Performance arts-based methods in environmental governance: The use of applied theatre to foster representation of local people's values in environmental decision-making.

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The candidate confirms that the work submitted is her own, except where work which has formed part of jointly-authored publications has been included. The contribution of the candidate and the other authors to this work is explicitly indicated below. The candidate confirms that appropriate credit has been given within the thesis where reference has been made to the work of others. This thesis is presented as an alternative thesis. This is deemed suitable as two chapters (Chapter 2 and 3) have already been published in an academic journal and a third paper (Chapter 4) is at an advanced stage, ready for submission. Below, I outline the status of each chapter and the authors' contributions.

Olvera-Hernandez, S., Mesa-Jurado, A., Novo, P., Martin-Ortega, J., Walsh, A., Holmes, G., & Borchi, A. (2022). Forum Theatre as a mechanism to explore representation of local people's values in environmental governance: a case of study from Chiapas, Mexico. People and Nature. https://doi.org/10.1002/pan3.10420

Silvia Olvera-Hernandez had the conception of the study and led the study design, data collection, data analysis and writing of the manuscript, with the support and supervision of Julia Martin-Ortega, George Holmes, Paula Novo, and M. Azahara Mesa-Jurado. Silvia Olvera-Hernandez developed the Forum Theatre script with support from Aylwyn Walsh and Alice Borchi, and input from other co-authors. Aylwyn Walsh led the training with performers with the support of Silvia Olvera-Hernandez, Alice Borchi and M. Azahara Mesa-Jurado. Silvia Olvera-Hernandez led the fieldwork with support from Paula Novo and M. Azahara Mesa-Jurado. Silvia Olvera-Hernandez led the fieldwork with support from Paula Novo and M. Azahara Mesa-Jurado. Silvia Olvera-Hernandez carried out the analysis with inputs from co-authors on the interpretation of the results. Silvia Olvera-Hernandez led the writing of the manuscript and the reviews with inputs from all co-authors. All co-authors approved its publication. Julia Martin-Ortega led and administrated the funding.

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The work in Chapter 4 of the thesis is at an advanced stage almost ready for submission to the Journal of Ecological Economics. The tentative reference is:

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Rationale for submitting a thesis by publication

This research explores the use of artistic methods in the realm of decision-making in environmental governance processes, with particular focus on the representation of local people's values in context of power dynamics. It is important to publish and share the results with diverse academic audiences in order to validate their potential and challenges for their implementation in practice. This is of particular relevance following the release of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Values Assessment (https://ipbes.net/the-valuesassessment) (which emphatically advocates for the need to develop alternative methods for value assessment. This makes the publication of findings from this thesis very timely.

The three empirical chapters of the thesis are those listed on the previous page. Every analysis has involved different research methods and data collection, each with an independent grounding within the literature. The multi-perspective approach with different sets of methods has been achieved more efficiently with three distinct academic publications than as a traditional monograph.

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Abstract

Environmental degradation, poverty, and social discrimination are some of the consequences of unfair environmental decisions often present in rural communities in the Global South. In the realm of environmental governance, one difficulty in achieving fair decisions is the lack of representation of local people's values in decision-making, often resulting from power differences that exclude people based on how their social axes intersect. Arts-based methods have been proposed to increase local people's participation in environmental governance, however, little has been written about the potential of performance arts-based methods in environmental decision-making with a focus on values and local power differences. Performance arts, such as applied theatre, are particularly interesting as they can create spaces to reflect on how power differences are experienced in the participants' everyday life.

In this thesis, I explore the potential of performance arts-based methods to bring to the fore local people's values and to discuss local power differences in environmental decision-making processes (in the contexts of environmental governance). The work has also included exploring to what extent environmental professionals see a role for these methods in environmental governance more broadly. This work was approached through the application of Forum Theatre in rural communities in Chiapas (Mexico) (Chapter 2), through the views of environmental professionals at the national level in Mexico (Chapter 3), and across a range of practitioners of environmental projects in the Global South (Chapter 4).

Findings provided evidence on the potential of applied theatre as a space for local people to bring to the fore plural and interconnected values. Furthermore, using these methods, it was demonstrated that local people negotiated their values during the emotive performances, imagining changes to conflicts (based on power differences) in environmental governance.

Despite applied theatre sharing challenges with conventional participatory methods such as the need for skilled facilitators, a rigorous ethical approach to 'do no harm' is particularly needed while power differences are discussed with these methods. Additionally, applied theatre credibility depends on the environmental professionals' epistemological positions; in some interventions, these methods will require the implementation of complementary tools for analytical support.

This thesis advances conceptual and empirical understanding of challenges and opportunities of using performance arts-based methods such as applied theatre to fairer represent local people's values in environmental decision-making.

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Chapter 1

Introduction

1.1 Research rationale

Unfair environmental decisions are to a large extent a consequence of a lack of representation of local people's values in decision-making (Chan et al., 2020; Edwards et al., 2016; IPBES, 2022; Kenter et al., 2016). This lack of representation has been a constant challenge in environmental governance in communities in the Global South, reflecting power differences that exclude people based on how their social axes intersect (e.g. how does gender intersect with economic status, religion, education and ethnicity, amongst others personal characteristics) (Rocheleau et al., 1996). Communities in the Global South have suffered by histories of exclusion and marginalization driven by colonization and weak institutional structures (Brasher, 2020; Hickel, 2016; Zafra-Calvo et al., 2020).

Environmental governance refers in this context to the set of regulatory processes and mechanisms through which different actors influence environmental action and outcomes (Bevir, 2009; Lemos & Agrawal, 2006; Lockwood et al., 2010), and involves a diversity of actors, such as civil society, NGOs, local people and other stakeholders (Schulz, Martin-Ortega, Glenk, et al., 2017). Environmental decisions, and therefore actions and outcomes from those decisions, are often influenced by the values of the actors involved, and by the relationships and power dynamics among them (Dietz et al., 2005; González-Hidalgo, 2017; Schulz et al., 2017). Recognising the multiple values that local people hold towards nature (and how these values form the basis for humannature interactions) can lead to fairer decisions and improved governance processes, as values represent how people perceive, relate to, inhabit, interact, and give meaning to nature (Chan et al., 2016; IPBES, 2022; Kenter et al., 2015).

The existence of power differences within local actors hampers the inclusion of a plurality of values in environmental decision-making, and hence in environmental governance more broadly (Ahlborg & Nightingale, 1994; Lockwood et al., 2010). This leads to environmental outcomes that do not reflect key aspects of diverse local people's relationships and interactions with nature. Local power differences refer to an unequal distribution of power within the society that creates hierarchies among groups of local people (Ahlborg & Nightingale, 1994). These can be interpreted as social rules or norms reproduced by power structures that decide who can and cannot control who benefits from nature (Ahlborg & Nightingale, 1994; Bee, 2016; Colfer et al., 2015). In practice, for example, local power differences are present when people with better skills and positions have more chances of becoming representatives (typically men with land tenure and good communication skills), excluding the voices and values of less powerful individuals and groups such as women and groups who lack land or resource rights (Cooke & Kothari, 2001; Leisher et al., 2016; Ratner et al., 2013).

Participatory approaches have been implemented mechanisms to recognise and represent local people values into environmental governance processes (Buhler, 2002; Leavy, 2017; Tremblay & Harris, 2018). Some of the participatory mechanisms used to understand values in environmental decision-making are surveys (Steg et al., 2014; Wainger et al., 2018), interviews (Haverkamp, 2017; Ives & Kendal, 2013; Ranger et al., 2016; Schulz, Martin-Ortega, Ioris, et al., 2017), focus groups (Mendis-Millard & Reed, 2007) and deliberative valuation (Ranger et al., 2016; Raymond &Kenter, 2016; Vargas et al., 2016). These mechanisms are advocated under the argument that they can enable people to play active and influential roles, building trust to share perspectives and understanding of relationships with nature (Heras et al., 2016; Leavy, 2017).

1.2 Exploring arts-based methods in the realm of environmental governance

1.2.1 Environmental governance context

In this research, I approached governance as the processes, mechanisms and institutions through which the rules and procedures that apply to members of a defined group are made, implemented, interpreted, and changed (McGinnis, 2016) and which (seek to) influence motivations and behaviours.

In this sense, environmental governance refers to the set of regulatory processes and mechanisms through which different actors influence environmental action and outcomes (Bevir, 2009; Lemos & Agrawal, 2006; Lockwood et al., 2010). These can be formal and informal rules (e.g. official governments laws versus customary or local people regulations) and can be formal and informal actors (e.g., state as formal, plus informal such as groups of friends/neighbours) (Bevir & Rhodes, 2016). Good environmental governance (in a normative understanding) describes desirable properties of governance processes to foster active participation by all actors (Tortajada, 2010). Lockwood (2010) mentioned eight principles that can be used to direct good environmental governance designs: legitimacy, transparency, accountability, inclusiveness, fairness, integration, capability, and adaptability.

Participation of different actors is key as the exchange of local knowledge such as meanings, values, beliefs, and conceptual schemes impacts the policy-making process (Bevir, 2009; Innes & Booher, 2004; Rhodes, 2016). Therefore, giving greater control to local people to bring to the fore their knowledge in governance processes can improve their inclusion and representation in environmental decision-making and policy implementation (Bevir, 2009; Bevir & Rhodes, 2016; Innes & Booher, 2004). It is important for those making decisions about governance to have access to many different perspectives and kinds of knowledge, so that they can make better decisions (Bevir & Rhodes, 2016; Challies et al., 2016).

However, questions have been raised as to whether existing governance processes and mechanisms adequately include and represent fairly all the actors, specifically powerless actors such as local people (Bevir, 2009, 2011). For this reason, studies of environmental governance have focused on implementing democratic interventions and rethinking the nature of inclusion and fairness in governance processes (Bevir, 2009; Lockwood et al., 2010). As mentioned by Lockwood (2010) 'inclusive governance is about having an awareness of and valuing diversity, and having policies and structures to foster actors contributions and engagement' (p. 994). However, being aware of the diverse actors and/or including them does not necessarily foster democratic interventions (Bevir, 2009; Lemos & Agrawal, 2006). Critics point out that processes and mechanisms in governance are required to be grounded in fair interventions (Bevir, 2009, 2011). In general, fairness in governance refers to offering respect and attention to actors' views in the absence of personal bias in decisionmaking, particularly about the distribution of power (where race, gender, ethnicity and socioeconomic status should not determine decision-making processes or outcomes) (Bevir, 2011; Lockwood et al., 2010). To this end, governance interventions using participatory approaches and methods can provide the spaces for different actors to deliberate and discuss local knowledge in the absence of personal bias (differences of power among actors) (Bevir, 2011; Rhodes, 2016). These are inclusive and involve collaboration, dialogue and interaction (Booher & Innes, 2002). However, as I will explain in the next subsections, these approaches have been criticized for the way they engage with power differences; to cover some of the flaws, arts-based methods have been explored in governance processes.

Overall, this research focused on exploring the potential of applied theatre, an artsbased method, to foster representation of local people's values (bring to the fore local people's values) and their interplay with power differences in the contexts of environmental governance (democratic). To explore this, I implemented an art-based method in two rural communities in Mexico. In these communities (as in most of the communities in Mexico) environmental governance interventions such as Payment for

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Ecosystems Services programs (carbon, biodiversity and agro-forestry services programmes PES–CABSA) have been implemented to empower communities to manage more sustainably their natural resources (Trench et al., 2018). However, the traditional land tenure that rules the local mechanisms on how most environmental decisions are made has been criticised as it excludes the voices and values of some community members (such as women, young people and those without land rights) (Bee, 2016; Pingarroni et al., 2022). Thus, it is precisely this context of inclusion and fairness in governance that matters to the case study. As such, this research is not aimed at developing the theoretical implications of arts-based methods in democratic environmental governance more broadly, but at exploring, from an empirical perspective, what can applied theatre bring to the table in terms of improved local representation in environmental decisions making (with a focus on values and power differences), i.e. governance here is seen as the context within these processes are explored and not the conceptual subject of study.

1.2.2 Conventional participatory approaches and arts-based approaches in the realm of environmental governance

In principle, participatory methods are a set of mechanisms that aim to enable people who have been marginalised for a variety of reasons to play an active and influential role in research by building trust for sharing perspectives and understandings (such as interviews, participatory mapping, participatory video, focus groups) (Heras et al., 2016; Leavy, 2017; Norström et al., 2020). Participatory approaches use these mechanisms to solve a problem by including people who are directly concerned with the outcomes (Leavy, 2017). From the 1970s, participatory approaches were rapidly incorporated into official discourses and environmental governance processes fostered by governments and international development agencies (Mohan & Stokke, 2000; Williams, 2004). However, their performance so far has been criticized as they fall short in engaging at a deeper level with power dynamics (Cooke & Kothari, 2001;

Mohan & Stokke, 2000; Rahnema, 1990). Some of these critiques are grounded on the way international agencies, such as the World Bank, use participatory methods to engage local communities (Mohan & Stokke, 2000). They frequently consider these communities as homogeneous, rather than a site of shifting alliances and power dynamics (Cooke & Kothari, 2001; Pollock & Sharp, 2012). Furthermore, they have been accused of manipulating local knowledge and needs according to the project interest since the project agencies establish the process of knowledge acquisition, analysis and representation (Chinyowa, 2015; Cooke & Kothari, 2001). In terms of values towards nature, there are critiques of how such agencies might influence agendas on value formation, determining values instead of eliciting pre-existing values (Himes & Muraca, 2018). Additionally, it has been said there is little evidence of long-term effectiveness of participatory approaches in materially improving conditions of the most vulnerable people or as a strategy for social change (Cooke & Kothari, 2001; O'Connor & Anderson, 2020; Turnhout et al., 2020).

To cover some of the flaws of participatory approaches, participatory action research was conceived as a new model for collaboration and dialogue with the communities (Rahnema, 1990). Participatory action research involves researchers and participants working together in critical-reflective processes oriented towards empowerment (Heras & Tàbara, 2014; Rahnema, 1990). These are generally designed as open-ended processes, where a diversity of epistemologies and methods can be put into practice. One example is arts-based methods (Heras & Tàbara, 2014).

Arts-based methods can be defined as process in which arts play a primary role in any or all of the steps of the research (Coemans et al., 2015). They combine a socialconstructivist and interpretative understanding of knowledge(s) and power dynamics including the role of emotions and beliefs (Heras et al., 2016). Using art, the participants take control of their own participation during the artistic processes (Coemans et al., 2015). In this context, the art forms are considered research data in their own right, images, sculptures or performance replace the traditional interview

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excerpts or observational data that are more feasible to be aligned to support the interpretation processes of the outsiders (e.g., researchers or facilitators) (Coemans et al., 2015; Heras et al., 2016; Scheffer et al., 2015). Some examples of arts-based methods reported in the literature include storytelling (Chan et al., 2016; Kenter, Jobstvogt, et al., 2016) and visual arts workshops (Edwards et al., 2016; Fisher et al., 2021), demonstrating the potential of arts-based methods to reveal participants' deep emotional connections to nature and to understand how power shapes, and is shaped by organizational routines, procedures, habits, and norms (Edwards et al., 2016).

Arts-based methods can therefore be conceived as important tools to promote a broader range of participation in the context of environmental governance (Edwards et al., 2016), opening up new ways of thinking, conversing, and understanding the complexity of social relationships and power relations in environmental decision-making processes (Heras & Tàbara, 2014; Edwards et al., 2016; Tremblay and Harris, 2018). In addition, some studies show that arts-based methods and approaches can foster actions for social-ecological transformations cultivating changes based on values (Horcea-Milcu et al., 2019; Pereira et al., 2020; Hensler et al., 2021). Values can serve as intervention points for facilitating transformational changes (Horcea-Milcu et al., 2019).

1.2.3 Performance arts-based methods in the realm of environmental governance

Within arts-based approaches, performance arts-based methods (such as film, dance and theatre) can engage critically with power differences (Chinyowa, 2015; Fletcher-Watson, 2015; Heras & Tàbara, 2014). Performance arts-based methods can operate as tools through which spaces can be opened to communicate beyond the limits of fixed identities and official discourses (Kester, 2005; Leavy, 2020). Through performances, videos or dances, participants dialogue personal narratives using body and voice, under the safety of the artistic process (Heras & Tàbara, 2014; Leavy, 2020; O'Connor & Anderson, 2020). Performance arts-based methods create an artistic frame to design spaces for participants to dialogue about their experiences (sensitive topics) sufficiently distanced from their real lives within the artistic frame (O'Connor & Anderson, 2020). These methods offer ways of experiencing knowledge, in which exploration, humour, imagination and empathic experience play a key role (Heras & Tàbara, 2014). These techniques are particularly prone to enhance the awareness of knowledge connectedness and building common trust (O'Connor & Anderson, 2020).

In this context, applied theatre can be particularly interesting in the area of decisionmaking in the realm of environmental governance. Applied theatre are dramaturgic activities carried out outside ordinary theatre institutions (Nicholson, 2005) in which participants get involved in cognitive and emotional dialogues and performances, to explore solutions to conflicts, getting involved in negotiations of meanings and exposing contradictions (Balfour, 2020; Brown et al., 2017; Leavy, 2020; O'Connor & Anderson, 2020). The emotional impact of participating in applied theatre can assist to expose and disrupt stereotypes and oppressive environments (e.g., exclusion from decision-making process), build bridges across differences, and foster empathy (discussing diverse solutions to deal with limits set by power differences) (Erwin et al., 2022; Guhrs et al., 2006; Heras & Tabara, 2014). The use of applied theatre in environmental projects is growing with examples related to participatory environmental policy making (Guhrs et al., 2006), environmental justice (Sullivan et al., 2008), exploration of subjectivity and emotion in environmental management (Morales & Harris, 2014), performance of biospheric futures with young generations (Heras et al., 2016), and to identify and deliberate on matters of concern in relation to the ocean (Erwin et al., 2022).

Despite this increasing interest, the use of applied theatre in environmental governance remains a largely unexplored research area; specifically, the interplay between the potential of performance arts-based methods to bring to the fore local people values and the discussion (and uncovering) of local power differences in

environmental decision-making (research gap). Also, concerns have been raised about the difficulties of assessing the impacts of these methods, and challenges in data interpretation and data representation for which is recommended to implement complementary methods (Leavy, 2020; Muhr, 2020; O'Connor & Anderson, 2020; Turnhout et al., 2020). These concerns have impacted on the credibility of these methods by environmental professionals (Heras & Tàbara, 2014; O'Connor & Anderson, 2020). We do not know how environmental professionals might assess the insights of parts-based methods. If the use of arts remains under-evaluated by environmental professionals, their potential might never be realised in practice. Therefore, encouraging the use of these methods for fair environmental decisionmaking, in part, requires doing research on the practicality of these methods that can build credibility with funders, bureaucrats, and governments (research gap)(O'Connor & Anderson, 2020).

This PhD aimed to approach these research gaps by exploring applied theatre, as a performance arts-based method, to bring to the fore the values of those affected by environmental decisions, while allowing discussions of the power differences that might limit the representation of their values in decision-making in the realm of environmental governance. Moreover, this research also explored practical aspects of using applied theatre as an innovative method in environmental governance processes (in terms of viability, cultural relevance and credibility) from the view of environmental professionals. Finally, this research offered knowledge about the potential and challenges of using performance arts-based methods for fostering better forms to represent local people's values in the contexts of environmental governance.

1.3 Conceptual base

To address its aims, this research drew on the concept of value pluralism from the Ecological Economics field. Power differences were approached in this research using

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the notion of intersectionality from Feminist Political Ecology. In the following subsection, I will explain these two main concepts but I also explain Forum Theatre, one particular form of applied theatre, which in Chapter 2 and Chapter 3 was used as the main method to explore. I also present the aspects used to explore the practicality of applied theatre in the realm of environmental governance processes (viability, cultural relevance and credibility). In addition, I present the auxiliary approach of 'transformation' used for the analysis of applied theatre in transformative spaces.

1.3.1 Value pluralism

Decisions regarding resource use and management are often influenced by the values of the actors involved (González-Hidalgo, 2017; Nightingale, 2013; Schulz, Martin-Ortega, Glenk, et al., 2017). Depending on how values are considered, human-nature relationships will be evaluated in one way or another to make environmental decisions (Tadaki et al., 2017). This, in turn, will determine the effect of such decisions in people's lives and in nature (Muradian & Pascual, 2018).

Values have received many interpretations by different disciplines. In philosophy, the study of values is known as 'axiology' (as a scientific inquiry about values), which in turn comprises the fields of ethics and aesthetics. Aesthetics focuses on the qualities ascribed to environments (Kenter et al., 2019; Schulz, Martin-Ortega, Glenk, et al., 2017). In contrast, ethics focuses on the notion of the 'intrinsic value' of the environment (the value is autonomous and independent of any other entity), which is commonly opposed to an 'instrumental value' (substitutable means to a human end and associated with utility) (Schulz, Martin-Ortega, Glenk, et al., 2017; Tschakert et al., 2017). The differences between intrinsic and instrumental values can also help us to understand and criticise Ecosystem Services Framework (this framework has become a common way to frame values toward nature in policy) (Martin-Ortega, 2015; Schulz et al., 2017; Tadaki et al., 2017). The Ecosystem Services Framework has a focus on understanding the links between ecological structure/function and human well-being (the benefits people can obtain from ecosystems), which has been associated with

purely instrumental values towards nature and usually using monetary valuation (Martin-Ortega et al., 2015; Schulz et al., 2017; Tadaki et al., 2017) . The categories of values following the Ecosystem Services Framework are supporting, provisioning, regulating, and cultural services. The first three categories focused on the instrumental value of the environment to humans, which to some degree can be evaluated in monetary terms, however, cultural values are characterised by incommensurability and can be left out in economic valuations (with other intrinsic values towards nature) (Chan et al., 2012; Kenter et al., 2019; Schulz, Martin-Ortega, Glenk, et al., 2017).

From a psychological perspective, values can be defined as desirable goals, varying in importance, that serve as guiding principles in people's lives (Schwartz, 2002; Schulz, Martin-Ortega, Glenk, et al., 2017). It assumes that individuals adhere to different value systems, and Schwartz (2002) proposed a set of different motivational types of values (recognized across cultures) composed in a circular structure according to two basic dimensions: a) 'openness to change' (combining the self-direction and stimulation value types) vs. 'conservation' (combining security, conformity, and tradition) and b) 'self-enhancement' (combining power and achievement) vs. 'self-transcendence'(combining benevolence and universalism) (Schwartz, 2002; 124.). Following Schulz et al. (2017) work, these values can be associated with environmental governance's principles (in a normative perspective) such as inclusion, equity, and solidarity (Lockwood et al., 2010), and can expresses proprieties of governance that are considered desirable.

The predominant interpretation of values towards nature in environmental management comes from neoclassical economics (Dietz et al., 2005; Kenter et al., 2015). In this approach, values towards nature are understood as a guide to environmental decisions, analysing costs and benefits and maximizing the individual's utility from nature, which is considered to be measurable in monetary units (Schulz, Martin-Ortega, Glenk, et al., 2017). Ecological economics challenges this by introducing a pluralistic notion of values (Martínez-Alier, 2002; Schulz, Martin-Ortega, Glenk, et al.,

2017). This represents a shift from as a single ultimate value, usually measured in monetary terms, to value pluralism (Schulz, Martin-Ortega, Glenk, et al., 2017).

Value pluralism acknowledges the multiplicity of perspectives and means by which humans value nature and supports collective and reflexive processes of value formation without attempting to 'translate' values towards nature into one single dimension (Himes & Muraca, 2018; Martínez-Alier, 2002; Schulz, Martin-Ortega, Glenk, et al., 2017). Epistemic pluralism suggests there are multiple ways of conceptualising values within human-nature relationships (Horcea-Milcu et al., 2019; Kenter et al., 2019). In this regard, value pluralism allows me to go beyond the dichotomies of values approaches, and explore how any social group can simultaneously use different standards of values to support their relationship with nature (Edwards et al. 2016; Himes & Muraca 2018).

In this research, I used value pluralism as a conceptual base, because it approaches values as connected to worldviews, based on history, culture, geography, experience and embodied experiences (Kenter et al., 2019). Plural values can be differentiated along multiple dimensions, such as the scale of values or the process by which they are elicited (Kenter et al., 2019; Tadaki et al., 2017). They intend to better reflect the complex relationships between humans and nature (Pascual et al., 2021), some of the categories created based on values pluralism are transcendental values and contextual values (Kenter et al., 2015, 2019), held and assigned values (Chan et al., 2018), shared values (Kenter et al., 2015)or relational values (Chan et al., 2018).Value pluralism shows that any social group can simultaneously use different standards of values to support their relationship and management of natural resources and their environment (Edwards et al., 2016). Within this approach of value pluralism, I chose specifically the Value landscape Approach proposed by Schulz et al. (2017) to explore a diversity of values (categorized as assigned, governance-related and fundamental) with an intent to go beyond the dichotomy of instrumental and intrinsic values and explore

how local people use different values to support their relationship with nature. In the next subsection, the Value Landscape Approach will be elaborated.

a) The Value Landscape Approach

While no single disciplinary framework can fully integrate the many understandings of social values of nature (Kenter et al., 2019), for this case study, I use the Value Landscape Approach (VLA) proposed by Schulz et al. (2017). VLA is particularly suitable to this research as it draws on the notion of value pluralism and it has an explicit focus on the interrelationships between values of nature and decision regarding nature management in the realm of environmental governance (Schulz et al., 2017). The Value Landscape Approach is relatively broad, encompassing three categories of value: fundamental values, governance-related values and assigned values.

The concept of fundamental values represents abstract trans-situational goals (such as universalism, benevolence, tradition) that can guide people's behaviour, in this case towards nature management (Schulz et al., 2017; Schwartz, 2002). Governance-related values refer to ideal characteristics of 'good' environmental governance, such as inclusion, capacity, effectiveness, and fairness (Lockwood et al., 2010). Assigned values represent the ones attached to the use of the natural resources aligned with the notion of ecosystem services (Schulz et al., 2017). We use the Value Landscape approach to frame plural values towards nature on the Forum Theatre, but alternative plural value frameworks, such as the relational values or shared and social values could have also been applied (Chan et al., 2018; Kenter et al., 2015).

1.3.2 Intersectionality

a) Power in nature management in the realm of environmental decision-making

In general, power is often considered a key part of human interactions and it is often defined as the ability to control resources (own and others), a definition rooted in theories of dependency and interdependency (Ahlborg & Nightingale, 1994; Bryant, 1998). Regarding nature, management power can be represented as how power works through discourses and disciplining institutions (constitutive power), while also can be interpreted as social rules or norms over who can and cannot use, control and make decisions over natural resources (Ahlborg & Nightingale 1994; Bee 2016; Carastathis 2014; Colfer et al. 2015; Lloro-Bidart & Finewood 2018). Lukes (2005) suggest that power might be experienced in decision-making as the power to make decisions, set agendas that benefit certain groups of peoples over others, and the power to shape perceptions and preferences (e.g., limitations by cultural norms or laws).

Power in the Political Ecology field can be an appropriate approach for this research as it acknowledges power emerging from human agency and power exercised in interactions between humans and non-humans with emphasis on access and control over natural resources. Dianne Rocheleau and colleagues invited political ecologists to extend this analysis of power and to include gendered relations; to extend their consideration of gender as a critical variable in shaping resource access and control, interacting with class, caste, race, culture, and ethnicity (Rocheleau et al., 1996). The sub-field considering this interaction of social axes in the analysis of power is Feminist Political Ecology. This sub-field has developed a further understanding of power relations on human-non-human relationships with attention towards gendered processes underpinning the politics of natural resource access, attending at the same time to the gendered agency of those struggling for justice and fairness (Elmhirst et al., 2017). Feminist Political Ecology has approached these phenomena through different analytic tools such as subjectivity and emotions (Morales & Harris, 2014), communing (Singh, 2018), decoloniality (Elmhirst & González, 2017) and intersectionality (Cole, 2017).

The concept of intersectionality from the sub-field Feminist Political Ecology focuses on the operation of power in everyday practices of natural management based on people's social axes such as gender, land tenure, education, age, and race/ethnicity. In environmental governance, the principle of fairness specifically points out the importance of being aware of the power differences to implement governance interventions (decision-making) in the absence of personal bias, particularly about the distribution of power where race, gender, ethnicity and socioeconomic status should not determine decision-making processes or outcomes (Bevir, 2011; Lockwood et al., 2010). Due to this, intersectionality can be an appropriate analytical concept to analyse the performance of power in local people's everyday lives in this research.

b) Intersectionality in Feminist Political Ecology

In more general views, intersectionality tries to address some challenges faced by feminist studies relate in approaching multi-categorical and simultaneous aspects of exclusion and marginalization (Gines, 2011). Intersectional theory began with the Black Feminist Statement proposed by the Combahee River Collective (1977/1993) (Carastathis, 2014). Kimberlé Williams Crenshaw highlighted intersectionality to address the whiteness of mainstream feminism and the sexism of antiracism (Crenshaw, 1989). It aims to explain the complexity of lived experiences of exclusion among multiple social groups (Carastathis, 2014) without reducing them into single categories based on race, sex, gender, ethnicity and other social axes. Rather, it understands the simultaneous, intercategorical and overlapping forms of oppression (Carastathis, 2014; Yuval-Davis, 2006). The term intersectionality refers to the theory or methodology used to identify and study realities using the concepts of irreducible, simultaneity and intracategorical (race, gender, and class) to look at the way that all of the systems of oppression overlap (Carastathis, 2014; Cole, 2008; Yuval-Davis, 2006). Some critiques point to the intercategorical component of intersectionality saying that it can be understood as an additive rather than a mutually constitutive approach to the relation among social categories (Cole, 2008; Yuval-Davis, 2006). However, intersectionality is about lived experiences and opens new avenues of cooperation (Crenshaw, 1989, 1991). It helps us think about the role of theory in addressing the inclusivity of voices, including those of the communities and ecosystems (Lloro-Bidart & Finewood, 2018; Mollett & Faria, 2013). Finally, like all methodologies and theories, intersectionality is constantly under construction (Carastathis, 2014).

In this research, I use the notion of intersectionality as an analytical tool from feminist political ecology, since it can help understand people as inhabiting multiple and fragmented identities. These identities are constituted through social relations that not only include gender but also class, religion, sexuality, and race/ethnicity; which influence their relationship with nature (Elmhirst et al., 2017; Mollett & Faria, 2013; Rocheleau et al., 1996), shaping the operation of power in the everyday practices of access and control of natural resource (Cole, 2017; Leder et al., 2019; Lloro-Bidart & Finewood, 2018). For example, Elmhirst et al (2017), show that, when women in Indonesia were excluded from decision-making, environmental decisions focused more on market (oil plantations) than on traditional uses, generating negative impacts for nature. In this regard, to use intersectionality in dynamic theatrical performances might allow us to display and analyse the simultaneous and intercategorical ways in how power differences work and overlap regarding nature use and management, and environmental decisions.

1.3.3 Forum Theatre

Forum theatre uses theatrical forms to facilitate and encourage engagement from the audience to 'solve' conflicts. It was developed in the 1970s by Augusto Boal as part of his methodology called Theatre of the Oppressed, based on Freire's work Pedagogy of the Oppressed (Freire, 1976). Theatre of the Oppressed is a dramaturgical set of techniques for the spectator to assume the protagonist role and change the dramatic action, through performing solutions and discussing plans for change with other spectators (Boal, 2013).

Boal was a Brazilian theatre director and theorist, who fought to build a progressive participatory theatre both as a metaphor for a social structure in which all citizens are agents of political and social change and a as 'a rehearsal for revolution' (Boal, 2013; Snyder-Young, 2011). As cultural activist, he worked with people in small and usually poor communities that dealt with conflicts such as civil wars and lack of government attention (Boal, 2013). Theatre of the Oppressed was created to open spaces in which spectators take the agency of protagonists to make the changes they want to see in the world (Snyder-Young, 2011). However, as Ali Campbell mentioned (2019), 'Since Boal's death, the complex issue of his legacy and its impact has been contested, sometimes acrimoniously, as individuals, groups and companies have sought to maintain a commonality of purpose and a consistency of delivery across their widely differing practices and contexts. Is the Theatre of the Oppressed a system, a movement, a toolbox of techniques or – as Boal often called it – a method?' (p.6)

In the Theatre of the Oppressed there are various degrees of involvement of the participants (or techniques / methods). In the first, participants offer some solution to the conflict performed, these solutions are then improvised by professional performers (Boal, 2013). In the second degree, the spectators act as 'sculptors' to transmit an idea through an image created with the body of some of the spectators. The third degree is the Forum Theatre proper. It uses practitioners to perform a scene representing common social interactions in which one character might feel oppressed or side-lined. During the performance, members of the audience can stop the scene, take the protagonist role (oppressed character) and change the scene using their own experiences on the topic (Boal, 2013, Heras & Tàbara, 2014). In this way, Forum Theatre can bring hidden narratives, challenging the illusions of natural authority between practitioners and participants, and allowing reflections about power distribution (Trevelyan et al., 2014).

In the realm of socio-ecological topics, Forum Theatre has been used to explore youth participation in social movements as a mechanism for nurturing critical hope and collective agency in the face of climate catastrophe (Alexandrowicz & Fancy, 2021), and to create scenarios among young people in rural communities to identify different plausible sustainable futures (Heras et al., 2016).

Forum Theatre does not come without risks, for example, some critiques mentioned that with Forum Theatre power differences could be assumed as oppressor and oppressed, i.e. a single kind of experience of oppression, without a direct analysis of

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the flaws between different marginalized groups or the ways in which a single individual can experience exclusion as an consequence of being oppressed (Weiler, 1991). Nevertheless, Forum Theatre raises provocative proposals in terms of what might be possible exploring it using intersectionality as analytic tool to make visible power differences around values towards nature and natural resource management in decision-making in the realm of environmental governance.

I decided to use Forum Theatre (among other performance arts-based methods) because it is a method created in the South Global for addressing Global South problems. In addition, I had a genuine interest in exploring Forum Theatre because I participated in one, and I could tell the emotional connection with characters and how that encouraged me to participate. This Forum Theatre was implemented by my supervisor committee as an experimental work carried out in the ROC-Usumacinta Project. My main arguments were that as Forum Theatre can integrate different knowledge systems, it can offer a better understanding of how local people value nature (the multiplicity of perspectives and means by which humans value nature) and how their power position (subtle differences between the oppressor or oppressed based on the intersection of their social axes) hamper the inclusion of their plurality of values towards nature in decision-making in the realm of environmental governance.

1.3.4 Viability, Cultural relevance and credibility of performance artsbased methods in environmental projects.

The discussion on operational aspects of applied theatre was guided by the terms of viability, cultural relevance, and credibility. I elaborate on viability, cultural relevance, and credibility using the interrelated failings in participatory approaches proposed by Williams (2004) and Cooke & Kothari (2001), namely: the rhetoric of participation (viability), the reinforcement of local power differentials (cultural relevance), and the limitations by Western models of cognition (credibility).

a) Viability

The rhetoric of participation relates to participation as a means to accomplish the aim of a project cheaply or/and quickly (Williams, 2004). Under the influence of government and international agencies, there is often a lack of encouragement to adopt participatory approaches, because even when benefits occur, they are not always tangible, and come out too slowly to fit into the normal funding cycle (Burdon et al., 2022; Kenter et al., 2014; Reed, 2008). In this sense, when these methods are implemented, local knowledge is shaped to cover the necessity of quick and tangible results (Cooke & Kothari, 2001), and universalised solutions (Turnhout et al., 2020). Under this, viability was explored in terms of resources such as time and training necessary to implement performance arts-based methods in projects that emphasise the virtues of receptivity, patience, and open-endedness, in opposite to cheap and quick approaches that foster participation just in rhetorical form (Chambers, 1994; Turnhout et al., 2020).

b) Cultural relevance

The reinforcement of local power dynamics refers to obscuring local power differences by uncritically celebrating 'the community' (Cooke & Kothari, 2001). Local relations of power shape how knowledge is produced and shared, however, government and international agents while implementing participatory methods frequently consider these communities as homogeneous and competent entities, rather than places of shifting alliances and power dynamics (Cooke & Kothari, 2001; Walsh & Burnett, 2021a; Williams, 2004). Due to this, cultural relevance in this research focused on the importance, in environmental governance projects, of understanding local contexts; and adapting the methods to respect and embrace different groups of people based on their abilities, language, and traditions (Turnhout et al., 2020; Walsh & Burnett, 2021b).

c) Credibility

Dialogues limited by Western models of cognition emphasise the use of language as the main form of communication, in contrast to non-linguistic, tacit, and experiential knowledge (Mohan & Stokke, 2000; Walsh et al., 2022). Human-nature relationships are characterised by complexity, uncertainty, unpredictability, and emotions (Muhr, 2020). By emphasising singular forms of cognition grounded in Western models, values towards nature expressed through other forms risk being ignored. In this sense, an important critique of international or government agencies is that their agendas grounded in Western knowledge may influence value formation, determining and reshaping values instead of just eliciting pre-existing values which are expressed in other modes of cognitions (Himes & Muraca, 2018). Due to this, credibility in this research was explored as the possibilities and challenges of implementing performance arts-based methods in environmental governance despite these methods exploring knowledge(s) as non-linguistic, emotional, and tacit (O'Connor & Anderson, 2020; Walsh et al., 2022).

1.3.5 Transformative change

Without transformative change, humanity is at risk of continuing to degrade nature with consequences for nature's crucial contributions to people (Chan et al., 2020; Tschakert et al., 2017). Social-ecological transformation is an umbrella term which describes fundamental changes in structural, functional, relational, and cognitive aspects of socio-technical-ecological systems that lead to new patterns of interactions and outcomes to address the social-ecological crisis (Brand & Wissen, 2017; Scoones et al., 2020). These transformations occur from incremental, carefully planned interventions made by local actors (shot scale) and social mobilization (large-scale) (Brand & Wissen, 2017). In the sustainability field, there are three main forms to approach transformations: structural, enabling and systemic (Scoones et al., 2018, 2020). The structural approach refers to changes in the foundations of society, in key moments when economies and societies change (Scoones et al., 2020). However, this

approach can overlook local activity while potentially creating crisis and tension in societies (Scoones et al., 2020). Enabling focuses on highlighting the people's agency in choosing the aims and direction of transformation through revealing values, knowledge and relationships (including power differences), emphasising political mobilisation and emancipation (Horcea-Milcu et al., 2019; Muhr, 2020; Scoones et al., 2020). Systemic approaches focus on levels as targets for instrumental change through policy incentives usually led by the state in alliance with others (Abson et al., 2017; Horcea-Milcu et al., 2019; Scoones et al., 2020).

Several studies support the idea that performance arts-based methods can be tools in transformative spaces with a focus on enabling and systemic approaches (Heras et al., 2016; Lopez et al., 2018; Muhr, 2020). Transformative spaces are openings to express different opinions and beliefs (values) towards socio-ecological changes based on empathy (Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019; Pereira et al., 2020). In these spaces, the emergence of plural values can foster socio-ecological changes that influence Leverage Points for transformation (Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019). Leverage Points are priority points for intervention for transformational change such as parameters (taxes and subsidies), design (access to information, rules and incentives) and intent (values, goals or paradigms (Abson et al., 2017). Values can impact points related to intent, as values underpin individual behaviours and, at a collective level, the societal paradigms from which institutions, rules, and norms emerge (Chan et al., 2020; Horcea-Milcu et al., 2019; Pereira et al., 2020). However, it is central to challenge pre-established analytical views on values allowing the development of understandings of emotional and philosophical connections to nature (Chan et al., 2020; Horcea-Milcu et al., 2019).

A transformative space is also a space for discussing freely possible solutions to existing problems in which ideas for social–ecological changes can emerge (Charli-Joseph et al., 2018; Pereira et al., 2020). In these spaces, participants get involved in problem reframing, reflexivity and negotiations based on human agency and collective action (Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019). The work of Heras &Tàbara
(2014) is an example of using performance arts-based methods to open spaces for discussing and negotiating, where participants expressed empathic experiences, and enhanced the awareness of knowledge connectedness (Heras & Tàbara, 2014).

In this research, I use transformation as an auxiliary concept to explore the possibilities of applied theatre as a tool in transformative spaces, especially on its potential a) to bring to the fore local people's values that challenge pre-established analytical views on values and can be used to foster changes that influence Leverage Points for transformation (Horcea-Milcu et al., 2019); and b) to be a space for discussing freely possible solutions to existing problems (based on power differences) (Charli-Joseph et al., 2018; Pereira et al., 2020). In the realm of environmental governance, applied theatre as a tool in transformational spaces could foster better forms to represent local people's values and changes towards fairer decision-making processes.

1.4 Research aim, objectives and questions

In this research, I aimed to explore applied theatre, a performance arts-based method, in its potential to foster representation of local people's values and their interplay with power differences in environmental governance. To do this, I divided this project in three stages, each one with a specific research objective:

The first objective was to contribute to the emerging literature on the use of artsbased methods in environmental governance, by focusing on understanding local representation of values towards nature and local power differences in environmental governance maybe fostered by these methods. The research explored the potential of Forum Theatre to encourage dialogues among local people regarding values and power differences. I explored this through a case study in Chiapas (Mexico) in two rural communities, located in a tropical agroforest frontier. In response to this objective, I pursued the following sub-questions:

- 1. (How and why) Does Forum Theatre bring to the fore local people's values towards nature?
- 2. (How and why) Does Forum Theatre open spaces for local people to discuss local power differences in environmental decision-making?
- 3. (Why) Does Forum Theatre sustain sustainability transformation processes?

The second objective was to explore environmental professionals' views on the potential of performance arts-based methods in bringing to the fore local people's values and to discuss local power differences in environmental decision-making; and to what extent do they see a role for these methods in environmental governance. This was done through focus groups and interviews in which environmental professionals discussed a case study applying Forum Theatre, in two rural communities in Chiapas, southern Mexico. The original case study focused on the identification of local values and power differences, and the environmental professionals were interrogated about if and how those two issues were visible during the application, as well as implementation aspects regarding viability, cultural relevance and credibility of the method. Environmental professionals' validation of these methods is essential as they shape the interpretation, uptake, and implementation of environmental decisions in practice, but their views are yet unexplored.

In response to this objective, I pursued the following sub-questions:

- Is Forum Theatre identified as a mechanism to reveal and bring to the fore local people's values by environmental professionals?
- 2. Is Forum Theatre identified as a mechanism that opens spaces for local people to discuss about local power differences in environmental decision-making?
- What are the environmental professionals' views regarding the use and role of Forum Theatre in environmental governance? (Using the terms of viability, cultural relevance and credibility).

The third objective was to uncover evidence regarding the possibilities and challenges of using applied theatre as innovative methods through the experiences of those practising it. The focus here was not in the communities whose values are explored (objective 1), neither the environmental professionals involved in decision-making (objective2), but the practitioners of applied theatre as a technique. For this I used information from the previous objectives to explore the method beyond my particular case study in Mexico. I explored through interviews, the experiences of practitioners of 9 other environmental action research projects, all of which implemented applied theatre activities.

In response to this objective, I pursued the following sub-questions:

1. To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool for local people to bring to the fore plural values towards nature?

2. To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool to facilitate dialogue amongst participants about local power differences in environmental decision-making?

3. What can be said about the viability, cultural relevance, and credibility of the use of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods?

4. To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool in socio-ecological transformations?

This third objective set the ambition to explore the method across a broader range of contexts and environmental settings. All the projects explored took place in the Global South. By focusing on the Global South, I was not pretending to catalogue them as homogeneous; rather, I understood them as diverse, all of them facing different social and economic issues; and which are framed on historical exclusion contexts but at the

same time have evolved differently in time (Brasher, 2020; Pereira et al., 2020). I used their diversity as a strength – it reveals more possibilities and challenges. Also, these projects did not necessarily have the purpose of fostering representation of values in their original remit, but they serve here as amplified contexts in which to explore the potential for these methods.

1.5 Methods

1.5.1 Methods to cover objective 1 – To explore the potential of Forum Theatre to encourage dialogues among local people regarding values and power differences.

a) Case study

Forum Theatre was implemented in El Pirú and Galacia, two rural communities located in Chiapas, in the Lacandon rainforest in the frontier of Southern Mexico. The Lacandon rainforest is consider as a tropical agroforest and it is the last great remnant of high perennifolia forest in Mexico, feeding the most important basins (Usumacinta -Grijalva) which contain 30% of freshwater from Mexico (Carabias et al., 2019). The importance of this area for biodiversity and freshwater has made it the centre of various government strategies addressing its conservation (Cano-Castellanos, 2018)

From 1950 to 1970, people from different places around Mexico moved to the Lacandon rainforest for farmland, making this place a multi-ethnic territory. In 1978, part of this territory was decreed as a Biosphere Reserve called Montes Azules (Carabias et al., 2019). In this area, environmental governance interventions have been implemented to empower communities to manage their natural resources in a sustainable form (Trench et al., 2018). Governance interventions have been promoting sustainable production of corn, coffee, cacao among others, and creating conservation plans based on monetary valuation of the natural resources (e.g., REED+) (Trench et al., 2018). These strategies weigh natural resource management practices and discourses of decentralisation, marketization and commodification (Holmes &

Cavanagh, 2016). This situation implies that monetary values towards nature have been privileged over other values, such as fundamental or cultural values that remain silenced.

Within the Lacandon Forest, this research was implemented in the communities of El Pirú and Galacia, located in the municipality of Marques de Comillas. El Pirú was founded in 1982; it currently has a total population of 207 inhabitants (INEGI, 2020). The main productive activities are agriculture and livestock. Galacia was founded in 1975; it currently has a total population of 232 people (INEGI, 2020). The main productive activities are agriculture, livestock and African palm oil plantations. Both communities were established under the umbrella of Mexico's Land Reform¹ (Trench et al., 2018), and currently they have developed so-called ecotourism projects (an 'ecolodge' in Galacia and an eco-activity centre in El Pirú), as part of Payment for Ecosystem Services (PES) schemes supported by government programs and civil society organizations.

The land tenure of both communities, as in most rural communities in Mexico, is called *ejido*. This land tenure system derived from the Mexican Revolution's claims based on communal land on which community members individually work designated farm-sites/fields and collectively maintain communal rules or law (Bee 2016). Land tenure is a key aspect to understand how most of the environmental decisions are made in this area. Under this *ejido* system people with farm-sites/fields (mainly men) are called *ejidatarios* (Bee, 2016). They form the so-called General Assembly, which is the maximum authority and is where most of decisions are made. The *comisario ejidal* is the executive arm of the ejido and the chief of *Ejido Council* formed by three more members (elected democratically) are responsible for implementing agreements made

¹From 1940 to the 1970, the distribution of land was based on the expansion of the agricultural frontier and the promotion of the colonization of the extensive national lands, either through ejido or by strengthening private property.

by this Assembly (Pérez-Cirera & Lovett, 2006). This decision-making process has been criticised as it excludes the voices and values of other community members such as women, young people or *avecindados*² (without land rights) (Bee, 2016; Pingarroni et al., 2022). When there are these complex power relations, spaces for transformation towards fair decision-making are a key aspect (Chan et al., 2020; Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019). Transformative spaces that can be used by local people to discuss their values towards nature and their views regarding power differences (which can be perceived as conflicts or not) in environmental decision-making can lead to strategic changes (solutions) towards fair decisions in environmental governance (socio-ecological transformations) (Edwards et al., 2016; Horcea-Milcu et al., 2019; Pereira et al., 2020). Therefore, these communities were a strategic place to assess Forum Theatre as a mechanism to promote the participation among those that have been marginalized and to discuss the barriers that keep them out of from decision-making processes in the realm of environmental governance.

b) Process of implementation

After selecting the communities, a script was elaborated (see the script in Appendix A1). Forum Theatre draws on creating a story that reflects everyday life situations that are familiar to the audience (Boal, 2013). To do this, I based initial script materials on previous qualitative fieldwork (including interviews and focus groups) conducted in the same communities as part of the Usumacinta ROC Project (Martin-Ortega et al., 2019) and based on my experience working in the area in the previous years. With the information of the cultural context in the area, a trans-disciplinary team (Lead by Prof. Aylwyn Walsh and me) created a script portraying different scenes related to environmental management in a community assembly which can be understand in terms of value conflicts. Each scene had specific conflicts based on the power

²Avecindados are potentially marginalized since have limited access to forest resources and governmental benefits (Pingarroni et al., 2022)

differences of the characters, and also showed the values they held. In the scenes, nine characters discussed their views regarding the potential development of an ecotourism project as part of a Payment for Ecosystem Services (PES) scheme proposed by a government agent (character), in a fictional community. The conflict was based on the local cultural context, specifically the Mexican government's interventions in the area, and the difficulties faced by women, landless people and young people in participating in *ejidal* assemblies, where environmental decision are made (explained in the previous subsection 1.5.1 a).

To create a safe space to talk about power differences and values a trained facilitator and performers were selected for the activity. The process for elaborating the script also included the production of five drafts revised by the supervisors and a final draft translated into Spanish (leaded by myself as a native Spanish speaker). The Spanish draft was then shared and discussed with the team of performers (those who joined the research team and help implementing the Forum Theatre), who provided further feedback and adjusted some of the language and the characterisation. The final story was divided in 6 scenes (see the script in Appendix A1).

With the script ready, I selected 7 performers formed in the techniques of Forum Theatre to implement the Forum Theatre in the communities. Then, I implemented a Forum Theatre in the communities in November 2019. A total of 21 people attended in El Pirú (11 women and 10 men), and 20 in Galacia (17 women and 3 men). The activity was recorded (a summary video showcasing the process is available online: https://water.leeds.ac.uk/our-missions/mission-2/performing-change/performingchange-resources/). I used the video recording to import notes and transcriptions regarding the local people's performances (and other forms of participation) during the Forum Theatre into qualitative data analysis software (Nvivo12). Then I qualitatively analysed these.

A month after the Forum Theatre activity, I conducted semi-structured interviews with over half of the participants, to capture their reflections on the activity (see interview structure in Appendix A2). In Galacia, we undertook 14 interviews (12 women and 2 men), and in 14 in El Pirú (8 women, 4 men, and 2 couples). All were either video or audio recorded.

1.5.2 Methods to cover objective 2 - to explore environmental professionals' views on the potential of performance arts-based methods in environmental governance

I implemented focus groups and interviews to a purposive sample of Mexican nationallevel environmental professionals to explore their views on the potential of performance arts-based methods. For that, I used the video material result from objective 1 (the case of study). The profile of participants was defined as 'environmental professionals involved in forming, designing and implementing environmental public policy' Martin (Martin-Ortega et al., 2019). This involves, in our context, civil societal organizations, government institutions, activists, and academics in Mexico. I sent the invitations to 37 environmental professionals, from those, 18 answered confirming their participation.

I organized two separate online focus groups. Focus group 1 took place on 19 March 2021 and focus group 2 took place on 26 March 2021. Each of the focus groups lasted four hours (including breaks). The focus groups started with an introduction of the basic theoretical background about values and power differences in environmental governance (see focus groups structure in Appendix B1). Following this, I showed the video result from objective. After watching the video, I facilitated a discussion on whether, environmental professionals identify Forum Theatre as a mechanism to bring to the fore local people's values to discuss about local power differences in environmental governance (to enhance decision-making processes). In addition, environmental professionals discussed regarding the use and role of Forum Theatre in environmental governance (using the terms of viability, cultural relevance and credibility). After the focus groups, I implemented online semi-structured interviews to explore further some of the comments shared in the focus group (see interview guide

in Appendix B2). Interviews lasted from 30 to 90 minutes and covered all 18 participants.

1.5.3 Methods to cover objective 3 - to uncover evidence regarding the possibilities and challenges of using applied theatre as innovative methods through the experiences of those practising it

This research used online semi-structured interviews with a purposive sample of practitioners of applied theatre as part of research projects related to nature use and environmental management in the Global South (see consent form in Appendix C1 and interview guide in Appendix C2). The practitioners participating in this research implemented applied theatre tools as part of projects focused on environmental governance. I recruited practitioners using the snowball method. I invited practitioners of 12 projects, of which 11 practitioner form 9 projects confirmed participation.

In the interviews, I first informed the interviewee that the research was aimed at exploring whether/how applied theatre methods improve the representation of local people's values in environmental decision-making (in the context of environmental governance). The next set of questions were aimed at gaining further understanding of the projects, identifying the project's aim and the reasons for choosing performance arts-based methods. In the next set of questions, I explored the possibilities and challenges of these methods as a space for local people to express their values for nature and discuss local power differences. Subsequent, I asked about aspects of viability, cultural relevance and credibility around environmental topics in the Global South. A final set of questions focused on participants' views on the potential of using these methods to foster socio-ecological changes or transformations.



Research aim: to explore performance arts-based methods, such as applied theatre, in their potential to foster representation of local people's values in environmental governance.

Objective 1: to explore the potential of a performance arts-based method to bring to the fore local people's values and to discuss local power differences in environmental decisionmaking.

Methods 1: case study (a Forum Theatre in two rural communities in Chiapas, Mexico) and Interviews.

Level: Local

Objective 2: to explore environmental professionals' views on the potential of using performance arts-based methods in environmental decisionmaking (using as example the case study from objective 1).

Methods 2: focus groups and Interviews with a range of environmental professionals from a cross different areas in Mexico.

Level: National



Objective 3: to uncover evidence regarding the possibilities and challenges of using applied theatre as innovative methods in the context of environmental governance (in the Global South) through the experiences of those practising it.

Methods 3: interviews with practitioners of applied theatre using evidence uncovered by objectives 1 and 2.

Level: Global South

1.5.4 Data analysis and interpretation

I analysed the findings for the thesis through a process of interpretation and evaluation. Field notes from the performances (Forum Theatre) and focus groups, and interviews transcripts were imported into qualitative data analysis software (Nvivo12). Coding took place on three separate occasions (one for each of the results chapters) in order to iteratively incorporate new data and reflections as they evolved throughout the research trajectory.

To analyse local people' values in the Forum Theatre (objective1) and the local people' values identified by environmental professionals (objective 2), I used a structural code system (DeCuir-Gunby et al., 2011). I used the Value Landscape Approach proposed by Schulz et al. (2017) because of its explicit focus on the interrelationships between values and environmental governance (Schulz, Martin-Ortega, Glenk, et al., 2017). Value Landscape Approach is relatively broad, encompassing three categories of value: fundamental values, governance-related values and assigned values. The concept of fundamental values represents abstract trans-situational goals (such as universalism, benevolence, tradition) that can guide people behaviour, in this case towards nature management (Schulz, Martin-Ortega, Glenk, et al., 2017; Schwartz, 2002). Governance-related values refer to ideal characteristics of 'good' environmental governance, such as inclusion, capacity, effectiveness, and fairness (Lockwood et al., 2010). Assigned values represent the ones attached to the use of the natural resources aligned with the notion of ecosystem services (Schulz, Martin-Ortega, Glenk, et al., 2017).

However, I was aware that no single disciplinary framework can fully integrate the many understandings of social values (Kenter et al., 2019). To analyse the plural values identified by practitioners in objective 3, I used a grounded approach (Srdjevic et al., 2017). This approach allows novel themes to emerge from the data with minimal influence from the researcher's preconceived ideas but also implies several limitations with regard to replicability and generalisability. I selected this more open approach because the participants' projects were not specifically aimed at or focused on values; we were inviting them to reflect on whether their

performance-based method may have helped bringing local people's values were brought to the fore, understanding that values can be seen as a reflection of reasons why nature is important to people (Chan et al., 2016; IPBES, 2022).

To analyse discussion on power differences, in objective 1, 2 and 3, I used a grounded approach (i.e., codes were attributed to themes as they emerged from the participants' narratives) (Srdjevic et al., 2017), which was expanded with categories and sub-categories as reoccurring themes were encountered. Local power differences were approached as informal social rules and norms that establish legitimate ways of relating to nature (i.e., who can benefit from nature's contributions) (Ahlborg & Nightingale, 1994; Bee, 2016; Colfer et al., 2015).

To analyse the aspects of viability, cultural relevance, and credibility, in objective 2, I also used a structural code system (DeCuir-Gunby et al., 2011). I used the interrelated failings in participatory approaches in environmental development proposed by Williams (2004) and Cooke & Kothari (2001) (see Chapter 3). However, to analyse these aspects in objective 3, I used a grounded approach (Srdjevic et al., 2017), but I was guided by the outcomes from objective 2 in terms of viability, cultural relevance, and credibility (see Chapter 4) to code the information by themes.

To analyse the potential of applied theatre methods as a tool in transformative spaces I used a grounded theory approach (Srdjevic et al., 2017). I focused on the characteristics of a transformative space presented by Charli-Joseph et al. (2018), Heras et al. (2016) and Pereira et.al. (2019); and I also used the importance of values to foster changes that influence Leverage Points for transformation presented by Horcea-Milcu et al. (2019). Additional details about the analytical approach used for each research objective are presented within each chapter, and the final coding structures are presented in Appendices A3 (Table A.2), B4 (Table B.2) and C3 (Table C.1).

Overall, in this research, by weaving structural code systems and grounded approach theory I wanted to moderate as far as possible the co-creation of outcomes. This allowed me to recognize and validate participants narratives and views (grounded theory) while cross-validating the identified themes with those from similar research elsewhere and contextualising the findings with large-scale structures and discourses (structural code systems).

1.6 Research philosophy and positionality

1.6.1 Research philosophy

This research has an inductive and exploratory approach (Berg, 2009; Clark et al., 2021), aligned with the qualitative methodology described above. I used this approach because with this research I wanted to explore applied theatre as an innovative method, thus, the outcome rather than being discovered fully formed was co-created through answering to each specific objective and by the analysis of different views.

In addition, I used a qualitative toolkit, including case of study, interviews and focus groups to generated knowledge through a process of inductive reasoning based on people subjective experiences. The qualitative paradigm is the term used to designate a diverse range of methods and methodological practices informed by various epistemological and theoretical groundings such as postmodern and post-structural theories. The values underlying qualitative research include the importance of people's subjective experiences and meaning-making processes, and acquiring a depth of understanding (Leavy, 2017).

I also used a post-structural theory to develop this research. Post-structural theory turns to discourse as the primary site for analysis, acknowledges the role of language, custom and power as drivers that guide people's perceptions (Leavy, 2017) however it treats language not as a reflection of 'reality' but as a kind of descriptive phenomenology that is agnostic about the truth or reality (Escobar 1996). Post-structuralism, in this research, provided an opportunity to study the perceptions which give meaning and credibility to a social phenomenon (Leavy, 2017), using ideas such as pluralism, deconstruction, and fragmentation of meaning. The idea of pluralism (in post-structuralism) reflected in value pluralism (in Ecological economics) suggests there is no 'one correct way' of conceptualising values (Arias-Arévalo et al., 2018; Isacs et al., 2022). Regarding intersectionality, this has been influenced by post-structuralism. Post-structuralism in feminist studies exposes and subverts oppressive power relations by challenging main assumptions or disrupting dominant narratives (Leavy, 2020). For example, post-structural feminism draws not only on rational argument but also on poetic writing, fiction, music, and on the performing arts (Gannon & Davies, 2012). In addition, poststructuralism does not provide a set of methods; methodologies are seen as "thinking technologies" that are always, subject to critical scrutiny (Haraway, 2000 in Gannon & Davies, 2012). This research looks to foster performance arts-based methods in their credibility in their use to better represent marginalized people's values in environmental decision-making in the context of environmental governance; posts-structuralism can be seen as a guide for a critical discussion on the potential of these methods.

In this PhD research I integrated knowledge from different disciplines to explore the use of performance arts-based methods in environmental governance. Interdisciplinary research practices integrate concepts and methods that are traditionally thought of as separate fields (Leavy, 2016). The approach I adopted in this research reflects such an integrative strategy. I used concepts form feminist political ecology (intersectionality), ecological economics (value pluralism) field and art-based research (Forum Theatre). I also worked with academic researchers and practitioners from performance arts, ecological economics, and environmental development, and combined different methods of data such as from Forum Theatre, interviews, and focus groups.

1.6.2 Positionality

Positionality of the researchers refers to how researcher's position within the social and political context of the field shapes the way that participants interact with the researcher and ultimately the results of the research (this includes the limits of

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what we think we can accomplish and what we think we can do as researchers in the field) (Brasher, 2020). As such, there can be no research without positionality. The following section reflects on relevant considerations of the researcher's identity and experience.

My positionality in this PhD project has been shaped by my academic and professional background. I am Mexican. I did undergraduate studies in Social Anthropology and a Master's in Natural Recourses and Rural Development, both in Mexico. These degrees are rooted in interdisciplinary sciences and focus on combining theoretical and pragmatic ideas from the humanities, and environmental and social sciences to understand issues of human-nonhuman relationships. However, what influenced me the most in the search for better forms to represent local people in environmental decision-making was my professional background. I worked for 6 years as an independent consultant for some government agencies on the implementation of rural development projects with rural women in Chiapas, Mexico. These projects, despite the efforts to include women in sustainable projects, are still a long way to reaching a fair representation of local women's values in decision-making. This motivated me to explore innovative approaches to foster the participation and representation of people who have been excluded based on their social axes from environmental governance processes such as women or landless people.

1.7 Ethical considerations

Since the project involved fieldwork, and the processing and storing of data, ethical consideration was paramount.

First, 'Do no harm' was the primary principle in this research. This principle states that no harm should come to research participants (Leavy, 2017). With this as the mainstream value of this research, first, I followed with the Ethics review process which was reviewed and approved by the University of Leeds Research Ethics Committee (with the reference AREA 19-030). Some important ethical issues were considered in the data collection process included Forum Theatre participants' and interviewees' consent.

I asked to participants their consent before any activity commenced and they were provided of means of communicating with me at any time of the process to request further information. It should be noted that most of the people in these communities are very familiar with participatory forms of research and are very much used to interaction of this kind with researchers. The process for asking for their consent for participating in the Forum Theatre and post-interviews was the following:

Communal verbal consent was obtained by the local authorities (called *"comisariados ejidales"*). This consent sought the authorization of the implementation of the research at the community.

Individual verbal consent was obtained from the people interested in participating in Forum Theatre and the associated interviews. This consent had the following specific aspects:

- Voluntary participation in the Forum Theatre (as either spectator or spect-actor), with the possibility to withdraw at any time). Participants in the Forum Theatre activity were able to choose if they want to participate as either spectators or spect-actors and were able to opt-out of being interviewed even if they participated in the Forum Theatre. As well, the people had the possibility of just participate in the interviews, if they prefer so.
- Authorization to video-record their participation in the Forum Theatre.
 With the possibility to withdraw right before the activity starts. The raw recordings were only accessible and used by the researchers.
 Participants were informed that edited (smaller) versions of the video recordings would be used for dissemination purposes (e.g. academic conferences or in research related websites) and that anonymizing was

not possible in this activity. Removal of individual participants from the video was not possible, hence why we allow 3 days prior withdrawal.

 Voluntary participation in the interviews with the possibility to withdraw at any time. In principle, all participants were able to withdraw their data at any time until after the preliminary screening of the data was made by the researchers but before the formal analysis starts. I also asked for permission to record (video and audio) interviews with community members. Participants were informed that the interviews were confidential and they were able to withdraw at any point.

For the focus groups and interviews, consent was sought before the interviews and respondents were asked to opt out if they found that necessary. Interviewees also had the opportunity to ignore questions they found to be confidential although anonymity was assured. To ensure that the data were protected, the transcript, videos and audio recorder material were stored in a confidential online file provided by the University of Leeds, which was only shared with the supervisors.

A short version of the Forum Theatre activities was produced to share in public with some fragments of participants' involvement and their reactions. For this oral consent of the participant was gained. Also, the expectations were made clear in the consent form where the potential outcomes and impacts of the research were detailed.

Second, as Forum Theatre is an activity that can expose problems, but it also opens the space to discuss solutions, special ethical considerations were put into practice. For example, it was very important that people be reminded to participate as characters, with names of characters, not real names; and the role of the facilitator was understood as a key aspect to set Forum Theatre as a safe space to respectfully discuss general issues (Conquergood, 2013; Snyder-Young, 2022). The facilitator was trained on the ethics of Forum Theatre and rehearsed with the public. This is also in line with my commitment to uncovering methods that allow us (environmental professionals, academics, and other actors involved) to listen to voices that have been excluded from our forms to approach communities (my ethical principle).

1.8 Dissemination activities and additional work related to this PhD research

Extensive outreach and engagement have been conducted throughout the research trajectory, including presentations in international conferences, participation on summer schools and other activities. The conferences are listed below.

- 1 The international Conference on Earth System Governance 'Urgent Transformations and Earth System Governance: Towards Sustainability and Justice. From the 06th to the 8th of November 2019, in Oaxaca, Mexico. The title of my presentation was 'Performing fundamental values as an emancipatory mechanism to fostering inclusive participation in environmental governance'. It was presented in the Special Session of "Diverse epistemologies for the protection of biodiversity".
- 2 The 7th International Degrowth and 16th International Society for Ecological Economics Joint Conference: Building Alternative Livelihoods in Times of Ecological and Political Crisis. From the 5th to the 8th of July 2021. This was an online conference hosted by the University of Manchester, UK. The title of my presentation was 'Forum Theatre as a mechanism to explore representation of local people's values in environmental governance: a case of study from Chiapas, Mexico. It was presented in the session 'Art-based approaches to socio-ecological transformations'.

3 The Social Science Working Group twitters conference (early career researcher) of the Society for Conservation Biology. On the 20th of July 2021. The title of my presentation was 'Performing values as a mechanism to explore local representation in environmental governance'. This work was awarded with the 2021 Bridge Builder Award supported by the Society of Conservation Biology and the journal People and Nature.

(https://twitter.com/SCB_SSWG/status/1424899468667670528).

4 The Political Student Association and Early Carer Network's annual online conference. On the 4th of July 2022. On the symposium titled 'The State of Things'.

I also participated in two summer schools, during which I was able to present part of this research. The summer schools were 'The Summer School Feminist Political Ecology: New Spaces of Engagement for Environmental Future' (from the 29th of July to the 2nd of August 2019 at the University of Oslo, Norway) and The Politics Ontologies Ecologies Summer School (from the 10th to the 13th of June 2022 at the University of Pisa, Italy). This summer school was part of the XIV International Conference of the European Society for Ecological Economics (ESEE 2022).

In addition, I contributed to the acquisition of funds from the Impact Acceleration Accounts (IAAs) to complement this PhD research. Together with my supervisors and with colleagues from the School of Performance and Cultural Industries, a successful application to the ESRC Impact Acceleration Account award was made based on the core ideas of this PhD research. The project, entitled "Activating change on environmental governance through performance-based methods (PerformingChange)". While the PhD aims to evaluate the potential of Forum Theatre as a mechanism to understand local representativeness in environmental governance, the objective of the IAA project is to generate impact by activating dialogue and developing critical conversations about nature conservation and environmental management by those most affected by it, setting the ground for longer-term societal transformations. Both projects will address their aims through the same case study and will develop fieldwork synergies, but they are distinct in their aims and methods. For the PhD, Forum Theatre will be implemented and then evaluated through ethnography and interviews to members of the local community and environmental professionals. For the IAA project, Forum Theatre will be used to build local capacity in the application of performance-based methods for community dialogue and to raise awareness amongst the environmental governance research and policy community on the potential of performance basedmethods for impact delivery. In the IAA project, Forum Theatre will be evaluated through interviews with the theatre facilitators trained as part of the project as well

as the audience through which it would be disseminated (academics and other interested professionals).

I also collaborated in the elaboration of the research paper titled 'Valuing transdisciplinarily: Forum Theatre in Tabasco and Chiapas, Mexico'. Published in Research in Drama Education Journal (under the reference Walsh et al., 2022). This was part of the result of the project "Activating change on environmental governance through performance-based methods (PerformingChange)".

I also was invited by the Leeds Social Sciences Institute (LSSI) to participate in a short video to showcase participatory research practice across the University of Leeds - looking at the breadth and diversity of methodologies, disciplines, research locations etc. The video shows how I approached the design of the Forum Theatre with the communities, reflecting on any opportunities/challenges in this approach.

1.9 Structure of the thesis

This introductory chapter has set out the context of the research, highlighting the research rationale and core research gap, conceptual base, the research aims and objectives, methods and research philosophy, analysis and interpretation, positionality and ethical considerations.

Chapters 2 to 4 correspond to each of the three objectives and stages of the PhD. Chapter 2 presents the results of the case study, in which a Forum Theatre was implemented as a method to explore the representation of local people's values in environmental governance (objective 1). This was the first activity of the PhD aimed at establishing if applied theatre could be a space for local people to bring to the fore local people's values and to discuss power differences in environmental decision-making. The findings of this chapter are published in People and Nature Journal (impact factor 7.5) (under the reference Olvera-Hernandez et al. 2022).

Based on findings from the case study, that confirm the possibilities of Forum Theatre as a method in environmental governance, it was important to assess the feasibility of performance arts-based methods with environmental professionals (objective 2). Environmental professionals' validation of these methods is essential due to their key role in the implementation of environmental decisions. Thus, in Chapter 3, the results presented environmental professionals' views about if and how local people's values and power differences were visible during the application, as well as implementation aspects regarding viability, cultural relevance and credibility of the method. The participants in this stage were professional's experts on implementing participatory approaches in environmental governance projects but with none (or little) experience in performance arts-based methods. The findings of this chapter are under review in Environmental Science and Policy Journal (impact factor 6.4) (under the reference Olvera-Hernandez et al. 2023).

Based on the information from the previous objectives and to explore the method beyond my particular case study in Mexico, interviews were implemented with experienced practitioners on the use of applied theatre in environmental action research projects in different locations of the Global South. This was the third activity of the PhD (chapter 4), and the aim was to uncover practical aspects regarding the possibilities and challenges of using applied theatre as an innovative technique to foster the representation of local people's values in environmental decision-making.

I see these chapters (objectives) as a dialogue among local people, environmental professionals in Mexico, and practitioners around the world, regarding their views on the possibilities and challenges of the use of applied theatre tools in the context of environmental decision-making in environmental governance processes.

Chapter 5 comprises the overall conclusions of the research, including the key contribution to academia; as well impact derived from this work and suggested lines for future research.

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Chapter 2

Forum Theatre as a mechanism to explore representation of local people's values in environmental governance: a case of study from Chiapas, Mexico.

Olvera-Hernández, S., Mesa-Jurado, M. A., Novo, P., Martin-Ortega, J., Walsh, A., Holmes, G., & Borchi, A. (2022). Forum Theatre as a mechanism to explore representation of local people's values in environmental governance: A case of study from Chiapas, Mexico. People and Nature. https://doi.org/10.1002/pan3.10420

Abstract

Nature degradation, poverty, and social discrimination are some of the consequences of unfair decision-making over environmental resources within rural communities in the Global South. Barriers to achieving fair environmental decisions are entrenched power differences and the lack of representation of the diversity of local values in environmental decision-making.

Using intersectionality and value pluralism as a conceptual base, this is the first paper to examine the potential of Forum Theatre, a performance arts-based method, to discuss 'solutions' regarding power differences and values towards nature in environmental decision-making.

We implemented Forum Theatre in two rural villages in Chiapas, Mexico, framed around conflicts and power differences in eco-tourism development.

Participants felt empathy with the Forum Theatre characters and dissatisfaction over the conflicts, and this motivated them to engage and participate in collective reflections on their personal experiences with power differences in environmental decision-making.

From these reflections, participants performed diverse 'solutions' to the conflicts, bringing to the fore plural interconnected and dynamic values towards nature in these narratives. Despite this, Forum Theatre does not look to 'solve' conflicts; it is a safe space to explore how power differences and values towards nature play out in environmental decision-making.

Results offer a promising picture of the potential of Forum Theatre as an opening where participants could discuss power differences and values towards nature. However, establishing its potential as a tool in environmental decision-making would require engaging those involved in implementing environmental decisions that affect the communities but who operate from other levels of the governance structure, such as policy-makers and large NGOs.

Keywords:

Performance arts-based methods; Environmental decision-making; Intersectionality; Participatory methods; Power differences; Value pluralism

2.1 Introduction

Degradation of nature, poverty and social discrimination are some consequences of unfair environmental decisions often present in rural communities in the Global South. Difficulties in achieving fair decisions are largely a consequence of the lack of representation of local people's values in decision-making processes in the realm of environmental governance (Agarwal, 2009; Edwards et al., 2016). This lack of representation has been a constant challenge in environmental governance in such communities, reflecting power differences that exclude people based on social axes such as gender, economic status, religion, education and ethnicity (Rocheleau et al., 1996).

The complex relationship people have with nature shapes how they perceive, relate to, inhabit, interact and give meaning to nature, and values are a key part of this (Chan et al., 2016; IPBES, 2022). Values towards nature have been interpreted differently by diverse disciplines (Schulz, Martin-Ortega, Glenk, et al., 2017; Tschakert et al., 2017), but the predominant interpretation in environmental management comes from neoclassical economics (Kenter et al., 2015). In that approach, values towards nature are framed in terms of welfare changes that can be measured in monetary units (Schulz, Martin-Ortega, Glenk, et al., 2017). Ecological economics challenges this by introducing a pluralistic notion of values (Martínez-Alier, 2002; Schulz, Martin-Ortega, Glenk, et al., 2017). In this research, value pluralism is used to frame values towards nature (see Section 2.3.2). Value pluralism acknowledges the multiplicity of perspectives and means by which humans value nature (Himes & Muraca, 2018). It thus supports collective and reflexive processes of value formation without attempting to 'translate' values towards nature into one single dimension or unit (Martínez-Alier, 2002; Schulz, Martin-Ortega, Glenk, et al., 2017). Depending on how plural values are considered, human–nature relationships will be evaluated in one way or another to make environmental decisions (Tadaki et al., 2017). This, in turn, will determine the effect of such decisions in people's lives and in nature (Muradian & Pascual, 2018). Yet inclusion of plural values in decision-making in environmental governance processes is also mediated by power differences (Ahlborg & Nightingale, 1994; Lockwood et al., 2010), leading to environmental outcomes that may not reflect key aspects of local people's interactions with nature.

In the realm of environmental governance, power differences affect environmental decision-making in different ways (Ahlborg & Nightingale, 1994; Lloro-Bidart & Finewood, 2018; Rocheleau et al., 1996). For example, through the development of institutions (i.e. informal social conventions and norms and formal legal rules) that establish legitimate ways of relating to nature (i.e., who decides, whose values count, who can benefit from nature's contributions and who bears the cost of ecosystem degradation) (IPBES, 2022; Ratner et al., 2013). Power differences are then likely to result in socio-environmental conflicts and, ultimately, in negative impacts on biodiversity and ecosystems (IPBES, 2022). This can be seen when people in positions of power impose decisions that impact nature, such as prioritizing extractive activities over traditional uses, leading to actions that degrade ecosystems and affect people's well-being (Elmhirst et al., 2017; IPBES, 2022). In this research, we approached power differences in environmental decision-making using the notion of intersectionality from feminist political ecology, described as the operation of power in everyday practices of natural management based on people
social axes such as gender, land tenure, education, age and race/ethnicity (see Section 2.3.1).

Participatory methods have been advocated as mechanisms to overcome some of those power differences in environmental decision-making (Ranger et al., 2016). These approaches may enable people to play active and influential roles, building trust to share perspectives and understandings of their relationships with nature (Heras & Tàbara, 2014; Ranger et al., 2016). For instance, participatory development has been increasingly adopted by government agencies and international institutes as an approach to foster local people's participation in nature conservation and sustainable development (Mohan & Stokke, 2000; Williams, 2004). However, their performance has been criticized, as their engagement with power dynamics falls often short (Cooke & Kothari, 2001). Some critiques are based on the way that international agencies, such as the World Bank, frequently consider communities as homogeneous or as an entity, rather than places of shifting alliances and power dynamics (Cooke & Kothari, 2001; Williams, 2004). In terms of values towards nature, there are critiques of how such agencies might influence agendas on value formation, determining values instead of just eliciting people's pre-existing values of nature (Himes & Muraca, 2018).

Against this backdrop, arts-based approaches, defined as approaches in which arts play a primary role (Leavy, 2020), may offer opportunities for addressing some of these challenges, by combining a more social-constructivist and interpretative understanding of knowledges (Heras & Tàbara, 2014; Walsh & Burnett, 2021). By using arts-based methods, it is argued, participants can take control of their own participation by using different skills including verbal and non-verbal communication (Leavy, 2020), allowing them to communicate beyond the limits of fixed identities and official discourses (Kester, 2005). They also provide further space for emotions and beliefs (Heras & Tàbara, 2014; Morales & Harris, 2014), which are critical for understanding values towards nature (González-Hidalgo & Zografos, 2019; Kenter et al., 2015). Therefore, arts-based methods open up new ways of thinking about, discussing and understanding the complexity of social interactions with nature for environmental governance (Edwards et al., 2016; Heras

& Tàbara, 2014). However, these methods do not come without risk; they might reinforce power relations between scientific and other knowledge holders (such as community members) or local power differences between community members (Turnhout et al., 2020), for example, when powerful people control participation during the implementation of the methods, silencing other voices (Lee, 2015).

Within arts-based methods, performance arts-based methods (Boal, 2013; O'Connor & Anderson, 2020) have emerged as promising tools to dialogue about different human–nature relationships and sustainability (Brown et al., 2017, Guhrs et al., 2006; Heras et al., 2016; Morales & Harris, 2014; Novo et al., 2019; Sullivan et al., 2008). These are theatrical forms that deliberately blur the boundaries between actor and spectator to tell the stories of people who have been routinely excluded (Boal, 2013; O'Connor & Anderson, 2020).

Despite this increasing interest, performance arts-based approaches to environmental governance/decision-making remain largely unexplored. This research aims to contribute to this emerging literature by focusing on the potential of a performance arts-based method to understand local representation of values towards nature in environmental governance. It uses Forum Theatre (Boal, 2013) as a mechanism for local people to discuss 'solutions' regarding power differences that exclude their values towards nature from environmental decision-making. In this sense, we do not aim to propose a solution for better representation of local people in environmental decision-making, but rather to examine the potential of this method to encourage dialogues among local people regarding values and power differences.

We explore the potential of Forum Theatre through a case study in Chiapas (Mexico), analysing the creation and implementation of a performance arts-based method within two rural communities, located in a tropical agroforest frontier, using the notions of intersectionality and value pluralism to explore power differences and values.

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2.2 Forum Theatre

Forum Theatre, a performance arts-based method, was developed in the 1970 s by Augusto Boal as part of the Theatre of the oppressed (2013), which built on Paolo Freire's work Pedagogy of the Oppressed (Freire, 1976). Forum Theatre uses theatrical forms to facilitate and encourage engagement from the audience on a variety of social issues (Morales & Harris, 2014).

In practice, Forum Theatre uses artist/facilitators to perform a scene representing common social interactions in which one character might feel oppressed or sidelined. During the performance, members of the audience can stop the scene, take the protagonist role (oppressed character) and change the scene. The transition from spectators to spect-actors, aims to empower participant to perform some 'solution' to the conflicts, drawing on their own experiences (Heras & Tàbara, 2014). Augusto Boal (2013) named it a 'rehearsal for revolution' because the 'solutions' are not 'given' by experts from outside.

As such, it engages the audience in personifying experiences from their every-day lives, creating opportunities to reflect on delicate issues and unveiling power dynamics which can be otherwise difficult to question (Boal, 2013; Heras & Tàbara, 2014; Sullivan et al., 2008). To encourage participants to perform these experiences, implement different activities³ trained performers and a 'joker' (facilitator) are needed. Trained jokers are the bridge between actors and audience members (participants). They facilitate and encourage participants to reflect on conflicts and to rehearse different solutions in the relative safety of the artistic process (Boal, 2013; Campbell, 2019). In Forum Theatre, the joker is an artist who challenges the illusions of natural authority between practitioners and participants and allows reflections about power differences (Boal, 2013; Campbell, 2019).

³Activities such as when spectators become spect-actors freezing an on-stage action, so they can go on stage to take the role of the protagonist, and change the scene. Another is 'Hot seating', which the oppressed character can be interviewed by participants to explore details about their life, and create links of empathy. Also, the 'missing character', the audience can create new characters that might bring solutions to the problem (Boal, 1992, 2013; Campbell, 2019).

Due to these qualities, Forum Theatre has been used in different realms (Heras & Tàbara, 2014; Leung et al., 2020; Taylor & Taylor, 2017). For example, on intersectionality, Forum Theatre has been used to recognize the multiple (actual and future) student and teacher identities within classrooms and move towards including them in their future classroom communities (Powers & Duffy, 2016). In nature management, Forum Theatre has been used to help young people in rural communities identify plausible futures and potential barriers (Heras et al., 2016). However, it has not yet been used to opening dialogues about values regarding nature, except for the experimental work carried out in the ROC-Usumacinta Project⁴. In that preliminary work, precursor of that presented here, participants from academia, government agencies and NGOs performed roles of the local people to establish dialogues about ecosystem services in México. While limited in scope, it indicated the potential of improvisation theatre techniques, since they allowed discussion of the findings of the original research project, and opening new ways of thinking about how communities interact with nature (Novo et al., 2019). The ROC-Usumacinta Project did not, however, engage directly with the communities themselves, as we do here.

There are critiques of Forum Theatre as a research method, such as the risk of oversimplifying the daily reality of community members (Guhrs et al., 2006), and the use of a binary oppressor-oppressed idea of power (Armstrong, 2006). Despite these, we argue that Forum Theatre can integrate different knowledge systems, offering a better understanding of how local people value nature (the multiplicity of perspectives and means by which humans value nature) and how their power position (subtle differences between oppressor or oppressed based on the intersection of their social axes) hamper the inclusion of their plurality of values

⁴The Usumacinta ROC (risk of commodification) Project experimentally explored behavioural changes associated with the use of the notion of ecosystem services in local communities in Mexico. Results uncover political dilemmas that go beyond practical operational challenges of ecosystem services-based approaches and which might be rooted at a deeper level (Martin-Ortega et al., 2019). Further information on the project and a showcase of the Forum Theatre application can be found here: https://water.leeds.ac.uk/news/trying-new-and-fun-participatory-research-approaches-the-theatre-forum/.

towards nature in environmental decision-making. The next section describes how concepts of power differences and values were approached in this research.

2.3 Conceptual basis: intersectionality and value pluralism

This research draws on ideas of intersectionality from feminist political ecology and of value pluralism from ecological economics as the conceptual base underpinning representation of value for nature and power differences.

2.3.1 Intersectionality

In this research, intersectionality is used to frame power relations for the design, implementation and analysis of Forum Theatre (see Table 2.2 and 2.3). Intersectional theory began with Kimberlé Williams Crenshaw work to address the whiteness of mainstream feminism and the sexism of antiracism (Carastathis, 2014; Crenshaw, 1989). It aims to explain the complexity of lived experiences of exclusion among multiple social groups (Carastathis, 2014) understanding the simultaneous, intercategorical and overlapping forms of oppression (Carastathis, 2014).

Intersectionality is used as an analytical tool in feminist political ecology to understand people as inhabiting multiple and fragmented identities, which are constituted through social relations that not only include gender but also class, religion, sexuality and race/ethnicity. These influence their relationship with nature (Mollett & Faria, 2013; Rocheleau et al., 1996), shaping the operation of power in the everyday practices of access and control of nature resources (Cole, 2017; Lloro-Bidart & Finewood, 2018). For example, Elmhirst et al. (2017), show that, when women in Indonesia were excluded from decision-making, environmental decisions focused more on the market (oil plantations) than on traditional uses, generating negative impacts for nature such as deforestation.

In this regard, using intersectionality from feminist political ecology in dynamic performance arts-based methods might allow us to display and analyse the simultaneous and intercategorical ways in how power differences work and overlap regarding nature use and management and environmental decisions.

2.3.2 Value pluralism

In this research, we used the notion of value pluralism in the development and analysis of Forum Theatre as a method for framing values towards nature (see Tables 2.2 and 2.3). Epistemic pluralism, from ecological economics, suggests there are multiple ways of conceptualizing values within human–nature relationships (Horcea-Milcu et al., 2019; Kenter et al., 2019). As a result, new approaches have emerged from the idea that values are connected to worldviews, based on history, culture, geography, experience and embodied experiences (Kenter et al., 2019). These can be differentiated along multiple dimensions, such as the scale of values or the process by which they are elicited (Kenter et al., 2019; Tadaki et al., 2017). They intend to better reflect the complex relationships between humans and nature, such as transcendental values and contextual values (Kenter et al., 2015, 2019), held and assigned values (Chan et al., 2018), shared values (Kenter et al., 2015) or relational values (Chan et al., 2018).

In this regard, value pluralism allows us to go beyond the dichotomies of values approaches and how any social group can simultaneously use different standards of values to support their relationship with nature (Edwards et al., 2016; Himes & Muraca, 2018). While no single disciplinary framework can fully integrate the many understandings of social values of nature (Kenter et al., 2019), for this case study, we use the Value Landscape Approach proposed by Schulz, Martin-Ortega, Glenk, et al. (2017) and Schulz, Martin-Ortega, Ioris, et al. (2017), which is particularly suitable to this research because of its explicit focus on the interrelationships between values of nature and environmental governance (Schulz, Martin-Ortega, Glenk, et al., 2017). The Value Landscape Approach is relatively broad, encompassing three categories of value: fundamental values, governance-related values and assigned values. In Table 2.1, these categories are described, and some examples are shown.

Туре	Description	Examples
Fundamental	Goals or desires that can	Social status and prestige, pleasure,
values (broad	guide people's	excitement, traditions, safety, and
values)	behaviour.	harmony.
,		(Schulz, Martin-Ortega, Glenk, et al.
		2017; Schwartz 2002).
Governance-	Ideal characteristics or	Inclusion, capacity, effectiveness, and
related values	principles of 'good'	fairness(Lockwood et al. 2010)
	environmental	
	governance.	
	5	
Assigned values	Use of the nature aligned	Provisioning, regulating, supporting
	with the notion of	and cultural (Chan et al. 2016; Schulz,
	ecosystem services.	Martin-Ortega, Glenk, et al. 2017).
	,	

Table 2.1: The value landscape approach

We used the Value Landscape approach to frame plural values towards nature, but alternative plural value frameworks, such as relational values or shared and social values could have also been applied (Chan et al., 2018; Kenter et al., 2015).

2.4 Methodology

This research was approved by the Faculty Research Ethics Committee (reference AREA 19-030) at the University of Leeds. We obtained recorded verbal informed consent from participants prior to commencing research as it is customary in those communities.

2.4.1. Case study

This research was implemented in the Lacandon rainforest in Chiapas, the largest remnant of high perennifolia forest in Mexico, and feeder of the Usumacinta— Grijalva basins containing 34% of Mexico's freshwater (Yedra et al., 2016). Due to its ecological importance, this area has been the focus of various government conservation strategies (Cano-Castellanos, 2018).

This research took place in the communities of El Pirú and Galacia, in the buffer area of Montes Azules Biosphere Reserve. El Pirú, founded in 1982 currently has

207 inhabitants, 27 of whom identify as indigenous Tzeltal (INEGI, 2020). The main productive activities are agriculture and livestock. Galacia, founded in 1975 has a population of 232, with two people identifying as Tzeltal (INEGI, 2020). The main productive activities are agriculture, livestock and palm oil plantations. Both communities were established under Mexico's Land Reform Policy⁵ (Trench et al., 2018), and currently they have developed so-called ecotourism projects and are part of Payment for Ecosystem Services (PES) schemes supported by government programs and civil society organizations.

Land tenure is central to understand how most environmental decisions are made in this area. Both communities have *ejido* land tenure, a system derived from the Mexican Revolution's claims in which communal land is worked individually by community members on designated farm-sites, who collectively maintain communal rules or law (Bee, 2016). Most rural areas in Mexico use this *ejido* system, by which people with farm-sites/fields (mainly men), called *ejidatarios*, constitute the General Assembly, which is the maximum authority and is where most decisions are made (Pérez-Cirera & Lovett, 2006). The *comisario ejidal*, the executive arm of the *ejido*, is responsible for implementing agreements made by the Assembly (Trench et al., 2018).

2.4.2. Forum Theatre design and implementation

a) Script writing

Forum Theatre draws on stories that reflect everyday situations familiar to the audience (Boal, 2013). Our script material was based on previous qualitative fieldwork conducted in the same communities (Martin-Ortega et al., 2019). The main storyline concerned the potential development of an ecotourism project to protect nature as part of a PES scheme proposed by a government agent, in a fictional community named Las Delicias. The conflict was based on the local cultural

⁵From 1940 to the 1970, the distribution of land was based on the expansion of the agricultural frontier and the promotion of the colonization of the extensive national lands to distribute between landless peasants from other regions of the country and strengthen the border with Guatemala to avoid invasion, either through ejido, or by strengthening private property.

context and the difficulties faced by women, landless people and young people for their values towards nature being represented in *ejidal assemblies*.

Dialogues between oppressor and oppressed characters displayed specific value conflicts and different experiences of exclusion (see Table 2.2), using the concepts of intersectionality and value pluralism. Each scene had specific characters with intercategorical and simultaneous identities, based on the intersection of social axes such as age, education and land tenure. The oppressor and oppressed characters were created to have subtle binary power differences. The dialogues among characters outlined plural values, using the Value Landscape Approach framework. A draft script was translated into Spanish and revised by the four native speaking co-authors and the team of seven performers who joined the research team and helped implement the Forum Theatre with the communities. The final story was divided into six scenes and nine characters⁶.

Scene 1 Introduction			
Description	The government agent brings a new project to the community to		
	support PSE. He finishes the scene inviting the people to share their		
	position to decide in the next assembly.		
Characters	Social axes* Position towards the Values held		
characters	Jocial axes	project*	
Narrator and			This role is outside the
		project*	
Narrator and		project* -Double role. The joker	This role is outside the

⁶See Walsh et al. (2022) for more information about the methodological approach for writing the script.

Government agent/ oppressor	engineer e degree, living co in the city. p	He is trying to ncourage the ommunity, so he is ositive about the PES. 2 <i>Comisgrio</i> and Doña Of	Looking for achieve the government objectives agreed in the last meeting with international agencies.
	Scenez		
Description	Doña Ofelia approaches the <i>comisario</i> on the street. She explains to him that she wants a project to make mango jam, she already has the fruit, she only needs his support to propose it during the assembly but he, the <i>comisario</i> , is not convinced about her project, he just is focusing on the ecotourism project		
Characters	Social axes	Attitude towards the project	Values held
Comisario (village head) / oppressor	A married man 35-year-old, with land-rights.	, - Firmly on the side	He adopts the idea that for conservation to really work, it must be aligned with economic activities carried out by men. -Fundamental values such as power -Governance-related such as capacity -Assigned values such as provisioning
Doña Ofelia / oppressed	50-year-old widow. She is semi-literate.	-She wants a project to help her to make mango jams, but she needs the support of the <i>comisario</i> .	She has attachment to traditional views about the forest. -Fundamental such as universalism -Governance-related value such as capabilities -Assigned values such as cultural.

Scene 3. Pablo and his wife			
Description	Pablo explains to his wife that he is nervous about the next assembly when he will present the idea that ecotourism projects can improve the local economy and promote protection of the environment. He is nervous because he is not <i>ejidatario</i> and as young men are not usually considered in the assemblies		
Characters	Social axes	Attitude towards the project	Values held
Pablo / oppressed	Man, 30-year- old, high education, recently married, he does not have land rights.	 -He wants to make his village understand the importance of conservation. -He has an interest in finding alternative livelihoods through ecotourism. 	He is driven by the 'belief' that humans have a responsibility towards the environment and that the community should be stewards. -Fundamental values as universalism -Governance-related values such as solidarity and capability -Assigned values such as regulating
Pablo's wife/ oppressed	Young woman, married.	-She is a quiet supporter of eco- tourism developments. She did not have any line, but her body language affirms her husband's ideas.	When she appears at the scene, the main value conflict is between Pablo and the community assembly. However, we included her as a character with no explicit values to provide the opportunity for the audience to use her character to incorporate new ideas.

		Scene 4. Marcela		
Description	She is talking with her husband trying to explain her frustration. She explains to him that his family doesn't let her participate in the ecotourism project even when she could be a guide as she knows the area very well.			
Characters	Social axes	Attitude towards the project	Values held	
Marcela / oppressed	Young woman, married, living with her in-laws.	-She knows the forest so she can guide tours for the ecotourism project, but her in- laws disagree with that idea.	She associates the forest with knowledge and autonomy. -Fundamental values such as tradition -Governance-related values such as inclusion -Assigned values such as provisioning	
	Scene 5. [Don Israel and Doña Pat	ricia	
Description	Don Israel is trying to convince Doña Patricia to vote against the ecotourism project and support his livestock project so he can increase his money and keep lending to the people. However even when she does not understand the project very well, she knows that people in the community need to take better care of the rainforest.			
Characters	Social axes	Attitude towards the project	Values held	
Israel / oppressor	Cattle man, 45- year-old, relatively wealthy.	-He receives money through Payment for Ecosystem Services for some hectares with forest that he has, however he is	His values are focused on increasing production and wealth. -Fundamental values such as power and achievement -Governance related-values	
		planning to cut down the trees for his livestock.	such as legitimization -Assigned values such as provisioning	

Patricia /	An elder woman.	-She is proud of that	Grateful to the forest that
oppressed	She is pioneer,	farming background	gives her a way to survive
	'sent' to the	/ their titanic effort	and worried about its
	community after	to 'conquer' the	conservation.
	they were	forest, but at the	Fundamental values such
	allocated by the	same time thinks	-Fundamental values such
	government.	that some sort of	as tradition
		balance between	-Governance-related values
		conservation and	such fairness
		farming needs to be	
		achieved.	-Assigned values such as
			regulating

b) Training and rehearsal

Prior to the performance, we trained local artists (performers) in the techniques of Forum Theatre (Walsh et al., 2022). This aimed to train skilled artist-facilitators who were aware of the communities' social context and who would not oversimplify or misrepresent their message (Guhrs et al., 2006). The participants were recruited locally using a snowball method, for a total of 16 participants aged between 23 and 56. Seven participants joined the final team of performers in implementing the Forum Theatre with the communities.

c) Forum Theatre: The activity with the communities

In line with local customs, a month before the event, the project was officially presented to the community heads (*comisarios ejidales*), who agreed to invite the entire community to participate. In Galacia, the activity took place in a classroom in the primary school and, in El Pirú, in the eco-tourism facilities. The activity lasted 3 h. A total of 21 people attended in El Pirú (11 women, 10 men) and 20 in Galacia (17 women, 3 men). In both, attendees included the *comisario(a) ejidal*, other people with *ejidal commission* (secretary and treasurer), and people working in ecotourism, livestock and/or agriculture. Attendees at Galacia's event explained that many more women than men participated because the activity took place at the school, and the activities carried out there are usually attended by women.

The Forum Theatre took place as follows: (1) the performance of the script by the trained performers; (2) games to warm up voice and body (mimicry of favourite animals) and (3) sharing ideas in small groups and (2) the Forum Theatre itself, where participants changed the script by proposing 'solutions' to the conflicts. The activity was recorded and then edited in a short video⁷.

d) Post activity interviews

A month later, we conducted semi-structured interviews with over half of the participants, to capture their reflections on the activity. In Galacia, we undertook 14 interviews (12 women, 2 men) and in 14 in El Pirú (8 women, 4 men, 2 couples). All were video or audio recorded. The interview guide covered four main topics: (1) their perceptions about the Forum Theatre activity; (2) the procedures for participation in local environmental decision-making; (3) their perception of Forum Theatre for expressing why nature is important to them and (4) the potential of Forum Theatre as part of local environmental decision-making processes. The interviews were approximately 1 h long and were carried out in person in the communities.

2.4.3 Data analysis

We imported notes and transcriptions from the Forum Theatre and interviews into qualitative data analysis software (Nvivo12). We analysed these qualitatively, looking into:

Whether Forum Theatre can be a space in which power differences in environmental decision-making can emerge and be discussed, using a grounded approach (Srdjevic et al., 2017). In a descriptive interpretation of data of Forum Theatre participation and interviews, the more notable comments were selected to illustrate (a) if using intersectionality to portray power differences within in the script allowed participants to discuss power differences in environmental decision-

⁷A summary video showcasing the process is available online: https://bit.ly/3dX0aHX. We invite the reader to watch the video as part of the reading of this article, since the performance nature of the research is more fully appreciated through the actual performing-action.

making, and why; and (b) if local power differences were emerging in the 'solution' (narratives) to the imaginary conflicts on Las Delicias, and how.

How participants' values towards nature were brought to the fore during the Forum Theatre. We used a structural code system (DeCuir-Gunby et al., 2011) using Schulz, Martin-Ortega, Glenk, et al. (2017) and Schulz, Martin-Ortega, Ioris, et al. (2017) Value Landscape categories; fundamental, governance-related and assigned values (see Section 2.2). Fundamental values were identified as guiding principles of the narratives, which structured the formulation of governance-related values and assigned values, which were more openly discussed.

Reflections on Forum Theatre following Horcea-Milcu et al. (2019) and Muhr (2020) approach to the role of values and arts-based methods in sustainable transformation. We focus on leverage points, places within complex systems where interventions can lead to transformational rather than incremental changes (Horcea-Milcu et al., 2019).

2.5 Results and discussion

People interact and experience nature in different ways, leading to a wide diversity of values of nature. However, policymaking often prioritizes a narrow set of nature's values in decision-making, often excluding local people's values of nature (Tadaki et al., 2017). This affects nature in different ways, for example, when conservation policies focus on biodiversity for its own sake which may exclude values associated with people's livelihoods, leading to unsustainable conservation actions over time (IPBES, 2022). Table 2.3 shows the most significant results and how these maps onto the conceptual bases of the study (intersectionality and value pluralism), including aspects where they overlap. The results are organized by theme as per the following discussion. Table 2.3: Overview of the results and crosses with the conceptual basis(intersectionality and value pluralism)

Themes	Intersectionality	Value pluralism	
Power Differences: Forum Theatre and intersectionality to engage participation			
 Participants engaging with characters empathetically. Participants' narratives drawn from their own experiences became collective reflections as in real decision-making processes. 	 The operation of power in environmental decision-making portrayed in the script triggered people engagement. Imagined 'changes' were 'rehearsed' based on their own experiences. 	 Immersed in the people's narratives, participants brought their values towards nature to the fore. 	
Power Differences: Forum differences	n theatre and intersectionality t	o discuss local power	
 Developing scenes based on similar social groups allowed discussions of power differences. Dynamic discussions regarding power differences were developed respectfully. 	 It was not possible to analyse experiences of exclusion as discrete categories. Forum Theatre was an opening to consider how intersecting power differences are experienced in environmental decisionmaking. Forum Theatre offers possibilities to engage local people in topics of conflict (safe spaces) regarding nature management. 	 Locals negotiated their plural values towards nature in the space between the self and the fictitious other. 	
Local values: Fundamental values			
 Fundamental values were expressed through desires. Nature associated with wellbeing of future generations. 	 Forum demonstrated the assumptions about nature, gender roles, and related obligations (family, care, inheritance, and future generations). 	 Forum Theatre showed fundamental values such as universalism and achievement not 	

 Nature conservation awareness associated to achievement. 		•	as necessarily antagonistic categories. Forum format might enable complex values- based contexts to be staged and challenged.
Local values: governance-re	elated values		
 Recognition of challenges for women in governance structures. Authorities must be aware of diversity of human-nature relationships in a community. 	 The lack of representation of different values towards nature was questioned through governance-related values This related to terms of legitimacy of the environmental decision- making process and the capability of authorities. 	•	Governance- related were associated with some of the principles of good environmental governance such as legitimacy and capability
Local values: Assigned v	alues		
 Focus on 'use' of nature. Cattle management specifically seen as generating tensions and trade-offs. 	 Assigned values were attributed to the importance of significant relations and responsibilities between humans and nature. 	•	Assigned values were mentioned in terms of provisioning and regulating services. These were connected to other types of values such as universalism or inclusion.
Leverage points for Trar	sformation	1	
 Stakeholder collaboration: the research team 	 Scientific researchers' knowledge was not privileged over the 	•	Forum Theatre allowed to challenge analytic

(scientists and artists) and local state artists (trained in the techniques of Forum Theatre).	 performers. The Joker (artist facilitator) avoids reinforcing power differences between academics and local people 	views and to embrace more emotive and dynamics views on values.
enable participants to prepare themselves for future environmental negotiations with outside actors.	 Equally important is having long-term strategies to ensure that decision-makers, who represent another position of power, are exposed to these voices. 	valuation method should be carefully integrated alongside other methods to broaden our understanding of human-nature relationships.

2.5.1 Forum Theatre and intersectionality to engage participation

Participants considered that the use of intersectionality to frame the operation of power in everyday practices of nature management and environmental decisionmaking within the script generated a very realistic story that triggered their participation. However, this was not straightforward. For example, during the Forum Theatre, once the joker invited the spectators to become spect-actors, they were shy and had insecurities on how to perform, as this was their first time attending a performance activity or a play and that they did not know how to react (Interviews 9 in Galacia and 14 in El Pirú).

This shyness is not uncommon in performance arts-based approaches (Fletcher-Watson, 2015; Heras et al., 2016; Lee, 2015). Paradoxically, Fletcher-Watson (2015) argues that participants might also feel empowered by their choice not to participate. This reflects the nature of the participation process in Forum Theatre and the need for trained jokers to facilitate audience members 'coming into' the activity (Campbell, 2019).

Despite the initial hesitancy showed by the participants, they empathized with the characters and expressed dissatisfaction over the conflicts. They identified their

realities with the characters' relationship with nature (e.g. in terms of their agricultural activities or land tenure) and with the experiences of exclusion from environmental decision-making characters were facing (norms or rules that limit people's participation in decision-making). This emotional connection encouraged participants to overcome their insecurities and eventually go on stage to 'help' the character to 'solve' their conflicts. One participant stated:

'And the lady (Patricia), she made me remember, in 1985 when I arrived here, with my children, all small. So, just as she said there was no food... I remembered that difficult time I had here, but thanks to God and thanks to the projects, little by little the community has been developing... I thank all the performers because they reminded me of everything we have been through'. Forum Theatre (elderly mother- ejidataria in El Pirú).

This emotional connection is similar in other studies of Forum Theatre (Baer et al., 2019; Campbell, 2019; Heras et al., 2016) and in line with Boal's (2013) suggestion that empathy alone is not enough to motivate change; dissatisfaction is required to move spectators into action, producing unexpected, surprising and contradictory findings(Baer et al., 2019; Kester, 2005). In this study, Forum Theatre provided a space for enabling specific features of empathy and dissatisfaction to engage local people to participate. In the following subsections, how/why local people engaged in dialogues regarding power differences in environmental decision-making and values towards nature will be presented.

2.5.2 Forum Theatre and intersectionality to discuss local power differences

People and nature are interdependent, and understandings of how nature contributes to people's life vary across their worldviews and knowledge systems, when only a narrow set of worldviews are included, as it often happens when there are power differences, this will have implications for what values and ways of relating to nature are included (Agarwal, 2009; IPBES, 2022). We found that the experiences of exclusion from environmental decision-making portrayed in the script acted as 'callings' for different social groups to express their worldviews on nature. In this sense, each scene (Table 2.2) represented interactions among specific social groups, specific identities constituted through simultaneous social

axes, which influenced their relationship with nature (Elmhirst et al., 2017; Mollett & Faria, 2013). For each scene, we found that some social groups like the ones portrayed in the scenes were engaged in participating. For example, the second scene showed an elderly, semi-literate female character being oppressed by the *Comisario* character, a young, literate male head of the community (see Table 2.2). This scene represented exclusion of women from environmental decision-making based on the intersection of their land tenure, education and age. This scene particularly moved elderly women in the audience who performed different ideas to help the character face her conflict. One of these was creating a network of women including the wife of the *comisario*, who confronted the difficulties of being heard as users of nature in *ejidal* assemblies. The following comment is part of the dialogue between this participant and the character *Comisario*:

'That is true, and it couldn't just be me, it could be other women, maybe your wife too. We could make our jams and do what we want, a business for women and sell the jams here, or sell them in other places, pack them and send them'. Forum Theatre (elderly mother in Galacia).

Similarly, in the third scene, a male character without land rights named Pablo was concerned about presenting his ecotourism project to the community (see Table 2.2). This scene prompted some male audience members who were part of the communities' ecotourism projects to share some advice, such as encouraging Pablo to recruit more people interested in the project, and then, as an organized group, to look for economic support from the government (Forum Theatre in El Pirú).

In the fourth scene, Marcela, a young and landless female character was facing difficulties becoming included in an economic project (see Table 2.2). This scene was planned as an opening to discuss the participation of families without land within environmental decision-making. It generated some comments about the importance of caring for the rainforest together with women and children's wellbeing. For example, in the next comment a participant during the Forum Theatre intervened to say:

'Well, she should express her point of view with the authorities in private ... and the authorities also have to be flexible, take care of the rainforest, the rain, the animals but also of her children and grandchildren, the future'. So, if she wants to work, well, then the

ecotourism centre is for creating jobs...' Forum Theatre (female, young mother in Galacia).

Yet participants did not specifically mention the difficulties of landless people in participation. In the interview, a young, landless female participant commented briefly about how she wanted to participate in decision-making, but she did not say anything in the Forum Theatre because she knows that ejidal communities require people to hold land rights to participate (Interviewee 8, El Pirú). Forum Theatre was, therefore, an opportunity to break norms and confront power differences, but it requires longer-term engagement to encourage people to 'rehearse' imagined 'solutions' that may challenge deeply rooted power relationships.

Different social groups face diverse conflicts that limit their participation in decision-making; visualizing power differences among these groups is essential for the incorporation of a wider set of values into environmental decisions (Kenter et al., 2019). For example, incorporating women's values in decision-making could lead to better actions to protect nature (IPBES, 2022); in this case, they are looking to diversify productive activities in which all women can participate (and obtain benefits) and to participate in actions that support nature conservation.

In addition, participants were facing but were also confronted by performers playing the 'oppressor' role, as in real life. It is worth noting that no participants confronted the oppressor character with aggression or hostility. Instead, they tried different ways to respectfully solve the conflicts. This portrays Forum Theatre as a safe space to discuss local power differences, due to the distance that performance and characters create between the participant and the conflict being explored (O'Grady, 2022; Sullivan et al., 2008). Besides, we want to emphasize that Forum Theatre does not look for solutions; rather it looks to explore 'solutions', fostering emancipation processes because the solutions are not 'given' by experts from outside but are explored within the community (Boal, 2013; O'Connor & Anderson, 2020).

Despite the difficulties, the intersectionality approach in the design of Forum Theatre allowed discussion of some power differences as experiences of exclusion/inclusion of local people from decision-making within those communities, based on the intersection of social axes such as gender, age and land tenure, for example, the calls for women's inclusion in decision-making to advocate for more diverse livelihoods that would promote nature conservation and benefit women and future generations (in scenes 2 and 4). This shows the potential of performance arts-based methods over conventional participatory methods, for embracing the challenges of exploring local power differences in environmental decision-making.

2.5.3 Local values brought to the fore during the Forum Theatre

Plural values towards nature mentioned during the Forum Theatre are presented according to the three categories of the Value Landscape Approach: fundamental, governance-related values and assigned values. Although presented as three categories, it is important to note that values do not emerge in isolation but are interrelated. Further, they are dynamic and, therefore, may change over time (Schulz, Martin-Ortega, Ioris, et al., 2017), with our analysis just providing a 'snapshot' in a given context at a given moment.

a) Fundamental values

Participants did not openly discuss fundamental values during the Forum Theatre. This may be because they are guiding principles of attitudes and behaviours, and people would not typically refer to them explicitly in conversation (this is also in line with Schulz, Martin-Ortega, Ioris, et al. (2017)'s empirical application). Nevertheless, fundamental values were identified through the emotions and desires that guided the reflection and creation of diverse imagined 'solutions'.

The main dimensions in which participants developed their fundamental values were self-transcendence (universalism) and self-enhancement (achievement). Universalism is associated with the consideration and protection of the well-being of all people and nature, while achievement is associated with feelings of success through demonstrating capabilities according to social standards (Schwartz, 2002). For example, regarding universalism, participants mentioned protecting nature because it is a key element for future generations' well-being. In addition, their desire to protect nature was further complemented by knowledge gained through participating in environmental training. These were carried out by government agencies and non-profit organizations as part of the implementation of ecotourism activities. They saw their participation in training as an important achievement in their lives:

'Many people say that training (part of the ecotourism project) is wasted time, but it is not wasted time for me, it is 'learned' time, it teaches us of conservation and that brings sustainability to our ejido, and the ejido now sustains itself (economically) thanks to that'. Forum Theatre (middle aged mother-ejidataria in El Pirú).

Usually, achievement and universalism are portrayed as antagonistic, with achievement representing personal success and universalism representing acceptance of others as equal (Schulz, Martin-Ortega, Glenk, et al., 2017; Schwartz, 2002). However, in our Forum Theatre, these values towards nature seem to coexist in non-antagonistic ways, highlighting how the Forum format enables the staging and challenging of complex values-based contexts.

Bringing fundamental values towards nature to the fore is important as they guide human–nature relationships because concrete behavioural options are embedded in fundamental values (Sauer & Fischer, 2010). For example, in a study by Sauer and Fischer (2010), fundamental values such as universalism and conformity played a significant role in guiding German citizens' attitudes towards payment schemes to support buffer strips. In our case, we found that fundamental values could play a significant role in guiding local people towards sustainable nature managements to protect nature.

b) Environmental governance-related values

These were associated with some of the principles of good environmental governance such as legitimacy and capability (Lockwood et al., 2010). From a normative perspective, legitimacy refers to rules and norms that underpin democratic processes (Lockwood et al., 2010). Capability refers to resources, skills, leadership and knowledge that enable people to work effectively towards their environmental goals (Lockwood et al., 2010). These environmental governance-related values could ensure ways for fair decision-making procedures and equitable

distribution of nature's contributions to people or to strengthen environmental legislation (IPBES, 2022; Schulz, 2018).

Regarding legitimacy, some participants (mostly women) expressed how rules and procedures were barriers to their participation in environmental governance. It is well known that the lack of representation of some groups in *ejidal* assemblies challenges the legitimacy of decision-making, since in most of the rural areas in Mexico only '*ejidatarios*' (mostly men) are allowed to participate (Bee, 2016; Trench et al., 2018). During the Forum Theatre, women proposed valuing their inclusion in decision-making process for making fair environmental decisions that can represent their relationship with nature (see also Subsection 2.5.2). Participants also mentioned values that can be associated with legitimacy of authorities lies in the integrity with which authority is exercised, for example not manipulating outcomes for personal advantage. Having knowledge about different needs (as a capability component) is key to developing solutions to environmental issues (Lockwood et al., 2010).

'All needs are very important, as a Comisario, I think it is necessary for people who work in livestock to not prohibit it to them... but also to promote the ecotourism project because it works now for us and... our next generations are going to continue... and the ladies can get involved too'. Forum Theatre (male, young father in El Pirú).

Ignoring environmental governance-related values of those most affected by environmental decisions can lead to negative interplay between ecosystems and social outcomes (Akhmouch & Correia, 2016; Schulz, 2018). For example, in some communities in Indonesia, the absence of equity as an environmental governancerelated value excludes women's values from water distribution policies, resulting in women living with water scarcity (Cole, 2017). In our case, the lack of representation of different values towards nature was questioned through environmental governance-related values in terms of the legitimacy of the environmental decision-making process and the capability of authorities. It can be argued that, for these communities, having authorities who are empathetic towards community members' needs is important for better environmental and social outcomes.

c) Assigned values to nature

Most of the participants expressed assigned values to nature related to provisioning and regulating services. Following Martínez-Alier (2002), this could be explained by the material dependence of rural people on ecosystems. However, we found a clear connection between assigned values with other types of values, such as universalism and inclusion. For example, participants mentioned cattle management as a very lucrative activity, but which sometimes needs extensive clearance of rainforest, that is, signalling some of the trade-offs across ecosystem services. Some participants opposed extensive ranching on these grounds. A comment from a participant as spect-actor illustrates this:

'With the little experience I have, I could say that ... If we receive a forest with flora and fauna and if we used it for livestock, that project is cash, we spend it now and we will end the rainforest... we must talk a lot about this (conservation) and value what the living rainforest can give us'. Forum Theatre (male, elderly father in El Pirú).

However, they also shared technical knowledge gained through training and exchanges of experiences with other communities, about how to improve ranching to protect nature and create jobs for community members, for example:

'The rainforest is running out and it is our habitat... what you must do is ask for a better project, ask the authority to help you, to give you a project, let's say technically do not clear more area, build a stable, technically manage the cattle and then sell the milk and the meat... so we invite you (cattleman) to do a good project that even creates other jobs for us, such as taking care of the calves'. Forum Theatre (middle aged mother in Galacia).

The interconnection of values towards nature in terms of assigned values, governance-related values and fundamental values is also clear in the previous quote, where assigned values relating to cattle were related to governance-related values (inclusion of women in economic activities based on other forms to use nature) and fundamental values (caring for people and nature). We recognize that the values elicited during Forum Theatre were complex to categorize because the emotive narratives in which they emerged were also important in understanding those values. This is consistent with the idea that people living in rural areas are

more likely to attribute their values to the importance of significant relations and responsibilities between humans and nature, as explained by the relational values approach (Chan et al., 2016; Martínez-Alier, 2002), rather than just focusing on anthropocentric instrumental values. Instrumental values are the values most used to implement public policy (Gómez-Baggethun & Ruiz-Pérez, 2011; Schulz, Martin-Ortega, Ioris, et al., 2017; Winter, 2007) and often criticized as a promoter of nature commodification (Gómez-Baggethun & Ruiz-Pérez, 2011; Martin-Ortega et al., 2019).

The use of the plural values concept to analyse Forum Theatre allowed us to understand how values towards nature are interconnected, shared and constructed in the people's experiences regarding environmental decisions. Improving information about the diverse local people's values towards nature is key to improving the outcomes of negotiations and reaching more just and sustainable results (Kenter et al., 2019).

2.5.4 Some reflections on values and Forum Theatre in transformational processes

Without transformative change, humanity is at risk of degrading nature, with consequences for nature's crucial contributions to people (Chan et al., 2020; Tschakert et al., 2017). Values can serve as intervention points for facilitating transformational changes (Horcea-Milcu et al., 2019), as transcendental values underpin individual behaviours and, at a collective level, the societal paradigms from which institutions, rules and norms emerge (Horcea-Milcu et al., 2019, p. 1431). Changing values can be a strategy for sustainability transformation (Kenter et al., 2019). However, we agree with Chan et al. (2020), who argue that transformation in sustainability is not primarily a process of changing values but of identifying and incorporating values that people already hold. In this regard, Forum Theatre is a potential method in transformational processes as it brings plural values placed in nature to the fore, in a more emotive and dynamic form that goes beyond pre-established analytical views on values, looking for their further incorporation in decision-making.

In addition, trans-disciplinary approaches, such as this one, can be leverage points for transformation in sustainability (Fischer & Riechers, 2019; Horcea-Milcu et al., 2019) allowing understanding of emotional and philosophical connections to nature, challenging pre-established analytical views on values by actively involving actors outside academia (Muhr, 2020). Forum Theatre allows us to create reflexive interaction among the research team and local artists. In this regard, the perspectives and knowledge from the scientific researchers was not privileged over the performers in terms of the final script and performances (Walsh et al., 2022). For example, the scripted materials were drafted by the core team and further revised by local performers. Also, during the Forum Theatre activity, the academics were observers with minimum intervention, with the local performers leading the activity. As artists are usually perceived as 'context providers' rather than a 'content provider' (Kester, 2005, p. 153), their participation in this project created a sense of confidence for the local people to engage in discussion about diverse humannature relationships (values towards nature) and their experiences of environmental decision-making (local power differences).

Moreover, values negotiation, another important lever in transformations in sustainability (Horcea-Milcu et al., 2019), was identified during Forum Theatre. In our activity, locals negotiated their values towards nature in the space between the self and the fictitious other (Edwards et al., 2016). For example, when local women decided to go onstage and make the *Doña* Ofelia character perform their 'solutions', these were confronted by the *Comisario*, allowing improvisations about value conflicts as happens in reality. Therefore, Forum Theatre could also be identified as a space where participants can prepare themselves for future environmental negotiations with outside actors, 'rehearsing' including their values in environmental decision-making⁸.

Forum Theatre does not intend to be 'the best' method to categorize and assess the various values assigned to nature following rational and scientific arguments, as

⁸We again recommended seeing the video referred to in Section 4.2.3 for full appreciation of this point.

some of the most conventional environmental valuation methods do (Kenter et al., 2016; Raymond et al., 2014). In fact, Forum Theatre as valuation method should be carefully integrated alongside other methods to broaden our understanding of human–nature relationships but also to assure a better quality of analyses and interpretations (Muhr, 2020). For example, in this study and others (Edwards et al., 2016; Hensler et al., 2021; Heras et al., 2016) arts-based methods were implemented along with interviews to complement data on values towards nature with data on broader human–nature relationships. In addition, opening spaces for diverse voices to emerge is insufficient; it is equally important to have long-term strategies to ensure that decision-makers are exposed to these voices (Guhrs et al., 2006; Sullivan et al., 2008; Turnhout et al., 2020). This was discussed by the participants at the end of the Forum Theatre:

'if what was said during the forum does not get to government agencies, Forum Theatre might be useless'. Forum Theatre (middle-age man in El Pirú).

Forum Theatre can be part of the diverse methods in valuations and transformation processes towards better representation of local people in environmental decisionmaking. However, is important to engage environmental professionals such as government agents or NGO actors to better understand the possibilities of these methods in environmental decision-making processes in practice.

2.6 Conclusions

Representing and including local people's views and values has been a constant challenge in environmental governance, reflecting power differences that exclude them based on their multiple social axes, such as gender, age or ethnicity. Participatory methods have been advocated as mechanisms to include marginalized voices into environmental decision-making. However, they have not yet been able to fully engage with power differences. This paper examined Forum Theatre, a performance arts-based method, in its potential to serve as a mechanism for local people to dialogue on values towards nature and power differences in environmental decision-making. Participants of the Forum Theatre connected empathetically with the characters and felt dissatisfaction over conflicts. The emotional connections were key triggers of participation, motivating the audience to dialogue about their experiences of exclusion while they explored their 'solutions'. Forum Theatre does not look to 'resolve' conflicts, rather to explore possible solutions in the safe space of the fictitiousness. In this Forum Theatre people 'rehearsed' imagined values negotiations, unfolding conflicts based on power differences, putting their values towards nature on the table of the 'fictitious' environmental decision-making.

The use of the plural values concept to analyse Forum Theatre allowed us to understand how values towards nature are interconnected, shared and constructed in the people's experiences regarding nature management and environmental decisions. Fairer representation of local people's values of nature can lead to fairer and more sustainable decisions. For example, the representation of local people's values such as the importance of protection of nature for the well-being of future generations can lead to sustainable actions (over time) in reforestation or wildlife protection.

This paper contributes to the existing literature on performance arts-based methods in environmental decision-making. We do not claim that these methods are universally superior as participatory tools, or that they have no limitations and risks. Further research should complement this approach in comparison with more traditional methods. However, to fully establish the ability of performance-based approaches to positively increase inclusivity and mitigate the exclusion of people's values in environmental governance would require engaging in long-term processes of local transformation. It also requires engagement with those involved implementing environmental decisions affecting the communities and that operate at other levels of the governance structure, for example, policy makers, environmental NGOs and other environmental professionals. Understanding their perception of Forum Theatre could help gauge its potential as a mechanism for fairer environmental decision-making.

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Chapter 3

Can theatre be used in environmental governance? The view of environmental professionals in Mexico

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Abstract

Values of local people are often poorly represented in environmental decisions due to power differences. Performance arts-based methods have been put forward as one way to increase the representation of local values and signalling power differences. Environmental professionals' validation of these methods is essential as they shape the interpretation, uptake, and implementation of environmental decisions in practice, but their views remain largely unexplored. This paper uses interviews and focus groups with environmental professionals in Mexico to explore their views on whether these methods a) open the space to discuss a plurality of values and power differences within local communities; and b) can contribute to environmental decision-making, particularly with respect to their viability, cultural relevance and credibility. We use a case study applying Forum Theatre in two rural communities. Results indicate that performance arts-based methods provide openings for environmental professionals to identify interconnected values beyond single categories, and they have the potential to encourage local people to discuss power differences that constrain their participation in environmental decisionmaking. Results also highlight the importance of preparation and design, as well as rigorous ethical processes to carefully approach specific cultural contexts. Environmental professionals were wary of the methods credibility, partly due to disciplinary conventions that still adhere to positivism. Nevertheless, these challenges also demonstrate the possibilities of performance arts-based methods in fostering transformation and emancipation processes, encouraging local people to influence environmental decisions.

Key words

Environmental decision-making; Performance arts-based methods; Participatory methods; Power differences; Nature's values; Transformations

3.1 Introduction

Environmental decisions that represent the values of local people towards nature are key to addressing environmental degradation, poverty, and social discrimination (Agarwal, 2009; Colfer et al., 2015; IPBES, 2022; Reed, 2008). However, locals, who are often the most affected by these decisions, usually struggle to be fairly represented (Edwards et al., 2016; Elmhirst et al., 2017).

Environmental governance, as the set of processes and mechanisms that allow taking environmental decisions (Lockwood et al., 2010), involves a diversity of actors whose values influence those decisions (Schulz, Martin-Ortega, Glenk, et al., 2017). One difficulty in representing the values of local people in environmental governance is the existence of power differences (Lockwood et al., 2010). These power differences are present in the way in which power is distributed between groups of people (constitutive power), defining who can and cannot use, control, and make decisions over natural resources (Ahlborg & Nightingale, 1994; Colfer et al., 2015; Lukes, 2005). Local power differences affect environmental decision-making in different ways (Lloro-Bidart & Finewood, 2018; Rocheleau et al., 1996). In practice, for example, in rural contexts, they are present when people with land tenure have more chances of becoming representatives (typically men), excluding the voices and values of less powerful individuals and groups, such as women and groups who lack land or resource rights (Leisher et al., 2016; Ratner et al., 2013).

Participatory approaches have been increasingly implemented in the environmental realm to overcome power differences (Challies et al., 2016;Reed, 2008; Srdjevic et al., 2017). However, criticism is grounded in how the international agencies use participatory methods as their engagement with power dynamics often falls short

(Cooke & Kothari, 2001; Turnhout et al., 2020). In part in response to this criticism, there is an increasing interest in the use of arts-based approaches to address the inclusion of local people' values in environmental decision-making (Muhr, 2020; Ranger et al., 2016), as participants have more control over their participation using different skills (Coemans et al., 2015). The most common approaches reported in the literature include participatory video (Morales et al., 2021; Tremblay & Harris, 2018), photo voice (Lopez et al., 2018), storytelling (Kenter, Jobstvogt, et al., 2016), drawings (Hensler et al., 2021) and performance arts-based methods (Hensler et al., 2021; Heras et al., 2016). In these examples, arts-based methods show how local people's views and values are placed and exchanged in the meaningfulness of human-nature interactions.

Despite this growing interest, there is little information about how these methods are perceived by environmental professionals, such as policymakers and environmental NGOs, i.e. those supporting or undertaking processes of advising, designing, implementing and assessing environmental decisions (Martin-Ortega et al., 2019). So far, published work has predominately focused on the local inhabitants and communities engaged in these methods. However, the views of environmental professionals are of critical importance, due to their key role in the implementation of environmental decisions. They need to be able to identify and understand whose values count and how such values shape the outcomes of participatory processes; supporting better forms of representation (Edwards et al., 2016; Horcea-Milcu et al., 2019; Martin-Ortega et al., 2019).

If the use of arts remains under-evaluated by environmental professionals, their potential might never be realised in practice. Therefore, encouraging the use of these methods for fair environmental decision-making, in part, requires doing research on the practicality of these methods that can build credibility with funders, bureaucrats, and governments (O'Connor & Anderson, 2020, p. 27). The aim of this study is to explore environmental professionals' views on the potential of performance arts-based methods in bringing to the fore local people's values and to discuss local power differences in environmental decision-making; and to what extent do they see a role for these methods in environmental governance. This was

done through focus groups and interviews in which environmental professionals discussed a case study applying Forum Theatre, in two rural communities in Chiapas, southern Mexico.

3.2 From conventional participatory methods to performance artsbased methods in environmental governance

From the '70's, participatory approaches were rapidly incorporated into official discourses and environmental public policies fostered by governments and international development agencies (Mohan & Stokke, 2000; Reed, 2008; Williams, 2004). Under a variety of concepts, such as science-policy interface, democratization of expertise, and knowledge brokering, amongst other, these approaches aim to integrate different ways of knowing how to make environmental management processes more empowering, democratic and just, particularly in development contexts (Mohan & Stokke, 2000; Turnhout et al., 2020; Williams, 2004). However, critics argue that they have failed to properly engage local communities (Cooke & Kothari, 2001; Mohan & Stokke, 2000; Rahnema, 1990). Following Williams (2004) and Cooke & Kothari (2001), the failure of these methods can be described in three interrelated problems: the reinforcement of local power dynamics, the rhetoric of participation, and the limitations of Western models of cognition.

The reinforcement of local power dynamics refers to obscuring local power differences by uncritically celebrating 'the community' (Cooke & Kothari, 2001). Local relations of power shape how knowledge is produced and shared; however, government and international agents, while implementing participatory methods, frequently consider these communities as homogeneous, rather than places of shifting alliances and power dynamics (Cooke & Kothari, 2001; Walsh & Burnett, 2021a; Williams, 2004). The rhetoric of participation identifies participation as a means to accomplish the aim of a project cheaply or/and quickly (Williams, 2004). Under the influence of government and international agencies, there is often a lack of encouragement to adopt participatory approaches, because even when benefits occur, they are not always tangible, and come out too slow to fit into the normal

funding cycle (Burdon et al., 2022; Kenter et al., 2014; Reed, 2008). In this sense, when these methods are implemented, local knowledge is shaped to cover this necessity of quick and tangible results (Cooke & Kothari, 2001), and universalised solutions (Turnhout et al., 2020). Furthermore, dialogues limited by Western models of cognition emphasise the use of language as the main form to communicate, in contrast to non-linguistic, tacit, and experiential knowledge (Mohan & Stokke, 2000; Walsh et al., 2022). Human-nature relationships are characterised by complexity, uncertainty, and emotions (Muhr, 2020); by emphasising singular forms of cognition grounded in Western models, values towards nature expressed through other forms risk being ignored. In this sense, an important critique of international or government agencies is that their agendas grounded in Western knowledge may influence value formation, determining and reshaping values instead of just eliciting pre-existing values which are expressed in other cognition modes (Himes & Muraca, 2018).

Fully genuine participatory approaches need to emphasise the virtues of receptivity, patience, and open-endedness (Cooke & Kothari, 2001; Heras & Tàbara, 2014). To accomplish these standards, participatory action research was conceived as a new model for collaboration and dialogue allowing the use of flexible participatory tools to engage with communities (Rahnema, 1990). Participatory action research involves researchers and participants working together in critical-reflective processes oriented towards empowerment (Heras & Tàbara, 2014; Rahnema, 1990). These are generally designed as open-ended processes, where a diversity of methods and epistemologies can be put into practice (Heras & Tàbara, 2014). Following this flexibility for incorporating a diversity of methods and epistemologies, arts-based methods have been advocated to overcome some of the conventional participatory methods' challenges. These are methods in which arts play a primary role (Coemans et al., 2015), and often combine a social-constructivist and interpretative understanding of knowledge(s) and power dynamics (Heras & Tàbara, 2014; Walsh & Burnett, 2021b).

Performance arts-based methods, such as Forum Theatre, are one example of artsbased methods. They are theatrical activities that centre on conflict and require participation to reflect on delicate issues and unveil power dynamics which can be otherwise difficult to question (Boal, 2013; Heras &Tàbara, 2014; Olvera-Hernández et al.,2022; Sullivan et al., 2008). Their potential resides in the opportunity to foster active engagement and critical reflection and to explore and implement new encounters with the world (meaning-making) (Anumudu, 2018; Somers, 2002; Walsh & Burnett, 2021b).

Application of performance arts-based methods in environmental contexts is growing, with examples related to participatory environmental policy making (Guhrs et al., 2006), environmental justice (Sullivan et al., 2008), exploration of subjectivity and emotion in environmental management (Morales & Harris, 2014), performance of biospheric futures with young generations (Heras et al., 2016), and values towards nature (Hensler et al., 2021; Olvera-Hernández et al., 2022). In addition, these methods can be part of transformative processes, offering emotive approaches to values that could facilitate changes in systems (Muhr, 2020; Pereira et al., 2020). However, concerns have been raised about the difficulties of assessing the impacts of these methods, in relation to challenges in data interpretation and data representation in particular (Leavy, 2020; Muhr, 2020; Turnhout et al., 2020).

3.3 Methods

We implemented focus groups and interviews to a purposive sample of Mexican national-level environmental professionals. The project PerformingChange was used as a case study to facilitate the discussion. The following sections provide further details on the PerformingChange project, the role that environmental professionals play on the environmental developing process in Mexico, and the methods used in this research.

3.3.1 Case Study: Forum Theatre in Chiapas – The PerformingChange project

PerformingChange refers to several initiatives taken by members of El Colegio de la Frontera Sur (ECOSUR) in Mexico and the University of Leeds and Scotland's Rural College in the UK to explore the potential of performance arts-based methods, specifically Forum Theatre, as innovative mechanisms to deepen academic knowledge and practice in the context of environmental governance. Forum Theatre was implemented in El Pirú and Galacia, two rural communities located in Chiapas, in the tropical agroforest frontier of Southern Mexico (Olvera-Hernandez et al., 2022). This project is described in Text Box 3.1.

Text Box 3.1: PerformingChange project

Aim

PerformingChange explored Forum Theatre as a mechanism to bring local values to the fore, while also allowing for discussions on power differences in the context of environmental decision-making.

What is a Forum Theatre?

Forum theatre was developed in the 1970s by Augusto Boal as part of his Theatre of the Oppressed methodology. It uses practitioners to perform a scene representing common social interactions in which one character might feel oppressed or side-lined. During the performance, members of the audience can stop the scene, take the protagonist role (oppressed character) and change the scene (Boal, 2013). This method hopes to encourage local people to rehearse changes to the scenes from their own experiences on the topic (Heras &Tàbara, 2014).

Socio-political context in the area of implementation

In the case study area (El Piru and Galacia, Chiapas), as in most rural communities in Mexico, land tenure is central to how most environmental decisions are made. Owing to Mexico's Revolution, most communities have a property system based on *'ejidos'*, by which communal land is worked individually by community members on designated farm-sites and fields (Bee, 2016). People with land rights (*ejidatarios*) – mainly men - constitute the *Ejidal* Assembly, which is the maximum authority and where most decisions are made through voting (Bee, 2016). The *Ejidal* Commissioner and the Chief of *Ejido* Council are responsible for implementing agreements made by the *Ejidal* Assembly. This decision-making process has been criticised as it excludes the voices and values of other community members such as women, young people and those without land rights (Bee, 2016; Pingarroni et al., 2022).

Forum Theatre script development

A trans-disciplinary team created a script with six scenes, in which nine characters discussed their views regarding the potential development of an ecotourism project as part of a Payment for Ecosystem Services (PES) scheme proposed by a government agent (character), in a fictional community. The conflict was based on previous research conducted in the area (Olvera-Hernandez et al., 2022) and reflected on the difficulties faced by women, landless people and young people in participating in *ejidal* assemblies. Each scene had specific conflicts based on the power differences of the characters, and showed the values they held (Walsh et al., 2022).

Conceptual base

The concepts of value pluralism and intersectionality guided the Forum Theatre design and application. Intersectionality is described in feminist political ecology as the operation of power in everyday practices of natural resources management based on people social axes such as gender, land tenure, education, age, and race/ethnicity (Cole, 2017; Lloro-Bidart &Finewood, 2018; Rocheleau et al., 1996). Value pluralism, as proposed by ecological economics, acknowledges the multiplicity of perspectives and means by which humans value nature. The Value Landscape Approach proposed by Schulz et al. (2017) was used to integrate the many understandings of values towards nature encompassing three categories of value: fundamental values, governance-related values and assigned values.

Forum Theatre activity

Once performers played the full scripted scene, and with the help of a trained facilitator, participants were invited to take different roles to perform changes to specific issues within the scene. Participants related to the Forum Theatre characters and dissatisfaction over the conflicts, motivating them to engage in reflections on their own personal experiences with power differences in environmental decision-making. In these narratives, local people also brought to the fore plural interconnected and dynamic values towards nature.

Material for dissemination

The Forum Theatre activities were video-recorded and a short video showing the method and fragments from participant's involvement and reactions was produced. The videos can be found at the following link: https://bit.ly/3SIyneh.

The application of Forum Theatre is detailed and evaluated in a separate publication (Olvera-Hernandez et al. 2022). Here we focus on the analysis of the views of the environmental professionals.

3.3.2 Sampling, focus groups and interviews

a) Targeted sample

The profile of participants was defined as 'environmental professionals involved in forming, designing and implementing environmental public policy' (Martin-Ortega et al., 2019). This involves, in our context, civil societal organizations, government institutions, activists, and academics in Mexico.

Environmental professionals working on activism, academia, government institutions and civil society organizations have traditionally played a key role in planning and implementing the conservation strategies in rural communities (Hensler et al., 2021). Academics also often act as experts guiding decision-makers (Martin-Ortega et al., 2019). However, academics and professionals working in government institutions might also shape decisions with their own values (Hensler et al., 2021; Horcea-Milcu et al., 2019). Furthermore, environmental professionals working in civil society organizations have been argued to be agents of change, implementing diverse environmental projects (Hensler et al., 2021). Yet, rural people have also complained that civil society organizations hardly ever have sufficient resources to carry (long-term) projects out successfully, thus these organizations know that they are at risk of being perceived as illegitimate actors in environmental governance (Richard, 2009).

Eleven of the eighteen environmental professionals participating in this research are part of civil society organizations, 3 academics, 3 government agents, and one from the private sector (who, in the recent past was part of a funding international agency). Participants identified themselves as actors who actively participate in the implementation and follow-up of the environmental strategies.

Table 3.1 shows the number and types of organization to which the participants are affiliated and a brief description of their remit. The table also shows the experience environmental professionals had with participatory methods prior to our focus group, helping to establish a certain baseline prior to the workshop activities. It also shows the interview code allocated to each of the participants for analysis purposes.

 Table 3.1: Description of the focus group participants

Sector	Geographical area of operation	Organisation aims/activities	Participants' role in the organisation	Previous experience with participatory methods	Inter- view code
		Focu	s Group 1		
Civil Society Organization and activism	South Central Mexico	Feminist network promoting forms of living in harmony with Mother Earth.	 Supporting indigenous women's organizations in the implementation of sustainable development projects. 	Workshops and interviews	12
Civil Society Organization	National level	Influencing decision-making on climate change mitigation	 Identifying mitigation routes to reduce the emission of greenhouse gases in the agricultural and forestry sectors. 	Interviews and surveys	13
Civil Society Organization/ activist	Southeast Mexico	Developing social innovation projects to improve the quality of life of vulnerable populations.	 Implementing participatory diagnoses to identify solutions to environmental problems. 	Popular education, participatory diagnoses with focus groups and Lego Serious Play	14
Civil Society Organization	Southeast Mexico	Promoting civil rights, sustainable development, and participation of society in decision-making.	 Implementing social projects focused on sustainable water management. 	Environmental education	16
Civil Society Organization and academia	Yucatan Peninsula	Creating bridges between science and local knowledge, considering the emotional perspective to promote a culture of conservation	 Research projects focused on cultural and social factors that affect the conservation of primates in rural, urban and indigenous communities. 	Photovoice, participatory murals, storytelling, future scenarios and participatory maps	11

Civil Society Organization	National level	Contributing to the creation and execution of a national strategy for the active participation of women as agents of change in rural development.	 Promoting environmental education among women, Visualizing gender differences on the management of natural resources. 	Art such as murals and drawings	17
Civil Society Organization	Southeast Mexico	Promoting social, economic and environmental development of the indigenous and peasant sectors to improve their living conditions.	 Promoting traditional sustainable production in systems such as coffee and cocoa to generate added value. 	Workshops	15
Government Agency	Western of Mexico	Contributing to the preservation and sustainability of ecosystems and natural environments in Mexico.	 Environmental education Monitoring and rehabilitating wildlife 	Development of educational and dissemination material	18
Academic institution	Southeast Mexico	Developing, preserving, disseminating and transferring scientific and technological innovations to the rural sector.	 Promoting of conservation projects in indigenous communities. Environmental education. 	Interviews and surveys	9
Academic institution	National level	Preparing qualified human resources for the management, conservation, and rehabilitation of water to contribute to the sustainable development of Mexico.	 Fostering community water management and governance of common goods, with populations in situations of vulnerability. 	workshops and interviews	10

Sector	Geographical area of operation	Organisation aims/activities	Participants' role in the organisation	Previous experience with participatory methods	Inter- view code
		Focus	group 2		
Private sector	Latino- america	Combating systemic problems in the region through: Early Childhood, Water Security, Art and Culture, and Circular Economy	 Implementing corporative sustainability projects focused on access to water in semi-urban areas, conservation and reforestation in rural areas, and communitarian economic recovery. 	Focus groups, workshops, theatre as dissemination method	8
Civil Society Organization	Southeast Mexico	Promoting sustainable development by fostering the valuation of natural resources and the conservation of biodiversity	 Resolution and mediation of environmental conflicts Land use planning 	Pedagogical, ludo- didactic, and cultural techniques	5
Civil Society Organization	Yucatan peninsula	Promoting the development of marginalized communities through economic-productive diversification, and the conservation of natural resources.	 Monitoring projects of food sovereignty in rural and indigenous communities. 	Participatory maps, participatory flow charts and trend lines	1
Civil Society Organization/ activist	Northeast Mexico	Seeking reflection, debate and proposals for a revitalization of human-nature systems	 Implementing diagnoses, policy evaluations, and public consultations with indigenous communities 	Interview, surveys, focus groups, activities with films and music, and round tables	4
Government Agency	Southeast Mexico	Contributing to the preservation and sustainability of ecosystems and	 Implementing sustainable production projects and the 	Workshops, interviews, surveys	6

		natural environments in Mexico.	conservation of natural resourcesEnvironmental education		
Government Agency	Northeast Mexico	Promoting productive activities, conservation and restoration projects in forestry.	 Forest fire prevention projects Implementing training about rural fire fighting brigades. 	Workshops	7
Academic institution	Yucatan Peninsula	Education campaigns to foster sustainable projects.	 Implementing mangrove ecological restoration projects Environmental education workshops among fishing communities. 	Environmental education and hydrology	3
Civil Society Organization	Yucatan Peninsula	Collaborating as a civil society to build territories with equitable and sustainable governance.	 Planning and implementing sustainable development projects 	Community theatre, and various methods of popular education	2

b) Sampling

Participants were recruited following the snowball method (Biernacki & Waldorf, 2016). First, those professionals who were known by some members of the research team were invited. They were then asked to suggest other people who might be interested in participating. Eighteen environmental professionals confirmed their participation. Recruiting participants using this method allowed us direct access to a diversity of environmental professionals. This sampling method might have introduced some self-selection bias in that it may have attracted professionals which already had a pre-existing interest in participatory methods. We do not consider this a problem for the purpose of this research since its aims are precisely to explore the potential of performance arts-based methods *within* the realm of participatory environmental management.

c) Focus group design

The two focus groups were held in early 2021. Two separate focus groups were organised to maintain an appropriate number of participants (between 8 and 10) for better facilitation of the discussions (Barbour, 2011). The opportunity to divide the participants into two groups with similar characteristics suggests their views were not just an aspect of a one-off group, placing the researcher on the firmer ground concerning making statements about patterns of information (Barbour, 2011).

Each focus group lasted four hours. Due to the restrictions imposed by the COVID-19 pandemic, the focus groups took place online (Zoom)⁹ (Falter et al., 2022). To encourage participation, other online tools were used alongside Zoom, such as Padlet and Word Cloud. All participants were used to online interactions by the time the focus groups took place. The facilitators were an academic, a postgraduate student and a local artist, all of whom had

⁹We recognize the importance of experiencing this method for a better understanding of how Forum Theatre opens spaces for participants' engagement to discuss certain conflicts from their personal experiences. However, during the time this research was implemented restrictions related to COVID-19 were in place, making difficult to implement a Forum Theatre with the environmental professionals. This could be a very valuable activity to undertake in the future.

already participated in the implementation of the Forum Theatre with the local communities; and Spanish is their first language so there was no need for translation.

The focus groups started with an introduction of the PerformingChange project, plus a presentation of basic theoretical background about values and power differences in environmental governance. This set a common framing for the rest of the activities. Then, the video with the application of Forum Theatre with the two communities was presented, followed by another short video with interviews of local participants about their views on the activity. Both videos have the benefit of the professionals witnessing the evaluative, meaning-making comments of the local participants as '*spect-actors*' rather than only responding to the form/content of the intervention.

Following this, we facilitated a discussion on whether Forum Theatre can be a mechanism for local people to dissent and debate about environmental values and power differences in decision-making. First, participants were asked to come up with a list of the values they were able to identify from the recording, followed by the identification and description of how power differences had emerged as part of the action in the video. Secondly, participants were asked about their perception of operational aspects of Forum Theatre in terms of viability, cultural relevance, and credibility (see focus group handbook in appendix B1).To explore these aspects, all participants worked with the video that shows the implementation process and results from the Forum Theatre activity implemented in the communities as part of this research.

During the focus groups, an artist took graphic notes to share the outputs of the discussions with the participants and beyond (see appendix B3 – Figures B.1 and B.2). Using the PerformingChange project as a case study enabled the research team to consider practical and case specific questions in detail. During the focus group, participants asked for particularities of the case study and the facilitators were able to explain in detail the process of implementing a Forum Theatre with these specific rural communities. However, we acknowledge that this is a limitation in terms that it only concerns one case but one that we consider to be very valuable as an example/illustrative case.

d) Semi-structured interviews

Online semi-structured interviews followed the focus groups (see interview guide in Appendix B2). Interviews had a set of predetermined questions but that also allowed the interviewer to spontaneously explore themes or responses in detail about the comments shared in the focus group. At the end of the interviews, participants were asked to elaborate on the possibilities and challenges of using Forum Theatre in their jobs/activities (see interview handbook on appendix B2). Interviews lasted from 30 to 90 minutes and involved all 18 focus groups participants.

3.3.3 Analysis

Notes and transcriptions from the focus groups and interviews were analysed in the qualitative data analysis software Nvivo12. The analysis looked into the two main themes of the focus group: a) Values and power differences identified by the participants and b) their views on the viability, cultural relevance, and the credibility of forum theatre.

We coded values using a structural code system (DeCuir-Gunby et al., 2011). For this, we used the categories of the Value Landscape Approach proposed by Schulz et al. (2017): fundamental values (such as guiding principles), governance-related values (such as ideal characteristics of 'good' environmental governance), and assigned values (such as uses of nature) (Schulz, et al., 2017).

We then used a grounded approach to identify how Forum Theatre was perceived as a mechanism for identifying power differences (i.e. codes were attributed to themes as they emerged from the participants' narratives) (Srdjevic et al., 2017). The views on the aspects of viability, cultural relevance, and credibility were coded using a structural code system (DeCuir-Gunby et al., 2011). These categories were created using the interrelated failings in participatory approaches to environmental development proposed by Williams (2004) and Cooke & Kothari (2001), namely: the rhetoric of participation, the reinforcement of local power differentials, and the limitations by Western models of cognition. Viability was explored in terms of resources such as time and training necessary to implement performance arts-based methods in projects that emphasise the virtues of receptivity, patience, and open-endedness, in opposition to cheap and quick approaches that foster participation just in rhetorical form (Chambers, 1994; Turnhout et al., 2020). Cultural

relevance focused on the importance, in environmental governance projects, of understanding local contexts; adapting the methods to respect and embrace different groups of people based on their abilities, language, and traditions (Turnhout et al., 2020; Walsh & Burnett, 2021b). Credibility was explored as the possibilities and challenges of implementing performance arts-based methods in environmental governance and their framing of knowledge(s) as non-linguistic, emotional, and tacit (O'Connor & Anderson, 2020).

3.4 Results and discussion

3.4.1 Identifying local people's values and power differences using Forum Theatre

a) Local people's values

Participants in the focus groups identified local people's assigned values by making reference to ecosystem services such as supporting, provisioning, regulating, and cultural services (Schulz, 2017; Tadaki et al., 2017). They did not mention the ecosystem services framework by its name; however, the values mentioned were associated to some degree with ecosystem services. This is not surprising as this framework has become a common way to frame values toward nature in policy (Martin-Ortega, 2015). Specifically in Mexico, this framework is clearly embedded in its environment political discourse (Martin-Ortega et al., 2019; Mesa-Jurado et al., 2018). Focus group participants mentioned values associated with economic resources or goods, as illustrated by the following quote:

'They [the community participants] talked about natural goods from which they can obtain economic resources' (Focus group II, interviewee 4).

Participants mentioned they first recognized economic values because they know that local people need natural resources to survive in a market society. This is an example of how environmental professionals could shape the type of values they identified with their own values. In addition, the difficulty of noticing the non-market values associated with nature, including ecosystem processes upon which life depends, is common among policy-makers (IPBES, 2022). However, as the conversation on these market values unfolded, they mentioned that by using Forum Theatre they were able to identify how economic values

were interconnected with ecosystem services values such as climate regulation and aesthetic. They also mentioned connections with desires of protecting nature for the wellbeing of people. This can be associated with fundamental values representing desires that guide people's behaviour, going beyond the ecosystem services framework (Schulz, et al., 2017; Schwartz, 2002). The following comment is an example of this:

'Also, like those who mentioned livestock, the ecosystem value of the soil and the vegetation that allow grazing spaces but also dismantle the rainforest, these were associated with climate regulation services, for example, rain. People expressed the intrinsic value that if it rains, it rains for all of us, a value assigned to the native vegetation of the forest ...' (Focus group I, interviewee5).

In this regard, performance arts-based methods can be implemented to explore plural values of human-nature relationships that do not fit into the provider-receiver metaphor of ecosystem services (Chan et al., 2018), better explaining why socio-cultural processes are important to understand environmental values (Irvine et al., 2016; Raymond et al., 2014). These approaches to values could also help address criticisms that link ecosystem services notions to nature commodification (Kallis et al., 2013; Martin-Ortega et al., 2019) and is aligned with arguments around the importance of more pluralistic conceptualisations of values towards nature (IPBES, 2022).

Beyond ecosystem services values, environmental professionals also observed how local people mentioned values associated with environmental governance's principles (in a normative perspective) such as inclusion, (lack of) equity, and solidarity (Lockwood et al., 2010). In the Value Landscape Approach proposed by Schulz et al. (2017), these types of values are described as governance-related values, and expresses proprieties of governance that are considered desirable (Schulz, et al., 2017). For example, values identified by the participants were observed in terms of inclusion, collaborative work and negotiations. Inclusion is illustrated in the next comment:

'In Forum Theatre you can see how they (local people) value the recognition of the female voice and the value of the voice of young people in decision-making processes and it is very important to identify this' (Focus group I, interviewee 12).

While policy-makers often decide on the relevance of certain governance-related values based on a normative perspective (Akhmouch & Correia, 2016; Schulz, 2018), identification of values for transforming rigid governance processes should also include the governance-related values local people hold (Schulz, 2018; Zwarteveen et al., 2017). In this regard,

Forum Theatre allowed the identification by the environmental professionals of people's values regarding local challenges and expectations of improving environmental governance.

Participants identified local people's values in everyday life experiences, as elements that are constantly created and transformed, similar to what was mentioned in other studies (Edwards et al., 2016; Heras et al., 2016). For example:

'One of the advantages of Forum Theatre is that it can help build the references of those values, the experiences that build the values' (Interviewee 14)

'I also find it very nice that the themes that emerge are very personal narratives... it is not important only that this theme comes out and the abstraction of value is seen, but the way they [locals] say it is also very beautiful and powerful in those narratives' (Focus group I, interviewee11)

As demonstrated by the above reflections, performance arts-based methods offer a different way of seeing values than what conventional participatory methods, in which the values become abstract data (Edwards et al., 2016; Irvine et al., 2016; Kenter, Jobstvogt, et al., 2016). This can be an opportunity of seeing how values are interconnected, and tighter on the significant human-ecosystem interactions (Arias-Arévalo et al., 2017; Chan et al., 2018; Chan et al., 2016). However, identifying plural values is not enough; it is also necessary to understand how local power differences marginalize some people and their values.

b) Power differences

To better represent local people in decision-making processes, environmental professionals need to see the local power differences as this can help foster more inclusive and horizontal processes (Edwards et al., 2016; Kenter et al., 2016). In the focus group, some local power differences were identified by the participants, such as exclusion of women from decisionmaking. The following comment is an example of this:

'About different powers (in the video shown), there is the government that is proposing this ecotourism and the delegate who is the next figure of power, and the assembly where decisions will be made; but there are also the people of the town, the women who are not listened to, they cannot reach the assembly'(Focus group I, interviewee 5).

This comment refers to what other studies have mentioned, on the performance arts-based methods' possibilities for enabling the recognition and dialogues of existing power dynamics (Boal, 2013; O'Connor & Anderson, 2020; Olvera-Hernández et al., 2022.; Walsh & Burnett,

2021). Participants observed that power differences were being 'faced up to' (in some degree) during local people's participation, providing an opportunity to change learned behaviours such respect and listen to authority rather than speaking to them. For example, on the way women 'faced up to' the character with the authority to make decisions. The next comment illustrates this:

'If we stop to think, it is what our parents have taught us (to respect authority) ... but I think that it is already changing a bit, and the young people and women who participated in the theatre also said 'no, well, I also want to put in my point of view, and it is also valid' (Interview 6).

As Balfour (2009) said, instead of expecting miraculous big social and economic changes the most we can hope for [Forum Theatre] are 'little changes'. Forum Theatre can be a tool to start processes of change, 'the sum total of all these little, almost all these little positive choices we take, can one day bring about the change we are all waiting for' (Sircar, 1981, p. 55). Thus, performances by the participants, such as the one mentioned in a previous quote about 'changing a bit' learned behaviour, might represent a humanizing and liberating resistance that should not be underestimated (O'Connor & Anderson, 2020)at it is key for transformation processes (Muhr, 2020; Pereira et al., 2020).

However, Forum Theatre also generated some concerns among participants in the focus groups. They mentioned the possibility of creating more conflicts by upsetting some powerful local people with the performances. For example, they referred to the issue of when norms and rules that constrain women's participation are contested; and that some men could feel uncomfortable or upset. They might have commented on this because decision-making occurs at the assembly, which is constituted by mostly men-land right holders, excluding voices of women or landless people (Bee, 2016; Pingarroni et al., 2022).

It is important to keep in mind that with performance arts-based tools, people's reactions can also be negative or unexpected (Balfour, 2009; Campbell, 2019). This is similar to other participatory methods, in which the content of research touches on areas of high sensitivity such as marginalization or exclusion (Cooke & Kothari, 2001). To create a safe space to discuss sensitive topics skilled facilitators are an important component (Kenter, Jobstvogt, et al., 2016; Reed, 2008). In Forum Theatre, the support of performers/facilitators is recommended to create a character distance, allowing reflections on local power

differences from the safety of the role of the character (Boal, 2013; Campbell, 2019; O'Connor & Anderson, 2020). Participants also commented on this:

'It is a staging, a situation that is not mine; it allows me to give an opinion from a distance. So, it is a situation that is not in my community..., but there I express my own concerns and questions that I may be experiencing in my community' (focus group 1, interviewee 10).

This is precisely one of the aspects that make Forum Theatre a space to dialogue about experiences of exclusion; as an opportunity for environmental professionals to see whose values count, and how such values are represented (or not) in decision-making.

3.4.2 Operational aspects: viability, cultural relevance, and credibility

The discussion on operational aspects of Forum Theatre was guided by the terms of viability, cultural relevance, and credibility (described in subsection 3.3.).

a) Viability

Environmental professionals emphasised that for Forum Theatre to be viable, it needs training and a trans-disciplinary approach. These aspects are considered in other participatory methods implemented in the realm of sustainability (Reed et al., 2014). In this case, participants specifically referred to the need of having trained facilitators:

'Well, regarding viability... a lot of work must be done within the role of facilitator, and this is something that I find essential to having clarity about the principles and to work on them in practice, as a facilitator must have this experience this practice' (Interview 1).

In environmental decision-making, as previously mentioned, having a good facilitator is key to dealing with explicit and implicit power dynamics (Kenter et al., 2016). Facilitators need to be capable of using different tools for which they will need to have technical capabilities that tend to be developed through years of experience, intuition, and empathy (Reed & Abernethy, 2018; Richards et al., 2004; Sullivan & Lloyd, 2007). In performance arts-based methods, they require knowledge of theatre practice and the artistic process of developing stories and characters (Balfour, 2020). A trans-disciplinary approach to projects implementing performance arts-based methods in environmental governance was also suggested by some of the participants in the interviews. They commented that: 'Well, these types of activities and processes have to be implemented from a multidisciplinary and trans-disciplinary approach, it is implicit. So, if your training is not artistic, then there has to be someone who contributes that... then, you have that demand for more staff, more time; but it should not be seen as a limitation...they are like intrinsic characteristics for working these things' (Interview 11).

These comments represent the fact that trans-disciplinary work is common on projects implementing performance arts-based methods (Heras & Tàbara, 2014; O'Connor & Anderson, 2020; Walsh et al., 2022). The case study presented as example was indeed of trans-disciplinary nature, in which the value of collaboration was key to entering the field with an increased awareness of our own positions within epistemologies and praxis¹⁰. Therefore, trans-disciplinary work and trained facilitators will be necessary in projects that emphasise receptivity, patience, and open-endedness, in opposition to approaches that foster participation just in rhetorical form.

b) Cultural relevance

In participatory methods, understanding participants' cultural contexts is required to avoid constraining participation (Devente et al., 2016; Williams, 2004), for example, to adequate the methods to participants' skills, availability, or capabilities (Kenter et al., 2014; Reed, 2008). Environmental professionals participating in our research identified Forum Theatre as a method easily adaptable to different cultural contexts because the script is written to represent specific characteristics of that context. The next comment illustrates this:

'The script is created from the stories of the locals and that makes it culturally permeated, in that sense, I do believe that they [performance arts-based methods] can encompass different characteristics and can be adaptable to different contexts and cultural areas' (Focus group I, interviewee 10).

Certainly, the script needs to be a reflection of people's reality. Its customization permits the adaptation of the method to different contexts (Boal, 2013; Campbell, 2019; Walsh et al., 2022). However, the idea of performing people's realities created concern among the participants in the focus groups. They argued that, if Forum Theatre's representations are taken by the audience as simplistic or disrespectful, they will get upset. This might represent

¹⁰More information in Walsh et al., (2022).

a risk of breaking relationships between them and the communities, as illustrated by this comment:

'I'm thinking... We will have to start from a very deep knowledge [of the communities] to not create internal resentment and to not generate problems from a performance, in which they can feel ridiculed with a character' (Focus group I, interviewee 11).

In this regard, ethics is an important aspect to respectfully getting involved with the participants and avoiding discomfort. Ethics allow approaching the local participants and their cultural context with respect, reflecting on aspects such as local people's availability, selecting an accessible place for the participants, and language needs (Snyder-Young, 2022). However, ethical dilemmas are more than just inserting cultural differences into existing ethical frameworks, which only emphasize aspects of confidentiality, individual informed consent, or assessing individual risks (Brasher, 2020; Maiter et al., 2008). In performance arts-based methods, ethics of care also refers to how we approach the communities or participants, care about the script's development, care in how we perform the local realities, how to facilitate the participation process, and how we present results and following activities (Jordan, 2020; Snyder-Young, 2022). Thus, while the method is adaptable to different cultural context, its adaptability relies on a rigorous ethical approach (ethics of care).

In the original case study, ethics were approached by following the University of Leeds's ethical framework, which is based on the principles that a) research should aim to maximise benefits for society and minimise risk and harm, b) the rights and dignity of individuals and groups should be respected, c) participation should be voluntary and appropriately informed, and d) lines of responsibility and accountability should be clearly defined¹¹. Following these principles, the script was created originally in Spanish and all the activities were carried on in Spanish (the first language of the participants)(Walsh et al., 2022). In line with local customs, the project was officially presented to the community heads (*comisarios ejidales*), who approved the research and agreed to invite the entire community to participate. The joker and performers were trained on the techniques of Forum Theatre and

¹¹(Faculty Research Ethics Committee at the University of Leeds - reference AREA 19-030). For more information on the framework please see the following link: https://www.ukri.org/councils/esrc/guidance-for-applicants/research-ethics-guidance/

were made aware of the communities' social context and who would not oversimplify or misrepresent the conflict presented in the script (Olvera-Hernandez et al., 2022; Walsh et al., 2022). The above measures respond to an ethics of care, which involves the active acceptance of responsibility to foster mutual trust, embrace conflicts to challenge power dynamics, and long-term commitments within pluralistic research collaborations (Staffa et al., 2021).

c) Credibility

Participatory methods generally are sometimes questioned by professionals and funders in terms of their ability to produce valid and usable outcomes (Burdon et al., 2022; Kenter et al., 2014; Reed, 2008). These actors expect tangible and quick results from participatory approaches, which should be defensible and useful to incorporate in a 'legitimate' way into the decision-making process (Kenter et al., 2015). This was also mentioned in the focus groups regarding performance arts-based methods. Participants were concerned about finding support to implement these methods due to difficulties to offer tangible results. As part of this concern, participants commented the possibility to upset local people if they are not closed with useful results (agreements). The following comment illustrates this concern:

'If the Forum Theatre objective is only going to be to leave these issues in the air, if there are not going to be these minute agreements, it is also necessary to see how prepared the community is, they might feel like: and now, and now what? Because the community is also used to agreements... it would be necessary to see what the feeling of the people is if the people perceive it well' (Interview 9).

Forum Theatre in which the central objective is to allow participants to explore different solutions without the intention of reaching any final agreements (Boal, 2013) might therefore not always be 'defensible and useful' in the eyes of some environmental professionals (Devente et al., 2016; Muhr, 2020). In addition, as an answer to this regard (close with agreement), it has been recommended that the performance arts-based activities be implemented along with quantitative or qualitative methods. The use of additional methods can assure better analyses and interpretations (Leavy, 2020; Muhr, 2020; Turnhout et al., 2020). For example, Muhr (2020) says that complementing arts-based methods with qualitative methods for data analysis was vital to support the analyses of the artistic output. Environmental professionals also mentioned the importance of follow-up

activities, using different methods, to complement the Forum Theatre to be feasible in environmental governance contexts. The next comment illustrates this:

'I think that the other step is to associate techniques or associate other exercises that can lead, perhaps not to agreements but to other results' (Interview 6).

The need for implementing follow-up activities can be a reflection of the existing power relations between environmental governance epistemologies in which some ways of knowing, such as science and economics, dominate policy and decision-making forums, for example, through the quantitative metrics of assessment often used in these arenas (Erwin et al., 2022; Horcea-Milcu et al., 2019); with these alternative methods seating less comfortably in those kind of evaluation frameworks. However, 'knowledge of the world cannot and should not be reduced into words and numbers alone' (O'Connor & Anderson, 2020, p. 14), specifically, when we are trying to understand values in social-ecological dynamics which are fluctuating, emotional, complex, and improvised (Brown et al., 2017; Himes & Muraca, 2018).

All in all, embedding performance arts-based approaches into projects looking for fair representation of local people in environmental decision-making can help recognise power differences and help those who have been marginalized to actively engage in finding synergies and solidarities, imagining actions that could guide on directions of change (Erwin et al., 2022; Walsh & Burnett, 2021a). This could also help address difficult issues from an ethics of care perspective in the long-term (interrogating power relations through reflective dialogue, building decisions upon marginalised knowledges) (Staffa et al., 2021). In this research, this was evidenced when participants identified that the Forum Theatre application methods encouraged participants to dialogue about local power differences (from their own experiences) and to act toward changing learned behaviour that constrains them from influencing environmental decision-making (section 4.2). In addition, participants referred to the possibilities of using Forum Theatre to identify values beyond the ones associated with the market and create spaces to discuss values through emotive narratives (section 4.1). In this regard, this research consent with the idea that performance arts-based method could be used for supporting sustainable transformational processes, challenging pre-established analytical views [on values and power] that might foster societal paradigms openings (changes) from which institutions, rules, and norms emerge (Heras & Tàbara, 2014; Horcea-Milcu et al., 2019; Muhr, 2020; Pereira et al., 2020).

3.5 Conclusions

Fair environmental decisions require the representation of views and values of diverse actors in decision-making processes. However, local people, who are often the most affected by these decisions, usually struggle to be fairly represented because of power differences. Environmental professionals are key actors in the validation and implementation of methods that can help foster the representation of local people in decision-making. In this paper, we have explored their views on the implementation of a performance arts-based method, specifically Forum Theatre, to explore local values and power dynamics.

Our participants could identify local values emerging as part of the Forum Theatre activity, but rather than identifying values as single categories, they appeared as interconnected and contextualized by the people's life experiences. The method was also able to reveal values associated with environmental governance principles such as inclusion, equity, and solidarity, which can be used to develop an understanding of processes or systems around the decision-making process. In this regard, performance arts-based methods showed clear promise in being used to identify plural values of human-nature relationships, and the socio-cultural processes that are crucial to understand these environmental values. The method was found to be a space of experimentation and imagination that encourages people to perform how local power differences are experienced in their lives and fictional actions to blur them. Precisely this demonstrates that these methods can be a safe space to empathetically dialogue about whose values count, and how such values are represented (or not) in decision-making.

Performance arts-based methods share challenges with conventional participatory methods (e.g. need for skilled facilitators, adopting a trans-disciplinary approach and a rigorous ethical approach). Follow-up activities to generate further credibility for the method were seen as necessary. They clearly hold promise but, for the time being, environmental professionals might feel more reassured if they were used in combination with other methods to complement the outcomes obtained in Forum Theatre, such as imaginary solutions or scenic experiences, which are different from those commonly required by funding organizations or even from those expected by local participants.

It is worth noting that the views of the environmental professionals are rooted in their epistemological positions. Therefore, to better complement their views on the implementation of these methods in the realm of environmental governance, analysis of other case studies implementing diverse performance arts-based methods can provide further insights on how these methods improve the representation of local people's values in practice, and the existing operational aspects beyond those covered in this research. We also encourage future research exploring Forum Theatre to consider the positionality of other actors involved in environmental decision-making. For example, the use of Forum Theatre as an opening to transdisciplinary dialogue about experiences of exclusion in environmental decision-making experienced by the environmental professionals themselves. Finally, the process of implementing these methods can be a way for environmental professionals and local people to get involved in long-term projects that can lead to desirable social-ecological transformations.

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Chapter 4

Challenges and opportunities of applied theatre in environmental governance: the views of practitioners

Olvera-Hernandez, S., Novo, P., Martin-Ortega, J., Mesa-Jurado, A., & Holmes, G. (to be submitted). The possibilities and challenges of applied theatre in environmental governance: views from practitioners. Ecological Economics

Abstract

Applied theatre is starting to be explored as a promising mechanism for better representation of the values of local people in environmental decision-making. However, there is still a need to better understand the opportunities and challenges that these innovative techniques bring. In this research, we explore the views of users of applied theatre in environmental governance to explore aspects such as viability, cultural relevance and credibility. We implemented online semi-structured interviews with a purposive sample of practitioners of applied theatre methods as part of environmental research projects in the Global South.

Practitioners identified that local people negotiated their plural values during the applied theatre. They also confirmed that applied theatre created opportunities to reflect on how local people experience power differences, fostering some agency for people to bring to the discussion their own experiences and needs. Applied theatre is identified as a research method embracing more emotive views on human-nonhuman relationships, and a method that can encourage small but meaningful changes. Well-trained facilitators to encourage local people to become performers, and ethics of care to create safe spaces for participants are seen as critical aspects for good implementation. More research on the long-term impacts associated with applied theatre approaches still needs to be developed.

Keywords:

Environmental decisions; Ethics of care; Performance arts-based methods; Power differences; Values towards nature
4.1 Introduction

Local people's values towards nature are key element to make environmental decision. Values reflect how local people perceive, relate to, inhabit, interact, and give meaning to nature (Chan et al., 2016; IPBES, 2022), and can serve as intervention points for facilitating sustainable transformations (Horcea-Milcu et al., 2019, Chan et al., 2020; Kenter et al., 2019). Unequal distribution of power in environmental governance can hamper the representation of local people's values in environmental decision-making, often resulting in unfair decisions that contribute to nature degradation and that negatively impact local people's wellbeing and livelihoods (Agarwal, 2001; Ahlborg & Nightingale, 1994; Colfer et al., 2015). Differences in power shape who gets to participate in decision making, who has the authority to decide, how the agenda is set, and who benefits from this, based not just on laws but also cultural norms (Lukes, 2005). This is particularly pronounced in the Global South, where environmental injustices are often associated with histories of exclusion and marginalization derived from processes of colonization and weak institutional structures, and where there are increasing global pressures over nature (Brasher, 2020; Hickel, 2016; Zafra-Calvo et al., 2020).

Participatory methods have been advocated as mechanisms to include marginalised values into environmental decision-making (Leavy, 2017; Tremblay & Harris, 2018). These approaches may enable people to play active and influential roles, building trust to share perspectives and understanding of their relationships with nature (Heras et al., 2016; Leavy, 2017). However, conventional participatory approaches have 'struggled' to deal with power and representation, frequently considering communities as homogeneous, rather than places of shifting alliances and power dynamics (Cooke & Kothari, 2001; Williams, 2004). In the search for better ways to represent the values of local people in environmental decision-making, arts-based methods have been proposed based on the argument that they offer a more social-constructivist and interpretative understanding of values and power dynamics (Heras & Tàbara, 2014; Olvera-Hernández et al., 2022). Among these methods, performance arts-based have been put forward. These methods use e.g. theatre, film, or dance to deliberately blur the boundaries between characters (actors-producers-dancers) and spectators. These forms of arts can offer diverse channels of communication for local people to tell and contest their stories of exclusion (including values towards nature),

beyond the limits settled by power dynamics and from the safety of the artistic process (Jevic & Springgay, 2008; O'Connor & Anderson, 2020; Walsh et al., 2022; Walsh & Burnett, 2021b).

Amongst performance arts-based methods, we focus unapplied theatre, which we use here as an umbrella term encompassing different forms of dramaturgic activities conducted outside ordinary theatre institutions (Nicholson, 2005). In applied theatre, participants get involved in cognitive and emotional dialogues and negotiation of meanings, also exposing contradictions, to explore solutions to a conflict (Balfour, 2020; Brown et al., 2017; Leavy, 2020; O'Connor & Anderson, 2020). Emotional dialogues play a critical role in identifying and understanding values towards nature (Kenter et al., 2015), and in understanding decisions regarding natural resource use and management (Morales & Harris, 2014). Applied theatre can also assist in exposing and disrupting power differences and oppressive environments, building bridges across differences and fostering empathy (Erwin et al., 2022; Guhrs et al., 2006; Heras & Tàbara, 2014).

The use of applied theatre in environmental projects is growing with examples related to participatory environmental policy making, environmental justice (Erwin et al., 2022; Guhrs et al., 2006), exploration of subjectivity and emotion in environmental management (Morales & Harris, 2014), biosphere futures with young generations (Heras et al., 2016) and values towards nature (Hensler et al., 2021; Olvera-Hernández et al., 2022). Applied theatre can also foster actions for social-ecological transformations, offering more emotional and philosophical approaches that could facilitate changes based on those values (Horcea-Milcu et al., 2019; Muhr, 2020; Pereira et al., 2020). Hence, they have been proposed as mechanisms that can bring to the fore the values of people in rural communities, who are most directly affected by environmental decisions and who routinely, have been excluded from decision-making processes (Olvera-Hernandez et al. 2022).

However, there are few studies covering the operational aspects of applied theatre tools in environmental governance. Previous research (Olvera-Hernandez et al. 2023), showed some of the challenges from the perspectives of environmental professionals (who had experience implementing participatory methods but not performance arts-based methods) using the aspects of viability, credibility and cultural relevance. The operational challenges in terms of viability focused on resources such as time or training necessary to facilitate theatrical activities (Balfour, 2020; Chambers, 1994). In terms of cultural relevance, the challenges were associated with the importance of the ethical approach to avoid simplistic performances that might be taken by the audience as disrespectful (Campbell, 2019; Olvera-Hernandez et al., forthcoming). The challenges associated with credibility focused on the need for implementing follow-up activities to give validation or support to the outcomes form the theatrical activity as these methods explore knowledge(s) as non-linguistic, emotional, and tacit (O'Connor & Anderson, 2020; Walsh et al., 2022).

Exploring how these methods 'take place' in other environmental projects is critical for advancing the use of applied theatre for fairer environmental decision-making processes. The aim of this research is to uncover evidence regarding the challenges and opportunities of using applied theatre through the experiences of those practising it in environmental projects. Specifically, we aim to answer: a) To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool for local people to bring to the fore plural values towards nature and to facilitate dialogue amongst participants about local power differences in environmental decision-making? b) To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool in socio-ecological transformations? c) What can be said about the viability, cultural relevance, and credibility of the use of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods in environmental projects from the perspective of practitioners of performance arts-based methods? We applied semi-

4.2 Methods

This research used online semi-structured interviews with a purposive sample of practitioners of applied theatre as part of research projects related to nature use and environmental management in the Global South. By focusing on projects implemented in this region I am not pretending to catalogue them as homogeneous; rather, we understand them as diverse, all of them facing different social and economic issues framed within their historical exclusion contexts (Brasher, 2020; Pereira et al., 2020). It is precisely with this diversity that we aim at revealing a broader range of challenges and opportunities.

4.2.1 Sampling

We selected academics, artists or facilitators who have worked on the design, implementation or analysis of the project, to uncover the different perspectives their positions offer in exploring applied theatre use. These practitioners were recruited following the snowball method (Biernacki & Waldorf, 2016). First, practitioners who were known by members of the research team were invited. They were then asked to suggest more people that might be interested in participating. Practitioners of 12 projects were invited, of which 11 from 9 projects participated. Written consent was given to mention the project's name and their role.

The practitioners participating in this research implemented had applied theatre tools as part of projects focused on environmental governance. Three of them were research leaders of the project, six were investigators or research assistants, and two were PhD students. Three of these projects were implemented in Africa, three in Latin America, one in Asia and one more based in Europe but implemented with professionals working on projects in the Global South. Practitioners' backgrounds were in environmental anthropology, environmental history, sociology, development studies, geography, and theatre. Table 4.1 shows a brief description of the practitioners and their projects, the geographic area where the projects were implemented, and the interview code allocated to each of the participants for analysis purposes.

Table 4.1: Description of participants' projects

Code	Project title	Location, area/region	General project's aim	Form of applied theatre used (as defined by the project)	What were expecting to achieve with this method	Website
01	Southern Cape Interdisciplinary Fisheries Research (SCIFR) Project	Melkhoutfontei n, Cape Town, South Africa	To understand climate change in the coastal region of the southern Cape.	Results were used to create a narrative-drive production called 'As die See Byt.	To disseminate the results with people form Melkhoutfontein	https://www.news.uct .ac.za/article/-2022- 06-08-ocean- sustainability-many- knowledges-are- needed
02,03 and 04	Forum theatre to enhance joint agency in Kenya and Mozambique: towards relational understandings of climate change (FoRel).	Kanyaka municipal district in Mozambique, and Msambweni in Kenya.	To empower the joint agency of stakeholders to address governance processes for climate change adaptation in poor coastal communities.	Theatre of the Oppressed	For data collection and to enhance reflection among participants on adaptive capacity	<u>https://forumrelationa</u> l.org
05	Moving with risk	Manizales in Caldas, Risaralda in Pereira, Soacha in Cundinamarca	To understand how people experience forced displacement and relocation through a lens of disaster risk reduction in	Forum Theatre	To create spaces for local people to tell their life stories with dignity and agency.	https://changingthest ory.leeds.ac.uk/transf orming-conflict-and- displacement-through- the-arts-and- humanities-film-

		in Colombia.	Colombia.			programme/moving- with-risk-2019/
06	Build parallel worlds. Experiences of representation and creative materiality for the restoration of degraded areas.	Sacrificio Quinteroand Puchuncaví (ZSQP), Valparaíso Region in Chile.	To explore artistic expressions as promoters of relational values towards the restoration of degraded areas in Chile.	A film was produced based on the findings on how locals used art as medium to express their values	To communicate results	https://revistas.unc.ed u.ar/index.php/hetero topias/issue/view/240 5/549 https://www.youtube. com/watch?v=6uNUli Vm9Dk
07	Playing with wildfire	Chiquitania, Bolivia	Advance local and international public debate on the complexity and urgency of wildfire emergency	Community theatre and Forum Theatre were used	To generate community-based responses to multi- layered conflicts regarding wildfires.	https://playingwithwil dfire.org/es/el- proyecto/
08	Freiburg Scientific Theatre: Acting for sustainability	Main office in Freiburg in Germany.	To supports transdisciplinary knowledge on sustainability issues and participatory learning.	Scientific theatre allows participants (including local people) to access scientific knowledge and react to it emotionally.	To bridge the gap among scientific knowledge and the public	http://scientific- theatre.org/
09	The Lived Experience of Climate Change	Dhaka, Bangladesh	To understand how land tenure influences climate change impacts and in turn how land tenure can influence strategies for enhancing climate	Performances called 'Pot Gan' a traditional folk medium, featuring melody, drama, pictures and dancing	To build awareness of how climate change affects the lives of those living in Dhaka slums.	https://www.tandfonli ne.com/doi/abs/10.10 80/13569783.2020.17 91696https://www.yo utube.com/watch?v= myM8d0AiRgw&t=2s

			resilience in a Dhaka slum			https://www.youtube. com/watch?v=kD5ND oP0R7E
10	LalelauLwandle: An Experiment in Plural Governance Discussions (part of One Ocean Hub, a collaborative research)	KwaZulu-Natal coastline	To understand the needs of multiple fisheries active in South African waters	Empatheatre is a research method in which data gathering, analysis and dissemination is collaboratively facilitated across different publics using performances.	To make visible local people stories of living with the ocean that are seldom seen or heard in the public domain.	https://www.empathe atre.com/a-theatre- project-explores- collective-solutions-to- saving-the-ocean-by- dr-kira-erwin
11	The Cape Town Museum of Watery Relations	Cape Town, South Africa	To develop an online interactive map of the various water samples/stories	Diverse performance arts-methods	To share experiences regarding environmental issues.	https://falling- walls.com/engage/co mmunity/museum-of- watery-relations/

4.2.2 Semi-structured interviews

A total of 11 online semi-structured interviews lasting from 30 to 90 minutes were conducted between October-December 2022. An interview script with predetermined questions was used (Appendix C2) but allowing the interviewer to explore responses further (Babbie, 2021). The interviewer first introduced herself and informed the interviewee that the research was aimed at exploring whether/how applied theatre methods improve the representation of local people's values in environmental decision-making. I informed participants that whilst I understood that their project might not be specifically aimed at or focused on values, we were inviting them to reflect on whether their performance-based method may have helped bringing local people's values to the fore. All the projects had a component of local power dynamics in environmental decision-making in their aims, which we also explored in our interviews.

The first set of questions was aimed at gaining further understanding of the projects, identifying the project's aim and the reasons for choosing performance arts-based methods. In the next set of questions, we explored whether these methods brought to the fore local people's values towards nature. As an introduction to these questions, we briefly explained that values can be seen as a reflection of reasons why nature is important to people (Chan et al., 2016; IPBES, 2022), without specificying anyparticular value framework Respondents were prompted to reflect on whether local peoples' values were discussed or if expressions of values emerged during the implementation of their methods. Then, we asked about the challenges and opportunities of these methods to open spaces for discussing local power differences in environmental decision-making. Local power differences were explained as differences in the ways of relating to nature set based on formal and informal social norms (Ahlborg & Nightingale, 1994; Lloro-Bidart & Finewood, 2018; Rocheleau et al., 1996).

Subsequent questions prompted responders to explore some practical aspects of the use of these methods, organised around notions of viability, cultural relevance and credibility. Following Olvera-Hernandez et al. (2023), viability was approached in terms of resources such the importance of facilitator with artistic skills (Balfour, 2020) and the use of trans-disciplinary approaches (Leavy, 2020; Walsh et al., 2022). Cultural relevance was explored in terms of safe spaces (Campbell, 2019; Prentki, 1998) and the ethics of care (Staffa et al., 2021; Walsh & Burnett, 2021b). Credibility was explored in terms of reliability of applied theatre as a research method to academics and funding institutions (Leavy, 2020; O'Connor & Anderson, 2020).A final set of questions focused on participants' views on the potential of using these methods to foster socio-ecological changes or transformations, before inviting respondents to provide any further comments about the topic of this research.

4.2.3 Analysis

Notes and transcriptions from the interviews were analysed in the qualitative data analysis software Nvivo12. The analysis looked into the three main themes a) Values and power differences that emerged in the theatre application as identified by the practitioners; b) their views on viability, cultural relevance, and the credibility of applied theatre for environmental decision making; and c) changes and transformation processes influenced by the implementation of applied theatre tools.

We used a grounded approach, i.e. codes were attributed to themes as they emerged from the participants' narratives (Srdjevic et al., 2017). Values were approached using the concept of Epistemic pluralism, from ecological economics, that suggests there are multiples ways of conceptualising values within humannature relationships (Horcea-Milcu et al., 2019; Kenter et al., 2019). Local power differences were approached as informal social rules and norms that establish legitimate ways of relating to nature (i.e. who can benefit from nature's contributions) (Ahlborg & Nightingale, 1994; Bee, 2016; Colfer et al., 2015).

The views on the operational aspects of using applied theatre were coded using a structural code system in DeCuir-Gunbyet al. (2011). Following, the aspects of viability, cultural relevance, and credibility were explored as per the work in Olvera-

Hernandez et al. (2023). The use of applied methods to foster changes (in socioecological systems) was approached also using a structural coding base on the notion of intervention tools in transformation processes (Charli-Joseph et al., 2018; Pereira et al., 2020).

4.3 Results and discussion

4.3.1 Emergence of Local Values towards nature using applied theatre approaches

Previous studies have shown that applied theatre supports dialogues in which values towards nature can be brought to the fore without attempting to 'translate' values towards nature into just one single dimension or unit (Hensler et al., 2021; Heras et al., 2016; Olvera-Hernandez et al., 2022). This was confirmed by the practitioners in our research. They mentioned that local people could express plural values towards nature in form of performances or as comments during the theatrical activity. For example, a practitioner mentioned that local people's values towards trees were mentioned associated with getting ecological benefits (such as rain) and the protection of their livelihoods (such as local harvest production) (interviewee04).

In addition, some studies have shown that applied theatre can become a site of negotiation and experimentation (Campbell, 2019; Hensler et al., 2021; Heras & Tàbara, 2014; Olvera-Hernandez et al., 2022). Negotiations understood as unfolding the values of different actors involved in participatory settings (Horcea-Milcu et al., 2019). This is possible because in applied theatre the integration of different perspectives within an atmosphere of emotional engagement can trigger a stage where it is possible to re-think, re-create and re-present reality (Boal, 2013; Campbell, 2019; Leavy, 2020; Walsh et al., 2022). This was confirmed by our interviewees who mentioned that local people can use applied theatre as space to negotiate their values in form of performances (i.e., local people took a character/role which allow them to participate in iterative societal negotiations with other characters). In these negotiations, practitioners were able to see hear

and feel local people's values as part of social interaction in the everyday life. The following is an example:

'We have people called sangomas who are like a traditional healer, they can also be sort of doctors, like in a spiritual way, they can work in magic... they undertake a journey that is actually quite secret.

So when we interviewed the sangomas, they told us only what they said was OK for us to know and for others to know, and for many people who have family and who come from that culture, even if they don't practice the ancestral beliefs anymore, they found it beautiful to watch there.... we did take it to play it in some of the rural towns along the coast..., and when the conversation was going an older man, in traditional Zulu culture men are afforded more respect the older they are, so he stood up and he was not actually happy that we had shown the sangomas... and I did think ohh have we done something that isn't sensitive? And this is also why it's so interesting. When you create the space where the audience can talk to now, because then, an even older man... said people must see this, he was like, this is our heritage, this is our history, it matters, and it counts. People must watch this... make sure that people's cultural and spiritual connection to the ocean is taken more seriously' (P4).

However, the results are aligned with Heras and Tabara (2014) that 'negotiations' in applied theatre should not be taken for granted; this is subject to the extent that participants have the capacity and opportunity to be participle during the process.

4.3.2 The playing out of local power differences

Previous studies have mentioned that applied theatre is an emotive activity that evokes empathy and dissatisfaction, involving the audience in commenting or personifying experiences from their everyday lives and reflecting on power differences which can be difficult to question (Baer et al., 2019; Boal, 2013; Heras & Tàbara, 2014; Olvera-Hernandez et al., 2022; Sullivan et al., 2008). This was confirmed by our respondents, who mentioned that applied theatre tools opened spaces where participants get involved in emotive discussions on how power differences have affected them. The next quote illustrates this:

'People will be very open and honest, and you can be quite emotional... For example, when we took the play to the Eastern Cape in South Africa, a very emotional response from one of the women who is a fisher herself, a small-scale fisher who had experienced directly as many people in South Africa these forced removals and racist, that happen to her and her father and her grandfather and the memories of seeing that... experiencing that exclusion from much wealthier Africans forcing people to move to build holiday houses. And she stood up, it was so powerful, it's definitely the most powerful response l've seen; she came into the middle of the circle and almost performed her story, it was so intense, and passionate' (P 10).

In addition, interviewees remarked that applied theatre tools did not necessarily open discussions on what the research team expected based on their projects aims or belief system or their understanding of the conflict. Rather, local people decided which specific aspect they wanted to discuss during their participation. The following illustrates this:

'We want to hear people's experiences... However, sometimes these things do not represent what we as researchers think about reality. So, there is that tension between life histories and the reading that these individuals have of social and natural processes and what we think is happening. For example, in this case, people never talked about the fact that there are large economic processes of deforestation in this region, no, that was something that was not a problem for them... at a macro level there are other things that they did not talk about' (P7).

In terms of power differences, this means that applied theatre fostered some agency for people to actually bring to the table their own experiences and agenda (Balfour, 2020; Campbell, 2019; Snyder-Young, 2011), over the agenda of the external researchers. This is possibly, due to artists usually being perceived as 'context providers' rather than 'content providers' (Edwards et al., 2016). How the agenda is set often gives benefits to certain groups of peoples over others (Lukes, 2005). For example, power relationships between international organizations partnering with small civil society organisations often determine the agenda misunderstanding the priorities and commitments of local people (e.g. controlling their participation to shape local knowledge production to produce favourable results for their projects) (Cooke & Kothari, 2001; Walsh & Burnett, 2021a). In this sense, applied theatre can be an innovative method to support policymakers into eliciting people's pre-existing values towards nature rather that determining values by political agendas (Himes & Muraca, 2018; IPBES, 2022) (see section 4.3.1.)

4.3.3 Viability, cultural relevance and credibility of applied theatre methods in environmental projects.

In terms of viability, in other participatory methods implemented in the realm of sustainability facilitators play a key role to dealing with explicit and implicit power dynamics (Reed et al., 2014). Other studies have confirmed that implementing an applied theatre activity require facilitators capable of developing stories and characters to encourage local people to become play writers, performers, or directors (Balfour, 2020), and through these tools discuss about their experiences with power differences (Boal, 2013; Campbell, 2019). Respondents confirmed the importance of a well-trained facilitator with artistic skills to find ways to open dialogues through performances, looking for positive group dynamics, and encouraging participants to question assumptions. However, they also mentioned time as another aspect associated to viability. They commented that investing time to understand the socio-cultural context of participants is key to creating trust and building relationships with the participants. The following comments illustrate this:

'Don't be in a hurry to get in and out of places because it's the real connections and the relationships that develop that make the work meaningful for everyone, not just for you as a researcher but the process becomes more meaningful when there's the deeper connections' (P11).

This has been identified by the literature before (Balfour, 2020; Heras & Tàbara, 2014). Time is a crucial resource in creating relationships with locals based on trustworthiness and encouraging them to participate (Heras & Tàbara, 2014; Leavy, 2020). The process of trust and community building during approaches implementing applied theatre tools has the aim of translating the abstract view of a conflict or problem, into how people experience it and the possible actions for changing it (Heras & Tàbara, 2014). Thus, implementing these tools is not just about the facilitation process during the activity, it is also about 'having a cup of tea, chatting and listening to local people' (Balfour, 2020, p. 9).

In addition, it is worth noting that in four of the case studies explored in this research, applied theatre was used as a dissemination method. In these cases, the local people's engagement in the dissemination process highlighted the potential of applied theatre to involve local people in dialogues, in which they are not just passive recipients of information but active participants discussing academic results that affect them directly. This has shown that applied theatre tools can be part of a toolkit in participatory action research, in which a diversity of methods and

epistemologies can be put into practice (Heras & Tàbara, 2014); in these cases, encouraging participants to critically reflect about academic results.

In terms of cultural relevance, practitioners mentioned that applied theatre needs to offer safe spaces for locals to discuss their issues. Safe space is a term used in participatory interventions (conventional or arts-based) as part of the ethical approach. Ethics requires a bundle of principles and protocols, in which the main principle is always 'do no harm' it also focuses on maximising benefits for society, respecting privacy, and respecting the rights and dignity of participants (individuals and groups) (Brasher, 2020; Maiter et al., 2008). Interestingly, one of the practitioners argued that in applied theatre safe spaces cannot really be assured to the participants because social interactions are dynamic and difficult to predict (as in other participatory methods), and that it is better to instead share the measures taken for guiding a respectful dialogue with participants. The next comment illustrates this:

'Following, like the European norms you have to create something called a safe space, but ... most of us don't live in safe spaces. You know, we don't live that, so for me, I'm like, it must be, as I said, it must be deeply respectful. You must work very hard to minimize power imbalances, you will never get rid of them in those rooms, but you must work hard to minimize them. We need to be prepared to facilitate in a way in which we work our hardest to make sure no one leaves feeling hurt or offended' (P 10).

In applied theatre, measures taken to create respectful dialogues are in line with an ethics of care (Sadeghi-Yekta& Prendergast, 2022). Ethics of care in applied theatre refers to care about how we approach the communities and how to facilitate the participation process (Jordan, 2020; Leavy, 2020; Sadeghi-Yekta & Prendergast, 2022), particularly when we work with people who have experienced vulnerability and marginalisation (Jordan, 2020). To do this, a certain degree of talent and expertise is required, as well as a conscious design, recognising that each person's story belongs to that person alone (Erwin et al., 2022; Jordan, 2020). This ethical approach was further elaborated by our respondents, for example:

'The principle of doing no harm to participants has to be the first and foremost thing above and beyond getting your degree or your research output. And so, it's about strong ethics principles that have, you know, the ethos of care underpinning them and not just legalistic check boxes or approaches that protect the university more than the actual relationships'. (P 11)

Failing on implementing an ethics of care may lead to oversimplifications and to misleading processes of knowledge integration, thus limiting or even being detrimental to the research potential of applied theatre (Heras & Tàbara, 2014).

In terms of credibility, previous studies have mentioned that performance artsbased methods could use complementary methods to assure better analyses and interpretations (Leavy, 2020; Muhr, 2020). For example, Muhr (2020) says that complementing arts-based methods with qualitative methods for data analysis was vital to support the analyses of the artistic output. However, our respondents mentioned that applied theatre methodologies can stand as a research method by itself, but they also implemented tools such as interviews and ethnography to gather information to create the script or to follow up with what people shared during the performances. The use of these other methods did not intend to give 'validation' to the theatrical activities, but to add on to the research process.

Another aspect mentioned was credibility to local people. Our respondents said that they cannot speak for the locals regarding their credibility on the method. However, they observed that arts-based methods, specifically those associated with applied theatre are not commonly applied and local people are unaware of how to participate and what would be the possible outcomes. Our respondents highlighted the relevance of warm-up activities or games before the main theatrical activity can foster local people engage in performances. This reflects the nature of the participation process in applied theatre and the need for a space in which audience members can feel confident about 'coming into' the activity (Boal, 2013; Campbell, 2019; Heras & Tàbara, 2014). It was also mentioned that for building credibility in these methods for local people, it is key to have and share real expectations of the possible outcomes that can be reached with their participation in the activity. Other studies have mentioned that setting mutual expectations and building relations of trust and respect is key to co-create knowledge that leads to reflexive analysis and concerted action for change (Alkon, 2011; Reed et al., 2014).

4.3.4 Applied theatre as a tool in transformative spaces

Without transformative changes, humanity is at risk of continuing to degrade nature (Chan et al., 2020; Tschakert et al., 2017). Previous studies support the idea that arts-based methods can be a tool for generating transformative spaces (Charli-Joseph et al., 2018; Heras & Tàbara, 2014; Muhr, 2020; Pereira et al., 2020). In these spaces, participants can freely express different opinions and values towards nature and explore alternative socio-ecologic changes (Charli-Joseph et al., 2018; Muhr, 2020; Pereira et al., 2020). The understanding of philosophical connections between societies and nature through people's values can support changes as these underpin individual behaviours and, at a collective level, the societal paradigms from which institutions, rules, and norms emerge (Chan et al., 2020; Horcea-Milcu et al., 2019; Pereira et al., 2020). However, it is key that diverse participants can express themselves freely aside from those participants who usually dominate discussions (Pereira et al., 2020). Respondents in this research confirmed the potential of applied theatre for generating spaces where participants can freely expose different values and propose some ideas of change, specifically people who have been historically excluded. The following are some comments made by respondents regarding applied theatre potential:

'So this is the participation which is not only participation, it is the way of freedom as well. When somebody leaves the outdoors and goes to the stage to propose some change. It's not only participating, it's getting freedom. This is a way of exercising the freedom' (P3).

'This group of people that have been so ignored, you know, we're talking about colonial times. We talk talking about apartheid, we talking about post apartheid in South Africa in which they are still deprived in a variety of ways persistently. To see their story and have their story now on the Internet and or a place where they can refer people to it and show friends and family. That kind of spark to let people know that you matter is one of you know, one of the biggest steps towards building resilience and adaptive capacity, letting people know that things can change' (P1). Moreover, in a transformative space, participants can also explore problem reframing, reflexivity and negotiations to foster socio-ecological changes based on human agency, collective action and empathy (Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019). The work of Heras & Tàbara (2014) is an example of using performance arts-based methods to create spaces for negotiation and collective representation of paths for transformation. This was possible because these tools offered ways of expressing empathic experiences, enhancing the awareness of knowledge connectedness (Heras & Tàbara, 2014). In this research, collective action to foster actions to protect their forms to manage nature was also mentioned by our respondents as an outcome of using applied theatre. They commented that after implementing applied theatre tools, a network was created, connecting participants and civil society organizations to collaborative influence changes:

'During COVID they (the research team and some local people) created something called the coastal Justice Network and started moving funds to the fishers that we had met along the coastline (during the implementation of applied theatre activities) so that they could join a WhatsApp group together and support each other in those lockdown regulations that we had, which were preventing many of them from going on to the beach and fishing... So the play got us into a movement of environmental justice, theatre processes are just beautiful ways in which you try to knit together social fabric and hopefully make them more successful in changing some of the hearts and minds' (P 10).

Finally, applied theatre tools foster discussions on changes that might seem small and different from what was expected (by the researchers or environmental professionals, partly due to disciplinary conventions that still adhere to positivism) (Heras & Tàbara, 2014; Olvera-Hernandez et al., 2023; Sircar, 1981), but these small changes can still be triggers for larger transformations. For example, in applied theatre, Sircar (1981) mentioned, 'the sum total of all these little, almost all these little positive choices we take, can one day bring about the change we are all waiting for' (Sircar, 1981, p. 55). This was echoed by our respondents; as it was mentioned before, one of the main changes encountered was that people who have been marginalized decided to participate. While this change might seem small at first, these small but emotive changes have the potential to lead to meaningful changes based on empathic-collaborative work, such as the network mentioned in a previous comment. For this reason, more research on the long-term impacts associated with applied theatre tools in transformative spaces is needed.

4.4 Conclusion

Local people's values towards nature reflect how local people relate to nature, and representing them in decision-making is essential in making fair environmental decisions. Applied theatre is emerging as a mechanism to better represent local people's values towards nature in environmental decision-making. This research aimed to explore the views of practitioners of applied theatre in the context of environmental governance to uncover evidence regarding the use of applied theatre to bring to the fore local people's values, to discuss power differences in decision-making processes, and to foster changes towards sustainable transformations. The research also included operational aspects such as viability, cultural relevance and credibility, with a particular focus on the Global South.

Results show that applied theatre is seen as a tool that brings to the fore plural values people hold about nature, and these can be 'negotiated' as part of the performances, while participants were trading-off their views in the light of conflicts (based on local power differences) in environmental decision-making. In addition, applied theatre is an opening for local people to bring to the discussions their own issues, fostering some agency for people to bring to the table their own agenda regarding power differences in decision-making.

There are some practical aspects to be considered when using applied theatre methods in environmental governance. One primary aspect was implementing an ethics of care. This was mentioned in terms of caring about the participants and respectful facilitation of discussions (cultural relevance). To do this, personnel will need time to know the cultural context of the communities and to create a confidence link with the local people (viability). In addition, it will be necessary to have skilled facilitators (viability) to encourage people to participate on respectful discussions. To build credibility on these methods it is essential to have a clear aim and clear expectations on the type of outcomes. One of the outcomes of applied theatre is the possibility of being used as a tool in transformative space as it opens spaces in which local people can bring to the fore values and discuss problems based on power differences, imagining changes in the decision-making process. These changes, in a long-term process, could allow environmental decision-makers hearing different voices including those living in marginalized areas and who have been excluded (historically) form decision-making and to foster further transformational processes.

With this research, applied theatre is identified as a feasible method to open spaces where power differences can be discussed, and local people's values can be seen and represented in environmental decision-making. However, more research on the long-term impacts associated with applied theatre approaches to transformational processes still needs to be developed.

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Chapter 5

Applied theatre in environmental governance - discussion and conclusions

5.1. Introduction: Revisiting the research objectives/summary of findings

This PhD research was designed to explore the potential of performance arts-based methods in environmental governance. Specifically, this thesis adopted a groundbreaking approach to studying the use of applied theatre to bring to the fore local people's values and to discuss power differences in environmental decision-making. In doing so, I also explored some of the concerns that have impacted the credibility of these methods by environmental professionals (Heras & Tabara, 2014; O'Connor & Anderson, 2020), along with some practical aspects of its implementation such as viability and cultural relevance. Furthermore, as the research developed, interest in understanding the potential of applied theatre as a tool for interventions in transformation processes emerged. I addressed the potential of applied theatre to represent values and discuss power differences in environmental decision-making from different angles: with local communities (Forum Theatre application and individual in-depth interviews), environmental professionals at the national level (focus groups and interviews) and across different contexts/case studies (interviews to members of other projects). While this research focused on applied theatre as a research method, the findings are relevant to the use of performance arts-based methods for environmental governance more generally.

The rationale for this thesis is based on the challenges in environmental governance for representing local people's values in decision-making processes and consequently reach fairer decisions (Agarwal, 2009; Edwards et al., 2016; González-Hidalgo & Zografos, 2019). Participatory methods have been advocated as a mechanism to include marginalised voices into environmental decision-making; however, criticism is grounded in how the international agencies use participatory methods (Cooke & Kothari, 2001; Turnhout et al., 2020). For example, obscuring local power differences by uncritically celebrating 'the community' (Cooke & Kothari, 2001; Walsh & Burnett, 2021a; Williams, 2004), or shaping local knowledge to cover the necessity of quick and tangible results (Cooke & Kothari, 2001).

Performance arts-based methods (such as film, dance and theatre) have been put forward to cover some of the criticism. In this context, applied theatre can be particularly interesting, as the theatrical activities are centred on conflict based on power differences, assisting to reflect, expose and disrupt stereotypes and oppressive environments (e.g., exclusion from decision-making process) (Erwin et al., 2022; Guhrs et al., 2006; Heras & Tàbara, 2014). Despite this, applied theatre in environmental governance, with a focus on power differences and values towards nature, remains a largely unexplored research area. In this research, I aimed to explore applied theatre in its potential to foster the representation of local people's values and their interplay with power differences in environmental governance. In the following table 5.1, I present the outline of the objectives, research strategy, research questions and results. Table 5.1: Summary of objectives, research strategy, research questions and main findings

Objective 1 (Chapter 2): To examine the potential of Forum Theatre to encourage dialogues among local people regarding values and power differences through a case study.

Methods: A case study in two rural communities in Chiapas, Mexico. Using Forum Theatre and in-depth interviews. Questions Results • Forum Theatre format seems to enable complex values-based contexts to be staged and 1. Does Forum Theatre bring to the challenged. For example, fundamental values such as universalism and achievement were not fore local people's values towards necessarily antagonistic categories. Forum Theatre also seems to enable to explore how values interconnect. For example, assigned nature? • values were mentioned in terms of provisioning and regulating services, and these were connected to other types of values such as universalism or inclusion. • The operation of power in environmental decision-making portrayed in the script triggered 2. Does Forum Theatre open spaces people to discuss their own experiences of exclusion. for local people to discuss local • It was not possible to analyse experiences of exclusion as discrete categories. power differences in environmental • Forum Theatre demonstrated the assumptions about nature, gender roles, and related decision-making? obligations (family, care, inheritance, and future generations).

	•	Forum Theatre allowed challenging analytic views and to embrace more emotive and dynamics
3. Does Forum Theatre sustain		views on values.
transformation processes?	•	When using Forum Theatre, it was recommended to have long- term strategies to ensure that
		decision- makers, who represent another position of power, are exposed to these voices

Objective 2 (Chapter 3): To explore environmental professionals' views on the potential of performance arts-based methods in bringing to the fore local people's values and to discuss local power differences in environmental decision-making; and to what extent they see a role for these methods in environmental governance.

Methods: Views of environmental professionals at the national level in Mexico based on local communities application of Forum Theatre (from objective 1). Using Focus groups and interviews.

Questions	Results
1. Is Forum Theatre identified as a mechanism to reveal and bring to the fore local people's values by environmental professionals?	 Local people's values can be used to develop an understanding of a 'good' environmental decision-making (such as inclusion, equity, and solidarity). Forum Theatre can be an opportunity for exploring people's values as everyday experiences of their interaction with the ecosystem.
2. Is Forum Theatre is identified as a mechanism that opens spaces for local people to discuss about local power differences in environmental decision-making?	 In Forum Theatre participants might be open to changing learned behaviours such as respect and listening to authority rather than speaking to them. Forum Theatre also generated some concerns, such as the possibility of creating more conflicts by upsetting some powerful local people with the performances.

3. What are the environmental			
professionals' views regarding the			
use and role of Forum Theatre in			
environmental governance? (Using			
the criteria of viability, cultural			
relevance and credibility).			

Viability:

• Forum Theatre needs facilitators with knowledge of theatre practice and a trans-disciplinary approach to increase awareness of researcher's positions within epistemologies.

Cultural relevance:

- Forum Theatre as a method was seen as easily adaptable to different cultural contexts because the script is written to represent specific characteristics of that context.
- The idea of performing people's realities created concerns, as these can be taken by the audience as simplistic or disrespectful.

Credibility

- Follow-up activities in Forum Theatre interventions were mentioned to make this method feasible in environmental governance contexts.
- The need for implementing follow-up activities also uncovered existing power relations between environmental governance epistemologies in which some ways of knowing, such as science and economics, dominate policy and decision-making forums.
- The process of implementing these methods can be a way for environmental professionals and local people to get involved in long-term projects that can lead to desirable social-ecological transformations.

Objective 3 (Chapter 4): To uncover the opportunities and challenges of using applied theatre for environmental governance through the experiences of those practising it

Methods: Uncovering evidence from those practising applied theatre in a context of environmental governance across a variety of contexts in the Global South. Using, semi-structured interviews to a purposive sample of practitioners.

Questions	Results
1. To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool to encourage local people to reveal plural values towards nature?	 In applied theatre local people take a character/role to then participate in iterative value negotiations with other characters. In these negotiations practitioners can see, hear and feel local people's plural values as part of social interaction.
2. To what extent do practitioners of performance arts-based methods perceive applied theatre as a tool to encourage local people to dialogue about local power differences in environmental decision-making?	 In applied theatre local people discussed power differences mainly those between local people and government agencies. In applied theatre, local people have the agency to decide what topic to discuss, which might be different from what the research team expect.

3. What can be said about the	Viability:
viability, cultural relevance, and	• Beyond having facilitators with artistic skills, it is necessary to build relationships of trust with
credibility of the use of performance	the participants.
arts-based methods in	Cultural relevance:
environmental projects from the	 In applied theatre, social interactions are dynamic and difficult to predict.
perspective of practitioners of	• To create respectful dialogues, it is essential to implement an ethics of care approach.
performance arts-based methods?	Credibility:
	 Follow-up activities should not be used to give 'validation', but to add on to the research
	process.
	• To ensure the credibility of these methods with participants and practitioners, setting honest
	expectations is needed.
4. To what extent do practitioners of	Changes start the moment local people, who have been excluded, decide to participate.
performance arts-based methods	• The information gathered can also be used to support activism by civil society organizations.
perceive Applied Theatre as a tool in	• Interventions using applied theatre could lead to small but meaningful changes in processes of
socio-ecological transformations?	transformations.

5.2 Discussion and contribution of the thesis to Academia

This thesis offers a number of contributions which advance conceptual and empirical understanding of performance arts-based methods in environmental governance. In the next subsection I address these contributions by themes.

a) Values of local people

Decisions regarding resource use and management are influenced by the values of the actors involved (Edwards et al., 2016; Schulz, Martin-Ortega, Ioris, et al., 2017; Tschakert et al., 2017). Epistemic pluralism suggests there are multiple ways of conceptualising values within human-nature relationships (Horcea-Milcu et al., 2019; Kenter et al., 2019). New approaches to values have emerged from the idea that values are connected to worldviews, based on history, culture, geography, experience, and embodied experiences (Kenter et al., 2019). They intend to better reflect the complex relationships between humans and nature.

Environmental professionals, when they use conventional participatory methods regarding values, can shape local people's values with their own views on values or cover specific agendas (Cooke & Kothari, 2001; Turnhout et al., 2020). In this sense, an important critique to international or government agencies implementing conventional participatory approaches is that their agendas may influence value formation, determining and reshaping values instead of just eliciting pre-existing values which are expressed in other modes of cognitions (Himes & Muraca, 2018). Against this backdrop, arts-based methods can promote a broader range of participation (Edwards et al., 2016), as artists are unlikely to impose their own agenda on the participants, they are mainly focused by the evaluative criteria of arts, such as originality, creativity, and provocativeness (Edwards et al., 2016).

This research has contributed to this emerging literature (Edwards et al., 2016; Heras & Tàbara, 2014; Tremblay & Harris, 2018), exploring applied theatre methods (using the notion of plural values) to bring to the fore local people's values. In chapters 2 and 3, Forum theatre revealed how values towards nature do not emerge in isolation. Similar to what mentioned by Edward et al. (2016) values were constructed in the people's experiences, and they emerged interrelated and dynamic (therefore may change over time). For example, in Chapter 2, local people's values were associated with well-being for future generations, and with ecological benefits such as rain, but also with the inclusion of women for better forms of environmental governance. The values elicited during Forum Theatre were complex to categorize because the emotive narratives in which they emerged were also important in understanding those values. Regarding this, Muhr (2020) and Hensler et al. (2021) suggest the use of an arts-based tool kit to experiment and transform our ways of thinking, listening, participating, and better organizing the information to be able to analyze and integrate diverse values into decision making. This was also supported by Chapter 4, where the findings underlined the importance of emotive narratives to trigger spaces where it is possible to re-think, re-create and re-present reality to better understand values negotiations.

In this research, findings also demonstrated that applied theatre fostered some agency for people to actually bring to the table their own topics, hence the values they wanted to present. Thus, the values local people brought to the fore did not necessarily open discussions on what the research team expected based on their project's aims. This points out the potential of applied theatre methods to cover some of the flaws of conventional participatory methods, which are criticised for influencing, determining and shaping people's values following project agendas (Cooke & Kothari, 2001; Himes & Muraca, 2018; Turnhout et al., 2020).

All in all, applied theatre does not intend to be 'the best' method to categorize and assess the various values assigned to nature following rational and scientific arguments. However, this research puts forward that applied theatre can be an innovative method to support environmental professionals in eliciting people's preexisting values towards nature rather than determining values by political agendas.

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b) Power differences

As highlighted throughout this thesis, one barrier to achieving fair environmental decisions is entrenched power differences and the lack of representation of the diversity of local values in environmental decision-making. Participatory approaches have been increasingly implemented in the environmental realm with the aim of overcoming power differences (Challies et al., 2016; Reed, 2008). However, there is criticism grounded in the way international agencies use participatory methods as their engagement with power dynamics falls often short (Cooke & Kothari, 2001; Turnhout et al., 2020). Conventional participatory approaches have 'struggled' to deal with power and representation, frequently considering communities as homogeneous, rather than places of shifting alliances and power differences (Cooke & Kothari, 2001; Williams, 2004). In practice, local power differences might be reflected as people in positions of power imposing decisions excluding the voices and values of less powerful individuals and groups during the interventions (Elmhirst et al., 2017; IPBES, 2022). In this research, in chapter 2, using intersectionality in the design of Forum Theatre made it possible to elaborate a script to perform and explore local power differences as they are experienced in the communities. The representation and discussion of local shifting alliances and power differences in the performances let the participants empathised with the characters and expressed dissatisfaction over the conflicts, encouraged them to perform and discuss their own experiences with local power differences in environmental decision-making. In addition, in Chapter 3, findings showed that, in Forum Theatre, diverse participants can 'faced up to' (to some degree) situations where they have been excluded, providing an opportunity to change learned behaviours such as respect and listening to authority rather than speaking.

The possibility for local people to discuss their agenda is another benefit of applied theatre over conventional participatory methods mentioned in this research. Most interventions using conventional participatory methods tend to set the agenda, often giving benefits to certain groups of people over others (Cooke & Kothari, 2001; Lukes, 2005). For example, organizations prioritize their agenda,

misunderstanding it with the priorities and commitments of local people (e.g., controlling people's participation to shape local knowledge production to produce favourable results for their projects) (Cooke & Kothari, 2001; Walsh & Burnett, 2021). However using applied theatre, as it was mentioned in Chapter 4 (where multiple applications of applied theatre in a diversity of contexts) showed how local people actively brought the discussion their agenda, finding synergies and creating solidarities to 'imagine' changes in decision-making.

Despite of these benefits, for those environmental professionals with no experience with applied theatre tools, the idea of performing and discussing power differences generated some concerns such as the possibility of creating more conflicts by upsetting some powerful local people. This is an honest feeling also explored in Campbell (2019) and Walsh & Burnett (2021a), as environmental professionals need to care for the well-being of all participants. This research identified applied theatre as a safe space for local people to confront or negotiate with imagined power in diverse ways, due to the distance that performance and characters create between the participant and the situation or problem being explored (facilitate reflections from the safety of the role of the character). However, it is important to recognize that applied theatre is not consistently safe and its safeness depends on a rigorous ethical approach.

Overall, in this research applied theatre was identified as a safe space for local people to confront or negotiate with imagined power in diverse ways, having the potential over conventional participatory methods, to ethically embrace the challenges of exploring local power differences in environmental decision-making.

c) Viability, cultural reference and credibility

Despite the interest in applied theatre in environmental governance, prior to this research there was little information about how these tools are perceived by environmental professionals, such as policymakers and environmental NGOs. The views of environmental professionals are of critical importance due to their support
advising, designing, implementing and assessing environmental decisions (Martin-Ortega et al., 2019). However, if the use of art remains under-evaluated by environmental professionals there is a risk of continuing get involved with methods that are more prone to promote 'tokenistic' participation and eventually lead to unfair decisions (Cooke & Kothari, 2001; Prokopy, 2004). This thesis makes a significant contribution in this area, by researching on the practicality of these methods, which that can then build credibility with funders, academics, environmental professionals and local people (O'Connor & Anderson, 2020, p. 27). I used the criteria of viability, cultural relevance, and credibility to explore some practical aspects of the use of applied theatre in environmental governance with environmental professionals.

Viability

Having a trained facilitator in environmental decision-making is key to dealing with explicit and implicit power dynamics (Ranger et al., 2016). In performance artsbased methods, they require knowledge of theatre practice for developing stories and characters (Balfour, 2020). The findings in Chapter 2 underlined that the support of performers/facilitators is key for applying tools related to applied theatre, to create a character distance, allowing reflections on local power differences from the safety of the role of the character. However, implementing these tools is not just about the facilitation process during the activity, it is also about 'having a cup of tea, chatting and listening to local people' (Balfour, 2020, p. 9). In chapter 4, time was also identified as another aspect associated with viability; it is a crucial aspect for creating relationships with locals based on trustworthiness.

In Chapter 4, findings also demonstrated that applied theatre could be used as a dissemination method (being this a most common form of using it in environmental research projects); highlighted the potential of applied theatre to involve local people in dialogues, in which they are not just passive recipients of information but active participants discussing academic results that affect them directly. This proved that applied theatre tools can be part of a toolkit in participatory action research as encourage participants to critically reflect about academic results

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(Heras & Tàbara, 2014). In this research, performance arts-based methods are identified as tools that emphasise the virtues of collaboration, receptivity and openendedness; and these will requires killed facilitators on performing arts, honest relationships with locals and collaborative work.

Cultural relevance

Cultural relevance in this research focused on the importance, in environmental governance projects, of understanding local contexts; adapting the methods to respect and embrace different groups of people based on their abilities, language, and traditions (Turnhout et al., 2020; Walsh & Burnett, 2021b). Understanding participants' cultural contexts is required to avoid constraining participation (Devente et al., 2016; Williams, 2004), for example, to adequate the methods to participants' skills, availability, or capabilities (Kenter et al., 2014; Reed, 2008). In this research, the reflection on these aspects in chapters 3 and 4 was elaborated within the ethics approach. Ethics allow approaching the local participants and their cultural context with respect, reflecting on aspects such as local people's availability, selecting an accessible place for the participants, and language needs (Snyder-Young, 2022). Ethics requires a bundle of principles and protocols, in which the main principle is always 'do no harm'; it also focuses on maximises benefits for society, respecting privacy, and respecting the rights and dignity of participants (individuals and groups) (Brasher, 2020; Maiter et al., 2008). In applied theatre tools, ethics is remarkably important as participants can feel discomfort with the performances of conflicts of power (Sadeghi-Yekta & Prendergast, 2022). The findings in Chapter 3 confirmed how the ethical approach is an important aspect to avoid simplistic performances that might upset participants.

In Chapter 4, findings described the ethics approach in applied theatre as an ethic of care. Ethics of care, is a moral theory that involves the active acceptance of responsibility for particular others to foster mutual trust, embrace conflicts to challenge power dynamics, and to see those individuals empowered rather than maintaining a state of passive compliance and dependency (Sadeghi-Yekta & Prendergast, 2022; Staffa et al., 2021). In chapter 4, ethics of care was described as

the precautions needed to not harm people during the performances and facilitation. Specifically, it was mentioned the importance of taking care of how the research team approach the communities or participants, care about the elaboration of the script, about how practitioners perform the local realities, how to facilitate the participation process, and how the research team present results and following activities. For this, it also implies long-term commitments within pluralistic research collaborations (Staffa et al., 2021).

Over all, the adaptability of these method to different cultural and socio-political contexts relies on a rigorous ethical approach (Sadeghi-Yekta & Prendergast, 2022; Staffa et al., 2021).

Credibility

In applied theatre tools such as Forum Theatre, the central objective is to allow participants to explore different solutions without the intention of reaching any final solution (Boal, 2013). This might therefore not always be 'defensible and useful' in the eyes of some environmental professionals (Devente et al., 2016; Muhr, 2020). This was mentioned in the findings in Chapter 3, environmental professionals were concerned about finding support to implement these methods due to difficulties to offer tangible results or outputs. As an answer to this, it has been recommended that arts-based activities be implemented along with quantitative or qualitative methods to assure better analyses and interpretations (Muhr, 2020; Turnhout et al., 2020). However, in chapter 4, practitioners mentioned that the use of these other methods, together with applied theatre tools, is not intended to give 'validation' to the results but to add to the research process.

The previous results confirm the idea that performance arts-based methods face particular challenges in being seen as credible, producing valid and usable insights, by professionals and funders (O'Connor & Anderson, 2015). However, these challenges and specifically the need of implementing other methods (for validation or to add something) can be a reflection on the existing power relations between

environmental governance epistemologies in which some ways of knowing dominate decision-making processes (e.g. quantitative metrics of assessment).

In this thesis, I mentioned that applied theatre does not intend to be 'the best' method to categorize and assess the various values assigned to nature following rational and scientific arguments, as some of the most conventional environmental valuation methods do. In this sense, to ensure the credibility of these methods it is needed to set honest expectations of the type of outcomes that can be reached and establish long-term commitments through the implementation of follow-up activities.

d) Potential for Transformation

Transformative change is necessary to decrease actions that degrade nature with consequences for nature's crucial contributions to people (Chan et al., 2020; Tschakert et al., 2017). Transformative spaces create openings to participants can express freely different opinions and values towards socio-ecological changes based on empathy (Charli-Joseph et al., 2018; Muhr, 2020; Pereira et al., 2020). Findings from this research support that applied theatre can open spaces for local people to bring to the fore values towards nature in emotive narratives (Edwards et al., 2016; Hensler et al., 2021). For example, in Chapter 2, Forum Theatre had the potential to bring plural values placed in nature to the fore in a more emotional, dynamic and collective form that goes to foster changes based on empathy. Moreover, Forum Theatre helped me and the environmental professionals to understand how values towards nature are interconnected, shared and constructed based on people's experiences with nature. This was confirmed in Chapter 3, when environmental professionals, during the Forum Theatre, identified values immersed in emotive narratives regarding people's experiences with nature, allowing them to identify diverse local people's values beyond the ones associated with the market (beyond analytical views on values).

The understanding of emotional and philosophical connections between societies and nature through people's values can support a change in behaviours and possible changes for transformations (Chan et al., 2020; Horcea-Milcu et al., 2019). Values can impact points related to intents, as values underpin individual behaviours and, at a collective level, the societal paradigms from which institutions, rules, and norms emerge (Chan et al., 2020; Horcea-Milcu et al., 2019; Pereira et al., 2020). However, it is central to challenge pre-established analytical views on values allowing the development of understandings of emotional and philosophical connections to nature (Chan et al., 2020; Horcea-Milcu et al., 2019).

In addition, in transformative spaces participants get involved in problem reframing and negotiations based on human agency and collective action, in which ideas for changes can emerge (Charli-Joseph et al., 2018; Pereira et al., 2020); ideas aside from those who usually dominate discussions (Pereira et al., 2020). The findings in this research support this. For example, in Chapters 3 and 4, results show that environmental professionals identified applied theatre as a tool that can encourage participants to discuss their problems regarding local power differences in environmental decision-making and to act collectively (performance) toward changing learned behaviour that constrains them from influencing environmental decisions. In Chapter 4, practitioners added that despite changes proposed with these methods can be seen as 'small' by policy-makers, these are meaningful and can be represented as collective actions to 'imagine' together paths for transformation. In addition, in Chapter 4, practitioners mentioned that these tools encourage people who have been historically excluded from participating, to go on stage and perform their experiences of exclusion.

Overall, this research reinforces the idea that performance arts-based methods can contribute to transformational processes, opening spaces to challenge preestablished analytical views on values that might foster changes in societal paradigms from which institutions, rules, and norms emerge (Charli-Joseph et al., 2018; Hensler et al., 2021; Heras & Tàbara, 2014; Muhr, 2020). In addition, applied theatre tools encourage people to participate in problems-based discussions on power differences in environmental decision-making and 'imaging' changes based on empathy and collaborative work (Brown et al., 2017; Heras & Tàbara, 2014; Muhr, 2020). In environmental governance contexts, applied theatre can lead to a better representation of local people's values in environmental decision-making which could result in changes towards fairer environmental decisions. However, more research on the long-term impacts of applied theatre in transformative spaces in the realm of environmental governance is still needed.

e) Environmental Governance

In this research, findings showed that applied theatre tools can be spaces for local people to bring to the fore their values towards nature, offering the opportunity to other actors such as environmental professionals to identify local people's values. This opportunity, in environmental governance can cover aspect related to the inclusion and fairness (which are two principles supporting democratic processes) (Bevir, 2009; Lockwood et al., 2010). In this context, inclusion is about having an awareness of a diversity of actors and their values and fairness offers respect and attention to diverse actors' views in the absence of personal bias but also challenging the status quo (power differences) (Bevir, 2011; Lockwood et al., 2010). For example, findings in Chapter 2 demonstrate that Forum Theatre opened spaces for local people to bring to the fore diverse and interconnected values in an emotive and dynamic form that goes beyond pre-established analytical views on values. Findings in chapters 3 and 4 showed that environmental professionals and practitioners perceived that this form of approach to values better reflects the complexity of human-nature relationships, and it can improve the representation of local knowledge in decision-making.

In terms of power differences, participatory methods have been advocated as mechanisms to include marginalised voices in environmental governance (Bevir, 2011; Rhodes, 2016). However, they have not yet been able to fully engage with local power differences (Cooke & Kothari, 2001; Mohan & Stokke, 2000; Rahnema, 1990). In this research, findings showed that applied theatre covered some of the difficulties with conventional participatory methods. For example, in Chapter 2, applied theatre was a mechanism for local people to challenge powerful characters

(status quo) and dialogue on conflicts based on power differences in decisionmaking processes (in governance context). In chapters 3 and 4 environmental professionals and practitioners confirmed the potential of performance arts-based methods (Brown et al., 2017; Heras & Tàbara, 2014; Muhr, 2020); they identified applied theatre as a space for experimentation and imagination that immediately encourages people to perform how local power differences are experienced in their lives and fictional actions to blur them. This confirm that in this applied theatre activities people can feel empathy with the characters and dissatisfaction over the conflicts performed, and these emotions are key triggers of participation, motivating diverse members of the communities to go on stage and explore their 'solutions' to the conflicts (Boal, 2013; Campbell, 2019; Heras & Tàbara, 2014). This research also confirms previous studies that demonstrates that arts-based methods, can be a space to empathetically dialogue about whose values count, and how such values are represented (or not) in environmental decision-making, as part of the more complex context of governance processes (Brown et al., 2017; Edwards et al., 2016; Fisher et al., 2021; Hensler et al., 2021; Muhr, 2020).

Therefore, applied theatre can be a space for transformation in governance providing openings to explore local knowledge such as values, discussing and overcoming differences of power among actors (challenging the status quo) (Charli-Joseph et al., 2018; Horcea-Milcu et al., 2019). This can lead to changes towards better representations of diverse actors in environmental decision making, and fair environmental governance processes.

5.3 Suggestions for future research

In this section general limitations incurred on this thesis are outlined and suggestions on how they could be addressed via future research are provided. The intention is to propose directions for future research which could build on the theoretical and empirical contributions of this thesis.

1) I used the Value Landscape Approach proposed by Schulz et al. (2017) to analyse values in chapters 2 and 3. This approach is particularly suitable to this research because of its explicit focus on the interrelationships between the values towards

nature and environmental governance. However, in the findings, I found that the values elicited during Forum Theatre were complex to categorize because they were expressed as everyday life experiences and the emotive narratives in which they emerged were also important in understanding those values. For this reason, it might be interesting for future to explore local people's values in the narratives of forum theatre with an alternative plural value framework, such as relational values or shared and social values (Chan et al., 2018; Kenter et al., 2015). For example, a relational value is an approach that attributes importance to the significant relations and responsibilities between humans and nature (Chan et al., 2018; Chan et al., 2016). Such relations might be articulated in the forms of stories, myths, metaphors, ethical roles (e.g., stewardship), social practices, and ontological frameworks (Chan et al., 2018; Tadaki et al., 2017).

2) In this thesis, there are two chapters in which the views of environmental professionals or practitioners were explored. In these chapters the methods used were focus groups and interviews, but it would have been very valuable to explore these issues through direct forum applications with the professionals themselves¹². I recognize the importance of experiencing this method for a better understanding of how Forum Theatre opens spaces for participants' engagement to discuss certain conflicts from their personal experiences. However, during the time this research was implemented restrictions related to COVID-19 were in place, making difficult to implement a Forum Theatre with the environmental professionals. I suggest as future research exploring Forum Theatre to understand the positionality of other actors involved in environmental decision-making.

3) In Heras & Tàbara (2014), applied theatre was used to assess theatre-based participatory tools and methods at supporting active learning. In that research they mentioned as a future research direction the following: 'How can we assess the quality and effectiveness of applied theatre in sustainability learning and

¹²There is an example of the use of applied theatre to facilitate transdisciplinary dialogue with academics to engage them with the heart as well as the mind on sustainability themes (Freiburg Scientific Theatre, 2023).

transformation taking into account the multiple aesthetic and emotional dimensions which go beyond the ordinary scientific analysis and methods' (p. 396). This was also raised in this thesis, by the interviewed environmental professionals in Mexico, in Chapter 3. They commented on the importance of follow-up activities for a better quality of results from the Forum Theatre. However, in Chapter 4, practitioners were confident in the credibility of the method and the follow-up activities were identified just as complementary tools to go along with processes of change. As a future research direction, it might be interesting to elaborate on the understanding of the necessity of assessing the quality (conventional evaluation frameworks) of applied theatre in environmental governance. This can be oriented as a reflection on the existing power relations between environmental governance epistemologies in which some ways of knowing, such as science and economics, dominate policy and decision-making processes.

5.4 General Conclusions

Participatory methods have been advocated as a mechanism to include marginalised voices into environmental decision-making; however, they have not yet been able to fully engage with power differences. Performance-based methods (such as film, dance and theatre) have been put forward to represent these values and power differences fairly. In this context, the use of applied theatre in environmental projects is growing with examples related to participatory environmental policy making (Erwin et al., 2022; Guhrs et al., 2006; Heras et al., 2016; Morales & Harris, 2014). However, very few of these focus on power dynamics and values; and, in general, arts-based approaches are still far from having been sufficiently explored in the context of environmental governance and decision making. In this research, I explored applied theatre in its potential to foster representation of local people's values and their interplay with power differences in environmental governance. Elaborating on this understanding I look forward to encouraging professionals to use these methods for fair environmental decision-making.

In this research, I provided evidence on the potential of applied theatre tools to bring to the fore local people's values. These were plural, interconnected and contextualized by people's experiences regarding nature (use and management) and environmental decisions. One key finding was the possibility of 'negotiating' values as part of the performances, while participants discussed their views on the conflicts in environmental decision-making. This showed applied theatre tools as an opening to embrace, dialogue and 'face up to' power differences in decision-making from the safety of the emotive performances; i.e., discussing power differences in the space between the self and the fictitious other (character). Furthermore, as performance arts-based methods bring plural values placed in nature to the fore in a more emotive and dynamic form (that goes beyond analytical views on values), these can serve as intervention points for facilitating transformation processes.

Findings also confirmed that performance arts-based methods share challenges with conventional participatory methods such as the need for skilled facilitators, time and a rigorous ethical approach. When using applied theatre tools in environmental governance, implementing an ethics of care approach is remarkably important as participants can feel discomfort with the performances of sensitive topics (experiences of exclusion). In addition, findings evidenced that the implementation of previous or follow-up methods might be seen as complementary but not essential for building credibility of applied theatre tools as research methods.

This thesis contributes to academic discussions and offers empirical evidence on the potential of implementing applied theatre methods to bring to the fore local people's plural values towards nature, and to discuss and imagine changes to conflict based on power differences in environmental decision-making. This will be of interest to scholars, environmental professionals, activists, and practitioners who seek information to encourage them to implement innovative methods for better representation of local people's values, and consequently fairer environmental decisions.

5.5 References

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Appendices: Supplementary materials

Appendix A: Supplementary materials for chapter 2

Appendix A1: Script Forum Theatre (Chapter 2 – Objective 1)

This script is the main material used for the implementation of the Forum Theatre in the two rural communities, in Chiapas, Mexico.

Script:

This first section with the overview is intended to help the performers understand the characters and their motivations so when it comes to the Forum section, they are better able to use detail (see table A1.1 for more information on the characters, arguments and characterisation). Obviously, as a script this is one representation: it cannot mean everything at the same time, as there have been choices to foreground certain issues. The script in Forum Theatre is intended to be provocative: i.e. – highlight issues that need to change. We are using the scenarios to consult the audience about what needs to change and how. It is *like* life, but not their life. Thus, the scenes need to reflect what could be true at the level of power, status, decision making, and values and not at the level of character (gender, age or family situation).

Intro for context:

Payments for ecosystem services reward people who undertake nature conservation/ restoration activities in recognition that by doing so (instead e.g. deforestation or farming) the provide/secure benefits (ecosystem services) that benefit others/the wider society. One criticism is that they are seen as potentially converting these conservation practices into a way of commodifying nature.

Those that hold land rights (mostly men) decide which project they want to implement (from the range of projects that the government promote). Some usually decide the most profit. (i.e.: limited perception of values/ and timescales – a focus on short term profits can be an issue). But not all want more profit, and there are some that want to keep community traditions, etc.

Characters (Type / name/ form of address)	Characteristics and arguments (i.e.: need to identify their standpoint/ will/ need)	Characterization
Comisariado (chief) with land-rights who wants to reforest (in Galacia to conserve) to receive payment for that but at community level doesn't have enough	He is trying to convince more people to conserve – firmly on the side of ecotourism. What does he want:	He has a need to keep the community with reduced tension but also wants to attract more projects/ investment.
people who want to conserve in order to receive payment as a community	Profit/ more investments/ quicker decisions. And he is motivated by conservation, i.e. he genuinely wants to	i.e: with the ultimate motivation that forest conservation is well aligned with economic development/reconciled.
Man, 35-year-old, married, 6 kids, he has basic education; he knows how to speak in public, funny. The wife is at home	preserve the forest, but he adopts the idea that for conservation to really work, it has to be aligned with economic development, as opposed to more eco-centric views which promote	He is fair but also more likely to pay
always, he is like "charming-patriarchy".	conservation for the intrinsic values of nature. He could be convinced that there will be more support coming	attention to the men. He finds the women's projects are not profitable enough, and is quite conservative in his
	for conservation activities in the long run so that both conservation and economic development are aligned. But, he has a focus on more short term profits.	attitudes, so he doesn't like the idea of women trying things that are new.
	Problems: He has a fight to settle between the ones that are deforesting	He is very ambitious, he is looking for projects to increase his money and also he wants the appreciation of the men in the
	There is tension with the women whose projects have stopped being funded	town. He is very macho, he loves women, at home. (He is not mean, he does not
	There is a conflict of interests because he is also the uncle of the 'ecotourism guy'.	want to harm anyone, it is the system that taught him that he needs wife, money and appreciation to be a successful men).
	Moral issue: authority/subversion care/harm	

Table A1.1: Characters, arguments and characterisation (for Chapter 2)

Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	characterisation
An older woman Doña Ofelia that has		She is looking after her elderly parent and
mango trees and she want to make	What does she want:	a child.
mango jams.	To use her land productively;	
	To work with her skills;	As a widow, she relies on govt support,
50 years old, she did not finish primary education, she is semi-literate, she is a widow. She lives from economic	To assert her capacity to do the work but just not on the same terms as the men.	but is now looking for more money.
government support, milpa (corn in a	Opposition: but it was difficult to produce on time.	
piece of land a bit far away from her	(competing issues: eg, she has a problem with the higher targets	She is very lovely, everyone loves her
house), fruit and chicken (in the house	because she needs to maintain the household/ other obligations	food, and most of the women go to her to
yard).	and not enough income to pay additional workers).	ask for advice. She has fruit trees but she needs more hands to produce a product
	Why this character is here?	that she can really be sold. She always
	To understand ways to promote her participation and strategies to put their values and ideas into the decision-making.	ends selling her mangos to the "coyote" an intermediary who pays little money to her (almost nothing), and then this person
	Conservation projects that does not fit with the traditional ways	takes the fruits to the city where he gets a
	of conservation: she has just acahuales (medium size trees) and	lot of money. She needs a strong network
	the payment look for tall selva-).	to help her.
	Contradiction between local and external definitions of	
	conservation.	
		She has attachment to traditional views,
	Individual/collective	i.e. wants to stick to them
	Hurry / patience	
	Empathy/indifference	(ie: not only about the forest, but about
		making the best of her situation in the

	She is an ejidataria (she has land rights) but she is older and she does not know or like to speak in public, so men respect her but they don't take her ideas into account	way she knows – mango jam! – not trying to challenge the status quo) Need to conceive of what someone who really values tradition think about the forest, its values, and its relation to communities.
Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	characterisation
One young woman that lives with the mother in law that cannot ask for projects because she and her husband do not have a piece of land. Young women 17-18 years old, married, 1 baby, with a men without land rights, she has basic education (her family in law thinks that if she goes alone to the parcel the other people would think that she still single). She must go to the parcela with her mother in-law or stay at home helping with the cleaning)	 What does she want: autonomy, independence and she has some competing issues. She cannot strength her network because she has to be at home helping with the cleaning. She knows the forest so she can guide tours but no one agrees with that idea because something could happen to her (women need to stay at home) Moral issue: Little trust Background: she used to work on a group project and some women participating in the chicken food production group ended up angry with each other because the project did not work out. Moral issue: fairness/ cheating Authority/ subversion 	She is stressed and frustrated. She is feeling hopeless about the situation and she loses her temper. She now is married living with her family in law. The family really likes her, but they think that women should help in the house, so she is all day helping at home and she has no time to go outside. She misses her autonomy, doing something outside the household She is in favour of ecotourism projects for autonomy/ economic reasons. She likes the forest and wants to work there.

Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	characterisation
One young man (Pablo) with a family tie		He is quite proud
to land-rights (ie, several members of the	What does he want:	He has a passion and ambition to build
family have rights) working in ecotourism	He wants to increase ecotourism	this as he has a tie to the land.
	He wants to make his village understand the importance of	
30 years old, further education and he	conservation vs livestock/palm oil/other productive activities	
has taken training (This means good	related to deforestation	He has an interest in finding alternative
connection with government agencies		livelihoods through ecotourism, though
and NGOS) he is married, 1 little kid,	Opposition:	for that it is necessary that others with
starting his family.	other people in the community are cutting down the forest	land conserve / participate in the project.
	because they want to introduce livestock. Therefore, some	
	conservation areas will be lost, that means less animals (the	
	majority of the tourist go there to bird watching, without the	Attitudes to women: positive, as he is
	conservation area the number of birds would be reduced).	widely travelled and goes elsewhere as
		part of ecotourism networks
	Moral issue:	
	Sanctity/ degradation	
	fairness/cheating	He grew up in a family with a stable
	loyalty/betrayal	economic position, has land, he is a man.
	trust/fear	His parent has "restaurant" where most o
	Environmentality	the technical personal from government
	(Singh, 2013)	and NGOs had lunch or dinner, maybe
		they used to rent a room for them, so he
		grew up surrounded by these outsiders.
	Values: driven by a 'belief' that humans have a responsibility	
	towards the environment and that the community should be	
	stewards.	

	He is powerful and he has become the protector of the forest and wants all of the people take care of the forest. This care that according to the literature has been there always (there: rural/indigenas communities) now emerge with these kinds of characters that they are well trained by outsiders (government or NGOs) and use the government language to promote care	
Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	Characterization
A man with livestock (Israel)	What does he want:	'Productivist': focused on increasing
Man, 45 years old, secondary education,	He wants more space so he is cutting down trees for his	production without paying any attention
he is good at public speeches, people like	livestock.	to the environment (as long as it doesn't
him because he gives loans and rides		impact his business). This would align well
when people really need them. People	Problem:	with the lack of skills to engage in
respect him however, they know that what he does is not good for the	He doesn't have the skills to run his project.	conservation activities (only skills to run the business to maximize financial gains)
environment ((Doyon and Sabinot, 2014)	Adding the sustainable part in their everyday needs more work	and also his view that people in the
	hours.	community might be passive, reactive,
		etc.
	Has little trust because he keeps getting pushed to diversify and	
	he does not want to give up his livestock.	He has does not have too much time for
		livestock as he lives in a town nearby, so
	Has a bad attitude towards women's inclusion.	he's not based permanently at the community (therefore it's harder / more
	He went to USA. He inherited the livestock but was able to	costly to control what happens with his
	expand the business after he went to the US / saved	business, doing things that require more
	moneyand this expansion is mainly based on accumulation of	presence, etc.) However, his family still

	 land/animals., Now he thinks that people in the communities are poor because they want to continue doing what they do (taking care the forest and he prefer business). He might also have the view that policies keep changing, hence the mistrust. Moral issue: care/ harm fairness/cheating 	live there. He maintains livestock in some hectares of his "parcela" (piece of land) and, at the same time, receives money through Payment for Ecosystem Services for the hectares with forest it is not white or black, they decide how many hectares they keep on conservation or the
	Indigenous-rural/development Why this character is here? To face the powerful people (economically speaking). To know,	CONAFOR (National Commission for Forestry) recognized as subject to receive PES
	values attached to the future of nature in the community.	
Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	characterisation
Resident (older man) (ejidatario)	Someone who is against the PES projects: (doubt, etc). Little confidence in the authorities outside the ejido, based on	
	previous failed projects/wider political issues.	
Milpa producer: an elder guy that does traditional agriculture. Milpa is (corn, been, pepper, squash, and other basic	Remembers bad experiences.	
products for food production)	Has little trust in ecosystem services based approaches and the commodification of nature. Is it because of a moral reasoning (they have the wrong values towards what nature is, and what it	
Pioneers 'sent' there after they were allocated land by the government.	should be for), or pragmatic reasons (they will fail, or backfire)? Or a combination of these and other things?	

This character recalls all the hardships of arriving to the middle of the rainforest, they had to fly in food, there were no roads, basic services and the first thing they had to do was to clear the forest to start producing something there. But he also talked about all the problems linked to clearing too much and not having water / facing all the problems linked to degradation.	Moral issue: Attachment to work and method of farming: milpa Autonomy to produce crops This character could be someone who is proud of that farming background / their titanic effort to 'conquer' the forest, but at the same time who thinks that some sort of balance needs to be achieved.	
Characters (Type / name/ form of address)	Characteristics and arguments (ie: need to identify their standpoint/ will/ need)	characterisation
Govt agent	Double role (note we are not investing too much explanation in these technical characters as they have very short input).	Has glasses Boots and a cap with a similar logo of government
Narrator	Double role	Must have a traditional blanket or something similar

Script: (aiming for 20 minutes – 25 minutes): Each scene starts with a still image – a graphic illustration of the conflict in the scene.

Scene 1: Opening scene after a general assembly

As they come out of an informal community meeting

Narrator: On a day much like today, in a place much like here, we meet the people of Las Delicias village. They are coming out of an assembly gathered to consider the future. The future of their location, the future of their community.

In our scene, we will see something about payment for ecosystem services.

Everyone we meet has a story to tell. Everyone we meet has a problem to resolve. The question is 'whose story is the loudest'? Whose problem is the greatest? How will it be resolved? And why do they make these decisions?

Song to get into position.

Government agent: (shaking hands with someone as they leave) Thank you everyone, yes, and remember, at the formal assembly tomorrow, we will be voting! We would like to give support to create more projects that promote the conservation of the forest, and in some places reforestation! We want the people of Las Delicias community to be rewarded for the good service they provide by nurturing our nature. (he takes off his glasses to wipe them) We want to promote Ecotourism!

Community members chorus:

- We want our children to find work, but not like this. Not like this.
- Conservation again? But what about farming?
- You know that we want more livestock or other products that we can sell in Comitan or Palenque, there is not a project for that?
- Send this man away.
- Look around, the people have such different responses.
- o **Wait....**
- Narrator: The townspeople go away thinking about how they can vote: they have been told the projects must support the different eco-touristic camping areas. Like hiking paths, bird watching, kayak tours, nocturne hikes to look at fauna... The activities need to promote the conservation of the forest to bring more tourists. You see, the government agent thinks there are many benefits! But the townsfolk are not always sure.

Government agent: Conservation will also be part of the project of payment for ecosystem services! You understand? Yes. Well. See you tomorrow.

Scene 2: Pablo about the value of the ecotourism services

(We see him preparing his speech for tomorrow to his family)

OK – I am nervous for tomorrow. Listen to my ideas.

Fellow residents: the time is now for a challenge to protect the past for the future. Seriously! They want to pay us to keep our forest protected. It's an honour! For instance, is it not wonderful to lead hikes in the forest we know so well? You can tell stories, walk all day, and people will be impressed about your knowledge of the local plants!

We hope to include the whole community in the ecotourism projects – this will be an opportunity for everyone. Not just the men farming, but women's initiatives too. Last meeting, we discussed the impacts of palm oil production on the forest. I respect the community's wishes, and I am also here to inform you of the increased benefits of the ecotourism projects: if we continue with conservation efforts and reforestation, we can care for the resources. We can show the best of our area! And we can welcome these guests with support from NGOs. I know we have some differences to overcome, fellow residents. This is a lot of change. But we have a responsibility to the environment, and we can protect its wonders.

What do you think? Will they vote for the project?

Scene 3: Mango tree woman (Doña Ofelia) in a meeting with Comisariado

- Doña Ofelia: I'm glad I saw you passing. Comisariado, you are well known for being a fair and considerate man, who takes care of the negotiations of these projects. I am really in need now. You know I'm looking after my niece, and we need more plans for survival.
- Comisariado: Yes Doña Ofelia, and how is your husband, and your mother? I hear she's taken a turn for the worse?
- Doña Ofelia: Well, thank you for asking, but as I know you are in a hurry, I had an urgent plea to put to you before the next meeting for a project I want to propose. I have heard about the government proposals but I will be unable to benefit from that and I have some other ideas I want to put forward.
- Comisariado: You know, I can say yes, but it is not *my* decision. You should bring the problem to the general assembly for wider deliberation and we can hear about it there. Then, the people can vote on it.
- Doña Ofelia: Yes, sir, I know it is not usual but I did try and discuss this last month at the meeting and I was told we ran out of time and that the group projects needed to be discussed first. Forgive me, but I think this is really important to keep the women engaged in collective projects. I can't lead a hike or a kayak tour – that is for the young men! I can't do nothing, and I have land that is already bearing fruit. I take care of my trees but I cannot do everything by myself, if the projects would be collective doña Maria and

doña Claudia could help me. But... as I told everyone at the last meeting, it is simply impossible for me to meet the targets of the projects. And my land won't get payment for conservation because I just have acahuales (medium size trees) and the payment is for high selva. I am not able to work alone because I have my family...

- Comisariado: Yes, yes, and that is important. Some would say, the MOST important. Last year the government or an NGO gave you chickens, but all of them died. It is not that I am *against* women's projects but you are very busy at home. I think it is better if we focused on projects that can bring money to the community as the payment for ecosystem services does. You see, we do not want the children to raise themselves, or the tamales to grow *directly* from the ground. *Someone* has to grind the corn. I mean (*clears throat*) You know how much we appreciate your tamales! There are some things that are more precious to us -
- Doña Ofelia: Thank you, sir but I do not want to discuss my tamales, I want to talk about making jam from my mangos. It is delicious and you know, people want it. But it's difficult to get all the material, you know, pectin, we need to go to the city and I cannot do that.
- Comisariado: *(he's preparing to go, putting on his hat again)* I need to think what's best for the whole village, not just one family. Even if I knew your father (RIP). Maybe you can bring some jam to the next meeting? Thank you for that suggestion. We'll see you there. Goodbye, Doña Ofelia.

Chorus 2:

- It's a competition of will and desire.
- But if we listen to the official, we have to spend the money ourselves.
- Who benefits? Who benefits?
- The tourists that's who.
- And if I wait and choose agriculture subsidies, I can pay for my children to get educated.
- Who benefits? Who benefits?

Scene 4: argument between the resident (Mr ejidatario) and man with livestock (Israel)

(sitting with a coffee)

Mr ejidatario: Well, Israel, what do you think? You heard the officials – they WANT our area to have the ecotourism project. It seems there are people that want to see nature as the 'richest place to appreciate humanity'.

Israel: Come on, 'friend'. We know that ecotourism project will just make more work – what I want is to increase my production! All this expectation, it means I have to change my approach. The latest problem was when Pablo told me I could not cut down more trees for new grazing for my livestock. I just want to do what I do. I want to maximise the business, you understand, friend?

- Mr ejidatario: And these management systems are causing problems. Social problems. Marginalisation.
- Israel: Yes, that's where we agree: especially the women getting involved. I don't support that, it's causing more problems. No one knows if they are coming or going, our way of life will disappear. We are here to *work* the land, not to sit and look at it! Who cares if there is a little less forest, if it means we have the space for more livestock?
- Mr ejidatorio: Well you know what they say?: Without forest there is not paradise for tourists: not animals, not trees, not forest sounds...who wants to ride 5-6 hours to see cows and palm trees? Hahaha. We need to think about what these people want. Because I think there's a problem here with a parade of outsiders coming to buy a little experience of paradise.
- Israel: Yes, I see the problem. And we know from recent years that there are lots of promises but then things don't turn out that well in reality. All I am saying is our villagers are poor because they want to continue doing what they do. They talk about taking care of the forest, while I prefer business.
- Mr ejidatorio: Israel, I understand you. But they are very focused on this project. I think the Comisariado has already decided. And Pablo, you know: He is very convincing! What are you going to do at the meeting?

Scene 5: Young woman (Marcela) who wants her own project (complaining to her husband)

Marcela: (the husband has his back to the audience, and she is doing some kind of work – mopping the floor)

You know, I am sick of this. I don't like this kind of life, here living with your family, your mother... You know what she said to me this morning: 'You should be working harder...'. She was blaming me because we didn't get a further project for the chicken food. I am sick of talking about the chicken project. Anyway, my dear:

I would like to participate in the ecotourism project; I can help making food for the tourists or take them for a tour in my father's milpa.

You know, she complained to me that we lost the contract because they kept staying home to look after sick children. It was their fault, because of course we could not deliver

the production in time for the contractors. How would you expect to do that? *You* don't get to complain that I lost that job.

I tried my best. I left home early, but every day I had to return here and clean. In your mother's house. It is not my house, and we don't have any land. Five years, now. That is why I am sad and furious. And stuck. Because we are here and I have no way to get another project. I am forced to do chicken food. For someone else. I don't even like chickens. Or chicken food. Or this house. Or you, I think.

I don't know what your own plan is and I am losing patience with you. You keep saying we can save money and get land and then we can start our own project. But when? I have got *ideas* for this ecotourism project, I can do it, you know.

What's stopping you? Why do you refuse – *(shouts/ swears/ cries)* Sorry. I know you don't like it, but I'm thinking about our children. For them.

I want you to vote for the ecotourism project so I can do something I know and enjoy!!

(she strokes his hair)

Scene 6: Individuals speaking directly to the audience

where the action is poetic/ reflecting the impacts/ implications of what they want and what is standing in their way (ie: in Boal's terms, why are they oppressed?)

- Pablo: You know, if we just understood the importance of the freshwater basins... We have a unique place here and we should be proud of this heritage. In my ecotourism project, we are trying to value biodiversity that is a treasure for all people - preserving mother nature for the world/ future generations. I am *proud* to show this area to tourists. They come here to appreciate what our ancestors knew was special. OK, maybe not *ancient* past – but your grandfather moved here, to establish farmland. We're in a special position here and we need to protect this precious resource.
- Israel: I wish my father was still alive. Because he would know what to say to these new things I have to do: no. We don't do it like that. It doesn't work like that. Why? Because we know? But these technical experts come and give new ways, new rules. I don't understand why we need to change everything to ecotourism? Following others that care more about the water than about the cattle. We have lots of water. My job is the cattle. And I have no interest in the tourists.
- Comisariado: I'm under pressure because I need to protect everyone's interests. I'm really trying to work with the agents and the experts but sometimes it can be difficult to do everything for everyone. I need to help people make decisions and to make them for the right reasons. But everyone keeps talking to me, 'but Comisariado....', 'please Comisariado', you remember my father, Comisariado?' and sometimes I just need to tell them – I mean we want to

keep young people here and have work for them. We need to agree to this ecotourism project! I even got my nephew to return because of it; It's for the greater good. Not for *my* good. Not my wife's good; for the community. And sometimes I wish people would understand that!

Chorus

I want a different future for my children/

we have lost our way/

It's for the greater good/

We need to protect the past for the future/

I feel like I am shouting in the wind

Marcela: I have a lot of energy, and I am a good worker. When I was growing up, everyone called me 'small fire' because I was wild and full of energy and I would just burn and burn. But here, I'm like ash. Like dust. I can never feel clean because I don't know how I can get a project without my own land. I was passing by and I heard people talking about the ecotourism project and I really want to give my support. I can help with tours or at the restaurant. I know that my husband is not ejidatario, but if we cannot have our own land at least we need jobs that can give us some money... I want a different future for my children!

Resident (ejidatario): Personally, all this makes me feel we have lost our way. I remember how it was when we first came here! We were hard workers, facing hardships of arriving in the middle of the rainforest. Did you know, for instance, that we had to fly in food, there were no roads, basic services... and the first thing we had to do was to clear the forest to start producing something there! And we did it. It was tough, and we survived. But it was not without problems – at first we were pioneers, making our way, but that forest clearing meant we had no fresh water! Friend- it was like we had conquered the forest in one way... Now, we are forgetting the voice of the land here and I am sorry, but I think there are too many competing problems. I know you think it is easy to come together here and manage to care for the land and our communities. And now they are all jumping like chickens to 'win' the projects. They're lying and cheating each other and blaming. To do work that degrades our forest, and affects the freshwater. Sorry, but I just don't trust those other projects! Look how many of these projects have failed! Think about the resources we have. I am here to remind you of the importance of the forest – and what you are all blinded by is money. And we need a balance!

- Doña Ofelia: I was working in the milpa and selling my products to the coyote, but I can no longer work there and the coyote gives me less money ... the forest is our life, it gives us food and health. But we need money to cover other expenditures, so we need to take care of the forest and at the same time to earn more money. The conservation project is good, but I can't take so much time out of the home. It makes me sad that you are not taking me seriously. I never dreamed I would make Jam. But there's a good market for sweet deliciousness, and since I have the mango trees, I should be able to distribute it, but I have to go to the city get pectin and I cannot do that myself. If I can solve that, I already know it would work. But I want them to understand my circumstances. I cannot work like a team of men. I don't promise that. I promise to make delicious jam. But first, I want to be listened to. I keep feeling like I am shouting in the wind. I try to speak in the meetings, but... it just doesn't get heard. And then it is too late, and they want me to serve my jam as a treat.
- Narrator: And so, as the vision of the ecotourism project sits alongside all these voices in the community, the question remains: whose story is the loudest? Whose problem is the greatest? How will it be resolved? And why do they make these decisions? We return to the assembly, to hear the final discussion.

Repeat chorus:

I want a different future for my children/

we have lost our way/

It's for the greater good/

We need to protect the past for the future/

I feel like I am shouting in the wind

Scene 7: Back at the Final assembly

CONFLICT:

Comisariado: I have been deliberating overnight after the assembly yesterday, and it seems we have three decisions on which to vote:

- More ecotourism (which we have all heard will bring wealth into our area. And I am all for wealth!, hahaha)
- The inclusion of women (Yes, Well this is an area for conversation. Ahem.);
- Do we stay with agricultural subsidies (and I think you all know my personal beliefs on this one)...

Clears his throat

As you know, it is important to hear from people. I know many conversations were held last night. Some even said there were arguments! But these are important decisions about our future. So, I want to invite the ideas from those gathered here before the ejidatarios vote: what do you think?

Repeat chorus:

I want a different future for my children/

we have lost our way/

It's for the greater good/

We need to protect the past for the future/

I feel like I am shouting in the wind

The deliberation/ the Forum: How do the audience get involved in talking about the

Appendix A1.1: Letter of authorization and Verbal consent to carry out the Forum Theatre in the communities (Chapter 2 – Objective 1)

First is the English translation of the letter asking to the local authorities for their authorization to implement the project and the Forum Theatre in their communities. Second is the verbal consent guide asking for people's authorization to video record the Forum Theatre activity.

a) Letter for authorization

Date *Ejidal* authorities Municipality... Chiapas

Dear *Ejidal* Authorities with this letter we want to introduce you, the student Silvia Edith Olvera Hernández, who is carrying out her doctoral studies at the University of Leeds in the United Kingdom. Silvia will be visiting you to kindly ask for your authorization and support to develop two activities, one is a community theatre and the other is some interviews between some people in the community. The community theatre or Forum Theatre activity consists of the presentation of a play (with professional actors) where at the end time is given for the people who attend to share their opinion on the theme of the play. There will also be interviews so that people who attend the theatre can tell us what they liked or didn't like about the activity. The objective is to better understand how decisions are made in the community regarding the conservation and management of natural resources.

These activities are part of two projects where Silvia participates that are a continuation of the Usumacinta ROC project that in past years was carried out in her community by Dr. M. Azahara Mesa Jurado of Ecosur, and in which they already collaborated with the University of Leeds. The first project is a study she is conducting to evaluate whether Forum Theatre promotes conversations about people's values towards nature. The second is a project that the University of Leeds together with El Colegio de la Frontera Sur (ECOSUR) is developing to evaluate whether Forum Theatre helps promote nature conversation.

With no other business at the moment, we thank you for your attention to this letter and hope to have your support.

b) Verbal consent guide: Asking for local people' authorization for video record the Forum Theatre

(After presenting the project and explaining the Forum Theatre activity we will ask to the participant for their authorization to video record the Forum Theatre activity)

My name is Silvia Edith Olvera Hernández, I am a student, I am doing a PhD at the University of Leeds in the United Kingdom. In this project I would like to evaluate whether Forum Theatre promotes conversations about why nature is important for you (people's values towards nature) and how environmental decision are made. The community theatre or Forum Theatre activity consists of the presentation of a play (with professional actors) where at the end time is given for the people who attend to share their opinion on the theme of the play. There will also be interviews so that people who attend the theatre can tell us what they liked or didn't like about the activity. The objective is to better understand how decisions are made in the community regarding the nature resources management.

I kindly ask for your authorization to video record the Forum Theatre activity. You can withdraw before the activity with all of you as participant starts. The raw recordings will be only accessible and used by the researchers. However and edited (smaller) versions of the video recordings will be made to be used for dissemination purposes (e.g. academic conferences or in research related websites) and that anonymizing will be not possible in this activity. But after seeing the theatre and right before we start the forum you can withdraw. Thanks for your authorization (or not).

Appendix A2: Interview guide with Forum Theatre participants (Chapter 2 – Objective 1)

This interview was conducted with people from the communities that participated in the Forum Theatre to cover objective 1.

Interview format

Permission to record interview (1min)

In this interview we will ask you about your experience as participant in the Forum Theatre, but first we want to ask for your approval to record this interview since the information you share with us will be used for academic research purposes, including scientific publications and academic dissemination. Your comments and answers will only be shared among members of the PerformingChange project team, and the data that you share with us and that we use in reports will be treated anonymously. If this interview is video recorded we would like to kindly ask for an authorization to video record. With the possibility to withdraw right before the activity starts. The raw recordings will only be accessible and used by the researchers. Participants will be informed that edited (smaller) versions of the video recordings may be used for dissemination purposes (e.g. academic conferences or in research related websites) and that anonymizing will not be possible in this activity.

Questions

About the forum theatre

- 1. What do you remember about the forum theatre?
- 2. How did it make you feel? What do you like the most and what do you like the least?
- 3. Why were you encouraged to attend the forum theatre? Were you there during the entire activity?
- 4. When you were invited, what did they say? What did you expect from the theatre forum?
- 5. After the activity, did you talk/think about the characters and their stories again? [if yes, elaborate...what they talked about, with whom...]. Did they tell at home what he saw in the theatre?

-I talk a little about the theme of the play and the characters just to remember-

- 1. Are the situations that arose in the play, are they situations that have happened in this community? (that I elaborate)
- 2. Have you ever seen a play? (If, where, when about what?)

- 3. Do you think that in the forum theatre that was presented, the situations problems of the characters were clearly explained?
- 4. For example, if the characters lived in this community, which of the characters do you think would have the biggest problem?
- 5. Do you think we could have touched on a topic that would make someone present uncomfortable?

On the situation of the interviewee or interviewee

- 1. With which character did you identify the most? Because?
- 2. How long have you lived in this community?
- 3. And what you do for a living?
- 4. General information on your activity- What do you plant or how many cattle do you have- who do you sell it to?
- 5. And do you know about payments for environmental services?
- 6. Do you get paid?
- 7. So, are you part of the ecotourism association (canto de la selva or selvaje)? (or not)
- 8. What do you think of ecotourism (livestock-milpa-palma)?
- 9. Have you participated in training? What type?
- 10. What was your community like before ecotourism?
- 11. What did you do before ecotourism?
- 12. When the ecotourism project arrived, was there a problem similar to that of the characters?

About participating in the theatre

- 1. So, during the forum theatre, were you able to express what you felt?
- 2. Would you have liked to say anything else?
- 3. What do you think of what other people shared? Did any bother you or find it interesting?
- 4. Do you think some stories were not told?
- 5. What other problems or situations in a community could be presented in a forum theatre?

Attended but did not participate

- 1. Is there something you would have liked to say but couldn't?
- 2. How did you feel when joker started asking who wanted to participate in the activity?
- 3. How do you think other people felt about this activity?
- 4. Do you think that activities like this help people to share their feelings and ideas? Because?
- 5. Do you think some stories were not told?
- 6. What other problems or situations in a community could be presented in a forum theatre?

Others

- 1. Would you like to attend another forum theater?
- 2. Is there anything else you want to share with us?

Appendix A3: NVivo Code book for the analysis of the Forum Theatre (Chapter 2 – Objective 1)

Note: Value pluralism (The Value Landscape Framework) and Intersectionality provided initial analysis structure, the remaining nodes emerged from the forum theatre and interviews

Name	Description	Files	References
Plural values	Multiple ways of conceptualising values within human-nature relationships	0	0
Fundamental Values	Goals or desires that can guide people's behaviour. Examples: Social status and prestige, pleasure, excitement, traditions, safety, and harmony.	0	0
A chievement	Personal success- capability	5	7
Benevolence	Preservation and improvement of the welfare of people with whom one is in personal contact	5	5
Power	Control and dominance over people and resources	4	8
Security	Harmony Society and relationships family or reciprocation of favours	3	5
Universalism	Protection for the welfare of all the people and nature - social justice- equality-protecting the environment	6	11
Governance related values	Ideal characteristics or principles of 'good' environmental governance. Examples: Inclusion, capacity, effectiveness, and fairness	0	0
Capability	Capacities, knowledge, experiences to effectively share responsibilities - access to knowledge	12	32
Fairness	Consider future generations and non-humans - share the benefits - awareness of the different needs according to the intersection of each person's social axes	14	21
Inclusion	Awareness and valuing diversity - political structures that support everyone-diversity among decision makers-opportunities to improve participation in projects	10	23

Table A3.1: Code book for analysis of Forum Theatre(Chapter 2 – Objective 1)
Legitimacy	Authority - acceptation y justification of communal rules	14	17
Assigned Values	Use of the nature aligned with the notion of ecosystem services. Examples: Provisioning, regulating, supporting and cultural		
Cultural	People may benefit from the knowledge that an ecosystem simply exists or that it will be around for future generations to enjoy- education	15	161
Environmental education	Environmental Education: workshops or courses on environmental awareness, ecological knowledge.	18	78
Knowledge Silvopastoral systems	Practice of integrating trees, forage, and the grazing of domesticated animals in a mutually beneficial manner. Using the principles of managed grazing and is one of many different forms of agroforestry	21	38
Aesthetics	Appreciation of beauty related to nature	2	5
History		10	18
Recreation	Activity done for enjoyment when one is not working	13	65
Spirituality	the quality of being concerned with the human spirit or soul as opposed to material or physical things		
Provisioning	Provisioning services encompass all the outputs of materials, nutrients and energy from an ecosystem. These might include food and water supplies, raw materials for construction and fuel, genetic resources, medicinal resources and ornamental resources	15	55
Food		6	12
Fuel	Material that is burned to produce heat or power	3	7
Monetary resources		10	32
Regulating	Associated with their regulatory and habitat functions, such as climate regulation, pollution control, storm protection, flood control, habitat for species, and shoreline stabilization -ecological benefits	10	18

Ecological benefits	The benefits arising from the ecological functions of ecosystems. Such as rain, fresh water, and benefits accrue to all living organisms, including animals and plants, rather than to humans alone	10	16
Power differences- Participation	Using intersectionality from feminist political ecology in dynamic performance arts-based methods might allow us to display and analyse the simultaneous and intercategorical ways in how power differences work and overlap regarding nature use and management, and environmental decisions	0	0
Rules to participate	1) Ideas, customs, norms and rules that condition participation according to gender, age, status, education, etc.	18	20
Power relations	2) The importance of groups such as family, compadrazgos, friends and community. The unity of people to face differences of power (conditions) that influence people's participation.	10	21

Appendix B: Supplementary materials for chapter 3

Appendix B1: Frame of activities for the focus group conducted with environmental professionals (Chapter 3 – Objective 2)

This focus group structure was conducted online with environmental professionals to cover objective 2.

Table B1.1: Focus groups with environmental professionals- frame of the activities (Chapter 3 - Objective 2)

Activity	Description	Format
Con	We start asking the participants their consent to	Online chat on
sent to record	video-record the focus groups. We want to ask for your approval to record this focus group since the information you share with us will be used for academic research purposes, including scientific publications and academic dissemination. Your comments and answers will only be shared among members of the PerformingChange project team, and the data that	Zoom
	you share with us and that we use in reports will be treated anonymously. In the publications, explicit quotes from some of your comments to this focus group may be used, but your name or personal data will never be used, only the organization to which you belong or, if you prefer, only in reference to the type of organization to which you belong (please indicate your preference in this regard).	
Welcome	Before the event, the participants will be invited to fill in a padlet a post with their names, institutions, and their work responsibilities as a manner of introducing themselves. Then the first minutes of the meeting, after the welcome and the introduction are dedicated for everybody to read this information in the padlet. Following this there will be a brief introduction to the objective of the focus group, and plan for the session.	Padlet to meet the participants and Power point or just to mention the house rules
Cloud of mood	To get along with the participants. They will share their expectations in a short sentence about the focus group.	Cloudword
Project objectives presentation	Brief presentation of the objectives of PerformingChange project	PPT presentation

Participatory methods	Then, there will be a brief description of participatory methods used in environmental governance. In the screen they will see listing the participatory method that they have used.	Padlet with post-its with the names of the methods.
Brainstorming: Usefulness of participatory methods in environmental governance.	Following this, the participants will describe the usefulness per some of the methods, using key words short phrases in post-its that the facilitator will link to the post-its with the name of the method it refers. Some of them will have the opportunity to explain why they chose that word or phrase (like in a brainstorming rhythm). *A member of the team will start as an example for this activity. Examples of key word for usefulness: interviews-connection with people or surveys- systematization	On Padlet, using post-its notes the participants will draw/write their views for some methods.
Brainstorming: Limitations for participatory methods in environmental governance.	The team will explain some of the limitation founded in literature (trying to close to values and power differences). Then, the participant will write key words about limitation of these methods base in their experience or knowledge. After this, some participants will have an opportunity to explain why they chose that word (like in a brainstorming rhythm). *A member of the team will start as an example for this activity. Examples key words for limitation: interviews-transcription or you cannot really see the dynamic of values in a community, just the vision of one person at the time.	On Padlet, using post-its notes the participants will draw/write their views for some methods.
Performative methods	The following activity will be a short description of performative methods and their theoretical possibilities to overcome some of the limitation of the general participatory methods mentioned before by the team. And maybe some of the one listed by the participants.	PPT to help with some pictures
Break		
Values and power differences in environmental governance.	To follow the previous activity, the team will be present information about values in environmental decision-making and the power differences that might be distressing an effective representation of local people values in those decisions. *This information will frame the importance of using participatory methods	PPT presentation
Forum Theatre – Video	Then the video of the Forum Theatre will be screened for the participants to identify some values and power differences during the local people performances or	Youtube

	participation.	
FT to talk- perform about values	The next activity will be questions to discuss values identified in the video. Do you identify some values? Which ones? What do you think about identifying values using this method? *If it is necessary repeat some scenes of the video.	Open dialogues The participants will discuss the values indentified in the video.
FT to talk- perform about power relations	Following the discussion on values, the participants will discuss power differences identified in the video. Do you identify some power differences? Which ones? What do you think about identifying values that might be hidden by power differences using this method? *If it is necessary repeat some scenes of the video.	Open dialogues The participants will discuss the power differences indentified in the video.
Break		
First comments: General impressions on the practicality of the Forum Theatre	As the next activity, the participants will briefly discuss the challenges and opportunities in terms of viability, credibility, disciplinary bias, and cultural relevancy of Forum Theatre in practice. The main question will be: what are your general thoughts about the implementation of a Forum Theatre (in terms of disciplinary bias, credibility and cultural relevancy)? Viability: aspects about time, economic resources and personnel. Credibility: whether they think this is a credible tool, i.e. whether they take it seriously and whether they think policy makers higher up would take it seriously. In addition, the type of information requested by your institutions, such as reports, informs or other final documents might influence your willingness to use different methods. Culture relevance: It can be adapted to respect and encompass different groups of people according to their abilities, language, traditions. Then, on a padlet the participants will write their thoughts about the challenges and opportunities that a Forum Theatre might face in the terms listed above using post-its and then we will link them. A member of the team will start as an example for this activity. Examples of key word for challenges: disciplinary bias or credibility- it is important to quantify values for those surveys are better. Examples of key word for opportunities: appropriate to culture- it can be modified according to people	On Padlet, using post-its notes the participants will draw/write their views.
	interests and skills.	
Video- Interviews	To show some comments by the people who participated in the FT during the interviews in terms of	Video

(towards improving representation)	barriers and opportunities of FT to improve their representation (social network, capacity building and civil society dialogue).	
FT as an opening for dialogue	Then, they will be asked about FT as an opening for dialogue to improve representation in environmental governance. -Dialogue: time-place opportunities for dialogue and to balance their interests.	In an open dialogue the participants will draw/write their views.
Close	To close the focus group will be asked to the participants if there is any other comment that they would like to bring up about Forum Theatre. After the last comments, the moderate will summarize the key points and she will explain the participants the logistics for the follow up interviews. The follow up interviews will be about the usefulness of Forum Theatre, the main question will be, could – should Forum Theatre be used in your work? Why? How? We will finish the focus group.	Open dialogue

Appendix B2: Interviews guide conducted with environmental professionals (Chapter 3 – Objective 2)

This interview was conducted with environmental professionals after the focus groups to cover objective 2.

Interview format

- 1. Welcome (solve technical problems) (5min)
- 2. Permission to record interview(1min)

We want to ask for your approval to record this interview since the information you share with us will be used for academic research purposes, including scientific publications and academic dissemination. Your comments and answers will only be shared among members of the PerformingChange project team, and the data that you share with us and that we use in reports will be treated anonymously. In the publications, explicit quotes from some of your comments to this interview may be used, but your name or personal data will never be used, only the organization to which you belong or, if you prefer, only in reference to the type of organization to which you belong (please indicate your preference in this regard).

Questions

- 1. What do you remember the most about the focus group? (2min)
- 2. Do you think you learned something new, or do you reaffirm something you already knew? (To elaborate) (5min)
- How was for you the activity of identifying values and power differences in the video?
 Do you think it was a challenge or something easy to identify these elements (elaborate) (3 min).
- 4. On the practicality of the Forum Theatre, during the workshop, we talked about viability, credibility, and cultural relevance. Is there anything you would like to comment on the practicality of forum theatre more generally? (5min)

During the focus group forum, it was questioned Forum Theatre in terms of closing the exercise and results.

5. On closing the exercise, some of you referred to the limitations of the Forum Theatre for closing the reflection on issues of inclusion-exclusion (of oppressed-oppressor relationships). Someone called this as - leaving the community bubbling-. Some of you were worried that this could lead to conflicts in the community, or it could have a

negative impact on organized groups or processes already achieved by some NGOs. What are your thoughts about this? (7 min)

- 6. Regarding results, some of you referred to the limitations of the Forum Theatre to close with agreements, points for improvement, or next actions. And as we know, Forum Theatre has no intention to reach agreements or specific results regarding the inclusion-exclusion problem, but there are other results such as the process itself as a space for reflection and the development of communication skills, not only using the spoken language, also body language (rehearsing for the revolution). What are your thoughts about this? (7 min)
- After what you have shared with us about Forum Theatre, could you see yourself using Forum Theatre in your professional work? Could you give us some examples? (10 min)
- 8. Why do you think Forum Theatre might or might not be useful in your work? (to elaborate) (7 min)

To end this interview, is there anything else you would like to comment

Appendix B3: Graphic notes taken during the focus groups with environmental professionals (Chapter 3- Objective 2)

Figures B3.1 and B3.2 are the graphic notes elaborated during the focus group (in Spanish). These were taken by an artist as a way to share the outputs of the discussions with the participants and beyond. Although they are in Spanish, we would like to share those as a part of the results of this research.

Figure B3.1: Graphic notes form Focus Group 1 (Chapter 3 – Objective 2)



Spanish language graphic notes by Williams Ballesteros



Figure B3.2: Graphic notes form Focus Group 2 (Chapter 3 – Objective 2)

ESTE PROYECTO FUE FINANCIADO POR: ESRC IMPACT ACCELARATION ACCOUNT (IAA) DE LA UNIVERSITY OF LEEDS.

Spanish language graphic notes by Williams Ballesteros

Appendix B4: NVivo Code book for the analysis of focus groups with environmental professionals (Chapter 3 – Objective 2)

Note: Node Value pluralism (The Value Landscape Framework) and Intersectionality provided initial analysis structure for values and power differences. Viability, cultural relevance and credibility were created using the interrelated failings in participatory approaches to environmental development proposed by Williams (2004) and Cooke & Kothari (2001. The remaining nodes emerged from the forum theatre and interviews.

Table B4.1: Code book for the analysis of focus groups with environmental professionals (Chapter 3 – Objective 2)

Name	Description	Files	References
Local power differences	Using intersectionality from feminist political ecology in dynamic performance arts-based methods might allow us to display and analyse the simultaneous and intercategorical ways in how power differences work and overlap regarding nature use and management, and environmental decisions	5	12
Plural values	Goals or desires that can guide people's behaviour. Examples: Social status and prestige, pleasure, excitement, traditions, safety, and harmony.	0	0
Assigned values	Use of the nature aligned with the notion of ecosystem services. Examples: Provisioning, regulating, supporting and cultural	8	12
Fundamental Values	Goals or desires that can guide people's behaviour. Examples: Social status and prestige, pleasure, excitement, traditions, safety, and harmony.	2	4
Governance related values	Ideal characteristics or principles of 'good' environmental governance. Examples: Inclusion, capacity, effectiveness, and fairness	5	10
Practicality			
<u>Viability</u>	Viability was explored in terms of resources such as time and training necessary to implement performance arts-based methods (general aspects)	0	0
Joker	Bout facilitators and facilitation processes	9	15

Other aspects	Time and other resources	10	16
<u>Cultural</u> relevance	Cultural relevance focused on the importance, in environmental governance projects, of understanding local contexts; adapting the methods to respect and embrace different groups of people based on their abilities, language, and traditions	0	0
confidence	Confidence links with local people	8	12
Respect	Respectful / unrespecful performances	3	9
<u>Credibility</u>	Credibility was explored as the possibilities and challenges of implementing performance arts-based methods in environmental (funding and as method)	5	17
Closing activity	The importance of closing the activity with agreements or other activities	6	13
Other methods	Contribution of other methods to give credibility to results from forum theatre	5	17
General Forum Theatre	Values towards Forum Theatre/ why forum theatre is interesting	9	24

Appendix C: Supplementary materials for chapter 4

Appendix C1: Consent form for interviews with practitioners (Chapter 4 – Objective 3)

This was the consent form sent to practitioners before implementing the interviews to cover objective 3.

Consent form: Interview ¹³

Through this form I have been informed that:

- The aim of this project is to explore whether/how performance art-based methods improve the representation of local people's values in environmental decisionmaking.
- 2. My participation is requested as a professional (academic or practitioner) who has worked as part of projects related to nature management (or similar) and in which performance-based methods have been implemented.
- 3. The opinions expressed during the interview cannot be taken as the official position of the organization I work for. But, this opinion can be contextualized following the type of organisation I work for.
- 4. The opinions expressed during the interview will be used solely and exclusively as research material and no other use will be given. This includes the use of quotes from my answers to the interviews in academic publication and other relevant outlets.
- 5. All personal information (name, contact details) provided during the interview will be treated in a strictly confidential manner and will stored securely in the University of Leeds' repository, according to GDRP rules.
- 6. I can request the withdrawal of the information provided during the interview at any time until the 9th of December 2022, by contacting the PhD student Silvia Olvera-Hernandez (eeseoh@leeds.ac.uk).
- 7. I can request information on the results of the investigation when it is completed, without undermining the independence of the investigation, of which only the research team are guarantors.

¹³This research is funded by ESRC Impact Acceleration Account (University of Leeds) the National Council of Science and Technology (CONACYT) of Mexico. It involves PhD student Silvia Edith Olvera-Hernandez, Prof. Julia Martin-Ortega, Prof. George Holmes, Dr. Paula Novo and Dr. Azahara Mesa-Jurado (El Colegio de la Frontera Sur, México).

Please read and then let us know if you agree with the statement by adding an X in the box:

I give my consent for the information provided in the course of the interview to be identified (including in quotes of my answers published in academic publications and other outlets)



by the name of the organization I work for and by my role in it by the type (and not the name) of the organization I work for and by my role in it



By the type (and not the name) of the organisation I work for, without reference to my role in it.

Also,

I confirm that I have read and understand the information presented above. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

- I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
- I consent to the interviews being video or audio recorded for the purpose of making an accurate transcription. I understand that once the transcription has been made and anonymized that the audio recording will be destroyed.

I agree to take part in this study.

Name of Participant

Date

Signature

Appendix C2: Interview guide conducted with practitioners (Chapter 4 – Objective 3)

This interview was conducted with practitioners on applied theatre to cover objective 3.

Interview format

Welcome (solve technical problems) (5min) and Consent to video and/or audio record and use of quotes (1min)

Thanks for giving us your approval to record this meeting in the consent form we sent to you on the DATE. As we mentioned to you, at any moment you can decide to stop the recording or withdraw from the interview without any problem.

In this interview, we will be talking about your project (name or description). We would like to know about your experience implementing performing arts-based methods. We will ask you about the possibilities and challenges of these methods as a space for local people to talk about power differences and nature's values. To finish the interview, we will talk about the viability, cultural relevance and credibility of these methods.

1- About your experience in the project (15 min)

I have read your project's information and understand it was aimed at [read from their website].

- 1. Could you share with me (briefly), a little bit more about the general aims of the project? To whom it was targeted?
- 2. Could you tell me about the type of performance arts-based method used?
- 3. Why did you select that performance arts-based method? Or what was the motivation for doing so?

- Were you planning to use performance-based methods originally or this came as a second thought? and why?

- 4. Could you tell me what were expecting to achieve with this method?- Did you achieve what you wanted with the method? Why /why not
- 5. What do you think were key factors to the success of your project (if there was success)?

Values (10 min)

I know, you might not have been looking into values for nature, but I would like to still ask you about that. Values are a key element in making decisions related to nature. For

example, values reflect why nature is important to people. Values also can be understood as desires. They give meaning to nature (values shape and they are shaped by how people perceive, relate to or inhabit nature).

- 6. Could you tell me, whether [name of the method] could be a space for local people to express their values towards nature? Why/why not?
 - -Did people express why nature is important to them? How?
 - -Could you give me some examples?
 - -Did people express their desires for a better future (regarding environmental aspects)? -Could you give me some examples?
- 7. In your project, did emotions play a role to encourage people to express their values? How?

Power differences (10 min)

I would like to now ask you about power difference. Such as informal social rules and norms that establish legitimate ways of relating to nature (i.e. who can benefit from nature's contributions). Or as powerful actors, who impose decisions that impact nature over other point of views.

8. There was some specific power dynamics planned to be discussed or confronted in your project? Why?

Specifically about local power differences, those that exclude some groups of people based on the intersection of their social axes such as gender, class, caste, race, culture, and ethnicity).

9. Did local power differences emerge (make them visible) during your project (and the performances?)? Could you give me some examples of the local power differences that might have emerged?

- Why (or why not) people were encouraged to talk about these (local) power differences?

10. Could you tell me, whether the method worked as a space for different groups to participate? And if so how?

- Why (or not) this method was helpful to engage with groups of people who have been marginalized or excluded from environmental decision-making.

- Why (why not) the facilitation process helped to blurring power differences?

Viability, cultural relevance and credibility (7min)

There are some operational requirements, explored in the academia such as viability, cultural relevance (sensitivity) and credibility. **Viability** can be explored in terms of resources such as time and training (trained facilitator and a trans-disciplinary team).

11. What you can tell me about the facilitation process during the implementation of [name of the method] in your project?

-What do you think are the characteristics of a good facilitator in performance arts basedmethods?

- Do you think these methods required a more skilled facilitator than other conventional participatory methods (with knowledge of theatre or other forms of arts)? (why/why not)

- 12. To what extent the implementation of performance-based methods needed a transdisciplinary team (for example artists working on the design, implementation and analysis)?
- 13. There is something else you would like to tell us about resources, time, and training necessary for implementing these methods in environmental projects?

Cultural relevance (7 min)

Now we will talk about Cultural relevance (sensitivity), which focused on the importance to respect and embrace different cultures and worldviews (ethics).

- 14. In your project, what do you think was the key to ensuring that these methods were respectful of the cultural context?
 - How was the process to elaborate the materials (scripts or other materials).
 - -Which information did you use to elaborate the material?

- Do you need to have a relationship with the participants to elaborate the materials? Why/why not

-Do you need to have a relationship with the participants to implement these methods? Why/why not

- 15. How ethics was approached in the project?
- 16. There is something else you would like to tell us regarding cultural relevance (cultural sensitivity) when these methods are applied in environmental projects?

Credibility (7min)

Now we will talk about credibility, this can be explored in terms of the challenges to validate among the local people or funding institutions non-linguistic or more emotional results.

- 17. Performance-based methods often present information through image, sound, and movement. Which of these (or others) were used in your project?
- 18. To what extent have results represented trough image, films, performances or other autistics forms, impacted on the credibility of your project with the local people? And with funding institutions or government agencies?
 - There were other qualitative or quantitative methods implemented in your project?

-To what extent do performance-based methods need to be implemented along with other methods to assure the good quality of results?

- Why (or why not) your project was considered a long-term project?

19. Are there other challenges in terms of credibility for these kinds of methods? Could you give me some examples?

- What do you think needs to be done to increase the credibility of these methods in the area of environmental governance?

Transformation (Closing) (5 min)

To close this interview

20. To what extent do you think the use of these methods can foster socio-ecological changes? Or other transformational changes?-Did you observe any changes or transformation during your process or do you have evidence of this having happened as a consequence of your project.

Appendix C3: NVivo Code book for the analysis of the interviews with practitioners (Chapter 4- Objective 3)

Note: The Chapter 3 results provided an initial analysis structure; the remaining nodes emerged from the interviews.

Name	Description	Files	Refer.
Power differences	Local power differences were approached as informal social rules and norms that establish legitimate ways of relating to nature (i.e. who can benefit from nature's contributions)	10	51
Local Power Differences	Using the intersectionality approach, who can use and manage nature. Differences focused on gender, age and land tenure.	4	11
Power Differences during decision- making	An intersectionality approach of who can or cannot participate in decision-making.	4	4
Power Differences in the script	Who power differences were portrayed in the script	5	10
Representation of power differences	Feelings and thoughts about performing power differences	4	7
Practical aspects	The discussion on operational aspects of Forum Theatre was guided by the terms of viability, cultural relevance, and credibility.	0	0
<u>Credibility</u>	Credibility was explored in terms of the credibility of applied theatre as a research method to academics and funding institutions	10	47
Clear aim	All comments related to the aim	4	5
Long-term projects	All comments related to the length of the project	3	3
Other methods	The use or not of other participatory methods	5	9
Results- reflection	All comments regarding the results obtained	6	9

Table C3.1: Code book for analysis of the interviews with practitioners (Chapter 4 - Objective 3)

Solidarity	All commented regarding aspects of collaboration or solidarity	4	8
<u>Cultural relevance</u>	Aspects regarding cultural relevance were explored in terms of safe spaces and the implementation of a ethics of care	10	40
Ethics of care	Specific mentions of ethics of care	8	12
Playwriting	How was the processes of playwriting	7	21
Relationship	How was the approach with the communities	4	7
Safe space	How practitioners provide a safe space (or not)	4	7
<u>Viability</u>	Viability was explored in terms of resources such the importance of facilitator with artistic skills	9	36
Cost	Comments related to funding	4	8
Facilitation	Comments related to the skills of facilitators	7	21
Time	Comments mentioned time as resource needed	6	11
Tran- disciplinary	Comments mentioned collaborative work	4	5
Sustainable transformation	Leverage points are places within complex systems, where interventions can be directed to bring about change in overall system behaviour.	8	21
Changes in general	Changes on decision-making processes or environmental governance on general	4	5
Changes on people		7	12
Values	Values were approached using the concept of Epistemic pluralism, from ecological economics, that suggests there are multiples ways of conceptualising values within human-nature relationships-Why nature is important	8	20
Negotiations	Negotiations understood as unfolding the values of different actors involved in participatory settings	9	12