Transdisciplinarity as a decolonizing research practice: A Latin American perspective

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Abstract: *The paper intends to contribute to an international understanding of transdiciplinarity (TD) from the perspective of Latin America. The basic argument is that TD is a research practice that can foster knowledge democracy within the framework of decoloniality as a social and academic praxis. The first part of the paper highlights some historical and contemporary practices that are important to shape a decolonizing approach to transdisciplinarity. The second section discusses issues involved in the development of transdisciplinary political, contextual and institutional conditions, besides the researcher's personal and professional commitment and preparedness.*

Introduction

There is a growing consensus that the contemporary awareness of the complexity of the world we live in requires changes in the way we understand and approach the production of knowledge. Technological developments in information and communication have revealed the undeniable interconnectedness among peoples, between the socio-historical world and nature, between the local and the global. Theories about systems, webs, complexity and globalization pose new questions about our place and role as individuals and as society.

This happens at a time of mass migrations, of refugee camps, of walls and fences to 'protect' one's own space. For the majority of the world's population the planet is becoming a risky place of marginalization, where the human need to survive and the capacity to transcend are unequally balanced in favor of the former (Dambrósio, 2001). News about the increasing number of fires in the Amazon forest in 2019 (Queimadas, 2021) has spurred renewed reflection about the carelessness of the so-called civilized world regarding nature, and the difficulty to overcome the idea that it is just a resource to be used and exploited. The outbreak and spread of COVID-19 since the end of 2019 have once more revealed the limitations and unpreparedness to deal with worldwide crises.

Concepts such as interculturality and multiculturalism are intellectual attempts to shed light on what happens when people with different cultures come together, and have to build a common living milieu. Countries and peoples develop their own ideas on what they consider right or the most appropriate, from free integration to restricted forms of adaptation, to open denial of the 'other'. In the academic world the growing interest in promoting and understanding internationalization (Abba, Streck, 2019) can be seen in this same context of creating conditions to live in this

common world, either competing or collaborating, or both competing and collaborating.

The production of knowledge is not immune to this phenomenon, and universities and research institutes face the challenge of confirming the relevance of their work. One of the main features of techno-science corresponds to the attempt to articulate science and technological development, with a clear predominance of applied research (Lacey, 2012) While there is an obvious gain in approximating scientific research from technology, there is also the risk of reducing the scope of research and science to what is immediately useful and profitable. The shift of funding research from public to private organizations points in this direction (Pesquisa Fapesp, 2018).

What is called for is a broader view of research, which at the same time is more than a merely instrumental perspective of science, and a view of individuals as clients for new products to be developed. That's where interdisciplinarity (ID) and transdisciplinarity (TD) come in as concepts and practices whose purpose is to develop and promote an alternative to the traditional forms of producing knowledge. In this paper, the argument is that TD is a research practice that can foster what has been called knowledge democracy (Tandon et al., 2018) within the framework of decoloniality as a social and academic praxis

The paper intends to contribute to an international understanding of TD, addressing the following issues: 1) What potentials and advantages do ID and TD research present in Latin America, including contributions to solving complex multidimensional problems? 2. How have historical and geographical contexts and conditions shaped possibilities and limits? 3. How is research organized in time and space, including any special initiatives to accomplish national and local goals?[1]

The text is divided into two parts. The first one highlights some historical and contemporary practices that are important to shape a decolonizing perspective of transdiciplinarity. The practice of *Investigación Acción Participativa* – IAP (Participatory Action Research) associated in Latin America with the name of Orlando Fals Borda in Colombia is an example of how the 'encounter of disciplines' originates a creative process of knowledge production. Another historical practice that uses a transdisciplinary approach is the investigative process that preceded the literacy program proposed by Paulo Freire, which is a reference for *Pesquisa Participante* (Participatory Research). A third historical practice in which TD in Latin America is rooted is *Sistematización de Experiencias* (Systematization of Experiences).

The second section of the paper presents and discusses issues involved in the development of transdisciplinary research based on examples from *sistematización de experiencias* and from a university in South Brazil. The argument is that besides personal commitment, there are political, contextual and institutional conditions that may favor and potentiate or hinder the implementation of TD.

In the concluding remarks, I return to the questions that guided this reflection: In what sense can TD become a resource for democratizing knowledge and knowledge production. Three propositions are put forward to sum up the argument: that TD is potentially a decolonizing research approach when fostering

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[1] These questions were posed by the organizers of the panel 'Dynamics of Inter- and Trans-disciplinarity within Institutions: Cultures and Communities, Spaces and Timeframes' (Prof. Dr. Julie Thompson Klein Wayne State University USA and Transdisciplinarity Lab – ETH Zürich, Switzerland, and Dr. Bianca Vienni Baptista, Transdisciplinarity Lab – ETH Zürich, Switzerland). International Transdisciplinarity Conference 2019. JOINING FORCES FOR CHANGE. 10-13 September 2019, Gothenburg, Sweden.

certain attitudes of openness and solidarity, when engaging in emancipatory projects, and – above all – as a humanizing and democratizing praxis.

Roots of TD in Latin America

It would require a broader framework of space and time to present a panoramic view of TD in Latin America. The aim of this section is to highlight issues that are relevant for understanding some roots of TD in Latin America as well as contemporary practices. Before identifying these issues, we will have a brief look at the practices we are referring to in the text. There is no intention of claiming that these practices were an exclusive development in Latin America. Their originality lies in the attempt to perform research that is rooted in Latin American reality at the same time that it is connected with practices in other parts of the world that share similar desires to promote social changes based on principles of justice, equality and solidarity.

The backdrop against which alternative research practices can be understood and interpreted is given by the concepts of coloniality, and its counterpart, decoloniality. Some of the main features that characterize this discourse are: a) that the legacy of modernity driven by and from Europe, and based on conquests of new lands and markets, is not yet overcome, although manifesting itself in different ways; b) that racial relations played and continue to play an important role in forging the subjective and objective conditions for exploitation of peoples; c) that both the concepts of colonialism and post-colonialism do not adequately grasp the continuities and discontinuities within the world system that took shape with what is understood as modernity; d) that social transformations within the context of coloniality require framing social and environmental problems within historical global development (Moraña, Dussel, Jáuregui, 2008).

I follow Maldonado-Torres' argument that not all forms of transdisciplinarity are the same. He argues that ethnic studies can provide an example of decolonizing transdisciplinarity because it is there that epistemological challenges emerge from the zone of the non-being which require overcoming the limits of the disciplines (Maldonado-Torres, 2016: 76). Ethnic studies, he points out, investigate the centrality of the forms of exclusion by hegemonic forms of power, of being and knowing by using multiples markers of difference, a variety of discourse procedures and methodologies. This zone of the non-being can be seen also through other lenses, such as poverty and gender oppression.

Some of the historical practices that deal with the zones of non-being are well known in Latin America. They grew in different parts of the sub-continent most often without an explicit connection among themselves. The academic motivation went hand in hand with the commitment to participate in people's struggle to transform their reality. If ID or TD happened, it was not because researchers took courses on the subject in order to apply it, but because social and cultural conditions required a different approach to produce relevant knowledge in this context. In what follows we will take a brief look at those that have had deeper influence since the second half of the past century.

Orlando Fals Borda, a Colombian sociologist, is well known for the concept of *Investigación accion participativa (IAP)* – Participatory action research. While working as researcher in rural communities he realized that a different approach to knowledge was necessary, not only to the social sciences, but to science in general. In "Action Research in Disciplinary Convergences" he writes: 'We were sociologists, anthropologists, economists, theologians, artists, farmers, educators and social workers. We were, then, a diverse and complex group, some of whom

had decided to leave the university routines and dedicated ourselves to alternatives searches' (Fals Borda, 2010: 360).

He goes on to mention colleagues from different parts of the world, including Da Silva in India, Darcy Ribeiro and Paulo Freire in Brazil, Rodolfo Stavenhaven in México, Marja Swantz in Tanzania, Camilo Torres in Colombia, John Elliot and Peter Reason in England, Stephen Kemmis and Robin Taggart in Australia, Myles Horton in the United States. This *contigente sentipensante* (thinking-feeling contingent) was enlarged with the participation of physicians, dentists, nurses, economists, engineers, musicians, among others. The agenda in different countries and regions may have been different, but there was a common understanding that transformative knowledge should be produced with the people and not for them (Streck, 2014).

In Latin America, Fals Borda advocated a *ciencia propria* against the prevailing intellectual colonialism (Fals Borda, 1973). His critique of scientific eurocentrism was due to the recognition that the main contemporary problems such as poverty, hunger, ecological destruction and violence require complex levels of analysis that go beyond specialized knowledge, although thismay also be necessary. 'There would then appear a new field of scientific and technical action connected directly with the urgent needs of the community and not for the enriched bourgeoisie which is destroying everything.' (Fals Borda, 2010: 199). This would result in much more democratic organizations and actions.

A second major reference is Paulo Freire who in the process of literacy developed the concept of thematic investigation of the generative themes that would provide the words – 'pregnant with the world' – for learning how to read and write. Reading the world, he argued, precedes the reading of the word, which in turn also means pronouncing the world. There is an ontological presupposition that links saying one's true words and transforming the world: 'To exist, humanly, is to *name* the world, to change it. Once named, the world in turn reappears to the *namers* as a problem and requires of them a new *naming*. Men[2] are not built in silence, but in word, in work, in action reflection' (Freire, 1972: 76).

The silence he refers to is not the silence of reflection and meditation, whose withdrawal from the world is only a means for a more profound connection. It is the culture - of silence - resulting from systematic prohibitions to speak an authentic word, i.e., the possibility to express in words and deeds the attempt to fulfill the human ontological vocation to be more (*ser mais*). This true or authentic word, in turn, can never be pronounced in solitude nor can one say this word for another, as a prescription. According to Freire, dialogue is 'the encounter between men, mediated by the world in order to transform it' (1972: 76).

The generative themes are elaborated through a participatory research process consisting of four stages. The first one is an acquaintanceship with the area and the constitution of a research team with participants from the community. 'Representatives of the inhabitants participate in all activities as members of the investigative teams' (Freire, 1972: 105). The second stage consists in the selection of some contradictions that will be used to create codifications to be used in the third stage when the team returns to the community for a decodification in the 'thematic investigation circles' with a maximum of 20 persons. In the last stage, the researchers undertake a systematic interdisciplinary study of their findings. He gives as an example the theme of development, which lends itself to be approached by many disciplines. Only after this process of breaking up the themes from a variety of perspectives will new codifications be organized as educational resources.

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[2] Attentive to the criticisms of feminists, Freire acknowledged his gender biased language in his first writings.

Sistematización de experiencias (Systematization of experiences), the third reference, is a practice of knowledge production that combines evaluation, research and education. Since it is usually developed outside the university with social movements and NGOs there are few explicit references to academic disciplines, although it uses knowledge of the discipline to analyze the data collected by the participants. Oscar Jara (2012) points out that *sistematización de experiencias* was created and developed in Latin America in the field of social work in the 1950s and 1960s as part of the effort to create theoretical and methodological references to understand people's reality within their own conditions. Jara identifies eight major influences for the developments: Reconceptualized social work, adult education, popular education, popular communication, theatre of the oppressed, theology of liberation, theory of dependence and *investigación acción participativa* (2012: 44).

As in the praxis of Orlando Fals Borda and Paulo Freire, there is the denial of a neutral methodology to understand reality. Among the main characteristics of this methodology are the following: the centrality of daily life practice and of professional work as sources of knowledge; the attempt to overcome the dichotomy between theoretical and practical learnings; the development of criteria for rigorousness in knowledge production that are not necessarily linked to academic standards; the promotion of emancipatory subjectivities; the contribution to the community's identity and organization; the establishment of connections with other emancipatory social practices (Jara, 2012; Barragán, Torres, 2017).

There are other experiences in Latin America that represent a rupture with the classical research methodologies largely based on positivist principles (Streck, Adams, 2019). In Brazil, Carlos Rodrigues Brandão is a reference for participatory research with strong anthropological influences (Brandão, Streck, 2006). João Bosco Guedes Pinto, with great experience in several Latin American countries, reinterprets action research for Latin America highlighting the need for a general theory of knowledge, where knowledge is seen primarily as relational, historical and procedural since reality is itself identified as movement or a set of movements (Duque-Arrazola, Thiollent, 2014).

In spite of the diversity in terms of socio-cultural contexts, of epistemological references and of the academic and professional background of the researchers, there are some important commonalities. Among these we highlight the following ones: a) the close relationship between the researchers and the challenges of social reality b) the understanding of the social processes and structures in terms of their historical formation; c) the permanent relation between theory and practice evolving into a cycle of action-reflection-action; d) the trust in the community as capable of an effective contribution in the research process; e) the absence of closed methodological models; c) the integration of quantitative and qualitative data in an open-ended movement of producing knowledge and acting critically to transform a specific situation framed within a broader historical and social context.

Transdisciplinarity: Conditions and contexts

Latin America is a diverse and multifaceted political and cultural reality and there may not have been much actual communication among the experiences mentioned above. Nevertheless, it can be assumed that they emerge from the same social, cultural and political matrix, which in this paper we are defining as coloniality, respectively, the search and struggle to overcome this condition through decolonizing praxis. Although the concept of (de)coloniality was developed at the end of last century, these practices from the middle of the same century can be considered predecessors (Mota Neto, 2016) of this academic effort to update the

interpretation of Latin American reality within reconfigurations of power relations and exercise.

A major issue raised so far concerns the conditions for ID and TD. If apparently this approach to research is not only a requirement to meet current complex social problems but has also proven historically to be relatively successful in producing results, why is there still resistance or indifference within academic circles? More specifically, what role and place do IT and TD play within the university? Can universities learn from experiences outside the academic context?

One of the conditions for implementing inter and transdisciplinary work is obviously personal commitment. In the biographical writings of Orlando Fals Borda, Paulo Freire this is very evident, and this commitment can be identified in others as well. There is a strong ethical and political ingredient to this commitment based on the perceived evidence of social injustices perpetuated in spite of the existence of more schools and universities.

The experience of these intellectuals also shows that personal commitment, although always necessary, is not sufficient for a sustainable practice of TD in research and other academic activities. Fals Borda left the university with the argument that under the prevailing political conditions in Colombia the type of research he regarded as essential to produce conditions for lasting changes in society was not possible. Freire's literacy project in Brazil was considered subversive, he was persecuted and lived in exile from 1964 to 1979, in Bolivia, Chile, the United States and Switzerland. However, both of them returned to the universities once a new climate of democratization was established.

This means that there are socio-political factors that strongly condition the type of research that is possible in a given society and at a given time (Fricke, 2014).[3] There are themes that may be considered taboo; there are also methodologies that pose a threat, many times under the argument that they are not scientific enough; there may be institutional and organizational arrangements that don't allow for participation. The 'control' can be exercised through explicit interferences from authorities at the various institutional levels or through more subtle evaluation and funding processes. TD is not immune to the conditioning factors of the context, and considerations about the locus where it has the possibility to grow are fundamental.

The experience in Latin America, particularly in Brazil, is that there are powerful obstacles making it difficult for the university to implement TD. At the national and regional level the evaluation and the funding of projects follows a rather disciplinary approach. Fields of knowledge are seen as competitors for usually scarce resources and not as partners who share the desire and intention of making life easier and better for all. As an example, the same NGO of women in a poor neighborhood that produces soap from used kitchen oil may be studied by educators who want to see what knowledge women mobilize in the process of producing soap, by social workers who are interested in the social impact of the organization, and by psychologists that are interested in the identity formation of the women (Formoso, 2013). Who cares about the neighborhood and possible structural changes of the community to which these women belong? How to overcome the fragmented view of social reality and become more effective in collaborating with changes? These are questions posed to the university today.

A Colombian researcher, Alfredo Guiso (cf. Cifuentes Gil, 2016), remarked that TD is born in the university, and also dies in the university. This is quite true if we

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[3] Werner Fricke's comment is about action research, which shares with TD many characteristics such as the emphasis on co-production of knowledge by all stakeholders, the generation of actionable knowledge and the ethical commitment to societal change.

look at the experiences of Orlando Fals Borda and Paulo Freire who, for different reasons stopped working at universities for quite a long period in their lives. However, it is not completely true if we consider their return to the university under different conditions. Based on these experiences one could argue that TD corresponds to a border praxis that has no fixed location. Universities are important, but they are not the only locations where relevant knowledge is produced.

Walter Mignolo (2013) develops the concept of 'border thinking' closely related to decoloniality. It is a thinking that delinks from the modern *humanitas* that regarded and labeled the other as *anthropoi*, i.e., as somewhat less than human or human on a lesser scale. 'We delink from the humanitas, we become epistemically disobedient, and think and do decolonially, dwelling and thinking on the borders of local narratives confronting global designs' (Mignolo, 2013: 137). He goes on arguing that one should not expect to find enthusiastic support for this kind of thinking in universities and research agencies whose criteria of success, innovation and excellence are framed within a semantic universe of individual success and of international competition. This is also why 'border thinking and decolonial conceptions of the world are flourishing in the margin of academic institutions and outside outside it: in the wide and open 'academy of life' of which 'academic institutions of higher education' are a very small part.'

In this context, *sistematización de experiencias* deserves special attention due to its relatively loose institutional links. It may have originated in in the academic context of social work, but the practice of systematizing experiences found a fertile ground in popular social organizations and social movements. It is gradually gaining space among research methodologies in academic circles. Systematization of experience entails some characteristics that highlight its transdisciplinary character and may contribute to the implementation of TD in the university.

For one, *sistematización de experiencias* breaks the logic of research projects. The pace of the research process is based on the community's agenda, which does not necessarily coincide with the agenda of the professional who will coordinate the work. There is a simple reason for this: without the participation of the stakeholders who are the ones interested in knowing their reality and possibly promoting changes nothing will happen. The process necessarily starts from particular demands of neighborhoods, communities and social movements that feel the need to generate new knowledge about what they are and about their practice. The objectives, the procedures, the agendas as well as the expected outcomes need to be negotiated.

Secondly, *sistematización de experiencias* seeks alternative criteria of relevance and validity. Since it is developed on the borders of the academic milieu, the purpose is not the production of papers for peer-reviewed journals by a specialist, but of new understandings about their life-world. That's why one of the criteria for validity, for instance, is the type of relation that is established between the researcher and the stakeholders. Without a climate of trust, no valid data can be generated nor can relevant outcomes be produced. The researcher – as an outsider – may just help the stakeholders gain a better grasp of what is at stake. As a participant in a recycling project put it to our research group: 'You helped us to formulate new and better questions'. This does not mean that excellent academic papers should or cannot originate in the writings of the researchers or other stakeholders, sometimes the researcher together with the stakeholders. However, as all are co-producers of knowledge the paper is neither the only nor the most important result of this collective endeavor. It opens up the scope of the criteria of relevance and validity, which in universities tends to be quite reductive to the academic community.

Thirdly, *sistematización de experiencias* transcends disciplinary rationality. An analysis of the projects registered at the *Biblioteca Virtual sobre Sistematización de Experiencias[4]* reveals that the direct reference to disciplinary knowledge is mixed with knowledges from the community. For example, History or Geography are mentioned together with ancestral identity knowledge from the community; or the practice of intercultural dialogue extrapolates the traditional concepts of communication. It is assumed that ID or TD require disciplinary knowledge which is supposedly based on methodological rigorousness while TD and ID are criticized for the lack of this methodological rigorousness. The question posed by *sistematización de experiencias* to academia is whether today academic research can afford not to be transdisciplinary.

As already mentioned, although relatively absent in practice, TD has nevertheless become integrated into the university discourse. Inasmuch as *sistematización de experiencias* encompasses many aspects of TD, it finds a niche in extension programs, sometimes also referred to as social action. Oscar Jara, reflecting on the growing interest in universities to systematize experiences in their extension projects, writes optimistically that little by little tendencies to mere activism are being overcome, reports are less descriptive, and in many universities knowledge produced in extension and knowledge produced in extension and knowledge produced in research, are being creatively connected. There are more and more extension programs that incorporate personnel, time and resources to systematize their experiences as an exercise of critical interpretation (Jara, 2019).

Follmann helps us to close the circle that connects *sistematización de experiencias,* extension and TD. While highlighting extension as a privileged place for TD, he also acknowledges the role of this transdisciplinary context for feeding back into the disciplines.

> *Transdisciplinarity was born with this vocation, that is: it seeks to integrate internal and external knowledge into disciplinary schemes, where knowledge from outside the academy (sought in everyday perceptions, artistic perceptions and other sensibilities or even sapiential traditions of humanity), functions as external interrogators within the process of knowledge production and the educational process. This is when university extension becomes part of the entire educational process of the academic institution. (Follmann, 2014: 29)*

Universities are dealing with the challenge of rendering their work more transdisciplinary without giving up the development of specialized disciplinary research in many different ways, either developing centers for TD or building it into their 'regular' teaching and research structure. There are various types of obstacles, from financing to the prevalence classical disciplinary approaches to research by professionals in which they have been trained, but there are also opportunities that each university grasps and develops according to their own understanding and conditions.

Since a general overview of the status of TD in universities would require a study that is beyond the scope of this paper, I will present data from a university in South Brazil that has TD as a guiding principle. In 2002, Unisinos University identified three vectors in institutional strategic planning: Regional Development, Lifelong Education and Transdisciplinarity. For the current period (2018-2022) the three priorities were kept, adding a fourth one, Humanities and Technology.

To provide information for the reflection almost two decades ago a book was organized around some of the foundations of TD, such as TD and hard/soft

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[4] This virtual library is organized by *Programa Latinoamericano de Sistamatización de Experiencias del CEAAL,* <http://www.cepalforja.org/sistem/bvirtual/>.

sciences, TD and humanistic education, and TD and theory of complexity. Experiences of TD were also collected in some research projects, for example, from a multidisciplinary study in a mining area with the perspective of sustainable development (Souza and Follmann, 2003). The institutional guidelines identify TD basically in terms of attitude. 'It requires being humble and cooperative in the face of different knowledge, recognizing the limitations of the disciplines or their field of theoretical-technical domain in the face of the reality of complexity' (Unisinos).

How does the practice of IT and TD look like in reality? How have ID and TD evolved since then? The first problem when attempting to answer this question is where one should look to find an adequate answer. The structure in schools, academic units, graduate and undergraduate careers and courses is not much different from other universities, each one trying to have some original imprint given the institution's identity and the competitiveness in the higher education market. We will look at three places to identify characteristics of TD: institutionally registered research projects, the practice of a research group and an interdisciplinary journey of research methodologies.

Research projects: In a survey of the research projects in the University, from 2012 to 2020, only a very limited number of them included ID in their abstracts.[5] There was no mention of transdisciplinarity. The first period (2012-2016) and the second one (2017-2012) register seven projects each. Considering the totality of projects (2068), this number comprises less than 2% of the projects.

There is a predominance of projects in the field of law with 6 units; Engineering registered 2 projects, and the other fields – Applied Linguistics, Geology, Collective Health, Architecture, Philosophy and Computing – have one project. The fact of not having the word ID in their abstract does not mean that they do not establish partnerships with other disciplines. This sample, however, is quite representative of the fact that ID or TD is not a common practice, and when it happens it is mostly from an instrumental perspective.[6] Especially computer sciences play a role in providing support for gathering, analyzing and communicating data. This brief analysis reveals the difficulty of overcoming the culture of individual projects if there are no institutional arrangement to mediate between the individual researcher and his 'disciplinary' topic and the university's policy priority.

Research group: For about 20 years the research group 'Pedagogical Mediations and Citizenship'[7] has been working with participatory social processes, especially with participatory budgeting. The methodology of participatory action research enhanced the practice of some principles of TD: a) there was participation of stakeholders (in this case, the coordinating council) in co-defining objectives and strategies; b) there was the participation of a diversity of academic fields: sociology, political sciences; education, feminist studies and history; c) the project was conceived as a means for democratizing knowledge and knowledge production; d) the involvement of the community and their ways of knowing their reality (economy, geography, history, power relations, etc.) was essential for crossing and acknowledging disciplinary boundaries.

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[5] I thank Jessica Paola Schmidt, from *Unidade Acadêmica de Pesquisa e Pós-Graduação* for organizing the data for this survey.

[6] Julie Thompson Klein (2015) distinguishes between instrumental and critical ID, where the former type of methodological ID serves as support for a particular discipline. She still adds 'strategic' or 'opportunistic' ID, where one has a pragmatic use of ID put at the service of national needs or the market.

[7] Mediações Pedagógicas e Cidadania. Consejo Nacional de Desenvolvimento Científico e Tecnológico, <http://dgp.cnpq.br/dgp/espelhogrupo/3493883831842332>.

Journey of methodological workshops: The School of Humanities of Unisinos University promoted a journey of methodological workshops with a double purpose: a) to present the repertoire of methods for producing and analyzing data within the School of Humanities; b) to integrate teachers and students in the face of the challenge of ID and TD in research. Thirty-two workshops from the following fields and institutes were offered: History, Education, Philosophy, Social Sciences, Applied Linguistics, the Regional Social Observatory and the Nucleus for African and Indigenous Studies.

The journey provided the opportunity to become aware of the great variety of research experiences that exist in just one of the university schools, respectively, of the shortsightedness when one does not consider a broader scope of possibilities to approach reality. The list of workshops included titles such as 'Research and the genealogical method', 'Web History, e-Research e e-Teaching', 'The essentials of a case study', 'The challenge of public communication in science', 'Collective hermeneutics in ethnic-racial relations'. I had the opportunity to participate in the last one where leaders from various religious communities and a great numbers of African-Brazilians in a generally white university engaged, together with academics, in understanding ways and means to build conditions for a peaceful and fair living together.

Other contexts of TD in the university could be identified at a closer look, revealing that TD finds its ways at the borders of the research establishment.[8] The examples seem to show, on the one hand, that TD is in itself a complex process and hardly ever could be implemented top down. On the other hand, it can also be argued that there is a need for porosity within the existing institutional structures in order to allow these border practices to grow and inspire the creation of a place for real knowledge democracy within the institution and with society.

Concluding remarks

Let us now return to the argument relating TD to decoloniality. How can TD be conceived as a decolonizing process in research? Having as background the body of knowledge produced on TD and the information and reflections gathered in this paper, the understanding of TD seems to encompass to a lesser or greater degree the idea that it is an attitude, a project and a praxis. The concluding remarks will be presented in the form of propositions of TD as a potential decolonizing research practice.

TD is a decolonizing process inasmuch as it provokes a change of attitude in relation to the world, in relation to the other, and in relation to knowledge and production of knowledge. Nicolesco (2008: 95), referring to the levels of reality, identifies attitude 'as the individual or social capacity to keep a constant, unchangeable *orientation*, no matter the complexity of a situation and the hazards of life.' Follmann (2014) emphazises individual traits such as humility, openness and sense of social justice.

Maldonado-Torres (2016), drawing on the history of philosophy, argues for the centrality of the concept of attitude in research and presents another face of the concept. A decolonizing attitude would find its roots in the insurgent projects that resist, question and try to change colonial pattern of being, of knowing and of power. He takes Franz Fanon's *Black Skin, White Mask* as portraying the way modernity as a project produces racism and colonialism, and, respectively, how the

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[8] Another important institutional place for TD is the *Instituto Humanitas* (Universidad de Vale do Rios dos Sinos) that brings together specialists and professionals to discuss issues such as violence, youth in contemporary society, and industry 4.0 and its impact on society.

promotion of human equality is a political, epistemic and decolonizing process. TD as a decolonizing attitude represents the willingness to transgress the disciplinary logic, being open to the emerging of border crossings.

TD is a decolonizing process inasmuch as it is understood as a humanizing project. The struggle to overcome dehumanizing conditions requires a broad epistemic approach that does not fit within the limits of isolated disciplines and probably not in the conjunction of a couple of them. In this sense, it is a radically democratic future that is envisioned as a horizon towards which to direct the production of knowledge in a collaborative, solidary and critical process. TD can be part of the movement that attempts to create an alternative to the modern Eurocentric project based on the coloniality of power, of knowing and of being (Maldonado-Torres, 2016).

As part of an alternative project of society, TD also requires planning at various levels: personal, institutional, regional and national, and international. The cultivation of a transdisciplinary attitude needs to find programmatic and institutional channels for its implementation. When Gustavo Pereira (2015) refers to 'institutional learning' in ID it certainly also applies to TD. He identifies four key elements in these learnings: a) the mediation between generalities and particularities through programs (on a larger scale), themes (at middle level) and projects (on specific issues); b) catalysis or consolidation, composed of spaces for encounter and exchange; c) leadership; d) and active management.

Finally*, TD is a decolonizing process inasmuch it requires involvement with concrete social and environmental issues*. It is a praxis comprehending action and reflection, dialogue, and commitment to change. Catherine Walsh (2019) thus defines decolonizing praxis based on the Freirean dialectical movement of action and reflection:

> *It is reflexive and reflective, critical, theoretical, and pragmatic. It is intentional in that it acts upon and in reality to transform it, aware of its own processes and aims. And it is grounded in a critical humanism of inquiry and intervention that chooses existence and life over the dictates of dehumanities and the colonial, capitalist, patriarchal system. (Walsh 2019)*

Ultimately, it is a decolonizing TD praxis, committed to the struggle against the de-humanities that validate and legitimize the knowledge that is produced and the way this knowledge is produced.

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