view, is passive and exhibits little motive energy. Thus, educators speak of finding ways to motivate their students (spark this proactive behavior) or lament that the learners are unmotivated (they lack this inner energy or desire). Implicit in this view is the idea that motivated learners are in an active state (they take action) whereas unmotivated learners are in a passive state (they don't take action).

An adjustment perspective, on the other hand, does not assume that the classroom is a psychologically neutral space, in which learners either have the energy to take action or not. Instead, it assumes that motivation is fundamentally a *reaction* to learning demands. Just as cultural learning is provoked by the demands of adapting to a foreign situation, language learning is a response to the demands placed on us by teachers, classrooms and, indeed, the foreignness of the language itself. That is to say, there is no neutral state in the classroom. Learners may respond with curiosity and openness to foreign patterns (*engagement*) and/or a defensive response (*resistance*). In this view, resistance toward language learning is the flip side of engagement—two opposing responses to the challenges of learning. Motivation, then, is thus neither internal nor external—rather it's an emergent property that results from the ongoing interaction between learner and environment (Csikszentmihalyi and Rathunde 1993; Sampson 2015).



**Fig. 6.1** Engagement and resistance

This motivational dynamic is illustrated in Fig. 6.1. On the left, we see that an encounter with foreignness imposes adaptive demands on the learner—their normal socio-cognitive processes are disrupted. This is seen as psychologically demanding. Learners respond to these demands with more or less openness (O) to change—a willingness to engage with and integrate foreign patterns. This generates either engagement (an integration of foreignness) and/or resistance (a defensive exclusion of foreignness). It is proposed that resistance involves not only a negative affective response, but that it also acts as an inhibitory filter that gets in the way of learning. In this view, resistance results in feeling unmotivated, detached, resentful, and so on. When we experience foreignness in a positive way, we are open to change and may seek it out—which may be described as a learner being motivated.

Resistance is characterized by critical value judgments—a hesitation to accept a phenomenon as reasonable and normal (Shaules 2007). Among sojourners in foreign countries, these negative judgments are reflected in disparaging comments about cultural difference. Such criticism or denigration is often seen, however, as a simple reporting of the facts. The person who says “The people in that country are really primitive” believes this to be true in an objective way, and doesn’t see the ethnocentric value judgment contained within. Similarly, learner statements about foreign language study being useless, or irrelevant to their lives, for example, may indicate something similar. Criticism of the foreign language, or of their own supposed lack of talent or effort, may serve as a psychological defense mechanism intended (unconsciously) to insulate the learner from the psychological demands of learning. Students who denigrate themselves, declaring that they are no good at language learning, may more simply be experiencing a natural psychological response to the foreignness of linguaculture learning.

In one study that used this paradigm, Shaules (2017) evaluated attitudes about learning English in Japan, and found that individual learners frequently had mixed

feelings about language learning—they were at odds with themselves. For example, on the one hand they felt that language study was important, wanted to be fluent speakers, and found the idea of being international attractive. At the same time, they felt a lack of motivation to study, felt they had achieved little relative to the efforts they had made, and were generally self-critical about their learning ability. This mixed state reflects two concurrent reactions to the foreign demands of language learning—they feel engaged with the idea of being an English speaker, but resistance to the deeper demands of studying and learning to use the language. Shaules argues that such mixed states are typical of foreign sojourners as well—as with the apocryphal quip “I like France, but I can’t stand the French.” This statement implies that there is surface acceptance/engagement (I like French wine, food, etc.) mixed together with deep resistance (I don’t like French people’s communication styles, values).

By looking at the psychology of language learning in terms of adjustment to foreignness, we are able to find commonality between language learning and the cultural adjustment processes. The resistance/engagement paradigm operates as a conceptual bridge for educators—a way to think about language learning as a part of a larger cultural learning process. This doesn’t require a rejection of existing approaches to understanding language learning motivation. The notion of integrative motivation, for example—the idea that language learners are motivated by identifying with the target culture of the language they are learning—could be seen as similar to engagement (Gardner 2005). The idea that language learning involves adjustments to our sense of self is also common in motivation literature (Dornyei and Ushioda 2009). Much motivation literature, however, describes negative reactions to language learning in terms that imply psychological dysfunction, such as language anxiety (Zhang and Zhong 2012), or (un)willingness to communicate (Yashima 2002). The deep learning perspective, on the other hand, assumes that language and culture learning is psychologically demanding, and that resistance is a normal part of that process.

The demands of language and culture learning have real-world consequences. Many people fail in their foreign language learning, and outcomes depend heavily on the motivation, aptitudes, personality, experiences, and attitudes of each individual learner (Dornyei 2009; Dornyei and Ryan 2015). The deep learning perspective reminds us that language and culture learning involve adjustment to boundaries of the self and a degree of personal transformation. When we internalize a new domain of knowledge, we increasingly experience it as a natural part of who we are. When we master a foreign language, we gain more than an ability to perform the act of speaking—we *become* a speaker of the language. Similarly, when we have foreign experiences, we are doing more than gaining knowledge or skills, we are developing a more intercultural self—*becoming* a more cosmopolitan or international person. If, on the other hand, we resist the effort and change associated with development and transformation, we may experience *resistance*, a defensive psychological reaction that inhibits learning (Davis 2007; Shaules 2017).

**A developmental roadmap** The DMLL helps make sense of the powerful psychological responses provoked by deep language and culture learning. This chapter has discussed the psychological implications of a deep learning approach. This marks the end of Part 1, which introduces key themes that inform the DMLL. Part 2 shifts to a greater focus on theory, by putting the DMLL in the context of current language and culture scholarship, by exploring the connection between language and culture, and by describing the levels of the DMLL in more detail.

## References

- Agar, Michael. 1994. *Language shock: Understanding the culture of conversation*. New York: Perennial.
- Amodio, D.M. 2009. The neuroscience of stereotyping and prejudice. Paper presented at the inclusive leadership, stereotyping and the brain conference, Columbia University, New York, NY.
- Amodio, David M., and Saaid A. Mendoza. 2010. Implicit intergroup bias: Cognitive, affective, and motivational underpinnings. In *Handbook of implicit social cognition: Measurement, theory, and applications*, ed. B. Gawronski and B. Payne, 353–374. New York: Guilford Press.
- Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice. 1998. Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology* 74 (5): 1252–1265.
- Bennett, Milton J. 1986. A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations* 10 (2): 179–200.
- Bennett, Milton J. 1993. Towards ethnorelativism: A developmental model of intercultural sensitivity. In *Education for the intercultural experience*, ed. Michael R. Paige, 21–71. Yarmouth, ME: Intercultural Press.
- Bergen, Benjamin K. 2012. *Louder than words: The new science of how the mind makes meaning*. New York, NY: Basic Books.
- Byram, Michael. 2008. *From foreign language education to education for intercultural citizenship: Essays and reflections*. Clevedon, UK: Multilingual Matters.
- Byram, Michael, Adam Nichols, and David Stevens. 2001. *Developing intercultural competence in practice*. Clevedon, UK: Multilingual Matters.
- Chen, Chuansheng, Gui Xue, Leilei Mei, Chunhui Chen, and Qi Dong. 2009. Cultural neurolinguistics. In *Progress in brain research*, ed. J.Y. Chiao. New York: Elsevier.
- Csikszentmihalyi, Mihaly, and Kevin Rathunde. 1993. The measurement of flow in everyday life: Towards a theory of emergent motivation. In *Nebraska symposium on motivation, 1992: Developmental perspectives on motivation*, ed. Janis E. Jacobs, 57–97. Lincoln, NE: University of Nebraska Press.
- Curran, Charles A. 1972. *Counseling-learning: A whole person approach for education*. New York, NY: Grune and Stratton.
- Damasio, Antonio. 1994. *Descartes' error: Emotion, reason, and the human brain*. New York: Penguin.
- Damasio, Antonio. 1999. *The feeling of what happens*. New York: Harcourt Inc.
- Davis, John McE. 2007. Resistance to L2 pragmatics in the Australian ESL context. *Language Learning* 57 (4): 611–649.
- Derks, Belle, Michael Inzlicht, and Sonia Kang. 2008. The neuroscience of stigma and stereotype threat. *Group Processes & Intergroup Relations* 11 (2): 163–181.
- Diaz, Adriana Raquel. 2013. *Developing critical languaculture pedagogies in higher education*. Languages for Intercultural Communication and Education. Bristol, UK: Multilingual Matters.

- Dornyei, Zoltan. 2009. *The psychology of second language acquisition*. Oxford, UK: Oxford University Press.
- Dornyei, Zoltan, and Stehen Ryan. 2015. *The psychology of the language learner revisited*. New York, NY: Routledge.
- Elgin, Suzette Haden. 2000. *The language imperative*. Cambridge, MA: Perseus Publishing.
- Ellis, Rod. 2008. *The study of second language acquisition*. Oxford, UK: Oxford University Press.
- Furnham, Adrian, and Stephen Bochner. 1986. *Culture shock: Psychological reactions to unfamiliar environments*. Taylor & Francis.
- Gardner, Robert. 1985. *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner, Robert. 2010. *Motivation and second language acquisition*. New York: Peter Lang Publishing.
- Goel, Vinod, Milan Makale, and Jordan Grafman. 2004. The hippocampal system mediates logical reasoning about familiar spatial environments. *Journal of Cognitive Neuroscience* 16 (4): 654–664.
- Habwe, John Hamu. 2010. Politeness phenomena: A case of Kiswahili honorifics. *Swahili Forum* 17: 126–142.
- Hammer, Mitchell R., Milton J. Bennett, and Richard Wiseman. 2003. Measuring intercultural competence: The intercultural development inventory. *International Journal of Intercultural Relations* 27 (4): 421–443.
- Horwitz, Elaine K., Michael B. Horwitz, and Joann Cope. 1986. Foreign language classroom anxiety. *The Modern Language Journal* 70 (2): 125–132.
- Kahneman, Daniel. 2011. *Thinking fast and slow*. New York, NY: Farrar, Straus and Giroux.
- Kihlstrom, J.F. 1987. The cognitive unconscious. *Science* 237: 1445–1452.
- Kikuchi, Keita. 2013. Demotivators in the Japanese EFL context. In *Language learning motivation in Japan*, ed. Matthew T. Apple, Dexter Da Silva, and Terry Fellner. Bristol, UK: Multilingual Matters.
- Kikuchi, Keita. 2015. Reexamining demotivators and motivators: A longitudinal study of Japanese freshmen's dynamic system in an EFL context. *Innovation in language learning and teaching*: 1–18. <https://doi.org/10.1080/17501229.2015.1076427>.
- Kim. 2001a. *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. London: Sage.
- Kim, Young Yun. 2001b. *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, CA: Sage.
- Klein, Gary A. 1998. *Sources of power: How people make decisions*. Cambridge, MS: MIT Press.
- Kramsch, Claire. 1993. *Context and culture in language teaching*. Oxford, UK: Oxford University Press.
- Kramsch, Claire. 2000. Social discursive constructions of self in L2 learning. In *Sociocultural theory and second language acquisition*, ed. James P. Lantolf. Oxford, UK: Oxford University Press.
- Kramsch, Claire. 2015. Language and culture in second language learning. In *The Routledge handbook of language and culture*, ed. Farzad Sharifian. New York: Routledge.
- Lantolf, James P. 2000. *Sociocultural theory and second language learning*. Oxford, UK: Oxford University Press.
- Larsen-Freeman, Diane. 2011. A complexity theory approach to second language development/acquisition. In *Alternative approaches to second language acquisition*, ed. Dwight Atkinson. New York: Routledge.
- Lev-Ari, Shiri, and Boaz Keysar. 2010. Why don't we believe non-native speakers? The influence of accent on credibility. *Journal of Experimental Social Psychology* 46 (6): 1093–1096.
- Lozanov, Georgi. 2005. *Suggestopaedia—Desuggestive teaching communicative method on the level of the hidden reserves of the human mind*. Vienna: International Centre for Desuggestology.
- Lund, Nick. 2001. *Attention and pattern recognition*. Modular Psychology Series. East Sussex, UK: Routledge.

- Markus, H., and S. Kitayama. 1991. Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review* 98 (2): 224–253.
- Matsumoto, David, Satoko Hirayama, and Jeffery A. LeRoux. 2006. Psychological skills related to intercultural adjustment. In *Handbook of multicultural perspectives on stress and coping*, eds. Paul T. P. Wong and Lilian C. J. Wong. New York: Springer.
- Risager, Karen. 2015. Linguaculture: The language-culture nexus in transnational perspective. In *The Routledge handbook of language and culture*, ed. Farzad Sharifian, 87–99. New York: Routledge.
- Ryan, R.M., and E.L. Deci. 2002. Overview of self determination theory: An organismic dialectical perspective. In *Handbook of self-determination research*, 3–33. New York: University of Rochester Press.
- Sampson, Richard J. 2015. Tracing motivational emergence in a classroom language learning project. *System* 50 10 (20):10–20.
- Schumann, John. 1997. *The neurobiology of affect in language*. Malden: Blackwell.
- Schumann, John. 2015. Foreward. In *Motivational dynamics in language learning*, ed. Zoltan Dornyei, Peter MacIntyre, and Alastaire Henry. Bristol: Multilingual Matters.
- Schumann, John H. 2004. The neurobiology of motivation. In *The neurobiology of learning: Perspectives from second language acquisition*, ed. John H. Schumann, 23–42. New York: Routledge.
- Schumann, John H., Sheila E. Crowell, Nancy E. Jones, Namhee Lee, Sara Ann Schuchert, and Lee Alexandra Wood. 2004. *The neurobiology of learning: Perspectives from second language acquisition*. New York: Routledge.
- Shapiro, Lawrence. 2014. *The Routledge handbook of embodied cognition*. New York: Routledge.
- Shaules, Joseph. 2007. *Deep culture: The hidden challenges of global living*. Clevedon, UK: Multilingual Matters.
- Shaules, Joseph. 2010. *Beneath the surface: A beginner's guide to the deep culture experience*. Boston, MA: Intercultural Press.
- Shaules, Joseph. 2014. *The intercultural mind: Connecting culture and cognition*. Boston, MA: Intercultural Press.
- Shaules, Joseph. 2016. The developmental model of linguaculture learning: An integrated approach to language and culture pedagogy. *Juntendo Journal of Global Studies* 1 (1): 2–17.
- Shaules, Joseph. 2017. Linguaculture resistance: An intercultural adjustment perspective on negative learner attitudes in Japan. *Juntendo Journal of Global Studies* 2: 66–78.
- Sherif, Muzafer, O.J. Harvey, B. Jack White, William R. Hood, and Carlyn W. Sherif. 1961. *Inter-group conflict and cooperation: The robbers cave experiment*. Norman, OK: University Book Exchange.
- Stevick, Earl W. 1976. *Memory, meaning & method: Some psychological perspectives on language learning*. Rowley, MA: Newbury House Publishers.
- Stevick, Earl W. 1980. *Teaching languages: A way and ways*. Cambridge, MA: Newbury House.
- Sugino, Toshiko. 2010. Teacher demotivational factors in the Japanese language teaching context. *Procedia Social and Behavioral Sciences* 3: 216–226.
- Tochon, Francois Victor. 2010. Deep education. *Journal for Educators, Teachers and Trainers* 1: 1–12.
- Tochon, Francois Victor. 2014. *Help them learn a language deeply*. Blue Mounds, WI: Deep University Press.
- Trang, Tran Thi Thu, Richard B. Baldauf, and Karen Moni. 2013. Foreign language anxiety: Understanding its status and insiders' awareness and attitudes. *TESOL Quarterly* 47 (2): 216–243.
- Ward, Colleen, Stephen Bochner, and Adrian Furnham. 2001. *The psychology of culture shock*, 2nd ed. Philadelphia, PA: Routledge.
- Wederspahn, Gary M. 2000. *Intercultural services: A worldwide buyer's guide and sourcebook*. Houston, TX: Gulf Publishing Company.
- Wilson, Timothy D. 2002. *Strangers to ourselves: Discovering the adaptive unconscious*. Cambridge, MA: Belknap Press.

- Xiao, Jianfang. 2015. Deep approach to world languages and culture learning. *International Journal of Innovation and Research in Educational Sciences* 2 (6): 489–492.
- Yashima, Tomoko. 2002. Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal* 86 (1): 54–66.
- Zajonc, R.B. 2001. Mere exposure: A gateway to the subliminal. *Current Directions in Psychological Science* 10 (6): 224–228.
- Zhang, Renxia, and Jian Zhong. 2012. The hindrance of doubt: Causes of language anxiety. *International Journal of English Linguistics* 2 (3): 27–33.