

A Theoretical Perspective on the Status of Flow in SLA

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This paper aims to situate Csikszentmihalyi's (1997) concept of *flow* within the SLA literature. Flow is the experience of optimal performance, where concentration is solely dedicated to the task at hand, where the sense of time and the sense of self seem to vanish, and where pure enjoyment is experienced. I first draw attention to the field of positive psychology (where the concept originally emerged), then I focus on the relationship between attention, learning, and flow. The last two notions go hand in hand. The question considered, then, is how important is attention to the experience of flow? If flow is indeed an instance of learning, what type of learning does it fall into with respect to the intentional-incidentality dichotomy? After a short examination of the role of affect in the current literature, I turn to the discussion of some major studies that have been done on flow and their implications for classroom practitioners.

Keywords: flow, task-specific flow, attention, learning, emotion, positive psychology

INTRODUCTION

Why do some people seem to learn a language more easily than others? Which variables account for this difference? And how significant is motivation to language learning? Indeed, many factors come into play when learning a second language. We may distinguish language-related impediments, such as its phonological sound system or grammatical complexity; and cognitive factors including, but not limited to, one's ability to comprehend, store, and use information in a targeted manner; interference and influence of the first language (L1) on the acquisition of the second one; or for our purposes, motivation to learn a foreign

language, which is arguably an internal, brain-based drive. In the field of second language acquisition (SLA), motivation has occupied an idiosyncratic place. Because of its multifaceted nature of combining psychology and second language acquisition theory, it has moved through several stages since its introduction to the field of applied linguistics. These stages reflect the shift in linguistics and cognitive science that occurred forty to fifty years ago, when the cognitivist view saw the light, mainly due to works of numerous scholars such as the linguist Noam Chomsky.

In what comes next, we are limiting our discussion to one influential motivational drive, a state called *flow*. We shall first see how flow emerged as an important theoretical concept in positive psychology and then analyze the relationship between it, attention, and learning. Finally, while giving an overview of the main studies on flow in SLA, we draw some possible implications of being in that state, both for students and teachers.

FLOW IN POSITIVE PSYCHOLOGY

Evolution endowed our species, *Homo sapiens*, with complex brains, sophisticated physiology, and innate basic drives to ensure survival. Modern humans have come to dominate the animal world on every possible level. Because of our ease of adaptability to our environments and our use of an elaborate language system, unlike any we have witnessed in the animal world, our ancestors carved megaliths, built pyramids, and not so long ago, composed symphonies that potentially resonate with any human being. But these perks also allowed for significant pitfalls to emerge.

Although our innate physiological and psychological systems might have evolved to enhance the likelihood of our ancestors' survival, their effects may be unwarranted for life in our modern societies. The psychological underpinnings that cause our unhappiness are deeply ingrained in our biological design. Take for example the quest of finding the right mating partner. If our ancestors, indeed, lived in small groups, then the choice of a mate would not have been so excruciating; living in a small tribe entails that one would come to form strong bonds with almost everyone in the community they live in. Hence mate selection is easier and satisfactory. In contrast, in our current societies, we tend to

lead isolated, family-focused lives that limit our interactions. Due to our large populations, the possibilities of finding a potential mate are so endless as to be aleatory. Technology and social networks exacerbate this phenomenon by providing us with limitless ideals that could lead to frustration, depression, and loneliness. More generally, this sharp mismatch between our current and ancestral societies may hinder psychological growth and affect the quality of our lives (Buss, 2000).

The field of positive psychology, thus, was borne out of an acknowledgment of our evolutionary make-up and a desire to transcend it. Psychology traditionally aimed at treating mental illness. In contrast, positive psychology asserts that the former goal is insufficient for achieving happiness in life. By focusing on one's subjective experience, the question that guides researchers in this field is "what makes life worth living?"

Martin Seligman and Mihaly Csikszentmihalyi gave solid foundation to the field in their introductory paper "Positive Psychology: An Introduction," published in the *American Psychologist* in the year 2000. The authors ascertain their high confidence in the inception of the field: "We believe that a psychology of positive human functioning will arise that achieves a scientific understanding and effective interventions to build thriving in individuals, families, and communities" (p. 13). As the authors predicted, the field has grown to be quite influential on all of those three dimensions. Organizations such as Gallup are constantly measuring "well-being." Moreover, insights from the field have been applied across several disciplines, including economy, business, sports, and education, both on an individual and a collective level.

A major experience that has proven to be a positive contributor to happiness and well-being is Csikszentmihalyi's concept of flow. Upon interviewing and observing people from several disciplines, including musicians, athletes, and physicians, Csikszentmihalyi (1997) defined flow as a state of "optimal experience" that occurs when people feel "the sense of effortless action ... in moments that stand out as the best in their lives" (p. 29). When we are in flow, our attention is solely focused on the task at hand, the sense of time seems to disappear along with a dissolution of our identity, and the experience itself rewards enjoyment and aliveness.

But there are a few conditions required for flow to happen. First, when performing an activity, the goals need to be crystal clear. Moreover, the individual has to receive immediate feedback on his

actions. Finally, one has to have enough skills to meet the challenges presented. A highly skilled chess grandmaster might get bored if facing the average chess player. Alternatively, the chess player might become anxious when confronting the grandmaster. Therefore, it is crucial for the activities to provide enough balance for flow to emerge.

Education is one area where flow could have a notable impact. Teachers often complain that their students don't pay attention in class; blame is often assigned to the students because of their incompetence, background, or laziness. But these critics are missing the point: We learn when we are deeply invested in the material in front of us. Although not all students share the same interests, the way teachers present the activities and how they conduct them are the defining features of a successful classroom. More specifically, to eliminate all doubts, I would argue that learning can only occur once the students are in a state of flow.

In what comes next, we shall focus on the main research that has been done on flow, specifically as it relates to second language acquisition and the teaching of English as a second language. Before doing so, we first consider the relationship between flow and learning with a focus on attention.

ATTENTION, LEARNING, AND THE ELEPHANT IN THE ROOM

What is the role of attention in learning a second language, and how does the state of flow influence learning and attention?

In his seminal paper, "The Role of Consciousness in Second Language Acquisition," Schmidt (1990) argues that "noticing" is a necessary condition for learning a second language. When we notice something, we are aware of it from a subjective point and can, in principle, compare it to other noticed objects in the environment. Furthermore, Schmidt posits that the more we notice and "pay attention," the more we can learn. "Incidental learning," which happens when one has no intention of learning, is desirable and effective when the task at hand demands heightened attention.

It is tempting to claim that being in flow is a form of incidental learning. However, just because there is no deliberate control of attention does not mean that one is not aware of what is being learned. When we are absorbed in an activity to the point of being in flow, the cognitive

effort required to exercise control over attention is relinquished and is transferred to other cognitive mechanisms that directly interact with the main task (Kahneman, 2011). In other words, noticing is not a condition for learning while in a state of flow. We may, therefore, speak of “unconscious noticing” to designate those moments where the internal second language prototype undergoes instances of modification and amelioration to match an unconscious conceptualization of the second language as represented in the minds of its native speakers. Whether or not the subjective agent is aware of this process should not influence the learning of the second language.

For Csikszentmihalyi (2014), the state of flow is an instance of intentional learning that is intrinsically motivated and autotelic, which is to say that it is pursued for its own sake, not because of some extrinsic reward. Learning, in his view, should emphasize the acquired knowledge as well as the emotional current experienced and its effect on one’s growth and flourishing, and being in flow exemplifies these three dimensions.

Recent publications in SLA are now shifting the focus of the field towards a more positive, hedonic perspective. In a recent issue, Matthew Prior (2019) compares the status of emotions in SLA to the elephants in the room, a metaphor he borrowed from Swain. He observes that the field has been characterized by two facts: a focus on language, its use, and its relation to the human brain; and a misunderstanding of the role of emotions. Therefore, SLA is now undergoing an “affective turn” aimed at restoring the “imbalanced relationship” between cognition and emotion (Bigelow, 2019, p. 516), and this turn is not solely constrained to SLA.

At this point, we may go back to the evolutionary origins of affective variables, if only to point out how scientists in general are becoming more aware of the role of affect in our understanding of the human condition. The neuroscientist Antonio Damasio, for instance, has much to say about this topic. In a podcast with quantum physicist Sean Carroll (2019), Damasio shared Prior’s concerns about the focus on cognition in research. He asserts that we have gone too far to the point where we have forgotten that “there is something that from a point of view of evolution precedes all of that cognitive development. And that has to do with feeling, with affect” (0:03:45). Our states of affect are engendered by a combination of bodily and nervous system processes. Damasio argues that these states of affect are the product of our organism when it tries to achieve *homeostasis*, a dynamic (not a stable)

process that keeps the organism alive and functioning. Central to his proposals is the distinction between emotions and feelings. Emotions, for Damasio, emerged long before feelings. They are a set of actions (primarily originating within the body) created by evolution and “complemented by a cognitive program” (Damasio, 2012, p. 88). Whereas feelings are states that describe the reflections on those actions by the agent experiencing them, along with a simultaneous reflection on our mental states. In so doing, we are able to navigate a continuum of homeostatic states that we can describe as good or bad, optimal or undesirable. In the same podcast (Carroll, 2019), Damasio draws our attention to *well-being*, a term that “describes something that in the general distribution of states of life goes towards the good” (0:17:13).

Some might contend that emotions are nothing more than non-physical mind constructs that get their meaning from other related concepts (Schuman, as cited in Bigelow, 2019). But this claim presupposes an answer to the hard problem of consciousness (Chalmers, 1996). We still do not know how consciousness relates to the physical world. However, we can say, with a high degree of confidence, that there is such a thing as to experience anger, joy, and sadness. Moreover, we know, as a matter of empirical neuroscientific inquiry, that these states correlate positively with brain activity in several regions in the brain, including the visceral motor system, the limbic system, and especially the amygdala (Purves et al., 2004).

MAJOR STUDIES ON FLOW IN SLA AND THEIR IMPLICATIONS

In the field of second language acquisition, *flow* is a relatively new concept that has been seldom studied. Within the theoretical framework of SLA, flow can be considered a form of intrinsic motivation, an “inherent tendency to seek out novelty and challenges, to extend and exercise one’s capacities, to explore, and to learn” (Ryan & Deci, 2000, p. 70). Intrinsic motivation is a main component of self-determination theory, which asserts that human beings have three innate drives or needs that foster well-being: competence, autonomy, and relatedness (Ryan & Deci, 2000). Whereas “competence” refers to one’s perception of her abilities, “autonomy” designates the feeling of control that all humans share, and it could be synonymous with freedom of will. “Relatedness,” not least, denotes our sense of community and belonging.

Correlating these intrinsic and extrinsic factors with the dominant orientations in L2 theories was one of the main objectives of researchers advocating for self-determination theory (Dörnyei & Ryan, 2015).

Flow also denotes the experience of optimal engagement with a task. Philp and Duchesne (2016) acknowledge the implicit assumption within SLA that engagement (in some form) does lead to “optimal learning” but stress that the concept has rarely been studied nor formulated into a coherent theory. To that effect, they propose a multidimensional model of engagement: cognitive engagement (relating to cognitive mechanisms that require effort and deliberate control), behavioral engagement (characterized mainly by the duration of time spent on the task), emotional engagement (the extent to which one’s “states of affect,” to borrow Damasio’s term, influence their own perception of learning and their learning environment), and finally social engagement (referring to the actual environment of study and how it affects learning, including peer-interactions). Under this conceptual light, Philp and Duchesne (2016) suggest that flow is what happens when all these dimensions come into play; it’s the “ultimate in engagement” (p. 59).

Because of their modern nature, the studies conducted on flow focus mainly on the frequency of its occurrence. Some studies also investigate classroom versus task-based flow. While the former designates instances of flow that happen when one is in the foreign language classroom, the latter aims to find correlations between tasks (including designs and features) and reports of flow experience while doing them.

Abbot (2000), for instance, examined the relationship between flow and writing. In her case study of two boys in fifth grade, she collected data (interviews, field notes, writing samples) over a period of four months. The data showed that the boys conveyed their flow experiences through similar descriptions to those used by adolescents and adults in previous studies on flow. Moreover, these descriptions are consistent with some conditions of flow, namely, a merging with the self with the activity, high concentration while writing accompanied with confidence in the ability to do so, and “obliviousness” to the sense of time. In addition, the social context greatly impacted the frequency of being in flow. When the boys were in fourth grade, they had an enthusiastic teacher who applauded critical and independent thinking; consequently, the boys reported experiencing more flow in her classroom. In contrast, when the boys moved to fifth grade, their teacher, unfortunately, was quite controlling in comparison, both on the level of instruction and

interaction. To find their affective (i.e., homeostatic) balance, one boy decided to move to another school, while the other searched for ways to work on his personal writing in the classroom. Abbot concludes that teachers might want to consider giving learners more autonomy and control over the tasks and to avoid conflict.

That autonomy-promoting settings allow for flow to emerge has been corroborated by subsequent studies. In a series of interviews with ten teachers who reported experiencing flow in the EFL classroom, Tardy and Snyder (2004) observe that two characteristics of teacher flow, “authenticity” and “spontaneity,” might be responsible for fostering the ideal circumstances for flow to occur primarily for teachers but also for students. On authenticity, one teacher in describing her flow experience reported that it happened when the classroom discussions “became real, like it wasn’t discussing these artificial things for a purpose anymore, but really discussing things that they were interested in” (p. 121). Another participant in reporting whether teachers should consciously aim to attain flow stated, “I think you can plan toward it, that you can be very well prepared and just sort of hope that it happens,” suggesting that spontaneity is more favorable than control (p. 121). The authors allude to the fact that teacher autonomy offers a degree of flexibility in leading the course and in designing lesson plans, and hence giving opportunities to their students to engage in activities and topics that appeal to them. This focus on cognitive and emotional engagement may, in accordance to Philp and Duchesne’s (2016) multidimensional framework, lead to more students experiencing flow.

But perhaps the pioneering study that applied flow theory to language learning is Egbert’s (2004) examination of 13 high school students learning Spanish as a second language. Based on the works of Csikszentmihalyi, Egbert proposed four variables related to the emanation of flow: (a) a balance of challenge and skills that attracts one’s attention to be focused on the task, (b) a subjective cognizance that attention is dedicated to the task at hand, (c) the learner finds satisfaction and pleasure in carrying out the task that is both interesting and authentic, and (d) the learner feels control over the activity. Relying on a mix of qualitative and quantitative methods, including interviews and questionnaires, participants’ flow was measured based on their performances on seven tasks. The results showed that 92% of the participants experienced flow in at least one task. Furthermore, the same percentage of students went through the “optimal experience” of flow as

they were doing Task 5, in which they needed to interact via a computer with native Spanish speakers about a topic of choice. Although the success of this task might be attributed to an increased sense of control and autonomy, Egbert cautions against interpreting this finding as giving control more weight in comparison to the other three variables; at the same time, she deduces that it is permissible to evoke the notion of flow-inducing tasks, since more or less the same regularities of flow were observed across all tasks (Egbert, 2004).

A relatively recent study of 85 first-year EFL college students at a Hungarian university sheds some light on the interplay between classroom flow and task-specific flow. In a quantitative investigation that relied on questionnaires as its data input, Czimmermann and Piniel (2016) concluded that more than two thirds of the participants – all of whom had an upper-intermediate level in English or higher – experienced classroom flow. To arrive at this finding, the researchers presented a scale of 11 items to which participants were given a 5-point scale response range (from *rarely* to *almost always*), by which the authors could estimate the degree to which Egbert's defining characteristics of flow (skill/balance, attention, interest, control) were present. As for the second type, task-specific flow, a similar questionnaire was administered, after the participants completed a task in which they had to rearrange pictures in a specific order that told a story. This time, participants had to use another 5-point scale to express their agreement or lack thereof (from *strongly disagree* to *strongly agree*) vis-à-vis 15 items. Again, data analysis indicated that about 71% (more than two thirds) of the students experienced task-specific flow. A minor correlation was also established between the two types of flow as well as between their individual components, leading the researchers to conclude that both types are related but not the same construct (Czimmermann & Piniel, 2016). University EFL students, not least, were found to have a higher tendency to engage in flow experiences than their high school counterparts (from a previous study). The reasons might be that university students, in general, tend to focus on areas of inquiry that appeal to them, and in which they have a decent amount of knowledge and skill, factors that may foster more conditions for flow.

FLOW IN THE ESL CLASSROOM

In order for teachers to increase the likelihood of flow occurrences for their students, they first need to be able to identify it as it happens. This process is important because it not only challenges the teachers' understanding of flow but also reminds them that teaching, at its core, is a moment-by-moment experiential endeavor. Therefore, there can only be one place where students and teachers meet: the present moment. And in that space, the signs of being in flow will reveal themselves. A teacher, for instance, might notice that shortly after presenting an activity, students seem completely engaged in it. Or that, while leading a whole classroom discussion, every student is being attentive, inquisitive, and seems on the verge of contributing their opinions. Also, students can feel challenged by each other and not necessarily by the teacher, if they reply to each other's comments without any interference from the teacher. These are the moments of flow that we need to pay attention to.

Still, teachers need to aim, as much as possible, to design tasks that meet the flow criteria. One suggestion here is to incorporate "gameful learning" (Reinhardt, 2019). Games can be an effective and engaging way to induce flow, provided that the challenge level meets students' skills. Moreover, games have a particular feature that distinguishes them from other activities: They give a sense of agency to the player, even if at times that sense may be illusory. When we know, as a matter of experience, that our actions matter and that they have an effect, then we are more likely to push our cognitive abilities to their limits, while also focusing our attention – features of a flow experience. Under this light, it makes sense that learners would more likely be in flow if game tasks are given in a free order rather than arranged in a particular sequence (Reinhardt, 2019).

More generally, game design can inform our L2 curriculum and materials design. For starters, we could strive to make agency a core principle of lesson planning. We are more likely to learn content if we feel that it is relevant to us on a personal level. In practice, and depending on their students' backgrounds and interests, teachers have a responsibility to select content that students can build on and are familiar with, at least in the early stages of the course. Adopting an "old then new" approach to course design reduces demands on one's cognitive resources, which in turn facilitates engagement. Agency also presupposes

choice and acting on that choice. In this respect, we can envision a “open world” game-inspired course, where both the teachers and the students agree on the rules, and where students act on their sense of autonomy to decide which activities to do and when to do them. Not surprisingly, learners are more likely to be in flow if the game tasks are given in a free order rather than arranged in a particular sequence (Reinhardt, 2019). This approach, however, might work best in a small class as opposed to a bigger one, but teachers can always choose to make autonomy one of the main driving principles for course design.

And even if flow does occur in the language classroom, teachers will still need to acquire a myriad of strategies for dealing with and responding to it. In some cases, the teacher might choose to extend the duration of a flow-inducing activity as much as possible, while also making sure that doing so will not affect the students’ learning outcomes for that lesson. If the teacher feels like they have to end that activity after a period of time, then they can build on it and give students a slightly challenging activity that improves their skills in other areas of language learning.

Unfortunately, there are certainly various limitations that can prevent flow from happening. Predesigned curricula imposed by institutions may limit the teacher’s options when selecting learning activities, many of which may be either too difficult or too easy for students to do; consequently, they disrupt the skills–challenges balance required for flow to emerge. Additionally, students’ placement might not be ideal for flow. If a class is not homogeneous enough, then the teacher may spend more time working with students individually rather than collectively. Another impediment, not least, is the students’ subjective state itself. If one is feeling depressed or anxious, then they may not want to engage with learning at all. One wonders, however, whether the activity can be so engaging as to capture the student’s interest regardless of their emotional states; many creative works of art arose out of a state of deep sorrow and sadness. Can learning a language be an art form?

CONCLUSIONS

Owing to its interdisciplinary nature, I have tried to approach the topic of flow in SLA from different perspectives. Flow is the ultimate intentional learning experience, where attention is dedicated to the task

at hand, albeit unwillingly. In the second language classroom, both students and teachers reported having gone through the experience. Age does not seem to be a deciding factor for it to happen. Young learners, adolescents, and adults all potentially engage in such a state. Students and teachers alike are cognizant of the changes in their homeostatic states, and they can discern a flow experience from a non-flow one. This suggests that well-being and learning (in this case a second language) are inextricably linked. Finally, we should remind ourselves of the real purpose in pursuing this line of inquiry: “to make language learning and teaching personally meaningful and enjoyable and to help learners (and teachers) become more resilient to various challenges” (Bigelow, 2019, p. 522).

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