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## CHAPTER 4

# Conceptualizing learner characteristics in a complex, dynamic world

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The complex dynamic systems turn in second language acquisition has raised several fundamental challenges to studying learner characteristics, because a systemic perception of mental functioning that is characterized by nonlinear relations undermines the traditional theoretical basis of individual differences as distinct and stable learner attributes. This being the case, how can we account for the widely observed learner differences? Based on McAdams and Pals' (2006) personality construct, this chapter outlines a new, multi-layered model of learner characteristics which consists of a three-tiered framework: dispositional traits, characteristic adaptations, and integrative life narratives. The three levels of the construct treat learner variation in rather different ways, which is consistent with the intuitive belief that certain personality aspects are more entrenched than others. After describing the proposed framework, the chapter draws on anxiety research to illustrate the three types of system components and how they are compatible with the principles of Complexity Theory.

## Introduction

American biologist Richard Lewontin (2000:4) has expressed a widely shared notion when he pointed out that a “central problem of biology, not only for biological scientists but for the general public, is the question of the origin of similarities and differences between individual organisms.” Indeed, while every individual organism begins life “as a single cell, a seed or fertilized egg, that is neither tall nor short, neither clever nor dull,” through a process of differentiation a unique organism is formed with individual features and functioning patterns; thus, as Lewontin concludes, “Changes in size, shape, and function occur continually throughout life until the moment of death.” This is, of course, not a novel observation, as it has repeatedly been noted in the past, but the curious aspect of the inter-organism diversity, also underlined by Lewontin, is the fact that it goes hand in hand with a considerable amount of similarity. Indeed, Kluckhohn and Murray (1948:35) have famously

stated in this respect, “Every man is in certain respects: a. like all other men, b. like some other men, c. like no other man” (an observation that is true of women as well).

Given the existence of undeniable similarities and differences that one simply cannot fail to notice when communicating with fellow humans, the question that has been puzzling scholars over the past decades is how best to account for the systematicity of the commonalities and divergences. A well-developed strand of psychology – differential psychology or, as it has been recently more frequently referred to, individual difference (ID) research – has been entirely focused on exploring the parallel occurrence of the *uniqueness* and the *general aspects* of the human mind, and this complex duality has not been limited to personality psychology but has also been found to apply to the nature of language development and use. In her recollection of how she embarked on the journey of introducing Complexity Theory into applied linguistics almost single-handedly, Diane Larsen-Freeman (this volume) explains the significance of her early recognition that despite what traditional linguistics suggested, language was *not* a “bounded rule-governed system” but rather a system in constant change, characterised by “organic dynamism” (p. 17). The inadequacy of the traditional understanding of linguistics became even more apparent to her in the light of the intrinsic impact of the *context* on various aspects of second language acquisition (SLA), or second language development (SLD), as she prefers to call it, and therefore a Complexity Theory perspective made a great deal of sense to her:

CT’s systems perspective challenged the notion that we could come to understand SLD in a piecemeal, atomized way. It suggested that even if we could identify important independent variables in the SLD process, we could not determine their influence in any absolute sense because what was relevant was their interaction in context. Besides, complexity theorists assert that the contribution of any one of the variables changes over time. In fact, they went further and called into question any decontextualized experiment, which sought to identify the causal factor in SLD. (p. 18)

These points are of central importance to the current chapter, because learner characteristics have typically been seen as some of the most fundamental independent variables in research paradigms that are intended to encompass the overall operation of SLA in a comprehensive manner. In fact, the main thesis of this chapter concerns the very move from viewing learner characteristics as “independent variables” to understanding them in some way as being “integral” to the overall learning process, which is in full accordance with the holistic and dynamic perspective advocated by Complexity Theory (see e.g., Larsen-Freeman, 2012; Larsen-Freeman & Cameron, 2008). Such a move admittedly takes us out of our academic comfort zone, as it necessitates giving up the handy and neat notion of modular ID factors and pushes us to reframe learner characteristics in a more fluid and dynamic manner. The first steps along this way have been taken (see e.g., Dörnyei, 2009a, 2009b; Dörnyei & Ryan, 2015) and this chapter is intended to take stock of how far we have got and what further challenges lie still ahead.

## The traditional conception of individual differences

In a broad sense, an ID factor has traditionally been defined as any attribute, trait or personal characteristic that marks a person as a distinct and unique human being. This broad conception has typically been narrowed down to limit IDs to *stable* characteristics, that is, to individual variation from person to person when the individualising features exhibit continuity over time, and a further common restriction in ID research has been the emphasis on *broad dimensions* that are applicable to everyone and that discriminate among people *in general*. Thus, the classic ID construct refers to dimensions of enduring personal characteristics that are assumed to apply to everybody and on which people differ by degree; or, in other words, it concerns “stable and systematic deviations from a normative blueprint” (Dörnyei & Ryan, 2015: 3).

In SLA research, ID factors have been well established as constituting a relatively straightforward concept involving background learner variables that modify the general language acquisitional processes. In many ways, they were thought of as the systematic part of the background ‘noise’ in SLA, and it was also widely accepted that ID factors were powerful learner variables with potential make-or-break quality, affecting a range of different aspects of the acquisition process. With regard to the main types of learner attributes, *motivation* was generally seen to concern the affective characteristics of the learner, referring to the direction and magnitude of learning behaviour in terms of the learner’s choice, intensity and duration of learning. *Language aptitude* determined the cognitive dimension, referring to the capacity and quality of learning. *Learning styles* were seen to refer to the manner of learning, and *learning strategies* were somewhere in between motivation and learning styles by referring to the learner’s proactiveness in selecting specific made-to-measure learning routes. Thus, the composite of these variables was seen to answer *why, how long, how hard, how well, how proactively* and *in what way* the learner engages in the learning process.

This seemingly logical, comprehensive and intuitively convincing representation of learner characteristics ensured IDs a prominent position in the overall SLA paradigm: They were viewed as important mediating variables in the SLA process, explaining a significant proportion of learner variation in L2 attainment and performance. They were often perceived as some kind of *filters* and it was assumed that if we succeed in accurately determining the parameters of these filters through quantitative assessment, we could make reasonable predictions about the likely rate of progress of learning. This was thus an orderly worldview with straightforward linear cause-effect links underlying it: Higher motivation and language aptitude, accompanied by more productive learning styles and more effective strategic behaviour, lead to increased language learning achievement.

## Challenges to the “individual difference myth”

What could be wrong, one may ask, with the seemingly clear-cut conceptualisation of ID factors described above? As Dörnyei (2009b) has argued, the intuitively convincing classic ID paradigm rests on (at least) four assumptions: (a) IDs exist as *distinctly definable* psychological constructs; (b) IDs are relatively *stable* attributes; (c) different IDs form relatively *monolithic* components that concern different aspects of human functioning and which are therefore only moderately related to each other; and (d) IDs are *learner-internal*, and thus relatively independent from the external factors of the environment. A closer examination of these four underlying tenets raises serious questions about each of them: Research over the past decade has increasingly shown that individual learner characteristics are not stable but display salient temporal and situational variation, and neither are they distinct and monolithic in nature, but involve instead complex con-stellations made up of different components that interact with each other and the environment synchronically and diachronically (see Dörnyei & Ryan, 2015). In other words, the elegant view of learner characteristics comprising a series of modular IDs that are conceptualised as *discrete* and measurable *traits* that remain *stable* across situations may not be more than a convenient myth that we need to (reluctantly!) give up.

An illustration of the above point would be the fact that while we might say in an everyday conversation that, for example, Hubert is highly motivated and Geraldine has a low language aptitude, in actual reality these generalisations might turn out to be meaningless, because Hubert’s motivation might disappear overnight after an unpleasant experience and Geraldine might come across a language learning approach or methodology that suits her nicely and as a consequence may start making better-than-average progress. Accordingly, in the first decade of the new millennium, researchers gradually came to recognise that assuming the existence of distinct and enduring ID factors such as L2 motivation or language aptitude did not stand up to scientific scrutiny. Regarding my own research on language learning motivation, I have summarised the process of the transformation as follows:

I was still working within a process-oriented paradigm that was characterized by linear cause-effect relations [cf. Dörnyei, 2000, 2001]. In retrospect, however, I can see that the model I was proposing had multiple, parallel and interacting cause-effect relationships, accompanied by several circular feedback loops, making the validity of the overall linear nature highly questionable. Thus, it was really a matter of time before I realized that such a patchwork of interwoven cause-effect relationships would not do the complexity of the motivation system justice and therefore a more radical reformulation was needed. (Dörnyei, 2009b: 196–197)

In a special issue on emergentism that was highly influential in showing the field a direction for the necessary radical reformulation mentioned in the above quote,

Ellis and Larsen-Freeman (2006) expressively summarised the demise of the notion of the ‘variable’ from a complex dynamic perspective, highlighting the issues of contextual dependence and temporal variation, and it was clear to me when I read their paper that the description fitted ID variables perfectly:

The fact is that the effect of variables waxes and wanes. The many actors in the cast of language learning have different hours upon the stage, different prominences in different acts and scenes. The play evolves as goals and subgoals are set and met, strong motives once satisfied fade into history, forces gather then dissipate once the battle is done, a brief entrance can change fate from tragedy to farce, a kingdom may be lost all for the want of a horseshoe nail. (p. 563)

The final nail in the ID coffins was, as Dörnyei and Ryan (2015) explicate, the recognition that even the best-known ID factors are *not* monolithic but are made up of a number of constituent components that are diverse and that dynamically interact with each other. To take motivation for illustration, a complex motivation construct often includes cognitive or strategic components such as the appraisal of a learning situation or the effective use of volitional control, thereby straddling traditional ID boundaries, since cognitive variables have traditionally belonged to the sphere of aptitude. Interestingly, the recognition of the multicomponential nature of ID factors has given rise to an intriguing strand in educational psychology that examined what are known as *trait complexes* (e.g., Ackerman, Chamorro-Premuzic, & Furnham, 2011). According to this approach, rather than concentrate on specific learner characteristics in isolation, trait complexes reflect the *cumulative* impact of a number of different variables and describe how they combine to either facilitate or impede academic achievement. Indeed, one may argue that given the complex and interlocking nature of *any* higher-order human functioning, individual differences in mental functions will typically involve a *blended operation* of cognitive, affective and motivational components – a convergence that becomes even more obvious if we take a neuropsychological perspective, because at the level of neural networks, it is difficult to maintain the traditional separation of different types of functions (for more details, see Dörnyei, 2009b).

### The dawn of a new era

As a consequence of the above considerations, by the end of the first decade of the current millennium there had been a growing consensus amongst scholars specialising in language learner characteristics that the idyllic era of traditional ID research was over: The main attributes of language learners were not stable but showed salient temporal and situational variation, and they were not monolithic

but comprised complex constellations made up of different parts that interacted with each other and the environment synchronically and diachronically. It was also gradually recognised that simple cause-effect relationships were unable to do full justice to these multi-level interactions and the temporal changes. This being the case, the field was facing two serious challenges. First, we lacked the necessary research methodology to address SLA in a *systemic* manner; for example, while the following summary by Ellis and Larsen-Freeman (2006) started to ring true to a growing number of scholars, there were few if any guidelines on how to study such complex setups meaningfully:

There are many agencies and variables that underpin language phenomena, even as apparently simple a phenomenon as that of cross-linguistic lexical intrusions. Language is complex. Learners are complex. These variables interact over time in a nonlinear fashion, modulating and mediating each other, sometimes attenuating each other, sometimes amplifying each other in positive feedback relationships to the point where their combined weight exceeds the tipping point, which results in a change of state. (pp. 560–561)

The second problem that the field faced was directly related to the topic of the current chapter: We did not have an adequate theory of individual differences and personality within the field of SLA to accommodate meaningfully the new complex systems perspective. In other words, we could see that simplistic solutions which talked about ‘motivation’ or ‘aptitude’ as if they existed did not hold water any longer, but it was less clear how to proceed with this newly found wisdom. After all, how else could we talk about ‘motivation’ or ‘aptitude’, short of completely abandoning these concepts (which nobody was ready to do)?

In my 2009 summary of the field (Dörnyei, 2009b), I attempted to make sense of the confusing situation by raising two points. First I addressed an issue that had originally been mentioned by Carver and Scheier (1999): Could it be that the dynamic systems approach was merely a descriptive model without any real explanatory power? In other words, although we can certainly ‘explain away’ any dynamic movement-stability fluctuation by bringing in concepts such as emergence, self-organisation and attractor states, does this new conceptual system and terminology really help us to understand and predict the details of the learners’ behaviour? This question is closely related to Larsen-Freeman’s (this volume) discussion of Complexity Theory being a “metatheory” that both describes and prescribes the essential features of the new paradigm, and interestingly, the question of the usefulness of this descriptive/prescriptive function lay at the heart of a recently edited volume on motivational dynamics, as explained in the Introduction of the book (Dörnyei, MacIntyre, & Henry, 2015):

The challenge we set ourselves was thus fairly straightforward: we could either initiate a robust research project that takes well-established motivation constructs and, by applying dynamic principles to their investigation, produces convincing empirical evidence for the sustainability of the approach, or we would have to come to terms with the fact that the dynamic approach in SLA might be simply an attractive but ultimately unrealisable idea. The production of this volume was therefore intended to serve as the primary testing ground. (p. 5)

The second potential solution offered in the 2009 book followed the lead of educational psychology – more specifically Phillip Ackerman and his colleagues’ conceptualization of trait complexes that has been briefly mentioned earlier (e.g., Ackerman, 2005; Ackerman & Heggstad, 1997; Ackerman & Kanfer, 2004) – by suggesting that examining dispositional attributes individually is often challenging and unfruitful because the manner in which each operates depends on the full constellation of personal characteristics. Therefore, it was argued, the best way ahead was to identify *higher-level amalgams* of cognition affect and motivation that were relatively stable (i.e., were governed by a powerful attractor) and which acted as ‘wholes’. Examples of such conglomerates would include hybrid notions as ‘interest’, ‘flow’ and even ‘future self-guides’, but it may be argued (see Dörnyei & Ryan, 2015) that even such an established attribute as language aptitude is better seen as an ‘aptitude complex’ that subsumes multiple components interacting with each other and also with other motivational and emotional factors.

I still believe that the notion of higher-order amalgams of learner attributes is a sound one, and I have argued elsewhere (Dörnyei, 2014) that a lot of useful research can be directed at trying to identify the optimal combination of various factors within complex dynamic systems. However, while doing so might be a feasible strategy for the purpose of researching dynamic systems, this approach cannot substitute a comprehensive theory of personality that would accommodate the dynamic interaction of the various facets of learner characteristic. The rest of this chapter will introduce a potential candidate for such a broad theoretical framework, Dan McAdams’s New Big Five model of personality (e.g., McAdams, 2006; McAdams & Pals, 2006). This personality construct has the potential to explain contextual and temporal variation accompanied by dynamic interactions at various levels while, at the same time, it can also accommodate the fairly stable dimensions of a person’s identity.

## McAdams's model of personality: The New Big Five

At the end of the 20th century a consensus started to emerge in the field of personality psychology with regard to the main dimensions of human personality, and the resulting construct – the Big Five model (e.g., Costa & McCrae, 1985, 2008; Goldberg, 1992) – achieved a dominant status. It offered a modular framework consisting of five components – Openness, Conscientiousness, Extraversion-Introversion, Agreeableness, and Neuroticism-Emotional Stability – and this personality structure came to be seen as the standard for both theoretical and measurement purposes. However, the model had certain limitations: It was largely descriptive and it prioritised regularity over developmental processes, which explains McAdams and Pals' (2006) sentiment expressed in a seminal paper introducing a radically new perspective that “personality psychology should be offering more. Despite its recent revival, personality psychology still falls somewhat short because it continues to retreat from its unique historical mission. That mission is to provide *an integrative framework for understanding the whole person*” (p. 204, italics in original). The New Big Five model proposed by McAdams (e.g., McAdams, 2006; McAdams & Pals, 2006) is intriguing in that it builds on the traditional conceptualisation by situating the personality traits within a sociocultural context and a dynamically interacting personality framework.

The full model includes five layers, of which the middle three are of particular interest for our current purpose. These constitute a three-tier framework of personality, embedded between layers of a *general human design* and the *sociocultural context*. The three interim levels are as follows:

1. *Dispositional traits*, referring to relatively stable and decontextualized broad dimensions of individual differences, such as extraversion, friendliness, dutifulness, depressiveness and neuroticism. This dimension thus largely coincides with the personality structure of the original Big Five model.
2. *Characteristic adaptations*, referring to constructs that are highly contextualised in time, place and/or social role, and which include “motives, goals, plans, strivings, strategies, values, virtues, schemas, self-images, mental representations of significant others, developmental tasks, and many other aspects of human individuality” (McAdams & Pals, 2006: 208). This level of personality thus involves the sphere of the classic ID paradigm.
3. *Integrative life narratives*, referring to a highly personal organisational framework that helps people to make sense of their lives and which constitutes an individual's *narrative identity*. McAdams and Pals (2006) describe this novel personality dimension as “internalized and evolving life stories that reconstruct the past and imagine the future to provide a person's life with identity (unity,

purpose, meaning)” (p. 212). This is a genuinely new addition to the conception of personality with considerable implications for SLA and will be further discussed below.

This brief description of McAdams’s model is sufficient to show the fundamental difference between the old Big Five and the New Big Five constructs. In place of a simple unidirectional cause-effect relationship between personality and behaviour, the New Big Five suggests a more dynamic interplay between the demands of a particular situation and different types of personal characteristics, layered according to the degree of variation within them: (a) dispositional traits are the least situated components as they are relatively stable across diverse contexts, which is consistent with the observation that some of our attributes are determined by genetic codes; (b) characteristic adaptations can be seen as dispositional propensities in action, that is, highly contextualised aspects of individuality that interact with specific environmental conditions (e.g., someone is more anxious in certain situations than in others); (c) finally, as we shall see below in more detail, life narratives concern the most malleable structural component, one that can even be rewritten as part of a training programme.

The model portrays different personality characteristics not only interacting with each other within their own level but also cross-dimensionally, and underpinning all this is the individual’s biological inheritance as well as various sociocultural background influences. These features offer a genuine gateway to a more integrated theory of personality that attempts to explain the dynamic development of real people in actual contexts. It is also important to note that once we remove the ‘modular straitjacket’ from learner characteristics, we find that some propensities or attributes might occupy multiple spheres of the model at the same time; that is, they often have *both* trait-like and situated state-like manifestations (I will provide an illustration of this from a recent study on anxiety later in this chapter).

### Dörnyei and Ryan’s adaptation of McAdams’s model to SLA

Figure 4.1 presents the schematic representation of how Dörnyei and Ryan’s (2015) adapted McAdams’s personality construct to describe language learner characteristics. As can be seen, we placed the L2 learner’s *narrative identity* at the core of the framework, because we see it as the main organizational mechanism – or cohesive device – for the whole system. Because the concept of narratives has not been utilised for describing individual differences in SLA before, let us have a closer look at this novel element.

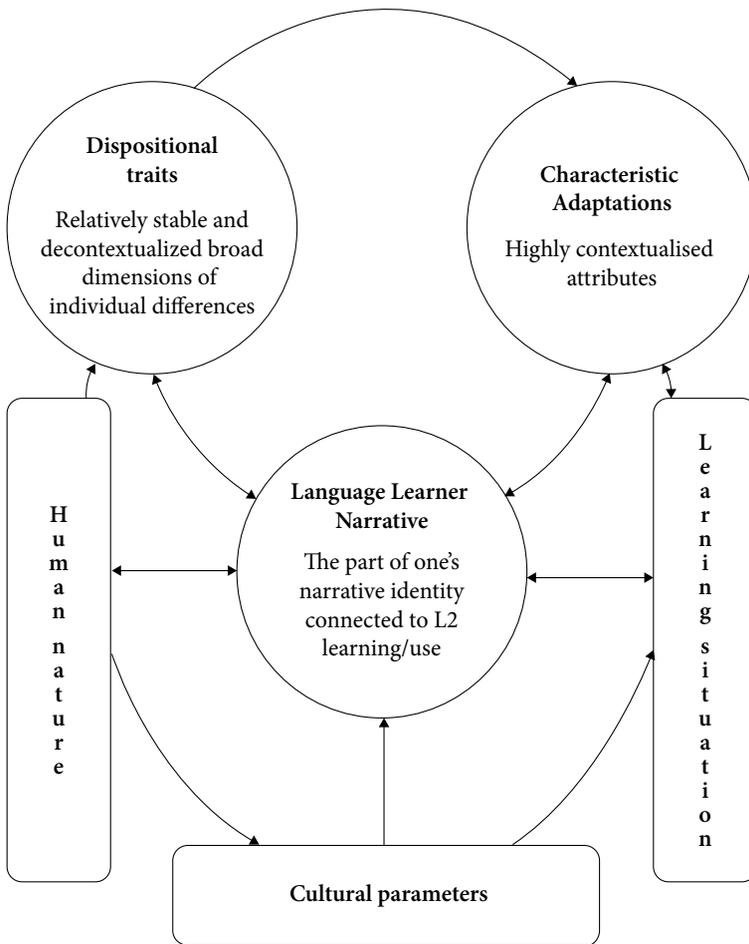


Figure 4.1 A narrative-based representation of the psychology of the language learner

### Narrative identity

The notion of ‘narrative’ has been well known to the field of SLA: Narrative inquiry as a research method has had its advocates for over a decade (e.g., Barkhuizen, 2013; Barkhuizen, Benson, & Chik, 2014; Bell, 2002; Benson & Nunan, 2004; Mercer, 2013; Pavlenko, 2002), and the value of narratives and stories as efficient classroom tools for language learning and teaching has also been widely recognized (e.g., Kalaja, Menezes, & Barcelos, 2008; Wright, 2009). More broadly, the social sciences as a whole have witnessed a narrative turn – or even narrative turns (see e.g., Hyvärinen, 2010) – over the past two decades, and according to Hyvärinen,

the principal characteristics of these turns have been (a) a growing interest in, and recognition of, narrative theory, (b) a willingness to use narrative inquiry as a tool of investigation and (c) the development of narrative as an explicit identity concept. The focus in the current chapter is on the idea of narrative as an explicit *identity* concept, which is probably the least known narrative facet within the field of SLA.

Narrative identity is concerned with the ways in which people organise and understand their experiences and memories in the form of various narratives, such as stories, excuses, myths or explanations, thereby making autobiographical stories the foundations of their self-concept. A pioneer in this area has been American psychologist Jerome Bruner (1987), who presented the thesis persuasively that people “seem to have no other way of describing ‘lived time’ save in the form of a narrative” (p. 12). Therefore, he argued, a life is not ‘how it was’ but how it is interpreted, told and retold; in short, “a life as led is inseparable from a life as told” (p. 31). Accordingly, Bruner famously concluded, “In the end, we *become* the autobiographical narratives by which we ‘tell about’ our lives” (p. 15). This thesis has resonated with a wide range of researchers and practitioners in diverse fields who all shared the belief that people organise and understand their experiences and memories of human happenings in the form of narratives, so much so that one could almost say that they narrate themselves into the person they become. As Kenyon and Randall (1997: 1) succinctly put it, “To be a person is to have a story. More than that, it is to be a story.”

Dan McAdams has been one of the most influential champions of narratives in psychology, and in his 1993 book, *Personal Myths and the Making of the Self*, he argued forcefully that personal or autobiographical narratives constitute a potent tool for creating coherence in the dizzying complexity of the world around us; as he stated, people come to understand who they are by creating heroic stories of their selves:

We are all tellers of tales. We each seek to provide our scattered and often confusing experiences with a sense of coherence by arranging the episodes of our lives into stories. This is not the stuff of delusion or self-deception. We are not telling ourselves lies. Rather, through our personal myths, each of us discovers what is true and what is meaningful in life. In order to live well, with unity and purpose, we compose a heroic narrative of the self that illustrates essential truths about ourselves. Enduring human truths still reside primarily in myth, as they have done for centuries. (1993: 5)

Thus, narrative identity has been described as “a person’s internalized and evolving life story, integrating the reconstructed past and imagined future to provide life with some degree of unity and purpose” (McAdams & McLean, 2013: 233). By way of illustration, the most developed account of a thematic narrative identity

is McAdams's description of the *redemptive self* (2006, 2012; McAdams & Adler, 2010; McAdams & Bowman, 2001), in which redemption functions as the central organizing principle for the individual to shape traumatic life experiences into a meaningful storied form that is constructive and forward-pointing (e.g., the death of a family member as bringing the family closer together or severe criticism at work as making someone a better employee).

*L2 narrative identity* can be defined as the specific aspect of an individual's ongoing internal narrative that relates to learning and using a second/foreign language. As shown in Figure 4.1, it is an integral part of the individual's overall life narrative, responsible for processing past L2-related experiences and constructing future goals. Regarding the Figure, Dörnyei and Ryan (2015) emphasise that it is too simplistic to be taken as a definitive model of L2 learner personality; rather, it was intended primarily to underline the pivotal position of narrative identity embedded within some other key personality components. Placing narrative identity in the centre suggests that it is exposed to the effects of all the other components and is therefore the most volatile element of personality. However, it is also the element that is most under human control, and because its relationship with the system is bidirectional, it not only holds the system together as a cohesive core but can also exert a *formative influence* on it. That is, the way people shape their life narrative will shape their whole mindset.

## Understanding language learner characteristics within the system

Although dispositional traits represent the most recognisable psychological aspects of individuality, their impact on (language) learning is largely mediated through the learner's characteristic adaptations. The latter can thus be seen as interfaces between stable, trait-like dispositions and the learning situation, and with this being the case, this layer of L2 learner psychology has been the primary concern for both researchers and practitioners in SLA, eliciting most studies within the classic ID paradigm. However, McAdams and Pals (2006) remind us that "the distinction between dispositional trait and characteristic adaptation may not be perfectly clear in every case" (p. 208), because certain learner characteristics have interlinked trait-like and state-like dimensions, and it was noted briefly earlier in this chapter that once we remove the modular straitjacket from learner characteristics, we find that some propensities will occupy multiple spheres. For example, in a qualitative study of the 'anxious self', Şimşek and Dörnyei (2017) have found that anxiety can be meaningfully identified both at the dispositional trait and the more situated, characteristic adaptation levels. On the one hand, most of the interview participants, who were selected for being particularly anxious learners, experienced detrimental effects of

anxiety in several walks of their lives; as one learner stated, “No matter what I do or which subject I study, I will become anxious as it is one of my main characteristics.” On the other hand, certain situations elicited significantly higher levels of anxiety than others, with stage fright and test anxiety being classic examples.

The most interesting finding of the Şimşek and Dörnyei (2017) study was the fact that anxiety could also be associated with the third layer of McAdams’s model, the narrative level, and that for the participants this association played a particularly powerful role in dealing with their anxious selves. In an attempt to make sense of their anxious reactions and to process them through explanations and rationalisations, several of the interviewees developed explanatory accounts and, depending on the main thrust of these personal narratives, we could distinguish three distinct reaction styles: *fighter*, *quitter* and *safe player*. That is, even though all the participants were selected because of their heightened perception of anxiety, the narrative accounts they produced of their anxious selves significantly influenced their overall disposition and their behavioural outworking.

Particularly telling evidence of the power of narrative identity was offered by some of those interviewees who had not produced a clarifying narrative for themselves before the interview. When the interview situation inevitably pushed them into a self-reflective, narrative mode, this played in several cases a conducive role in helping them to construct a cohesive meaning of their experiences, and at the end of an interview one participant for example said, “Thank you! Really... I have found that the problem is within myself because I limit myself.” Finally, one of the most remarkable findings of our interview study was the observation that when students managed to structure painful memories into constructive narratives and were ready to share and discuss these with their peers, this had a ‘redemptive’ impact on their negative thoughts or feelings, and although a qualitative study does not allow for generalisations, we noticed that these participants seemed to coincide with the ones who displayed a fighting disposition. This potentially important link will need to be confirmed by future research.

The above illustration supports the proposal that narrative identity might be seen as the central organisational mechanism underlying learner characteristics. It connects to all parts of the learner’s psychology, and both drives and regulates any occurring change. For L2 learners, their understanding of the interactions between their various characteristic adaptations and the learning situation will influence the development of their language learning narrative, and this narrative in turn will *feed back* into future adaptations. This phenomenon may be capitalised for developing classroom techniques by modifying learners’ narrative accounts in a pedagogically meaningful way, an approach that has been pursued in L2 motivation research focusing on the learners’ vision; as Dörnyei and Kubanyiova (2014) argue:

narratives are powerful tools for crafting our identities; they engage our thoughts and imaginations in an unparalleled manner both when we listen to a story and when we construct one... and because of the dynamic link between our narratives and our lives, changes in our personal narratives will also bring about changes in our self-images ... The close link between autobiographical narratives and future self-images offers an avenue for constructing desired future selves through getting the students to write various forms of guided autobiographies. (pp. 58–59)

### **Conclusion: Learner characteristics in a complex, dynamic world**

In the conclusion of their overview of learner characteristics, Dörnyei and Ryan (2015) point out that the current situation can be best described as a halfway position whereby we have already left behind the previous paradigm but have not as yet established the exact parameters of the new paradigm. Indeed, the traditional ID perspective that offered a neat way of exploring the psychology of the L2 learner by identifying small and discrete components of learner characteristics in isolation and then measuring them within well-selected learner samples in order to predict the effectiveness of SLA is undoubtedly outdated. However, while it is true that there has not been any fully-fledged new understanding of how to conceptualise learner characteristics in a dynamic manner, research on specific learner attributes has made significant progress in this respect, and McAdams's New Big Five model can be seen as a useful accommodating framework for these advances.

Several examples of these developments are offered by Dörnyei and Ryan (2015), for example when they describe the emerging understanding of motivation “as a highly situated, composite construct, with a strong developmental character ... fully compatible with McAdams's notion of characteristic adaptation” (pp. 104–105). Similarly, their account of the state of the art of learning styles research emphasises the fact that these cognitive styles can be seen as “parts of an adaptive system of interacting processes that are shaped by the requirements of the external environment... [with] a prime position in McAdams's New Big Five construct, as one of the key characteristic adaptations” (p. 139). And to offer a final example, Dörnyei and Ryan state about the new perception of learning strategies as self-regulatory mechanisms that “Within a framework of situated learner characteristics, self-regulation might be perceived as a dynamic construct that connects strategic capacity, intent and learning behaviour within the self-regulatory learner” (p. 169).

The main emphasis of this chapter has been on presenting McAdams's personality construct, so let us revisit briefly some of the key points in this regard. First, it is noteworthy that the theory does not reject the classic notion of personality traits and ID variables but suggests instead that individual differences occur

at different levels of situatedness, which creates continuity with past findings in personality psychology. Second, the model has an inherently dynamic character in that it portrays different personality characteristics not only interacting with each other within their own level but also cross-dimensionally. Third, the addition of the novel narrative dimension accounts for a so far overlooked level of the self, whereby people organize and understand their experiences and memories in the form of autobiographical stories and thus narrate themselves into the person they become. Thus, based on McAdam's model, we can recap the key aspects of an emerging new understanding of individuality as follows (Dörnyei & Ryan, 2015):

- We all represent some variation on a general human design.
- Each of us has certain cultural affiliations that distinguish us from others outside our own cultural groupings.
- We all have certain dispositional traits, which are both biologically/genetically and culturally based.
- We also have certain characteristic tendencies in the ways by which we adapt to the demands of particular situations.
- Finally, we make sense of all the above by generating an ongoing narrative that connects the disparate elements of our psychology and which also guides future development.

To conclude, this chapter began with Kluckhohn and Murray's (1948) classic observation that people differ from, but also have things in common with, each other, and McAdams's New Big Five construct offers a good account for the fundamental duality of similarity versus difference that permeates the whole learner characteristic domain. However, as is true of any model or conceptualisation, this depiction is also somewhat reductionist in nature, since the complexity of human identity goes beyond the layers included in the model. Yet, it is my belief that McAdams's dynamic conception of layered personality characteristics is a far more realistic representation than the traditional 'individual differences myth' and – most importantly from the vantage point of the current volume – it allows for meaningful interfaces with Complexity Theory. Larsen-Freeman (this volume) underlines the fact that metatheories such as Complexity Theory are ubiquitous and affect every aspect of our investigations by applying to a number of domains – the overview presented in this chapter indicates that the area of learner characteristics is without any doubt one of the key domains this observation applies to. Past research has confirmed Larsen-Freeman's assertions that there is "considerable intra- and inter-learner variability in development" (No. 14 of her key observations) and that "so-called individual differences are not stable and monolithic traits" (No. 15), and this chapter explored the ways by which we may reframe learner characteristics in the light of these premises.

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## References

- Ackerman, P. L. (2005). Personality, trait complexes and adult intelligence. In A. Elias, S. E. Hampson, & B. De Raad (Eds.), *Advances in personality psychology* (pp. 91–112). Hove, East Sussex: Psychology Press.
- Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin*, 121(2), 219–245. doi:10.1037/0033-2909.121.2.219
- Ackerman, P. L., & Kanfer, R. (2004). Cognitive, affective, and conative aspects of adult intellect within a typical and maximal performance framework. In D. Y. Dai & R. J. Sternberg (Eds.), *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development* (pp. 119–141). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ackerman, P. L., Chamorro-Premuzic, T., & Furnham, A. (2011). Trait complexes and academic achievement: Old and new ways of examining personality in educational contexts. *British Journal of Educational Psychology*, 81, 27–40. doi:10.1348/000709910X522564
- Barkhuizen, G. (Ed.). (2013). *Narrative research in applied linguistics*. Cambridge, UK: Cambridge University Press.
- Barkhuizen, G., Benson, P., & Chik, A. (2014). *Narrative inquiry in language teaching and learning research*. New York, NY: Routledge.
- Bell, J. S. (2002). Narrative research in TESOL. Narrative inquiry: More than just telling stories. *TESOL Quarterly*, 36(2), 207–213. doi:10.2307/3588331
- Benson, P., & Nunan, D. (Eds.). (2004). *Learners' stories: Difference and diversity in language learning*. Cambridge, UK: Cambridge University Press.
- Bruner, J. (1987). Life as narrative. *Social Research*, 54(1), 11–32.
- Carver, C. S., & Scheier, M. F. (1999). Themes and issues in the self-regulation of behaviour. In R. S. J. Wyer (Ed.), *Perspectives on behavioral self-regulation* (pp. 1–105). Mahwah, NJ: Lawrence Erlbaum Associates.
- Costa, P. T. Jr., & McCrae, R. R. (1985). *The NEO personality inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T. Jr., & McCrae, R. R. (2008). The revised NEO Personality Inventory (NEO-PI-R). In G. Boyle, G. Matthews, & D. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment, Volume 2, Personality measurement and testing* (pp. 179–199). London: Sage. doi:10.4135/9781849200479.n9
- Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology*, 70, 519–538. doi:10.1348/000709900158281
- Dörnyei, Z. (2001). *Teaching and researching motivation*. Harlow, UK: Longman.
- Dörnyei, Z. (2009a). Individual differences: Interplay of learner characteristics and learning environment. In N. C. Ellis & D. Larsen-Freeman (Eds.), *Language as a complex adaptive system* (pp. 230–248). Malden, MA: Wiley Blackwell.

- Dörnyei, Z. (2009b). *The psychology of second language acquisition*. Oxford, UK: Oxford University Press.
- Dörnyei, Z. (2014). Researching complex dynamic systems: 'Retrodictive qualitative modelling' in the language classroom. *Language Teaching*, 47(1), 80–91. doi:10.1017/S0261444811000516
- Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. New York, NY: Routledge.
- Dörnyei, Z., MacIntyre, P. D., & Henry, A. (2015). Introduction: Applying complex dynamic systems principles to empirical research on L2 motivation. In Z. Dörnyei, P. D. MacIntyre & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 1–7). Bristol, UK: Multilingual Matters.
- Ellis, N. C., & Larsen-Freeman, D. (2006). Language emergence: Implications for applied linguistics – Introduction to the special issue. *Applied Linguistics*, 27(4), 558–589. doi:10.1093/applin/amlo28
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26–42. doi:10.1037/1040-3590.4.1.26
- Hyvärinen, M. (2010). Revisiting the narrative turns. *Life Writing*, 7(1), 69–82. doi:10.1080/14484520903342957
- Kalaja, P., Menezes, V., & Barcelos, M. F. (Eds.). (2008). *Narratives of learning and teaching EFL*. Houndmills, UK: Palgrave Macmillan.
- Kenyon, G. M., & Randall, W. L. (1997). *Restorying our lives: Personal growth through autobiographical reflection*. Westport, CT: Praeger.
- Kluckhohn, C., & Murray, H. A. (1948). Personality formation: The determinants. In C. Kluckhohn & H. A. Murray (Eds.), *Personality in nature, society, and culture* (pp. 35–48). London: Jonathan Cape.
- Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford, UK: Oxford University Press.
- Larsen-Freeman, D. (2012). Complex, dynamic systems: A new transdisciplinary theme for applied linguistics? *Language Teaching*, 45(2), 202–214. doi:10.1017/S0261444811000061
- Lewontin, R. (2000). *The triple helix: Gene, organism, and environment*. Cambridge, MA: Harvard University Press.
- McAdams, D. P. (1993). *Personal myths and the making of the self*. New York, NY: Guilford Press.
- McAdams, D. P. (2006). *The redemptive self: Stories Americans live by*. New York, NY: Oxford University Press. doi:10.1093/acprof:oso/9780195176933.001.0001
- McAdams, D. P. (2012). Exploring psychological themes through life-narrative accounts. In J. A. Holstein, & J. F. Gubrium (Eds.), *Varieties of narrative analysis* (pp. 15–32). Thousand Oaks, CA: Sage. doi:10.4135/9781506335117.n2
- McAdams, D. P., & Adler, J. M. (2010). Autobiographical memory and the construction of a narrative identity: Theory, research, and clinical implications. In J. E. Maddux, & J. Tangney (Eds.), *Social psychological foundations of clinical psychology* (pp. 36–50). New York, NY: Guilford Press.
- McAdams, D. P., & Bowman, P. J. (2001). Narrating life's turning points: Redemption and contamination. In D. P. McAdams, R. Josselson, & A. Lieblich (Eds.), *Turns in the road: Narrative studies of lives in transition* (pp. 3–34). Washington, DC: American Psychological Association. doi:10.1037/10410-001
- McAdams, D. P., & McLean, K. C. (2013). Narrative identity. *Current Directions in Psychological Science*, 22(3), 233–238. doi:10.1177/0963721413475622

- McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61, 204–217. doi:10.1037/0003-066X.61.3.204
- Mercer, S. (2013). Working with language learner histories from three perspectives: Teachers, learners and researchers. *Studies in Second Language Learning and Teaching*, 3(2), 161–185. doi:10.14746/ssl.2013.3.2.2
- Pavlenko, A. (2002). Narrative study: Whose story is it anyway? *TESOL Quarterly*, 36(2), 213–218. doi:10.2307/3588332
- Şimşek, E., & Dörnyei, Z. (2017). Anxiety and L2 self-images: The ‘anxious self’. In C. Gkonou, M. Daubney & J. -M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 51–69). Bristol, UK: Multilingual Matters.
- Wright, A. (2009). *Storytelling with children* (2nd ed.). Oxford, UK: Oxford University Press.