The evolution of L2 education and research:  
An overview of paradigm shifts in applied linguistics

1. Introduction
Rapid changes, increasingly heterogeneous and diverse contexts, followed by new opportunities and challenges, all characterise the dynamic reality of a global world. This dynamism is also reflected in how approaches to L2 education and research have evolved over the last century. Owing to intensified mobility and interconnectedness, there has been not one but two paradigm shifts that can be observed in the last hundred years: from modernism, through postmodernism, towards transmodernity.

The aim of this paper is to make an attempt to capture these paradigm shifts in an effort to better understand the increasingly complex reality of the 21st century L2 classroom. The paper opens with a section devoted to the fragmented and deconstructed postmodern reality and is followed by two research approaches that emerged as a result of this paradigm shift. Both complexity theory and the ecological approach announced the advent of yet another paradigm, i.e. transmodernity. The new perspective to L2 education and research is illustrated with two key concepts embedded within the transmodern paradigm: transcultural identity and translanguaging. Finally, the paper ends with an examination of some implications for L2 researchers and educators, looking into the future.

2. Breaking up with the past
Even though, as Johnson (2001: 64) observes, the intellectual development of thought happens not as a result of a sudden change or shift, but rather emerges from a collective effort without any central force, postmodernism represents an apparent
disillusionment with the modernist and positivist ideals, such as the pursuit of objective truth. The great atrocities of World War II shook intellectuals, artists and philosophers, among many others, to their core, and urged them to question the commonly accepted and promoted values (for an interesting analysis see Guilherme 2002). Values such as progress, improvement, evidence, proof – so praised in the modernist era – have been subjected to scrutiny and reconsideration. This painful collective global experience served as a trigger for a drastic paradigm shift.

Pennycook suggests that “postmodernism should be understood not so much as a canon of thought, but rather as a way of thinking and doing, a sceptical view of the world that tries to take nothing for granted” (2006: 62). In other words, the postmodern paradigm is characterised by deconstruction, the utter questioning of what used to be considered reliable and objective – depriving us from “secure points of reference” (Cilliers 1998: 113), and thus leading to fragmentation and relativity. Indeed, Lee describes postmodernism as “a deep societal questioning of both the means and the ends of science” (1997: 17). As a result, postmodernism embraces an abundance of local narratives and perspectives, also illustrated by the example of the many definitions of postmodernism itself (Cilliers 1998). The juxtaposition of multiple local, subjective narratives with an inability to reach an objective truth makes it impossible to achieve one overarching narrative (Lyotard 1984) and leads to the “communalization of truth” (Bauman 1992: 37).

In L2 education, the postmodern perspective could be best illustrated by Kumaravadivelu's (2003, 2006) postmethod. Instead of focusing on yet another revolutionary teaching method with a specific set of techniques and materials, Kumaravadivelu proposes an alternative to method, which rejects the idea of imposing what to think and what to do, by highlighting a list of macrostrategies that could serve as teaching guidelines, for all L2 teachers. Those macrostrategies are: (a) maximizing learning opportunities, (b) minimizing perceptual mismatches, (c) facilitating negotiated interaction, (d) promoting learner autonomy, (e) fostering language awareness, (f) activating intuitive heuristics, (g) contextualizing linguistic input, (h) integrating language skills, (i) ensuring social relevance, and (j) raising cultural consciousness.

All of these macrostrategies are embedded within three major dimensions of the teaching process, namely: particularity, practicality and possibility. The first dimension focuses on the local and individual context of all the parties involved in the teaching process and reflects the utterly postmodern approach. It stresses the importance of recognizing students’ personal narratives, individual differences, learners’ distinctive needs and the specific classroom environment in which teaching and learning takes place. Practicality, on the other hand, underscores the connection between theory and practice. In other words, it points to the need for an exchange of ideas between researchers, policy makers and practitioners. Finally, the possibility category represents the educational dimension of language teaching; by learning foreign/other languages, students should be equipped with skills and tools that would empower and encourage them to actively participate in the social, democratic life of their communities.
It should be noted here that Kumaravadivelu’s work is deeply rooted in the postcolonial perspective, where language learning also seems to be considered a colonizing instrument. Postcolonial studies aim to expose and question the Eurocentric dominance. By redefining and renegotiating the postcolonial identity, which often takes place in what Bhabha (1994) calls *Third Space*, students become liberated from the oppressing “monolingual macro-order” (Creese and Blackledge 2010: 104). Channelling the voices of the oppressed and excluded, as well as dealing with the issues of social injustice, exploitation and discrimination, is what lies at the heart of the postmodern paradigm.

The emphasis placed on empowering students and teachers to become “engaged intellectuals” (Giroux 1993: 11) is also strongly connected to the premises of Critical Pedagogy. Paulo Freire, the father of Critical Pedagogy, considered the modern schooling system to be an oppressing environment and argued for a revolution, or “awakening”, that would promote such values as trust, engagement and democracy in education (Freire 1970, 1974). Freire (1970) believed that people should be trusted and given the opportunity to take control of their lives in order to fully govern themselves. In the educational context, this would be translated into entrusting students with the process and empowering them to make more informed choices. According to Henry Giroux, Critical Pedagogy:

> does not simply tell the student how to think or what to believe, but provides the conditions for a set of ideological and social relations which engender diverse possibilities for students to produce rather than simply acquire knowledge, to be self-critical about both the positions they describe and the locations from which they speak, and to make explicit the values that inform their relations with others as part of a broader attempt to produce the conditions necessary for either the existing society or a new and more democratic social order (Giroux 1993: 38).

As a result, students are no longer treated as mere recipients but rather co-creators of knowledge and “autonomous thinkers” (Mezirow 1997), who actively participate in the process of interpreting and producing knowledge. The teachers’ role, therefore, is to encourage learners to actively participate in the process of interpreting, producing and co-creating knowledge; not only to be present “*in the world*” but also to “engage in relation with the world” (Freire 1974: 39). The realisation that meaningful learning can only take place in a synergy between the interconnected components and agents involved in the process is what marks the beginning of yet another paradigm shift.

3. The emergence of new approaches – complexity theory and the ecological perspective

The fragmented and deconstructed postmodern reality provided a fertile ground for the emergence of new approaches to L2 education. Both the complexity and the contextuality of human interactions are at the heart of two strands of L2 education and research: complexity theory and the ecological approach.
3.1. Complexity theory

As observed by Smith and Higgins (2003), there is a growing popularity of scientific theories being incorporated into social and cultural studies. One of the most prominent examples is the adoption of complexity theory as a framework for explaining the intricate processes of L2 teaching and learning. The revolutionary discoveries in quantum physics, often referred to as “the mother of all complexities”, laid the foundation for watershed changes in the way reality is perceived and described. The most complicated mechanisms of evolution, traffic jams, sociology, urbanisation, disease, and many others (Johnson 2007) are explained by relying upon complexity theory and the concept of a complex adaptive system (for more recent developments in the research of complexity theory in applied linguistics see Sampson and Pinner 2021).

A complex adaptive system, as a unit of complexity theory, has been introduced to better understand the “emergent phenomena which are surprising, extreme and self-generated” (Johnson 2007: 19), and is characterised by five key features. A complex adaptive system is: (a) interconnected, (b) emergent and self-organizing, (c) non-linear, (d) feedback sensitive, and (e) open. The interconnectedness is illustrated by constant interactions and a network of relations between different elements and agents co-operating within the system. It refers to the collective behaviour of particular constituents and allows for a better understanding of how the system operates, without the need to attend to each individual component. The fact that those components organise themselves without any external controlling force means that the system is emergent and demonstrates the ability to self-regulate. The self-organizing capacity is intensified by its non-linearity, which means that even the smallest, least significant event might have a disproportionate impact on how the system operates. By breaking up with the causal way of thinking, it is possible to observe and get a deeper insight into seemingly unpredictable phenomena, such as traffic jams. Moreover, what makes a complex system adaptive is its ability to respond to external factors affecting the way in which the system operates and to adapt to changes in its environment. In other words, the system has the capacity to learn and memorise new information. It also indicates that the system is open, with no well-defined beginning or end.

In L2 education, the metaphor of the brain as a computer has lost its lustre and is no longer considered accurate, which is why complexity theory has been introduced as an alternative metaphor to better illustrate how random, unpredictable, flexible and dynamic language teaching and learning is (see, e.g., Larsen-Freeman 1997; Kramsch 2002; Larsen-Freeman and Cameron 2008) and how L2 teachers perform their roles as “agents of chaos” (Cvetek 2008: 253).

It is possible to explain some features of L2 teaching and learning by adopting the metaphor of a complex adaptive system. First of all, language as a system relies upon a network of interconnected subsystems, such as morphology, syntax or phonology. On the interpersonal level, language teaching and learning can be seen as a collaborative effort of the L2 users, who interact with one another and by these very interactions have an impact on language itself. The emergent quality
of L2 teaching and learning is expressed by the difficulty in predicting students’ success, as there is no fixed recipe for becoming a proficient L2 user – it depends on the context and individual differences of each speaker. It is also connected to non-linearity – the same initial condition, for example, a group of beginners of a given language, exposed to the same treatment, such as a particular teaching method, will show different outcomes. What is also important to highlight is the significance of regress in achieving language success. Many L2 teachers can relate to this, as it is virtually impossible to predict when an L2 learner will actually learn and internalise the new learning material. The fact that students are exposed to L2 input outside the classroom, largely owing to the Internet, also contributes to this situation. When we look at the feedback sensitivity of L2 teaching and learning it can be observed that “while rules can be used to describe such systems, the systems themselves are not the product of rules” (Larsen-Freeman 1997: 148). In other words, language use is context-dependent and adapts to the changes in its environment – an issue further explored by researchers interested in critical language awareness (e.g., Corson 1997; Duff 2004; Morgan 2004; Smitherman 2004). Finally, L2 learning is a process with no end in sight as “the target is always moving” (Larsen-Freeman 1997: 151), which can appear to the learners as both frustrating and inspiring.

3.2. The ecological approach

The ecological approach sheds some new light on the way L2 education and research are perceived (Kramsch 2008; Larsen-Freeman 2018), and it shares some of the premises with complexity theory (see Kramsch 2011b). Language ecology, or ecolinguistics, is defined by Haugen as “the study of interactions between any given language and its environment” (2001: 57). Even though there is a research strand that focuses more on the literal meaning of ecology (e.g., Halliday 2001), in the context of L2 teaching and learning the research on ecolinguistics is dominated by the metaphorical and more symbolic interpretation of the concept of ecology (Steffensen and Fill 2014). Nonetheless, Kramsch points to the “embodied nature of learning” (2011b: 16) and claims that language learning requires not only cognitive and affective effort, but is also arguably a bodily experience – it is an observation ecolinguists share with cross-cultural psychologists (see, e.g., Valsiner 2014). From the ecological perspective, it seems important to recognise the interrelationships between body and its environment as crucial components of an ecosystem.

The metaphor of an ecosystem was introduced into educational research most noticeably by Bronfenbrenner (1979, 1993), who presented a network of ecosystems – all of which are dependent on one another, yet operate autonomously within their own cycles. The author identified four interrelated ecosystems:

1. microsystem: focusing on a learner’s most immediate surroundings and the interactions taking place within this unit;

2. mesosystem: relating to interactions from outside the immediate circle that nonetheless play a crucial role in a learner’s development, such as a school or neighbourhood;
(3) **exosystem**: referring to agents and environments more distant from a learner whose more general policies and actions might influence the functioning of the whole system;

(4) **macrosystem**: embracing all the above-mentioned subsystems and the general socio-cultural context of the learner.

Bronfenbrenner’s model highlights two crucial aspects of an ecological approach to L2 education: the importance of interrelationship between particular agents within an ecosystem, and the relevance of context in performing any action within the system. In this respect, ecolinguistics cherishes diversity and heterogeneity of an L2 classroom and promotes activities that challenge imperialistic policies (for an interesting perspective see Cook 2007) or the monolingual ideologies (Creese and Blackledge 2010) on the one hand, and protects endangered, indigenous languages and their users on the other. However, what needs to be stressed is the pivotal role of *balance*, as emphasised by van Lier (2004), which lies at the heart of any ecosystem.

What distinguishes the ecological approach from other trends in L2 research is the attention drawn to the continuous debate on standards vs quality. Van Lier (2004) makes an important distinction between *quality* of learning and *standards* of learning. He argues that pursuing high standards of education does not necessarily lead to achieving high quality of educational experience. Higher educational standards are often measured by tests and questionnaires, focusing on obtaining quantitative data, yet the quality of learning is often related to anything but testing. From the ecological perspective, language learning should contribute to students’ personal growth by coming into meaningful dialogue with the environment (van Lier 2002).

This is also why discourse analysis has gained some attention in L2 education. By focusing on how power dynamics construct and are constructed by discourses, the ecological approach shares a common ground with Critical Pedagogy, which strives for social change and emancipation (for an overview of critical language awareness research see Svalberg 2007; in the Polish context, see, e.g., Lankiewicz 2015). The central role of local narratives and contexts is also in constant interplay with global, transnational identities.

Although the ecological approach shares some of the discontent with terms like “proof” or “generalisability” (van Lier 2004) with the postmodern paradigm, this novel perspective embraces the complexity of contemporary human relations and allows for a smooth transition towards transmodernity.

**4. Towards transmodernity**

The void created by the deconstruction, fragmentation and relativisation of the fundamental concepts and ideals made it possible to notice and redefine the asymmetric power relations in general, and in language education in particular (see, e.g., Kramsch 2008). Yet, it has become no longer possible to explain and describe the increasingly complex reality, so, as Rifkin observantly states, “humanity finds itself, once again, at a crossroad between a dying old order and the rise of a new age”
The evolution of L2 education and research... (2005: 181). The new paradigm has managed to fill this void by transcending the (post-)modern values in search for a more multi-layered description of the intricate reality, which is characterised by liminality, holism, interconnectedness, fluidity and dynamism. Following Hegel’s dialectic triad, transmodernity represents the synthesis of modernity and postmodernity, relying heavily on the achievements and discoveries of both perspectives (Ateljevic 2013: 39). The transmodern perspective has become the focal point of reference for many L2 researchers and educators (e.g., Kramsch 2011a, 2014, 2018; Canagarajah 2013, 2018; Larsen-Freeman 2017, 2018; Pennycook 2018).

There are two major factors that are inextricably linked with the emergence of the transmodern paradigm, namely: hyperconnectivity and superdiversity. Hyperconnectivity is a term used to describe communication systems that transcend the limits of space and time (Fredette et al. 2012); the fact that it is possible nowadays to watch an event taking place on the other side of the globe in real time from the comfort of our homes for free, illustrates this phenomenon perfectly. Superdiversity, on the other hand, refers to the increased mobility of people and the variety of different migration strategies, which make it almost impossible to predict which category should be ascribed to a particular migrant (Blommaert and Rampton 2011). The rising number of transnational families, maintaining bonds with usually more than two culturally distant communities, is only one of many trends that can be observed nowadays. There are two major concepts that perfectly illustrate the transmodern paradigm, i.e. transnational identity and translanguaging.

4.1. Transnational identity

As indicated above, the 21st century language classroom has been reshaped by the influence of hyperconnectivity and superdiversity, caused by increased mobility and the seemingly transcendent capacity of the Internet. The fact that there is a rising number of transnational families who decide on maintaining business and family relations across borders, very often communicating in English as a Lingua Franca (Jenkins 2007), indicates that the concepts of nation, national identity, and society are subjected to constant questioning and redefining. Apart from the apparent benefits of maintaining transnational bonds, such as the exchanging of resources, ideas and behaviours, there are still some challenges that are investigated by researchers in the field of intercultural education. An interesting case study of Chinese EFL students (Song 2012) may serve as a perfect illustration. A transnational group of Chinese students decided to migrate to the Inner Circle countries to learn the language by immersing themselves in the natural setting. Their intention was to embark on a short-term migration, learn the language, experience living in the target language country and then return to China. It was interesting to observe that, contrary to some expectations, those students who returned and re-entered their educational environments faced some difficulties assimilating at home. They became the “newcomers”, inhibited by their transcultural experience, who had to reintegrate into their home society. As Canagarajah observes, “mobility makes people out of place” (2013: 21) and that is one of the many reasons why L2 researchers decided to investigate the transnational identities of L2 learners and teachers
4.2. Translanguaging

Increased mobility and more and more diverse migration strategies have also had an impact on how languages are perceived and used in the transnational context. One of the most significant shifts towards transmodernity is reflected in challenging what Creese and Blackedge call the “monolingual macro-order” (2010: 104). In other words, the structuralist approach to languages, where languages are seen as closed and separate systems, seems to be no longer accurate in describing the translingual experience of migrants. Due to increasing deterritorialisation, languages are losing their tight connections with national boundaries. In fact, we are moving into the direction of a dynamic, integrative and transformative use of languages (Lewis, Jones and Baker 2012). Instead of separating languages, translilingual researchers put forward an alternative, i.e. translanguaging, by treating multilingualism as a form of a language repertoire with “an accumulation of semiotic resources” (Hawkins 2018: 58) where languages co-exist and resemble heteroglossia. In this respect, translanguaging is a creative, interactive and context-dependent act.

The translilingual practice can be best illustrated by Canagarajah’s codemeshing strategy (2011, 2013), where students are encouraged to incorporate all of their linguistic resources from their “language repertoire” in the academic context. By allowing students to speak their minority languages, the author introduces “alternative discourses” (Canagarajah 2013: 113), promotes language plurality, encourages identity formation and allows for an utterly transformative and liberating practice. Allowing L2 learners to negotiate their complex language and cultural identities is also an important issue raised in post-colonial studies (e.g., Spivak 1985; Bhabha 1994; Pennycook 1998; Canagarajah 1999).

It is important to note at this point that translanguaging is a phenomenon that can also be observed outside the classroom. Godwin-Jones (2018) observes that the multimodal and translilingual potential of internet communication in general, and social media in particular, opens up new possibilities of linguistic expression and communication. The expansion of the language learning environment makes it possible for the learning process to also take place outside the classroom, where the learning is implicit, unmonitored, uncontrolled and unpredictable (Godwin-Jones 2018). Social media platforms also offer an invaluable insight into their users’ spontaneous translilingual practices, or digital translanguaging (Schreiber 2015; Kim 2018; Zhao and Flewitt 2020).

5. Teaching implications

As the main scope of the article is purely theoretical and presents merely an overview of the emergent approaches and trends in applied linguistics, I would like to address at this point some of the more practical implications for L2 teachers, educators and researchers, especially those operating within the Polish educational context.
First of all, the transmodern paradigm puts more emphasis on the process rather than on the outcome. It should be stressed here that, from the perspective of complexity theory, it is important to take into account both progress and regress, which is an integral part of the learning process. That is why it would be necessary to question the hegemony of standardised testing by promoting alternative assessment tools and by fostering L2 learners’ self-assessment, challenging as it may seem.

By engaging L2 learners in taking a more active role in the process of L2 learning, the significance of incidental learning should be considered an equally relevant aspect of the teaching process. A variety of new modalities such as social media, video games or YouTube offer different means of expression – there is, therefore, a need to incorporate them into lessons, e.g., in writing classes, in an effort to bring the students’ out-of-the-classroom experience into the process and explore the intricacy of the new communication channels.

The more deterritorialised, post-structuralist approach to language learning should also result in challenging the status of a native-speaker as a role model for L2 learners and teachers. The question each L2 teacher should pose is: whose language should I teach? With the celebration of different dialects, minority languages and endangered languages and with the emergence of translingual practice, mostly accelerated by the possibilities of social media platforms, L2 educators and researchers need to be more open to welcoming and embracing language varieties in their endeavours.

The same applies to the question of whose culture should be discussed in an L2 lesson. The diverse linguistic repertoire brought into the classroom requires some reconsideration of the cultural aspect of language teaching and learning. Culture, defined as a complex and inclusive concept, exposing the layers beneath the surface of a cultural iceberg, often relates to: the knowledge of the other, skills needed to navigate between cultures, attitudes of curiosity and openness, as well as the metacultural dimension, like cultural sensitivity or critical cultural awareness. There is a need for a more intercultural approach that would encompass the complex cultural identities of all the parties involved in the process and challenge the ethnocentric attitudes.

Despite the fact that Poland is often seen as a linguistically and culturally homogeneous country, L2 educators are expected to navigate through increasingly heterogeneous and diverse contexts; there is a growing number of learners with a range of different needs, cultural backgrounds, migration experiences and transcultural identities. L2 educators in Poland need to be adequately prepared for working with more and more not only culturally, but linguistically, socially and ideologically diverse classrooms.

Finally, by embracing the complexity of L2 teaching and learning, seen also as a complex adaptive system, L2 researchers should focus more on qualitative and ecological research. In other words, the emphasis should be placed on local contexts and participants’ personal narratives, investigating teachers and learners within their environments.
6. Concluding remarks

The aim of the article has been to present and briefly discuss the recent trends in L2 education and research triggered by a recent paradigm shift that has challenged the postmodern perspective and offered a more complex, holistic and ecological insight into the intricate processes of language teaching and learning. Both L2 teachers and researchers need to navigate through an uncharted terrain and adapt to the new contexts that have emerged as a result of this paradigm shift towards transmodernity. The recent global events will definitely impact language education and it surely is interesting to see where the new paradigm will take us.

References


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Abstract
The main aim of the article is to present and discuss the evolution of L2 education and research expressed in two major paradigm shifts that could be observed over the last century: from the modernist approach, through postmodernism and postmethod, to transmodernity. The article also offers an overview of new approaches and trends in L2 education and research that emerged as a result of those watershed changes, in particular: complexity theory, the ecological approach, transnational identity and translanguaging. The paper ends with a brief discussion on how these changes affected L2 researchers and educators and what implications can be grasped.