

Developing critical consciousness of epistemic (in)justice

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Abstract: Societies and economies are, in part, structured and organised epistemically. However, who has the power to shape key territorial decisions and policies, and based on whose/which knowledges? Whose and which voices, practices, methods, problems, problem definitions and solutions matter in the process? Whose/which knowledge systems are legitimised or delegitimised? These are some of the questions that are raised in this paper on epistemic (in)justice. The discussion contributes to reflections on the development of action research pedagogies and methodologies, in particular on facilitating approaches and processes that are respectful and conducive to the central human capability of different people and groups to produce and receive knowledge. The genesis of the argument is rooted in a critical understanding of the on-going damages caused by epistemological hegemony and coloniality of power, and consciously working towards integrating perspectives of epistemic justice in our praxes. By stimulating the inclusion and participation of those who are marginalised, we contribute to countering dominant narratives and bringing forth nuanced perspectives of the lesser heard, and visible. With those in mind, I highlight the importance of epistemic governance, epistemic freedom, epistemic humility, and inter- and intra- territorial connectivity for enabling the co-creation of transformative relations, visions, spaces, dialogues, and actions in responding to climate change and the associated challenges.

Key words: epistemic justice, coloniality of power, humility, governance, knowledge, climate change.

Desarrollando una conciencia crítica de la (in)justicia epistémica

Resumen: Las sociedades y las economías están, en parte, estructuradas y organizadas epistémicamente. Sin embargo, ¿quién tiene el poder de formar decisiones y políticas territoriales clave, y enraizadas en qué conocimientos? ¿De quién y cuáles voces, prácticas, métodos, problemas, definiciones y soluciones de problemas importan en el proceso? ¿De quién/qué sistemas de conocimiento están legitimados o deslegitimados? Estas son algunas preguntas que se plantean en este artículo sobre (in)justicia epistémica. La discusión contribuye a las reflexiones sobre el desarrollo de pedagogías y metodologías de investigación-acción, en particular sobre cómo facilitar enfoques y procesos que sean respetuosos y propicios a la capacidad humana central de diferentes personas y grupos para producir y recibir conocimiento. La génesis del argumento tiene sus raíces en una comprensión crítica de los daños continuos causados por la hegemonía epistemológica y la colonialidad del poder, y en el trabajo consciente para integrar perspectivas de justicia epistémica en nuestras prácticas. Al estimular la inclusión y participación de aquellos que están marginados, contribuimos a contrarrestar las narrativas dominantes y revelar perspectivas matizadas de los menos escuchados y visibles. Destaco la importancia de la gobernanza epistémica, la libertad epistémica, la humildad epistémica y la conectividad inter e intraterritorial para facilitar la co-creación de

relaciones, visiones, espacios, diálogos y acciones transformadoras para responder al cambio climático y los desafíos asociados.

Palabras clave: la justicia epistémica, la colonialidad del poder, la humildad, la gobernanza, el conocimiento, el cambio climático.

1. Introduction

Studies in territorial development have long demonstrated that knowledge is central to how we think and organise socio-economic activities, determine priorities, manage and allocate resources (including funding), and develop actions. However, whose knowledge is central? Whose knowledge counts and whose knowledges are marginalised and silenced? Which knowledge systems are (de)legitimised? Who makes those decisions? Epistemic justice, which is the focus of this paper, considers such fundamental questions in the context of climate change.

Notions like climate accountability, climate reparation, and climate justice are gradually entering discussions on climate change and actions. Yet, the burden and impacts of climate change, characterised by more severe weather events and disease outbreaks, exacerbated food insecurity, water insecurity, displacement, identity loss, illness, and mortality in different contexts, continue to be disproportionately felt by vulnerable communities and populations who are already discriminated against on the bases of intersecting structures of power not limited to race, age, class, ethnicity, gender, migratory status, religion, spirituality, nationality, and language (Sultana 2021; Srivastava et al. 2022; Deivanayagam et al. 2023; World Meteorological Organisation, 2023). People who have historically contributed the least to climate change are experiencing climate injustices, pointing to the “unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries” (Intergovernmental Panel on Climate Change, 2023, p.42).

As part of developing just climate policies and actions, we need to address the unequal relations and inequities between the global North and global South, deeply rooted in varied forms of power and discrimination. The historical responsibilities of the “states, corporations and ruling classes of the global North” in terms of excess emissions, and the climate change burden placed on communities in the global South cannot be ignored (Deivanayagam et al. 2023, p.1). Newell and Adow (2022) provide several historical illustrations. For example: how richer colonial states such as the UK “reject polluting fossil-fuel infrastructures at home but provide financial support for fossil-fuel infrastructures in formerly colonised economies”; and the United States, with a population of approximately 323 million emitting “5bn metric tonnes of carbon dioxide per year” in contrast to the sub-Saharan Africa region emitting “a combined total of around 823 m metric tonnes of carbon dioxide per year from a population of about a billion people” (p.33–34). Consider also Ndlovu-Gatsheni (2021) who discusses the “empire of trade”, “colonies of settlement” also referred to as “territorial empire”, and the “empires of the mind” (which use knowledge to dominate other parts of the world, not least to have control over economic resources in Africa).

Various groups within the global North, namely Indigenous communities in settler-colonial states, migrants and racially minoritised are also disproportionately affected by climate change. In a recent conversation on 'Syilx-Led Climate Justice in a Global Context', Jeanette Armstrong mentioned the root causes of climate change and ecocide — capitalism, colonialism and extractivism, and argued that those who are largely responsible for it, notably governments and corporate actors have to be held accountable.¹

Equitable access, redistribution of resources, shared power, and the development of centrifugal dialogues, policies and actions are yet to be achieved both between and within territories of the global North and global South. In part, this could be because questions of climate change and justice are complex, not always recognised, and often contested. Huff and Naess (2022) identify blind spots in mainstream debates on climate and environmental change and justice, which impact policy agendas, namely the failure to: recognise diverse contexts and knowledges, deep-seated contestations, and risks linked to 'recovery' and 'emergency' mindsets. Whilst in light of the urgency around climate change, an imperative is to generate definitive solutions and actions, we need to ensure that these are not carried out at the risks of overlooking complex justice implications. For instance, extractive practices are now taking place under the guise of 'green', 'renewable', 'sustainable' projects with dire consequences for biodiversity and local communities (Brock and Steffens-Griffin, 2022). In those contexts, who gets to determine (why and how): who participates in governance processes, who can use what technology, which impacts are desirable, and whose knowledges and experience are more trustworthy, credible, actionable.

Larrea and Costamagna (2023) suggest that in addressing climate emergency, we need to understand its roots, deepen democratisation, avoid perpetuating injustices, and consider new relations of territorial development at multiple levels. Can perspectives on epistemic justice (among others) help us in those respect? The reflections in this paper are framed with that core concern in mind. In particular, I call on developing critical consciousness of epistemic justice to uncover nuanced challenges, narratives and often-uncomfortable truths of climate emergency in different territorial contexts, grounded in lived experiences and knowledges within and across localities, regions, and countries. Critical consciousness is crucial for political and economic freedom (Ndlovu-Gatsheni, 2018), to enhance democratic participation, and develop just action.

2. My flow of consciousness and loci of enunciation

Presumably, one's flow of consciousness is connected to the loci of enunciation, i. e. their geopolitical and body-political epistemic location, where epistemology intersects with the politics of location (Mignolo 1999; Grosfoguel 2011). I am still in the early process of making sense of, and articulating my loci of enunciation; it is in a state of flux – not fixed, not fully formed.

1 Jeanette Armstrong is a member of the *Syilx* Okanagan Nation, the Canada Research Chair in Okanagan Indigenous Knowledge and Philosophy, and Associate professor in Indigenous Studies at The University of British Columbia.

The *Syilx* People of the Okanagan Nation are "a trans-boundary tribe separated at the 49th parallel by the border between Canada and the United States" who "continue to assert their jurisdiction and responsibility over the stewarding of their land, resources and quality of life of their citizens" (Source: <https://www.syilx.org/about-us/syilx-nation/>.)

But I can share some reflections that might help understand my positionality, foci, and underlying tone in this paper on epistemic (in)justice. For example, when I write about the global North and global South, it is not with the view to reinforce divisions and borders.² I use the distinction as a signifier of coloniality and post coloniality and to highlight the historical and political disparity.

I was born, and grew up on the island of Mauritius, which was first colonised by the Dutch, followed by the French, and then the British. The island gained independence in 1968, and became a republic in 1992. Mauritius has strong historical, cultural, economic, epistemic, (geo)political, and social relations with several countries, most notably (and in no particular order) with China, England, France, India, neighbouring islands (including Seychelles, Madagascar, Comoros), and Eastern and Southern countries on mainland Africa (including South Africa and Mozambique). These have contributed to a complex mix of influences on the development of the country and its people. Rooted in its colonial legacy, the education system has been dominated by English and/or French.³ As Mignolo (1999, p.236) points out, “epistemology is embedded in languages and particular genealogies” and “colonial legacies, national languages and disciplinary foundations in the education system” shape how we think, and know. I became acutely aware of this after I left Mauritius in 2007. I went on to spend a significant amount of my time studying, working, and residing in the global North: England, Scotland, Canada. My (physical, emotional, mental) exposure to cultures, languages, landscapes, societies, histories, knowledges expanded. I have encountered how diverse people perceive and know (or do not know) ‘other’ people, countries, cultures, languages, including my own. These encounters have in turn contributed to who I was, I am, and becoming; my sense of belonging or isolation; and what, who, and how I know (and do not know).

Borrowing the words of Julia Alvarez, “mobility allow[s] us to maintain our connection to our native cultures and countries and language, so our old homelands were still part of our new selves. But by being here, that homeland had also undergone a change within us. We could not go back. We did not fit in there; we did not fit in here. We were caught between worlds, a no man’s land, no place for troubled mujeres . . .” (2007, no page number). We find ourselves “heal[ing] the split that originates in the very foundation of our lives, our culture, our languages, our thoughts” (Anzaldúa, 1987/2007, p.102). I often feel that I think and write from a place in-between (identities, languages, countries, continents, and my relations to these) and in the process run the risk of falling into crevices and gaps that exist. Belonging neither here nor there. This is not helped by the realisation that many of my personal and work connections increasingly exist and are maintained through virtual technology and spaces (which make interactions possible but at the same time add another layer of complexity).

I have written most of this paper whilst being on Turtle Island (North America) in what is now referred to as Canada during the time of the 2023 wildfires in the Western province of British Columbia. I was on the east side of the country, in Montreal, and received an emer-

2 I may be associated with either or both. And on both sides, I may be perceived as an outsider. There is heterogeneity within both the global North and global South, and marginalisation within each.

3 In Mauritius, there are several recognised languages and Mauritians tend to be bilingual, if not trilingual or multilingual. English being used the most for official written communication, and French and Mauritian creole being the most spoken ones. Bhojpuri, Hindi, Cantonese, Mandarin, Marathi, Tamil, Telegu, and Urdu are amongst other spoken languages on the island. In the education system, these languages are more subjects of study rather than being integrated in a holistic knowledge system. The expression of the various languages can be found more in ethnic/cultural/religious contexts, and to varying degrees may influence how communities see, sense, and interpret the world.

gency alert on my mobile phone. The university campus in the Okanagan Valley had to be evacuated. The wildfires were dangerously close. Embers had flown across the lake from West Kelowna to East Kelowna. The smoke engulfed the city. Air quality was at its worst. People lost their homes. I had colleagues and friends staying awake keeping watch to see if the fires were approaching their homes. Those who could, eventually, left the city for a few days to stay in safer parts of the valley.⁴ Weeks afterwards when I went back to Kelowna, I could still see and feel ashes and smoke. As I am writing these lines and finalising this paper, I am in Mauritius for a few weeks. As a small island developing state (SIDS) in the South West Indian Ocean, one of the most biodiverse oceanic regions, the island is highly vulnerable to climate change. Increasingly frequent heavy rainfall, cyclones, and flash floods have intensified environmental and human risks: landslides, loss of biodiversity, infrastructure damage, and diseases associated with food and water contamination. Climate-related disasters are not future threats; they have been present for many years and are now escalating. Yet, exploitative capitalism is thriving, leaving many vulnerable communities with inequitable resources left to fend for themselves.

Being critically conscious implies recognising commonalities and contrasts, and the ambiguous relations, and issues in and between peoples, cultures, and places that we encounter/live in. I see little transformation of: behaviours, cultures, policies, systems, structures, and justice-oriented action around me and feel that we could do with more critical consciousness, public dialogue, understanding, and responsible action. Epistemic (in)justice is one of the issues that we have to address.

3. Epistemic (in)justice

For Ndlovu-Gatsheni (2018), “epistemic justice is about liberation of reason itself from coloniality” (p.3). It concerns epistemic contribution and political action for social change. Epistemic contribution refers to the ability to provide and receive knowledge (Fricker 2007; Sigurðarson 2020). It is considered a central human capability linked to valuable beings and doings.

Virtues have to be held by both individuals and institutions to combat two kinds of discriminatory epistemic injustice that Fricker (2007) identifies: testimonial and hermeneutical. Testimonial injustice arises when a speaker is systematically afforded less credibility due to prejudice by the hearer (typically on the basis of social identity). Hermeneutical injustice refers to a person or group being disadvantaged due to the lack of collective interpretive resources and/or because of the advantage that those who are more powerful have in structuring social understanding. Bhambra (2021) argues for a broader understanding that considers the “grand narratives” that “structure the contexts within which we come to understand ourselves and others”. These determine “who has the power (and why) to assert their knowledge” (p.76).

4 There were over 2000 wildfires burning in British Columbia between April and October 2023. 60 of these were highly visible or posing a threat to public safety. See: <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-history/wildfire-season-summary>. A video by the BC Wildfire Service is available here: <https://www.youtube.com/watch?v=Ubz58lXXSWE&t=326s>.

Knowledge systems of marginalised communities, grounded in long-standing lived experiences, teachings, and understanding of climate-related issues are relegated to the periphery. Inclusion of marginalised people and knowledges, if it happens at all, is more often than not done through tokenism. Due to prejudices, their testimonies are wrongfully treated and viewed as lacking credibility. Hermeneutical injustice can happen through gaps in social understanding and in interpreting the diverse experiences and knowledges of those being discriminated against and disproportionately affected by climate change. This is reflected in the dominant narratives, for example, around Indigenous perspectives and knowledges that are usually framed as “ancient” or “traditional” knowledge in binary opposition to “scientific”, “modern”, or “advanced” knowledge and technologies (Battiste, 2002). In effect, there is a hierarchy created between so-called superior and inferior people, and superior and inferior knowledge (Grosfoguel, 2011), wherein non-Eurocentric knowledge perspectives, ways of knowing, and producing knowledge have been considered as “past” and “primitive” (Quijano and Ennis, 2000).

Westerncentric/Eurocentric knowledge systems have dominated education, research, and policies worldwide and how we conceive of ‘knowledge’: what counts as knowledge, and how we determine which knowledge is relevant, credible, valuable, rigorous (or not).⁵ In this process, diverse alternative knowledge systems have been erased, leading to epistemicides and linguicides. With regard to universities, Icaza and Vázquez (2022) have called for acknowledging their complicity in the “silencing of the radical plurality of the world” and “the geopolitical and genealogical location” of knowledge practices (p.112). Such issues of epistemic injustice extend to climate change education, research and policies, imbued with and perpetuating colonial, hierarchical, capitalist, and patriarchal relationships and practices.

Various scholars, activists and communities are resisting and countering dominant narratives, for instance by foregrounding Indigenous, decolonial and postcolonial thinking.⁶ Inspired by their work, I argue that we should be critically conscious of epistemic justice in territorial development processes and uncover the lesser heard and visible realities, and the often-uncomfortable truths associated with climate justice, grounded in lived experiences and knowledges within and across localities, regions, and countries. In the context of non-western and subalternised ways of knowing being destroyed, silenced, and invisibilised by epistemological hegemony, and coloniality of power, it is crucial that we open up more spaces for pluralistic ways of being, knowing, doing.⁷

These concerns around epistemic justice are relevant and go to the heart of constructing practical solutions framed around: praxis, participation in complex processes, explicitation of policy, individual and collective capacities and facilitation (Larrea and Costamagna, 2023).

5 Westerncentrism (which is considered as synonymous to Eurocentrism) is characterised by “an ethnocentrism that has privileged the questions, experiences, and knowledges of Western scholars and societies at the expense of their non-Western equivalents” (Moosavi 2023, p.137).

6 See for example the scholarly works of Bagele Chilisa, Ramón Grosfoguel, Walter D. Mignolo, Gayatri Spivak, Linda Tuhiwai-Smith, Anibal Quijano.

7 Coloniality of power (strongly associated with coloniality of knowledge) differs from colonialism. Coloniality refers to continuing colonial forms of domination reflected in colonial cultures and structures that persist following the end of colonial administrations (Grosfoguel, 2011). The international division of labour that exists, where cheap labour is often carried out by non-European in the periphery is an illustration of coloniality of power. That international division of labour exists in academic settings as well, where often “research assistants” or translators are recruited in the global South to organise and do the fieldwork locally thereby gathering “data” but the resulting knowledge (conceptual, methodological) and publications are authored by scholars in the global North.

4. Developing critical consciousness of epistemic justice in territorial development

Applying the critical lens of epistemic justice, I suggest that addressing climate emergency justly and sustainably necessitates being aware of, understanding, and transforming existing relations in ways that recognise, respect and bring together pluralistic knowledge systems (ontological, epistemological, axiological, methodological).

A proposal is to start developing critical consciousness of epistemic (in)justice by engaging with and integrating the following in practice:

- epistemic governance
- epistemic freedom
- epistemic humility
- inter- and intra- territorial connectivity

Integrating the above-mentioned concerns in the pedagogy, frameworks and methodologies of ARTD can bring deeper temporal awareness and make us ask fundamental questions about: who is involved/excluded, whose voices, whose knowledges, whose/which practices, whose methods, which problems, whose (definition of the) problems, whose solutions — where, when, why, what for, and for whom. Doing so will strengthen our conceptual and methodological approaches and make hidden realities visible and heard.

4.1. Epistemic governance

Epistemic governance concerned with addressing power relations in the underlying creation and organisation of knowledge on socio-ecological concerns (Vadrot, 2014) is a useful concept to integrate in analyses of territorial development. It prompts us to inquire about the generation, selection, application, and dissemination of knowledge in terms of “relational, structural, and soft power” and the relationship between “science”, knowledge, and policy (*ibid.*, ix; Jacob and Hellström 2018).

Questions that we should ask, include: On what basis are climate policies and action being developed? Whose knowledges and values are considered and prioritised, and on what terms? Which knowledge paradigms are favoured? What structures, including intersecting structures of power are in place? What are the consequences of exclusively focusing on or alienating particular knowledge systems in making key decisions on climate emergency? Whose interests are represented/protected and by whom, and whose are not? Whose voices and knowledges are determining decision-making processes? Who benefits or is most affected by these processes and decisions? Who is deciding for whom, and on what basis?⁸ In considering these questions, we can disrupt dominant forces and make visible unequal power relations. We can find ways to challenge epistemic injustices and integrate voices and knowledges that are valuable and yet omitted from processes of territorial development.

8 On a global scale, consider the disparity in power and control e.g. in international negotiations and impositions on post-colonial countries, and in shaping narratives of climate change. This is illustrated by the criticisms following COP26 (Sultana, 2022b). See also Deivanayagam and Osborne (2023) on the protected interests of extractive industries.

4.2. Epistemic freedom

Epistemic freedom refers to the right to think, ask questions, conceptualise, make sense of the world, and write from where one is located (historically, philosophically, theoretically, spiritually, geographically...), unfettered by Westerncentricism (Ndlovu-Gatsheni, 2018). This includes democratising knowledge from its singular to its plural conceptualisation of 'knowledges'. We need to deploy methodologies such as action research that can be sensitive to epistemic injustice and facilitate epistemic freedom in processes of territorial development not least to deepen understandings of climate emergency and its contextualised impacts for more nuanced approaches to policy-making and action.

A concern with epistemic freedom should enable the surfacing of voices, knowledges and stories that are omitted from narratives of climate emergency and action, centering the interests, knowledge systems, and lives of those on the periphery. It should enable different groups to express themselves in their own local languages, and envision the futures that they will live and that will impact them. An important implication is to recognise the self-determination and agency of marginalised, subaltern, minoritised groups and communities.

4.3. Epistemic humility

Epistemic humility is about "the explicit acknowledgment of the limits of knowledge in the face of rapidly evolving emergency during a time with heightened competing exigencies to act", and being consciously and critically reflexive, for example of implicit assumptions about what we know (and how) as well as what we do not know (Srivastava, 2022). It also involves "engaging with the implications of privileging certain knowledges and individuals and groups" (*ibid.* p.4) and accepting the gaps in or the fallibility of one's own interpretive resources (including concepts, frameworks, and methodologies) to understand the distinctive experiences of those who are marginalised (Goetze 2018; Walker and Martinez-Vargas, 2020).

Epistemic humility has been particularly observed in rapidly changing environments and in crisis situations where there is uncertainty, ambiguity, urgency, a temporary lack of information, and limited time for decision-making. According to Parviainen et al. (2021), in those situations, non-knowing is part of and affect political decision-making. The authors highlight the various dimensions of non-knowledge and the potentials of knowing as: 'known,' 'partly-known,' 'not-yet-known' (but likely to be known), 'will-be-known', 'unable-to-know' (not possible to know now due to known complexity) and 'unable-ever-to-know' (cannot be known due to known obstacles) (p. 237). Being aware of those different epistemic states can possibly enhance our understanding of the different inter-related phases of knowledge formation and how they impact political decision-making, including dealing with the uncertainty around the consequences of decisions and re-evaluating decisions in light of a change in the epistemic state.

Recognising the limits of what we know at a particular point in time, avoiding over-confidence, and not claiming knowledge about everything are important in working on issues of epistemic justice and climate emergency. The key question here is: do we stop with our limitations or do we go beyond these over time, deepening our perspectives by inquiring and seeking to learn from diverse communities and their ways of being, knowing, and doing?

4.4. Territorial connectivity

The planet that we inhabit is inter-connected and decisions taken within territories have both internal and external (positive and/or negative) impacts. If we are to truly transform relations in the face of climate emergency, we should reflect on responsibilities which not only lie within territories where we are from and/or located, live, play and work. Drawing on Grosfoguel (2007, p. 212), a pluriversal world calls for “critical dialogue between diverse critical epistemic/ethical/political projects” that recognises multiple praxis of living and engages with alternative knowledge systems, rooted in a collective concern for humanity and the health of the planet, and in relations of dignity and solidarity. In that respect, activating intra- and inter-territorial reflections and actions is crucial if we are to effectively address climate emergency in a just and sustainable manner.

Can we develop inter- and intra- territorial capabilities and practices through action research in ways that allow us to connect people, projects, communities, countries, continents and the wealth of knowledges that exist? What might be the challenges? To mind comes Zubigintza, a community of practice formed by action researchers that, since 2009, cogenerated the methodological features of ARTD in Orkestra -Basque Institute of Competitiveness, University of Agder and Praxis- Institute for Social Studies in Universidad Tecnológica Nacional, Facultad Regional Rafaela. Learning spaces, dialogues, experiences, and knowledges are shared with collaborators from the different territories. In recent times, other researchers (including myself) have been invited to participate in the community of practice. In my experience, practical challenges include language and time difference (when connecting online from different parts of the world). However, a critical awareness of these and collective efforts to include, take part, facilitate, engage, share, listen to each other have been conducive to critical dialogues and sharing of diverse knowledges amongst participants. In my view, this is possible because of the underlying relations of dignity, respect, honesty, solidarity, and openness to learn from commonalities and differences, all contributing to a sense of epistemic freedom and humility. Challenges to inter- and intra- territorial connectivity exist and need to be addressed so that they do not become barriers.

Focusing attention on epistemic governance, freedom and humility and inter- and intra-territorial connectivity can contribute to a better understanding of nuanced and pluralistic narratives, visions, vocabularies, and frameworks of existence and relationships between human and non-human species (Milanez et al., 2022). Doing so may bring us closer to co-creating just and transformative actions for all those impacted by climate emergency. On that note, the discussion by Streck and da Rosa in their paper in this special issue calls for justice that transcends human frontiers and include the earth and all living beings. The authors remind us of the interdependencies between life systems, and principles of reciprocity, mutuality, co-responsibility and sustainability.

5. Concluding remarks

Societies and economies are, in part, structured and organised epistemically. However, as implied in this paper i) epistemic injustice is often embedded in processes of knowledge generation, selection, application and dissemination; ii) the knowledge processes underpin

various inequities and inequalities in territorial development; and linked to these two first points, ii) epistemic justice is interwoven in multidimensional and multidirectional justice issues associated with and exacerbated by climate emergency.

As researchers, facilitators, and citizens, developing critical consciousness is the first step in recognising habits and practices developed, sometimes unconsciously, that may inadvertently exclude those who are on the periphery — less visible, heard, known, at times deliberately ignored and silenced. This work has to be carried out internally within ourselves and not only externally – to deconstruct (and decolonise) our own epistemic understandings and privileges, and in the process unlearn and relearn what we conceive as valid, relevant, credible, useful knowledge, evidence, methodologies, and methods. Some questions to ask ourselves in enriching our understandings of territorial challenges, and strengthening development processes in the face of climate emergency are: Can we stimulate the integration and centering of marginalised concerns, voices, knowledges, values, people, communities in our processes of action research for territorial development, conceptually and practically? How can we open up dialogues and spaces that bring together pluralistic ways of being, valuing, knowing and doing to collaboratively address rapidly changing, ambiguous, and uncertain situations linked to climate change? How can we stimulate the inclusion and participation of those who are marginalised in co-creating transformative relations, visions, spaces, dialogues, actions, and other possibilities?

Can and will the community of ARTD researchers take up the immense challenges of facilitating connections between territories in ways that support epistemic justice, and create equitable conditions that values pluralistic forms and ways of knowing to redress the many forms of injustices relating to climate change? The task ahead is far from being easy or simple. Disciplines such as economics and management, which predominantly follow a positivist-universalist, objectivist-neutral approach and inform policy-making within the framework of a patriarchal-capitalist world system have been slow in picking up on much of the concerns and discussions on epistemological hegemony and epistemic justice, which are pertinent to social, economic, educational, political, environmental relations and the development and use of knowledge in territories. The colonial legacy carries on in academic settings that shape research, teaching, and engagement, and in non-academic settings. A way to counter those challenges would be through more solidarity, support, and collaboration cutting across diverse institutions and territories. We also need more interdisciplinary approaches that draw on plural and holistic knowledge systems.

I have argued for integrating perspectives of epistemic justice in praxis to conceive of and develop new relations of territorial development, to deepen democratisation, and activate climate change policies and action that are sensitive to injustices. In the context of action research for territorial development, an aspect that could be explored further is epistemic justice from the perspective of more-than-human relationalities and systems. There is interesting work emerging on reconceptualising justice beyond the human realm, e. g. in the field of multispecies justice (see Chao and Celermajer, 2023 and references therein). As shown in many of these studies, there are key learnings from Indigenous knowledge systems. Action research pedagogies and methodologies that engage our multiple senses and provide embodied experiences through feeling, listening, observing, relating in nature may help us in gaining a better appreciation of more-than-human relationalities and knowledge systems. Let us step outside the confined walls of 'meeting rooms', 'offices', and 'classrooms' and spend

more time into our natural surroundings to inquire and develop new relations for territorial development!

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