Introduction

Transdisciplinarity in applied linguistics

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The field of applied linguistics (AL) has always considered itself to be a field that bridges the theory and practice of language learning and use, but the last two decades have seen a growing interest in so-called inter- and trans-perspectives on its object of study (e.g., Hawkins & Mori, 2018). While the prefix *inter-* as in *interlingual*, *inter-cultural*, *interdisciplinary*, and *international* tends to denote the movement between two distinct entities and their relationships, the prefix *trans-*, as in *translingual*, *transcultural*, and *transnational* aims at superseding the distinct entities themselves.

For example, the translingual and transcultural competence advocated by the MLA Report (MLA, 2007) referred to the ability not only to "operate between languages" but to "consider alternative ways of seeing, feeling, and understanding things" that would be different from those of educated native speakers (p. 237–238). When Ofelia García observed that bilinguals "translanguage" (García, 2009, p. 45), she did not mean that they switched codes like two monolinguals within an single individual, but that they used both codes in an integrated manner and were thereby inventing a new language, along the same lines as Makoni and Pennycook (2007) had proposed in their book *Disinventing and reconstituting languages*.

From there, educators got interested in multilingual authors' creative transpositions and translations (Kramsch, 2008; Kramsch & Huffmaster, 2015, and in translanguaging García & Li, 2014), translingual (Canagarajah, 2013), and transmodal practices (Kern, 2014) of meaning-making and language teacher development (Byrd Clark, 2016; De Costa & Norton, 2017; García, Ibarra Johnson, & Seltzer, 2017). The 'trans- trend' in the study of language was theorized by Li Wei in his talk at the AAAL convention in Orlando in 2016 and in his plenary at the AAAL convention in Portland in 2017 (see Li, 2017).

According to Li (2017), just as for many applied linguists before him who have drawn on integrative social theories (e.g., Sealey & Carter, 2004, for a concise overview and theoretically profound approach, or Broschart, 2007, for a thorough

discussion of the interplay between language, language use, genetics, and socialization), human beings' knowledge and practices of language cannot be separated from knowledge and practices of human relations and social interaction, which include the history and context of usage as well as the emotional and symbolic values of specifically constructed languages.

Building on Cook's (1991) notion of multicompetence, a translanguaging theory of language transcends the conventional boundaries between languages and between language and other cognitive and semiotic systems. It reconceptualizes language as a multilingual, multimodal, multisensory system of meaning-making resources. By doing so, it transforms our way of thinking about the divides between multilingualism, multiculturalism, multicompetence etc. And it highlights an individual's potential for creativity and criticality. In this view, the *trans*- prefix in translanguaging emphasizes:

- the fluid practices that go beyond (i.e., transcend) socially constructed language systems and structures to engage diverse multiple meaning-making systems and subjectivities
- the transformative capacity of translanguaging practices not only for language systems, but also for individual's cognition and social structures
- the transdisciplinary consequences of re-conceptualizing language, language learning, and language use for linguistics, psychology, sociology, and education.

Such a view echoes the distinction in AL made by Halliday (2001) between a discipline (e.g., linguistics), a field (e.g., educational linguistics), a topic (e.g., language learning and teaching), and a theme (e.g., the development of meaning making). In Halliday's view, AL is moving towards becoming a transdisciplinary field of research that focuses not on disciplines, but on themes – the main theme in educational linguistics being, in his view, learning how to mean (Halliday, 2001, p. 79).

1. What is transdisciplinarity?

Transgressing disciplinary boundaries, as outlined above, has resulted in two main conceptions of transdisciplinarity (TD) in AL. Both understandings of TD seek to transcend the notion of academic discipline, but they do so in two different yet related ways. In the first understanding (TD1), transdisciplinarity aims to transcend the concept of discipline *within* academia as the sole principle for organizing and controlling academic knowledge. As a consequence, TD1 argues for deep collaboration across and beyond academic disciplines and fields.

In a second understanding (TD2), transdisciplinarity aims at transcending academia in general as the exclusive source of legitimate knowledge. As a result,

TD2 argues for deep collaboration across and beyond academic *and non-academic* disciplines and fields. By doing so, TD2 is "research on, for, and with" practitioners (Cameron, Frazer, Rampton, & Richardson, 1992, p. 22). TD2 research sees, for example, teaching or policy-making professionals not only as the focus of research interest but also as participants and knowledge experts in the research process. Both TD1 and TD2 are represented in this volume of the AILA Review.

1.1 Transcending the discipline as the sole principle for organizing and controlling academic knowledge

As Francis Hult (2010) explains, the starting point in applied linguistics is not the discipline but the educational practice. Hult adopts Halliday's distinction between discipline (e.g., linguistics) and theme or angle of research (e.g., language learning is learning to mean). The theme has to be seen on a continuum from theoretical reflection (e.g., how people mean) to practical action (e.g., how people learn). As Halliday wrote:

With all the varied activities that go under the name of applied linguistics we have still not really achieved a transdisciplinary perspective. I say 'transdisciplinary' rather than 'inter-' or 'multidisciplinary' because the latter terms seem to me to imply that one still retains the disciplines as the locus of intellectual activity, while building bridges between them or assembling them into a collection; whereas the real alternative is to supersede them, creating new forms of activity which are thematic rather than disciplinary in their orientation. (Halliday, 2001, p. 176)

A theme, according to Halliday, "is defined not by content but by aspect, perspective or point of view" (p. 176). TD focuses on themes, not disciplines. One of these themes is the "construction of reality" through language (p. 190). In order to understand processes like language learning and language planning or language-related problems in everyday life, applied linguists must realize that they "are not engaged in forging some passive, ideologically neutral instrument for carrying out a prearranged lesson plan or policy. They are creating an active force which will play its part in shaping people's consciousness and influencing the directions of social change" (p. 191).

Applied linguists draw on various disciplinary insights to illuminate their angle on the practical problem at hand, but ultimately their goal is not to construct any particular discipline, but to adopt a theme that will enable them to solve problems of practice. Thus one could say, paraphrasing Pierre Bourdieu, that AL is a "theory of the practice" (Kramsch, 2015). Its object of study is the living process through which living, embodied speakers shape contexts through their grammars

and are, in turn, shaped by them (Bateson, 1979, p. 18) – or, as Halliday would say, "A grammar is a theory of experience" (2001, p. 195).

To construct AL as a theory of practice, applied linguists draw their inspiration from various theories that have been developed in other disciplines or fields, such as general linguistics, psychology, sociology, or anthropology. But these theories are not blueprints for explaining practice and then proffering recommendations for solving problems in the real world, or even for predicting the success of certain practices over others. Like any research on complex systems, the goal of applied linguistics research is twofold: (i) to observe, explain, analyze, and interpret practice and to communicate the results of its research to practitioners; (ii) to reflect on both the practitioner's and the researcher's practices and to construct a theory of practice that is commensurate with its object of study.

The papers by Tony Liddicoat and Chantelle Warner in this issue examine the benefits and also the risks involved in transcending the notion of discipline as the sole principle for organizing and controlling the acquisition of knowledge within academia. Bringing a theme (like learning to mean) derived from a variety of disciplinary insights to bear on the field of language learning and teaching certainly enriches teachers' understanding of their profession and can improve their effectiveness as teachers. But it can also exacerbate their feelings of inadequacy in the unequal relationship that research and teaching have on the market of symbolic goods. As Bourdieu remarked,

The relationship between the field of production and the educational system is both strengthened, in one sense, and undermined in another, by the action of social mechanisms tending to ensure a sort of pre-established harmony between positions and their occupants. These mechanisms orient very diverse personnel toward the obscure security of [an academic] career or toward the prestigious vicissitudes of independent artistic or intellectual enterprise.

(Bourdieu, 1985, p. 15)

Bourdieu reminds us that in a knowledge society (as understood from disciplinary or even from TD1 perspectives), teachers might accrue technical capital by being good (i.e., effective) teachers, but they will never have the same symbolic capital as researchers, who are perceived as producing new knowledge rather than just transmitting knowledge produced by others. In addition, as Chantelle Warner's paper shows, the age-old rivalry between the humanities and the social sciences within academia risks disrupting what Bourdieu calls "the pre-established harmony between positions and their occupants" (see citation above).

In this context, dominated by disciplines and academic reputations, tenured professors in other disciplines, such as literature, might be able to teach whatever they wish and be judged according to the 'prestigious vicissitudes' of their CV. They

therefore occupy very different positions in the academic hierarchy compared with language teachers. Many of the latter might enjoy much less employment security, have to teach five days a week, and be judged according to technical and measurable criteria of excellence. Applied linguists' activities, which can involve both teaching languages and doing research on language, are often perceived as not being in harmony with the prestige of their academic positions.

1.2 Transcending the academic discipline as the only source of legitimate knowledge

This second meaning of transdisciplinarity seeks to validate other, non-academic sources of knowledge, such as professional knowledge acquired through experience in the real world, technical knowledge acquired on the job, and expert knowledge developed in the management world (for overviews and critical discussions, see Pohl & Hirsch Hadorn, 2007; Perrin, 2012; and Stokols, 2014). An example is a discussion of the complexity theory perspective in a TD2 approach to language study by the Serbian sociolinguist Jelena Filipovic when she writes:

Contemporary social science and humanities have, in some areas and among some researchers, taken a turn toward an interpretative, emphatic [sic] and socially engaged research which transcends the boundaries of scientific disciplines and erases strict demarcation between science and society (between research 'agents' and research 'subject/objects'), and which takes knowledge construction and knowledge implementation outside of an academic arena into the real world. In a way, it may be understood as another name for transdisciplinary research, not only in linguistics, but also in other areas of social studies and humanities."

(Filipovic, 2015, p. 17)

For Filipovic, transdisciplinary research does not use the scientific terminology reserved to the exclusive few. Instead, it includes the discourse and research collaboration of a wide range of interested parties engaged in the process of identifying, defining, and solving problems in the real world:

Knowledge is viewed and understood as a common good which is preserved and further developed within an ever-open public debate among interested parties. Transdisciplinary research is collaborative, dialogical, reflective and generative. (p. 60)

Solutions are sought through collaborative, enabling and adaptive learning carried out in constructive and *bona fide* communication between academic communities and non-academic, both majority and minority communities of practice. (p. 65)

In Filipovic's approach, transcending the academic disciplines as the only source of legitimate knowledge does not mean ignoring the existing research paradigms. Indeed, the examples she provides come from a variety of fields such as sociolinguistics, applied linguistics, language policy and planning, critical discourse analysis, critical pedagogy, and gender studies. What is relevant is the "continous dialogue" among academic and non-academic stakeholders:

In order to define the right research questions, transdisciplinary studies need to maintain continuous dialogue with a number of stakeholders within and outside of academic communities with an ultimate goal of improving peoples' lives. (p. 71)

Without this discourse and dialogue, without this theoretically- and practically-based co-creation, shared reflection, and mutual appropriation of new concepts by both theory and practice, TD remains merely academic disciplines inter-operating on high levels of abstraction. Dealing "with language problems in the 'real world", in contrast, "is not a matter of relating ideas across the same plane of disciplinary abstraction, but of mediating a relationship between two quite different planes of reality: that of the abstract discipline and that of the actual domains where the folk experience of language is to be found." (Widdowson, 2006, p. 96; see also Widdowson, 2005).

The third and fourth papers in this issue address some of the strengths and difficulties that arise from broadening disciplinary knowledge and scientific discourse to non-disciplinary, non-scientific forms of building, acquiring, and talking about knowledge. Daniel Perrin's paper shows how academics from various disciplines can collaborate with practitioners to investigate and sustainably solve socially-relevant practical problems. Marlies Whitehouse's paper sheds light on financial analysts' situations and practices in their multilingual workplaces and explores which measures can improve financial texts' communicative potential.

2. For example: SLA

The two meanings of transdisciplinarity discussed so far, TD1 and TD2, have been applied, for example, to the investigation of second language acquisition (SLA). In this field, TD has been advocated recently by a group that calls itself the Douglas Fir Group (DFG), comprising ten prominent scholars in the field of SLA who proposed a new transdisciplinary framework for SLA research (Douglas Fir Group, 2016). The group takes transdisciplinarity to mean the process of drawing on and contributing to:

- various theories, e.g., sociocultural theory (Lantolf), language socialization theory (Duff), social identity theory (Norton), complexity and dynamic systems theory (Larsen-Freeman);
- various approaches, e.g., usage-based (Ellis, Ortega), ecological, and sociocognitive (Atkinson);
- various perspectives, e.g., biocultural (Schumann);
- various subfields of linguistics, e.g., variationist sociolinguistics (Tarone), systemic functional linguistics (Byrnes), and conversation analysis (Hall). SLA itself is termed a "field" (p. 20) by the DFG and called upon to adopt this new transdisciplinary framework.

None of these approaches, perspectives, and subfields constitute disciplines and nor do they represent themes, but they do highlight a diversity of theories and epistemes that have grown out of observing the practice of language learning and teaching, and a desire to solve the problems encountered in that practice. In their development, SLA theories have been inspired by such disciplines as sociology and anthropology (for Lantolf, Duff, and Norton), cognitive psychology and sociology (for Atkinson), neurobiology (for Schumann), and linguistics (for Tarone, Byrnes, and Hall). They could conceivably have also been inspired by other disciplines such as literary studies, psychoanalysis, cultural geography, philosophy, or political economy. But these SLA theories have not been beholden to the disciplines they have drawn on, in part because the DFG members have also sought to transcend the exclusively academic view of the term 'discipline'. As stated in the DFG manifesto:

A main target of [these new SLA] research efforts would be to understand the varying conditions that enable and constrain opportunities for and outcomes of language learning across private, public, material and digital contexts of social action and interaction. Another main goal would be to communicate with and serve learners themselves and other stakeholders, including teachers; administrators; appointed and elected officials; parents; community members; business leaders; and educational, business and health organizations. In sum, the new, rethought SLA would contribute to the development of innovative and sustainable lifeworld solutions that support language learners in a multilingual world. (p. 38)

By embracing the notion that "multilingualism is enmeshed in globalization, technologization, and mobility" (p. 19), the group affirms "a strong commitment to language and education and express[es] the hope that this document might, in time, foster collaborative forms of engagement between teachers and researchers" (p. 22), as well as between academics and other stakeholders in the business, political, and professional world.

3. Opening the debate

One can easily imagine how this shift from TD1 to TD2 in, for example, SLA could raise ethical questions that the academic world as well as classical domains of language teaching and learning are generally shielded from. While the Douglas Fir Group insists that their collective rethinking is firmly grounded in an "earnest ethical commitment" (p. 38), there is a risk that involvement with a variety of stakeholders in real life brings with it issues of political power and ethical dilemmas that teachers and learners are ill-prepared to deal with. On the other hand, conscious and reflected involvement in transdisciplinary research groups offers opportunities to explain such dilemmas, and, by doing so, to make them explicit – which is a relevant part of understanding and being prepared for real-world issues.

On the object level of AL research, the very interest in transcending disciplines and academic disciplinarity itself is, as Alastair Pennycook argues, a sign that we are slowly leaving the modernist domain of the human and entering a post-humanist world where language has to be understood as "resources deployed" (Pennycook, 2018, p. 7) and "spatial repertoires" (p. 9) in relation to people, objects, and place in a much larger ecological sense. Pennycook quotes Amin, 2015, who suggests that what is at stake "is the reordering of social identity as a reciprocal exchange between thinking bodies, machines and environments". This widening of perspectives to come to grips with rapidly changing real worlds is exactly what the TD, from its very beginnings in the early 1970s, had in mind (e.g., Jantsch, 1970; Mahan, 1970; see Bernstein, 2015 for an overview).

On the meta level of AL research, transdisciplinarity focuses on the processes of building and applying knowledge. This is where the fifth paper of this issue comes in. Alastair Pennycook suggests replacing the notion of discipline with "epistemic assemblage". This clarion call echoes, for the case of AL, what TD has long encouraged for scientific research in general: focusing on assemblages of epistemes instead of disciplinary traditions and boundaries. In contrast to disciplinary grand theories, assemblages are diverse – which can contribute to theoretical development. As Van Lier (1997, p. 102, drawing on Natsoulas, 1990) puts it: "Accepting diversity in a field is accepting that there will be anomalies and contradictions, even incompatible theories. However [...], points of incompatibility are the holes through which the world shines through to us."

With this issue of the AILA Review, we aim to stimulate an AILA debate about transdisciplinarity in applied linguistics. The five complementary contributions and the two responses, by Henry Widdowson and Jonathan Crichton, serve as

starting points for sharing and discussing viewpoints regarding this topic in the new AILA Researchers' Forum. The questions raised in this volume include:

- To what extent has applied linguistics always been a transdisciplinary field?
- What are, from an AL perspective, the advantages and disadvantages of transdisciplinarity as compared to interdisciplinarity?
- What are the main opportunities and risks inherent in collaborating with practitioners throughout research projects?
- Who decides which real-world problem is to be dealt with and by whom?
- Is profession any more a guarantee than disciplinarity for mutual understanding and sameness of judgment when academics collaborate with nonacademics in solving problems in the real world?
- If power and politics inevitably play a role in identifying and defining real-world problems, how should we conceive of the "problem-solving accountability" of the field of applied linguistics?
- How can empirically grounded good practices of transdisciplinary research in applied linguistics be identified, discussed, and shared effectively in the field?

4. Contributions and contributors

Tony Liddicoat's paper, "Language teaching and learning as a transdisciplinary endeavor", focuses on the idea of language learning from an intercultural perspective to examine how multiple disciplines as well as different academic traditions and research cultures shape – and blur – our understanding of the field. It considers some of the challenges of bringing multiple academic traditions to bear on educational practice and practices, be it within AL, which can be considered an intrinsically transdisciplinary field, or across and beyond academic disciplines.

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^{1.} https://aila.info/research/debate

Chantelle Warner, in "Transdisciplinarity across two-tiers: Applied linguistics and literature in collegiate foreign language fields", examines the current increasing dissatisfaction with the 'two-tiered configuration' of many US foreign language departments, which divide the study of language and the study of literature into two programmatically and hierarchically separate endeavors. She considers the perspectives and lived experiences of scholars whose academic work crosses between applied linguistics and literary studies and oscillates between TD1 and TD2.

Chantelle Warner is Associate Professor of German Studies, faculty member of the interdisciplinary program in Second Language Acquisition and Teaching, and Co-Director of the Center for Educational Resources in Culture, Language, and Literacy at the University of Arizona, where she also directs the German Language Program. Her research focuses on affective, experiential, and aesthetic dimensions of language use and learning, foreign language literacy development, stylistics, and literary pragmatics. She is a founding co-editor of the journal *Critical Multilingualism Studies*.

Daniel Perrin, in "On, for, and with practitioners: A transdisciplinary approach to text production in real-life settings", explains Progression Analysis as a multimethod approach to investigate text production practices in TD2 research frameworks and natural environments such as workplaces. Examples from four domains (education, finance, translation, and journalism) illustrate what value TD2 and, in particular, including practitioners as researchers can add to text production research in AL.

Daniel Perrin is Professor of Applied Linguistics and Dean of the School of Applied Linguistics at the Zurich University of Applied Sciences, President of the International Association of Applied Linguistics AILA, and editor of the International Journal of Applied Linguistics and the de Gruyter Handbook of Applied Linguistics series. His areas of research are media linguistics, methodology of applied linguistics, text production research, and analysis of language use in professional communication.

Marlies Whitehouse, in "The language of numbers: Transdisciplinary action research on financial communication" shows how in TD2 academics from various disciplines collaborate with practitioners to investigate and sustainably solve socially-relevant practical problems. She applies TD2 to explain the extent to which financial analysts' recommendations fulfill their requirement to mediate between experts and laypersons and how financial communication could be improved for the benefit of society-at-large.

Marlies Whitehouse (Language studies in Japanese, German, and English, University of Zurich) works at the Zurich University of Applied Sciences in Winterthur, Switzerland. She investigates text production and text reception

with a focus on inter-cultural, cross-domain, and intra-lingual aspects at the intersections of financial journalism, organizational communication, and financial analysis. She has had more than 20 years of professional experience in the financial sector. Her publications include two special issues on The Pragmatics of Financial Communication, but also award-winning short stories. Finally, in "Applied linguistics as epistemic assemblage", Alastair Pennycook argues that, despite many claims to the contrary, applied linguistics has never been a very convincing discipline. While this could bring a downside of insecurity, instability, and incoherence, it also offers many benefits in terms of flexibility, innovation, and breadth, allowing explorations in posthumanist AL, for example. Alastair Pennycook is Distinguished Professor of Language, Society and Education at the University of Technology Sydney, Adjunct Professor at the University of Oslo, and a member of the Australian Academy of the Humanities. He is the author of numerous award-winning books, including Metrolingualism: Language in the city (with Emi Otsuji), Language as a Local Practice, Global Englishes and Transcultural Flows, and The Cultural Politics of English as an International Language (a Routledge Linguistics Classic). His most recent books are Posthumanist Applied Linguistics (Routledge) and Popular Culture, Voice and Linguistic Diversity: Young Adults On- and Offline (with Sender Dovchin and Shaila Sultana; Palgrave Macmillan).

- The two responses to the above papers, meant to further stimulate the AILA research debate² hat follows this publication, are authored by Jonathan Crichton and Henry Widdowson.

Jonathan Crichton is Senior Lecturer in Applied Linguistics, University of South Australia, and Visiting Fellow in Psychiatry, University of Adelaide. His research focuses on professional and organisational communication, particularly in health settings. His books include *The Discourse of Commercialization*, and, with Chris Candlin, *Discourses of Deficit, Discourses of Trust*, and *Communicating Risk*. Most recently he has co-authored *Exploring Discourse in Context and in Action* (Palgrave), and is co-editing *The Handbook of Intercultural Communication in Health Care* (De Gruyter). He is series editor of *Communicating in Professions and Organisations* (Palgrave).

Henry Widdowson is Professor Emeritus, University of London and Honorary Professor, University of Vienna. He was a founding editor of the journal *Applied Linguistics* and for thirty years acted as applied linguistics adviser to Oxford University Press. His extensive publications include *Defining Issues in English Language Teaching* (2003), *Text*, *Context*, *Pretext* (2004) and *Discourse Analysis* (2007). A new book exploring key concepts in applied linguistics is forthcoming.

^{2.} https://aila.info/research/debate

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