

Confluence of knowledge: cyclical steps for transdisciplinary research in practice, Brazil

Gabriela De La Rosa^{1, 2}

¹ Knowledge, Technology and Innovation, Wageningen University & Research, The Netherlands

² National Institute of Science and Technology in Interdisciplinary and Transdisciplinary Studies in Ecology and Evolution (INCT IN-TREE), Brazil

Transdisciplinarity has been widely emphasized as an alternative approach for mitigating the social-environmental crises, and it is motivated by the limitations of compartmentalized disciplinary research. Transdisciplinarity is also a methodological process of learning and co-production, but its success requires attention to the complexity of human relationships, such as diverse values, interests, and tensions. This article aims to share insights from a transdisciplinary process co-developed with a fishing community and an academic research team in Brazil. It discusses steps for taking transdisciplinary research into practice, while also offering critical perspectives. By reflecting on these steps, I hope to assist research involving various stakeholders in better understanding the responsibilities and practical demands involved in converging different knowledge(s). By offering new avenues for addressing the problems of our interconnected world, the article asks for creativity and engagement to understand and develop practices of confluence of knowledge. This article does not aim to bring a recipe or a rigid structure to transdisciplinarity, but it is an invitation to think about how (or if) we are doing transdisciplinary science in a transformative way. Are we just reproducing the dominant pattern of science or creating novel pathways?

Keywords: transdisciplinarity; participatory action research; emotions: transformative, methodologies; Brazil

Introduction

Transdisciplinarity has been widely emphasized as an alternative approach to mitigate the social-environmental crises we are facing, and it is motivated by the challenges we find when we just solely consider disciplinary ways of thinking (Ludwig and Boogard, 2021). I understand transdisciplinarity as a research approach that aims to bring together different

types of academic, indigenous, traditional and empirical knowledge, ways of thinking, interests, and socio-cultural systems (Scholz and Steiner, 2015; Popa et al., 2015; Bammer et al., 2020). Transdisciplinarity is also a methodological process that can lead the process of learning and co-production. But to achieve this we must pay attention to the complexity of human relationships, such as diverse values, interests, and tensions (Ludwig and El-Hani, 2020; De La Rosa et al., 2024). This article builds upon a long-standing collaboration between the academic group and a fishing village in Brazil. This relationship, which began 9 years ago, has been shaped by shared efforts to address environmental and social challenges. Community members have actively participated in shaping research questions and co-creating knowledge, reflecting their interest in preserving traditional practices while navigating shifts toward a tourism-based economy. Their involvement in this process stems from a desire to ensure the sustainable development of their community while preserving their cultural heritage. This partnership has fostered mutual learning and trust, which have been essential for the success of the transdisciplinary process described in this article.

Transdisciplinarity can and should be about the confluence of knowledge. Confluence, a term introduced by Nego Bispo (2023), is the coexistence of elements that are different from each other but still come together in practices and worldviews. This is a crucial aspect of the *quilombola* way of perceiving the world. Quilombos are communities originally established by people of African descent who escaped slavery. In some cases, they also included Indigenous peoples and other marginalized groups, creating spaces of mutual support and cultural exchange. These communities have long been symbols of resistance, preserving Afro-Brazilian cultural traditions, oral histories, and a deep connection to the land through practices like small-scale agriculture. Today, quilombos continue to play a vital role in Brazilian society, advocating for land rights and contributing to the nation's cultural and political identity. Nego Bispo is a *quilombola* who describes himself as a translator, who moves between the preserved oral knowledge and the knowledge of outsiders. As stated by him:

A part of my being that is water, cooling the other part which is fire, through another part which is air, evaporated. And flowing through the cosmological space, in this part which is the earth, it solidified. And merging with other lives, in other bodies, existing and resisting, here I am.

This free translation of his poem, originally in Portuguese, and recited in an interview for *Itaú cultural* (2021) exemplifies how important it is to exchange knowledge and thoughts among beings for this marginalized group, who are also powerful fighters. We all are part of the same earth, we are part of the whole. The confluence between these different people from Africa and the different original Brazilian people, enabled them to keep their understanding of the world as a way to resist and to preserve their knowledge from the colonial epistemicide. Throughout this paper, I explore the concept of confluence and develop an analogy with

transdisciplinarity, endeavoring to integrate this perspective into academic discourse as a means of understanding the world.

Here we are talking about the confluence between different realms of science, various social actors, and forms of knowledge that come together and interact to become something greater. Like a river, where its tributaries merge, becoming one and flowing into the sea. However, we need to be aware that confluence does not mean that everything will be integrated. Still using the idea of a river, we can see the water flowing also through different pathways, with a small water's body, like small streams. The confluence of knowledge, along with its divergences, shows us the partial overlap between different systems of understanding (Ludwig and El-Hani, 2020). Bringing to the light that not everything is dancing in a perfect choreography, but that we do have many disagreements and divergences that deserve our attention.

To follow this path, it is important to understand steps to make these different knowledges partially converge in a living river. By steps, I mean the types of actions to navigate among the huge pool of knowledge of different actors. Actions such as building interpersonal relations and organizing everyday necessities of fieldwork that are of crucial importance for making transdisciplinary research succeed in practice but too often neglected in theory-driven debates about transdisciplinarity. This article therefore adopts a practice-oriented perspective when asking how to build a critical but still safe space for people who come from different parts of society to share their learnings which could come from their ancestors, their life experiences and/or from books as well. How to avoid reproducing the inequalities prevalent in society, understanding that there are different ways to understand and explain the world, and that western science is not the only source of valid knowledge (Chilisa, 2019; Krenak, 2020). While this paper acknowledges the vital role of communities in shaping and sustaining transdisciplinary efforts, its focus is on the researchers' responsibilities. Researchers must ensure their practices foster ethical, equitable, and effective collaborations, addressing power imbalances and creating spaces that allow diverse voices and knowledge systems to thrive.

To address this complex situation, community-based participatory action research (PAR) is a good possibility. PAR often appears as an alternative or extension of dominant scientific methods, serving as a means to transdisciplinarity theory with local action. This approach comes from the confluence of Paulo Freire's pedagogy, Orlando Fals-Borda, and feminist critiques (Smith, L. et al, 2010). It brings the idea that scholars should partner with the community members, instead of leading studies in the communities. To think and apply this type of research, academics need to open their minds to alternative ways to think about research questions, also thinking out of the box about what means to collect data, and how to do *science*. In the century we are in, it is unacceptable to still not include the diversity of people, especially racialized individuals, and minorities as a whole (Gonzalez, 2020).

In this article, the goal is to share part of the process co-developed over the last few years in an academic group and the fishing community of Siribinha in Brazil. The aim is to discuss the importance of each of the steps, while also offering critical perspectives. As Nego Bispo (2023) highlights, confluence of knowledge does not proceed in linear but rather cyclical steps that return to the beginning through a cycle of *início-meio-início* (start-middle-start) and therefore remain in constant interaction and tension. By sharing my own experiences in making these cyclical steps, I hope to assist anyone who desires to undertake research involving various actors in better understanding the responsibility involved in converging different knowledge(s) and developing their pathway to do so effectively.

Material and methods

I first arrived in Siribinha, a fishing village with approximately 500 inhabitants, located near the mouth of the Itapicuru River (Bahia, 2003), in 2017. It is part of the municipality of Conde, located on the northern coast of the state of Bahia, Brazil, which had an estimated population of 23,651 people in 2022 (Instituto Brasileiro de Geografia e Estatística, 2024). I chose this fishing community for investigation due to its deep ties with the Federal University of Bahia, established through an educational and conservation project developed in the community since 2016 by a team interested in conducting an inter and transdisciplinary research. At that time, my background was in biology, and I was beginning to develop a deeper understanding of ecology. I was interested in better understanding how to develop a conservation approach with the community, although with a limited theoretical foundation.

I chose to practice participant observation, conduct semi-structured interviews, and carry out Quick Participatory Diagnosis (QPD) in the community. Chambers (1995: 1253) defines QPD as ‘a growing family of approaches and methods aimed at enabling the local population to share, enhance, and analyze their knowledge of reality, with the goal of planning actions and intervening in that reality.’ This methodology was developed by the International Institute for Environment and Development (IIED) as an approach that involves various actors to ensure their full engagement in the evaluation process, interpretation, and validation of the results, as well as in generating ideas for action. The process is crucial for transparency and ownership, ensuring the accuracy and credibility of the results, and garnering support for acting (Booker and Franks, 2019). Nevertheless, I was facing a lot of challenges to engage more community members in this project. And I was trying to understand these challenges in a pragmatic and straightforward way, as it is taught to natural scientists. But are the problems from the real world something so straightforward to solve?

With these lived experiences, including the challenges, failures, and successes, I began to question whether these methodologies, and if the way I was practicing them, were sufficient to achieve my goals. The main aim was truly to include other systems of knowledge in the

decision-making process. I also began cultivating a strong relationship with some of the community members, and it grew over time. I started contemplating the significance of these relationships in involving them in the process, understanding their perspectives, and translating academic language for other actors. Moreover, I started on developing my background in social science and embracing a decolonial perspective on ecology. I began to confront the simplicity, and simultaneously the complexity, of attempting to weave together different narratives and forms of knowledge. It is a deeply enriching experience to serve as a mediator in the process of confluence.

Over the next few years, the research team developed strategies to better interact with the members of the Siribinha community, as well as with other stakeholders such as the research team itself, local policymakers, and community representatives from other surrounding locations (Figure 1).

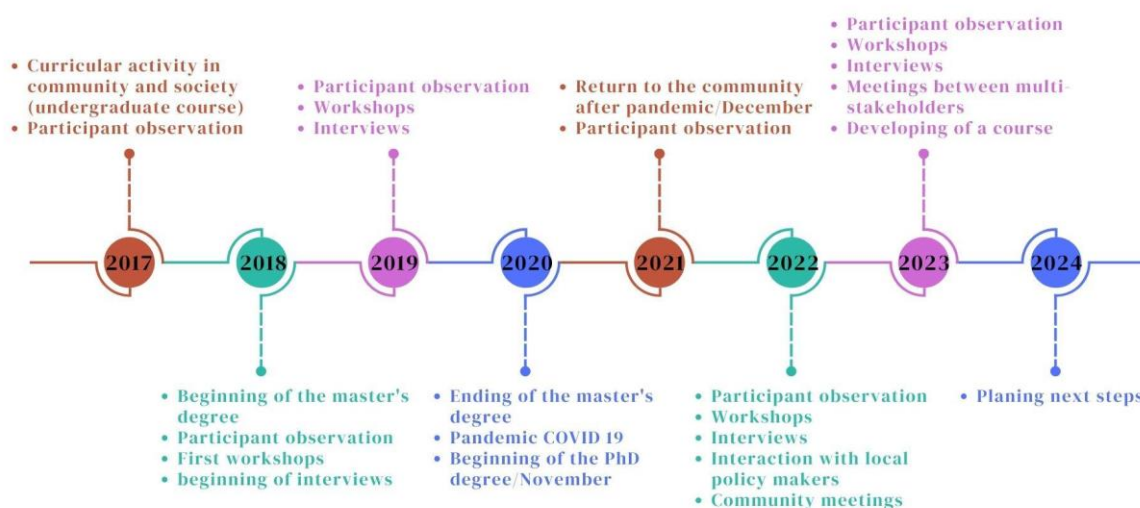


Figure 1. Timeline of the work developed by the author with the artisanal fishing community of Siribinha, Conde, Brazil.

Source: Author.

The six steps I will present in the sections below are the culmination of this multi-year engagement in a transdisciplinary project in Siribinha, which has encompassed numerous successes and failures. This represents a summarized version of the many lessons learned throughout this process, intended to provide outsiders with insight into engaging in this type of research. Returning to the cyclical concept of Nego Bispo, the aim is not to pave a linear path or reach a definitive conclusion, but rather to continually refine and adapt previously proposed ideas. Here, I emphasize the significant importance of the following aspects: (1) The team: It is crucial to consider the interpersonal relationships among the research team to

improve practices and results. (2) Fieldwork: Careful preparation and reflexive organization in the field. (3) Developed and used methodologies: Reflection on how to enhance methodologies and foster creativity throughout the process. (4) Facilitating community meetings: Creating a safe space for dialogue and exchange among individuals facing similar challenges. (5) Facilitating meetings between multi-stakeholders: Acknowledging the importance of involving various actors and creating space for dialogue. (6) Education through courses: Sharing insights with the new generation of researchers and incorporating fresh perspectives into the ongoing process of improvement.

Lessons from the research

1. The team

If a research team aims to have a transdisciplinary vision of doing science, it implies understanding the importance of maintaining good and equitable working relationships that go beyond isolated moments of meetings and experiences in laboratories or offices. It is necessary for the team to be composed with consideration of different objectives, converging interests and expertise to develop appropriate theoretical foundations, approaches, and interactions with other actors and social sectors. To achieve this, it is essential that the team is committed to this goal and develops fundamental skills for open, sincere, and empathetic dialogues with their colleagues and partners. This enables alignment for collaborations in the development of methodologies and interventions, in order to avoid group fatigue from interactions. This way, different skills and knowledge can join forces to produce high-quality work.

Transdisciplinary activities often involve fieldwork and daily interactions between diverse actors that can last from a few days to extensive multi-year collaborations. The activities faced often involve interactions with everyday domestic activities, household work, for example. Typically, this aspect is not considered in academic debates about transdisciplinarity, yet it significantly influences practices. This aspect, deeply studied since 1987 by Arlene Daniels and described as ‘invisible work’ (Poster et al., 2016), though not directly related to transdisciplinarity, is clearly present in the internal dynamics of a team. It prompts us to question what qualifies as work and why certain types of work go unnoticed, particularly in fieldwork where researchers are expected to solely focus on research, leaving unattended the responsibilities and daily tasks that support it. Often, these contributions remain unrecognized, rendering both the work and workers invisible. Challenging traditional definitions of visible labor highlights the gendered nature of invisible work. An environment of respect, care, and understanding must be developed among team members. One cannot import misleading ideas of neutrality and impartiality from science into the field, as if relationships did not also converge and influence each other (De La Rosa et al., 2024). This

lived experience is often not well-represented in scientific work when we refer to transdisciplinary approaches.



Figure 2. Picture of the research team in front of the house we stayed for a few months in early 2022.

Photograph: Islane Lessa. Reproduced with permission of the author and participants.

In my experiences over the past years of research activity with a transdisciplinary team working in this fishing community, I have observed a relatively higher number of women researchers (still mostly cis and white) than men. Indeed, the relevance of both gender and race for invisible day-to-day work has been widely reflected in feminist and intersectional debates including Gonzalez (2020) and Crain et al. (2016). This predominance has consequently had an impact on the challenges and successes we have shared. Sharing a house with 9 women made me develop a better understanding of this (Figure 2). By this time, if we did not organize, for example, a schedule with the daily tasks (i.e., sweeping the house or disposing of waste), things could be a bit chaotic. And I need to say that it was not noticed by me at first, but by a colleague who was doing her first fieldwork in this community. Nobody taught us about this, nobody talked about this on our research team before, or in the classes I had during my bachelor's, master's, or PhD. But how do we manage a house with so many researchers, full of work to do, but also full of this invisible work to manage? How important is it to have a sense of community and cooperation to overcome these difficulties and develop

healthy relationships that allow us to continue collaborating in our research? In my point of view, it is a negligence to think that it is possible to completely separate the personal and the professional relationships. Especially in this case, when you are sharing your routine with a group, and you also realize that you depend on others to better develop your research and apply your methodologies.

Taking into account human aspects, such as intrinsic abilities and vulnerabilities, and revisiting these processes in an iterative 'start-middle-start' cycle (Bispo dos Santos, 2023), embracing the vulnerabilities and mutabilities of human beings, is essential for the improvement of careful transdisciplinary approaches that truly aim to challenge the research status quo.

2. Fieldwork

In many communities of the Global South, including Siribinha, challenges of doing transdisciplinary research are influenced by colonialism and perpetuate extractive practices and epistemic injustices (Chilisa 2019; Cooke and Kothari., 2006). Another well-known challenge is so-called helicopter research (Haelewaters and Hofmann, 2021) where little time is dedicated to the local community where one works. This practice reproduces top-down approaches, by simply grabbing data without understanding the community needing and desires. However, it has been increasingly questioned by transdisciplinary researchers (Cooke and Kothari., 2006) and depending on the research question and the reality of the involved group, more time is being spent on these field trips.

Many topics must be considered when organizing a fieldwork approach that lives up to transdisciplinary promises of more equitable co-production. From my perspective, the first point to consider is the researcher's relationship with the place and the people who live there. Is their reality similar to that of the place? Do they speak the local language? Have they been to that place or somewhere with similar nature and dynamics? These are the first questions that should be asked, and if the answer to any of them is negative, then one needs to think about how to minimize or alleviate the effects of these factors. How can you ensure individual safety in the field without knowing the local reality? The necessary transportation, the availability of medical assistance, and common accidents that may occur in that place are sometimes underestimated, while they should be considered as a fundamental part of the development of transdisciplinary research.

Organizing accommodation, considering the team's available time (as team members have personal lives and limited resources), the most viable and safe transportation for everyone, as well as the availability of that transportation (How will someone access medical care if they have health issues?) How will the team be provided with food? Where will the groceries be purchased, who will cook, how often, and how much will this impact the research being conducted? All of these are fundamental points that are closely related to the funding of these

research projects and trips. I do not want to say that just those who have been working previously in similar conditions are capable of developing good fieldwork. What I am saying is that it is important to take into account different layers and realities that we constantly face in the field. What can be part of your baggage if you also had developed in your life the interest for this type of research, topics and experience different engagements with vulnerable communities.

Transdisciplinary literature often fails to emphasize the importance of integrating practical perspectives into the discourse. It is crucial for researchers to delve into everyday concerns, as these underpin successful and empathetic transdisciplinary practices. Neglecting these real-world issues undermines our efforts in transdisciplinary research, hindering our potential impact.

3. Developed and used methodologies

To foster confluence of knowledge, allowing for a fairer translation of understandings and ways of seeing the world, we have various methodologies at our disposal. Beyond the well-known semi-structured interviews, it is important to keep in mind that when we want to understand someone else's perspective, we also need to make ourselves vulnerable. We need to create a space for mutual, sincere and open listening so that this dialogue can develop genuinely and enrichingly. Furthermore, as academics, we should consider that our creativity can be used as a means to make interactions more horizontal. I understand, therefore, that participatory methodologies, often artistic, allow for the interaction of different languages and forms of expression, as well as different ways of teaching and learning (Dupuis et al., 2022; Rowe, 2005). If we have a vast array of methodologies, interventions, and knowledge about our individual abilities, we start with our research question and develop ways to mediate and understand the convergence and divergence of these different worldviews.

After a few years working on this type of research, I understand that in the field, everything may be better when it is possible to start with good (1) participant observation (Musante and DeWalt, 2010). Having the opportunity to live with a community that is not from where you came from, understanding their daily life, comprehending the internal dynamics, and the power imbalance shown in their routine is an extremely rich opportunity to validate (or not) our previous perception as an outsider. That is how we can better understand if our theories and ideas are a good combination for the reality we are facing, and which kinds of adaptations will be needed. For better putting together this puzzle, the (2) field diary (Punch, 2012) is completely relevant. The diary can be made in your best way to reflect on all the information you are bombarded with in the field, which means that you can write but also draw or use pictures as a way to express your perceptions. After this, some (3) semi-structured interviews (Brinkmann, 2014) can be conducted aiming to confirm (or not) your perceptions, seeing if you will need to apply more methods and how, trying to turn this interview into a conversation between people who trust each other and want to develop something great

together. You need to speak their language and understand at least a part of their background to create this environment. Then could be the time to use your creativity to develop, adapt, and apply (4) arts-based workshops (Pearson et al., 2018) if you feel it would be helpful for them and for your research question. How to make research also a funny moment for them? How to make this meeting fruitful and a moment of confluence? Being completely open to hear and see their needs, and what types of interventions they would like to have, maybe your role as a researcher could also involve organizing and mediating some (5) other types of meetings, enabling some new encounters. With this in mind, it is possible to develop and adapt different methodologies for the specific groups in question.

Acknowledging these mentioned points above allows us to develop new forms of theoretically well-founded interventions, while also allowing improvisation to have a voice and space. The organization and necessary adaptations will be pre-planned, but it is known to those who have experienced these types of encounters in practice that adaptations and improvisations will always be necessary. And for this, it is very important to also consider the group with whom we are interacting. Are we dealing with a group of researchers? Where are they from? A group of a traditional community? What is the dynamic among them? Who are the people attending the meeting? Are we talking about a group of politicians? Who are they? What are the internal relationships within this group? Many questions must be asked before being qualified to interfere in the world of others. This is a role of great responsibility, and far from being trivial in the context of the disciplinary dynamics that Western academia is formulated upon. It is necessary to make a huge effort to prevent the group you are studying with from feeling overwhelmed during the process.

4. Facilitate community meetings

As an essential part of developing transdisciplinary research, we must consider the importance and relevance of creating constructive moments and spaces for the exchange of knowledge and different experiences among various stakeholders. The different methodologies mentioned earlier play a role in this dynamic, as does the motivation to organize these moments. If we, as researchers developing our projects, identify gaps and the need for exchange with other groups, it is also our responsibility to facilitate that.

Logistical organization is important, and the first step to consider is the budget available to make these moments happen. We are aware that, considering the research reality in Brazil (the country where many of these insights came from), this is a factor of huge relevance. Our science has been severely underfunded, and our research has been developed at the brink of unsustainability. Unfortunately, transdisciplinary research is not among the most funded areas, which significantly hinders the engagement of researchers in this field.

The organization of an event that brings together different representatives and stakeholders begins with the need for comprehensive knowledge of social groups and organizations. More

than just knowledge, it is necessary to establish a good relationship with them so that the invitation is considered and accepted in the first place. As a second step, it is necessary to coordinate the schedules of the participants and the availability of space. For example, in mid-2022 our research team had the opportunity to facilitate a meeting in the artisanal fishing village we are working with (Figure 3).



Figure 3. Picture of the fishers and researchers at the meeting in Poças in August 2022.

Photograph: Julia Turska. Reproduced with permission of the author and participants.

At this point, we recognized that they had many needs that we were not capable of solving, but far better to be exchanged among who were facing similar questions or having developed in a different way. Acknowledging this, we were motivated to organize and mediate a meeting with different artisanal fishing communities in the municipality of Conde. We invited representatives from the fishing communities from Ilha de Maré and Conceição de Salinas, both from the state of Bahia, but with their particularities in terms of organization and struggles. This created a space for dialogue, using some well-known methods to plan the next steps that the community could take to self-organize and solve some of their issues.

Afterwards, our task as researchers in this area is to maintain engagement and devise methods to assist the community in applying the insights derived from such meetings.

5. Facilitate meetings between diverse actors

Following the same line of the need to allow and nurture spaces for the convergence of this knowledge, events can and should be organized to promote this exchange. These events can involve various members and groups from the academic community, as well as different community representatives. In this article, I present a successful example of an event that took

place in March 2023 at the Federal University of Bahia, co-organized and co-financed by the GEOS Project, The Netherlands (Figure. 4). The event, ‘Communities of research, communities of practice: towards a transforming transdisciplinarity’ brought together a Brazilian team that has been working on transdisciplinary research for nine years, researchers from different nationalities, backgrounds, and career stages, as well as members from traditional communities such as the Kayapó-Xikrin, residents of the fishing communities of Siribinha and Poças, and a member of the interstate movement of *quebradeiras de coco babaçu* (babassu breakers).



Figure 4. Pictures of the group who participated during the event ‘Communities of research, communities of practice: towards a transforming transdisciplinarity’ in March 2023.

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Initially, it was necessary to analyze the desired event format, consider the guest list, accommodation, catering, and transportation, and estimate the event's expenses. Afterward, invitations and a proposed agenda were developed. It was essential to plan the event's dynamics, organize space reservations, coffee breaks, as well as interactive activities such as city tours and event facilitation. We organized different parts of this event; some of them involved presentations for those who were not familiar with the city and the university setting. We believed it was only fair to introduce the place we were and the setting we, the researchers, came from, considering we always ask them to introduce their own place to us. This initiative was carefully planned to make the event as horizontal as possible.



Figure 5. Pictures of traditional communities in the event ‘Communities of research, communities of practice: towards a transforming transdisciplinarity’ in March 2023. 5A: Siribinha and Poças members, representatives of Kayapó-Xikrin and a member of the interstate movement of *quebradeiras de coco babaçu* during a round table. 5B: Pictures of Siribinha and Poças members presenting during the event. Copyright: Gabriela De La Rosa. Reproduced with permission of the author and participants.

The highlight of this event was, through this mediation and the years-long friendship and trust built with the participating communities, ensuring a safe space for them to have a voice and receive the necessary listening. We reserved some other moments for researchers working in the community to present their progress, results, and thoughtful insights through oral presentations and posters, with a language accessible for the whole public. It was a wonderful surprise that community members felt secure enough to interrupt and correct some of the oral presentations. For example, this happened when a colleague was discussing a paper combining academic and traditional knowledge from Siribinha and Poças, and community members asked to share their perceptions and point out any mistakes they noticed. They started conducting and leading this presentation in a very natural manner. We also tried to combine moments where the stage was given to them to organize their own way to present their reality, perspectives, and stories, in a way that the researchers and other interested public

were there to listen and ask questions. Previously, at this moment, we tried to align with them how we could support them, the format they wanted, and what they were expecting from us (Figure 5).

It was essential for the observations and knowledge of these communities to be valued by the attending academics, and this perception was constantly reaffirmed throughout the event. We had a significant relevance in this regard, and the expertise belonged to the members of the participating communities. Academics were actively corrected in their observations, personal exchanges took place, and emotions became part of the dynamic. This was something unusual in purely academic events. Throughout this and the previous sections, there is a consistent emphasis on the involvement of diverse systems of knowledge in transdisciplinary research, ranging from intellectual insights to emotional dimensions and various contextual factors. An interesting point to explore is the assertion that emotions are not just secondary elements but rather essential contributors to transdisciplinarity. This perspective seems to emerge implicitly as we explore into the intricate web of factors shaping transdisciplinary research and the attendant responsibilities of researchers. By acknowledging the role of emotions as central in the process, we challenge conventional assumptions that prioritize rationality over affectivity. This line of thought prompts us to reconsider the nature of knowledge creation, advocating for a more holistic approach that embraces both cognitive and emotional realms.

6. Education through courses

It is also important for the transdisciplinary process to share theoretical and practical knowledge with students in training. It was from this understanding that a course for the master's program in Ecology: Theory, Application, and Values and the program in Teaching, History, and Philosophy of Science, at the Federal University of Bahia, was organized by three PhD students with different academic backgrounds and experiences. The course, entitled 'Participatory methodologies: dialogue of knowledge and environmental conservation' had a workload of 34 hours and included artistic and participatory activities in addition to lectures. The course covered topics such as knowledge co-production, transformative participatory action research, communities of practice, theatre of the oppressed, and arts-based methodologies. These diverse themes stemmed from the different backgrounds of the proposing professors and were highly important and useful for the development of transdisciplinary work.

Courses like these should be incorporated into various graduate programs if we embrace the idea of transdisciplinarity as a guiding framework for our practices and activities. It is essential to overcome the barriers of disciplinarity and the homogeneity of backgrounds and *do science*. The development of this course aims to normalize access to different content from diverse areas and graduate as researchers with a holistic understanding of the socio-environmental challenges we face.

It is important not to romanticize the execution of courses like these but to discuss the challenges of coordinating such diverse schedules, the fast-paced nature of modern life, transportation costs, and space availability. Often, in published articles, we do not address these practical and very real aspects of implementing transdisciplinary theory into practice. Also, by sharing our diversity of knowledge and experiences throughout a course, it is possible to create a space that makes the students feel belonging to something. As feedback from this specific course, we heard many times, from different participants how they were missing this type of perspective. How they had no clue that more people are engaging in this type of doing science, sometimes with tears in their eyes. The group was really interested and engaged during the classes, bringing their own experiences, doubts, fears and desires. It was a place for a deep and nourishing exchange. And I acknowledge this to different things, but I am sure that one of them was the lack of these approaches in academic courses.

How can we expect people to know how to do it, how to navigate it, how to execute it? We need to combine theories with lived experiences, with practicality, and align the ideal with the achievable.

Conclusions

Transdisciplinarity promises a dynamic and indispensable approach that transcends the confines of traditional disciplines or our labs and offices. By offering new avenues for addressing the problems of our interconnected world, it asks for creativity and engagement to understand and develop forms to make the confluence of knowledge happen. However, transdisciplinary research also comes with complex practical demands from interpersonal relations to everyday necessities of fieldwork that often remain insufficiently reflected in the theory-driven literature on transdisciplinarity and can undermine its success and transformative potential.

This article does not aim to bring a recipe or a rigid structure about what and how to do transdisciplinarity, but it is an invitation to think about how (or if) we are doing transdisciplinary science in a transformative way. Are we just reproducing more of the same we learned during the past years? Here I presented some experiences of working with traditional communities, also with a large and mixed group of academic researchers. The research context I presented here has been developed in collaboration with the community over the past 9 years, resulting in many fruitful outcomes. The pathway is not linear; rather, it resembles spirals where we work together to understand how to adapt our researcher's minds to include diverse perspectives in the process. I consider this to be a successful experience because we can observe the deepening of relationships and their growing strength. We can see the community becoming increasingly engaged in the research we have been conducting and finding safe spaces to voice their desires.

I reinforce the importance of self-reflection as researchers about the development of our projects and interactions with other stakeholders. How important is it to have a non-academic repertoire when working with transdisciplinarity? What about incorporating literature from local ancestors, from indigenous peoples, rich with wisdom often overlooked in Western academia? When we write about our lived experiences and emotions, when we write from our own skin, we are expressing a deeper truth. We are engaging in what Conceição Evaristo calls *escrevivência*, in English akin to a written experience. The importance of bringing this discussion more often to academia, as something cyclical, as proposed by Nego Bispo (2023) - start-middle-start instead of start-middle-end. Trying to keep finding the headwaters, tributaries and mouth of all these different types of knowledge and societies to create something bigger and better. The idea of confluence by Nego Bispo was not initially intended as an academic concept for transdisciplinary researchers. It is rooted in the core principles of quilombo philosophy. Taking inspiration from Nego Bispo's writings for transdisciplinary research highlights not only the practical but also the political challenges of facilitating confluences of knowledge between actors with vastly different backgrounds and positions of power. His notion of confluence of knowledge therefore presents both an opportunity but also a challenge for fostering a more horizontal, equitable, and community-oriented approach to transdisciplinary research.

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About the author

Gabriela De La Rosa is a Brazilian researcher with an academic background in biology, ecology, and social science. Her focus lies in exploring the confluence among systems of knowledge. She is particularly interested in delving deep into participatory methodologies to facilitate meaningful dialogue, thereby addressing challenges in environmental conservation. The past years have exposed her to a spectrum of experiences, ranging from successes, challenges, and failures that have influenced her way of thinking and conducting science. As an optimistic scientist, she believes in the potential to cultivate a science that transcends conventional boundaries and embraces innovation in addressing complex issues.

Email: gtv.delarosa@gmail.com

ORCID ID: [0000-0002-7896-4534](https://orcid.org/0000-0002-7896-4534)