

An abstract illustration of a forest. The upper half features a dense canopy of trees with trunks and branches in various colors including green, yellow, orange, pink, and blue. The lower half is a solid, textured teal color, representing the forest floor or a body of water.

# (Re)building historical commons.

Exploring forest commoning as a transformative practice  
in the Northwestern Iberian Peninsula.

Marta Nieto Romero



## Propositions

1. Community forests activities are oriented to solve community needs and challenges  
(this thesis)
2. Participation in community forests is important for democracy  
(this thesis)
3. The challenge of the current Anthropocene requires that researchers explore and enhance processes of transformative change
4. There is a need to develop new metrics of academic impact that support participatory research
5. Beyond a basic income, people need a place where they feel they belong
6. A PhD is a learning process in all aspects of life beyond the scientific

Propositions belonging to the thesis entitled

(Re)building historical commons. Exploring forest commoning as a transformative practice in the Northwestern Iberian Peninsula

Marta Nieto Romero

Wageningen, 16 December 2022 (Date defence ceremony)







**(Re)building historical commons.  
Exploring forest commoning as a  
transformative practice in  
the Northwestern Iberian Peninsula**

**Marta Nieto Romero**



## **Thesis committee**

### **Promotor**

Prof. Dr B.B. Bock  
Personal chair at Rural Sociology  
Wageningen University & Research

### **Co-promotors**

Prof. Dr C. Parra Novoa  
Associate professor, Faculty of Science  
KU Leuven, Belgium

Dr S. Valente  
Assistant professor, Environment and Planning  
University of Aveiro, Portugal

Dr E. Figueiredo  
Associate Professor, Social, Political and Territorial Sciences  
University of Aveiro, Portugal

### **Other members**

Prof. Dr G.C.M. Winkel, Wageningen University & Research  
Prof. Dr O. Petit, University of Artois, Arras, France  
Dr K. Soini, Luke, Natural Resources Institute Finland, Helsinki, Finland  
Dr O. Bina, Universidade de Lisboa, Portugal

This research was conducted under the auspices of the Graduate School Wageningen School of Social Sciences.



**(Re)building historical commons.  
Exploring forest commoning as a  
transformative practice in  
the Northwestern Iberian Peninsula**

**Marta Nieto Romero**

**Thesis**

submitted in fulfilment of the requirements for the degree of doctor  
at Wageningen University,  
by the authority of the Rector Magnificus,  
Prof. Dr A.P.J. Mol,  
in the presence of the  
Thesis Committee appointed by the Academic Board  
to be defended in public  
on Friday 16 December 2022  
at 1.30 p.m. in the Omnia Auditorium.

Marta Nieto Romero

(Re)building historical commons. Exploring forest commoning as a transformative practice in the Northwestern Iberian Peninsula  
206 pages.

PhD thesis, Wageningen University, Wageningen, the Netherlands (2022)  
With references, with summary in English

ISBN: 978-94-6447-478-7

DOI: <https://doi.org/10.18174/580289>

Layout: Dennis Hendriks || ProefschriftMaken.nl

Cover: Rita Reis

Printing: ProefschriftMaken.nl

The research described in this thesis was financially supported by European Union's Horizon 2020 Research and Innovation Program under the SUSPLACE Marie Skłodowska-Curie grant agreement No. 674962 during 2016 to 2019, and under the eGROUNDWATER PRIMA Program grant agreement No. 1921

Financial support from Wageningen University for printing this thesis is gratefully acknowledged.



## Table of contents

<b>CHAPTER 1</b>	<b>Introduction</b>	11
1.1.	Commons and sustainability transformations	13
1.2.	Towards an integrated framework to study forest commoning	22
1.3.	Methodology: a place-based participatory research	31
1.4.	Case study selection and characteristics	35
1.5.	Data collection and analysis: a progressive contextualization	39
1.6.	Outline of the thesis	41
<b>CHAPTER 2</b>	<b>Historical commons as sites of transformation. A critical research agenda to study human and more-than-human communities</b>	45
2.1.	Introduction	47
2.2.	Historical commons and commons theories	49
2.3.	Commoning to build human and more-than-human communities	57
2.4.	A research agenda to critically study human and more-than-human communities	65
2.5.	Conclusion	69
<b>CHAPTER 3</b>	<b>Re-building historical commons: How formal institutions affect participation in community forests in Galicia, Spain</b>	73
3.1.	Introduction	75
3.2.	Theoretical background	77
3.3.	Methodology	80
3.4.	Results	83
3.5.	Problematising formal forestry-based commons' institutions	92
3.6.	Conclusion	95
<b>CHAPTER 4</b>	<b>Communal forest management and citizenship: political tensions and clashing citizenships in an urban municipality in Galicia (Spain)</b>	99
4.1.	Introduction	101
4.2.	Communal forest management, citizenship and forest politics	102
4.3.	Case study, materials, and research methods	105

4.4.	Citizenship and forest commoning practices and struggles in Teis	107
4.5.	Discussion and conclusions	118
<b>CHAPTER 5</b>	<b>Affective mapping to rebuild the commons? A Participatory Action Research in a historical community forest</b>	123
5.1.	Introduction	125
5.2.	Bringing affective relations and emotions to PAR	127
5.3.	Methodological approach	129
5.4.	Discussion and conclusions	142
<b>CHAPTER 6</b>	<b>Discussion and Conclusion</b>	147
6.1.	Introduction	149
6.2.	Key findings from the case-study research	151
6.3.	Theoretical and methodological contributions to understanding and studying commoners' agency and sustainability transformations	156
6.4.	Concluding remarks, limitations, and suggestions for further research	165
	<b>References</b>	173
	<b>Annexes</b>	194
	<b>Scientific summary</b>	196
	<b>Acknowledgements</b>	200
	<b>Agradecimientos</b>	202
	<b>Publications</b>	204
	<b>Biography</b>	205

## List of Figures

Figure 1	Theoretical framework of the thesis, as further developed from a preliminary framework presented below (Chapter 2)	23
Figure 2	Location of study area (north-western Iberian Peninsula)	33
Figure 3	Overview of the methodological approach of the thesis	36
Figure 4	Location and images of the three case studies	37
Figure 5	Framework to study processes of building human and more-than-human communities. Historical legalised commons become sites to enhance sustainable transformation through commoning	68
Figure 6	Borders of O Carballo commonland as specified by its classification resolution issued in 1976. Source: Jurado Provincial de Montes Vcinales en Mano Comun de Lu (1976). Dark green corresponds to reforested areas, while light green is pastureland	82
Figure 7	Timeline summarizing main historical events affecting Teis community, Teis community practices, and council (re)actions in relation to CFs and other civic associations in Vigo.	108
Figure 8	Image taken from the website of the Mancomunidad de Vigo	117
Figure 9	Picture of a walking guided tour in Teis CF for teenagers (left) and the flyer of the Camiña Camiño program of Montes de Vigo (Council and Mancomunidad). (right)	118
Figure 10	Mapping kit containing: 1) notebook with prompt sentences 2) detailed instructions, 3) a map of the baldio to mark their favourite place, and 4) objects to indicate the place (i.e. yellow string to mark their place and a jar to collect objects of the place)	134
Figure 11	Pictures of the video exhibition day called 'Encounters with the baldio	139

## List of Tables

Table 1	Research within the three schools on commons. The sections highlighted in grey refer to concepts that support a transformative research agenda for historical commons	52
Table 2	Three stages of commoning in historical commons and a characterisation of underlying practices of human and more-than-human communities	58
Table 3	Analytical frame to identify institutional logics as composed by different practices done in common and types of participation	80
Table 4	Logics within the community	88
Table 5	Two clashing citizenship build around CFs	103

## List of Textboxes:

Box 1	The printed affective map of the baldio	137
Box 2	Tips for action related to the contribution one	157
Box 3	Tips for action related to the contribution two	159
Box 4	Tips for action related to the contribution three	161









# Chapter 1

**Introduction**

*'If our species does not survive the ecological crisis, it will probably be due to our failure... to work out new ways to live with the earth, to rework ourselves... We will go onwards in a different mode of humanity, or not at all'*

*– Val Plumwood, (1939-2008), Australian philosopher and ecofeminist*



### 1.1. Commons and sustainability transformations

A multi-layered crisis is affecting the socio-ecological systems upon which life depends. Our modes of production and consumption are fundamentally responsible for an unprecedented decline in global biodiversity and causing carbon emissions, deforestation and unprecedented environmental risks (of natural disasters, extreme meteorological events, pandemics, etc.) (Brauman et al. 2019, Bradshaw et al. 2021, Turnhout et al. 2021). Moreover, the current political systems and an economic structure based on private profit and financially measured growth are failing to assure livelihood resources and conditions of well-being, such as access to basic food needs, housing, care and educational services – and to a clean and healthy environment (Brauman et al. 2019, Casas-Cortés 2019b, Steinberger et al. 2020).

As a result, sustainability scholars have called for research that studies and promotes *sustainability transformations* (O'Brien and Sygna 2013a, Feola 2015, Göpel 2016, Blythe et al. 2018, Fazey et al. 2020). Sustainability transformations generally refer to a fundamental change able to tackle the roots of ecological degradation and social inequality (Blythe et al. 2018). This involves going beyond changes in specific sectors (political, social, economic, etc.) and resource systems (food, energy, forest, etc.) and recognises, rather, the need to radically change the values, mindsets and subjectivities underlying our relations with our environments, our communities and nature (Göpel 2016, Bieling et al. 2020). Yet, sustainability transformation has been criticized for its theoretical and ethical argumentation that lacks empirical analysis and studies of transformations in specific places (Balvanera et al. 2017, Blythe et al. 2018). Such studies are urgently needed, therefore, not only to give the transformation discourse more substance but also to prevent it being co-opted by policy-makers justifying any political intervention in the name of sustainability and vested interests continuing with unsustainable practices under a veneer of eco-friendly progress (Blythe et al. 2018).

In this context, the *commons* have gained traction among researchers, activists and practitioners seeking to 'get down to work' to promote transformations through commoning initiatives, that is, community-based initiatives based on principles of the commons. A commons is a social and political organizational system in which the (re)production and consumption of resources is based on the direct participation of end-users who negotiate collective protocols for the satisfaction of community needs (Euler 2018). Far from a theoretical debate, commoning initiatives are emerging all over the world, around 'goods' like food, energy, knowledge, forest, and the urban space (e.g. Ruivenkamp and Hilton 2012, Vivero Pol 2015, Gilmore 2017, García López et al. 2017, Bloemen and de Groot 2019, Tsavdaroglou et al. 2019). These initiatives engage in relational processes of negotiation – and struggle, and resistance – to establish

egalitarian practices aimed at securing access to resources, taking responsibility (caring) for them and dividing the benefits according to users' needs (i.e. commoning) (Gibson-Graham et al. 2016a).

The popularity of *commoning* in relation to sustainability transformation debate and activism resides in the fact that it connects and bridges the multiple dimensions of current crisis. While commoning works as an alternative system of managing resources to those of the state and the market, it is also much more than that; it introduces a new civic and cultural ethic that breaks with conventional notions of citizenship and participation (Bloemen and de Groot 2019). A commons can emerge in any context – within private companies, state institutions, and NGOs, in families, spontaneously among strangers, etc. – any time that members voluntarily and ethically commit to maintain and nurture common resources with an emphasis on open access, fair usage and long-term sustainability (Bollier, 2016). As a result, commoning is transformative as it promote not just common goods but the common good itself, nurturing new 'forms of life', based on the participation of end-users, negotiation for co-existence with others (human and non-human), and care for the common (García López et al. 2017).

Much of the research on commons has been inspired by Nobel Prize winner Elinor Ostrom (1990), who investigated communal property systems capable of sustaining resources in the long-run<sup>1</sup>. Ostrom's empirical work succeeded in convincing the world that communities can overcome the so-called 'Tragedy of the Commons' (Hardin 1968). Hardin's seminal 'Tragedy' had postulated that common resources would tend to be overexploited because individuals have the tendency to act selfishly and free ride. In response to this theory, Ostrom documented actual instances where *commoners* – the people commoning – had successfully self-organized and designed rules for the collective sustainable use of resources. By doing so, Ostrom also differentiated a commons from *open access resources*.

Ostrom regarded commoners as rational actors able to collaborate when the perceived benefits of cooperation exceeds the costs. She also set out a list of attributes that

---

1 Before Ostrom, the standard definition of a commons was that of neo-classical economic theory, as a type of resource different from public, private and open-access resources. Resources were categorized depending on their 1) levels of *excludability* (or control of access) and 2) *subtractability* (or rivalry for the resource use), and commons resources were those with low excludability (i.e. controlling access to them by potential users may be difficult, costly and even impossible) and high subtractability (i.e. the level of exploitation of one user diminishes the supply for others). The neoclassical definition is rejected by commons researchers today because the excludability of a resource is not related to the intrinsic properties of resource but to the institutions, property rights and other forms of power that determine and regulate access to them. Elinor Ostrom deserves special credit for developing this analysis.

made cooperation less costly, and as a result, more likely<sup>2</sup>. And she formulated eight ‘institutional design principles’ (below, Section 1.2.2) that were conducive to the long-term sustainability of the resource system. These were set out both in respect of forestry and of commons (Ostrom et al. 1999, Ostrom 2000, respectively).

This *rational model of agency* has been extensively criticized (see Chapter 2 for a review). Crucially, it ignores the fact that it is typically *not* communities that are responsible for overexploitation, and that where this is the case, they are generally the victims of external socio-political and historical pressures. In fact, communities all over the world have had their basic means of livelihood expropriated – stolen by colonialists, nationalized by states and privatized for the extraction of commodities to be sold on global markets (Vandergeest 2006, Murray Li 2010). These developments have unequally impacted people along subaltern axes (of race, gender, class, identity, etc.), destabilizing social and ecological relationships and thus whole systems of commons, including the social fabric (Goldman 1993, McCay and Jentoft 1998, Cleaver and De Koning 2015).

Deprived of their livelihood resources, communities have had no choice but to abandon their community economies and find or insert themselves in globalized ones (Fournier 2013). Thus, in the words of Michael Goldman (1993, p. 68), communities are routinely ‘thrown into crisis’. Today, indigenous peoples and local communities maintaining commons systems in co-evolution with nature are relatively rare (Plumwood 2009), and those that have survived are constantly threatened by resource extraction, commodity production and mining, transportation and energy infrastructure, to name a few (IPBES 2019).

Moreover, communities are not just appropriators; they are also leaders of *counter-hegemonic movements* that stand against extractive developments and propose new modes of living aligned with local ecosystems, identities and cultures. The Zapatistamovement in Mexico and the Landless Movement of Brazil (Movimento Sem Terra) are just two examples of such commoning initiatives today. These initiatives have developed novel forms of organizing social and ecological relations, including the repartition of land, reorganization of livelihoods and the development of democracy and education (Starr et al. 2011).

2 Ostrom (2000) identified the following four attributes of the resource system: 1) the *feasibility of the improvement*, 2) reliable and valid *indicators on the conditions*, 3) *predictability* of flow of resource units and 4) a sufficiently small *spatial extent*; and the following four attributes of the appropriators: 1) the *salience* of the resources in terms of appropriators’ dependency, 2) their *common understanding* on how a resource system operates and how their actions affect one another and the resource system, 3) a *low discount rate*, 4) *trust and reciprocity*, 5) *autonomy* in determining access and harvesting rules and 6) *prior organizational experience* and *local leadership*.

Thus, it is increasingly recognized that building a commons not only involves community practices of resource use, extraction and management but also extends to political struggles that are deeply entangled with new ways of participating in social life, citizenships, and affective relations, to the land and its ecosystems and with one another (Villamayor-Tomas and García-López 2018, González-Hidalgo 2021). Nevertheless, despite this vibrant rejuvenation of old traditions and the infusion of local, sustainable alternatives with progressive ideals and practices, investigations remain rather thin on the ground. That is, there is a need for further research into these political counter-hegemonic performances and the struggles of the commons.

In order to address this gap and better understand commoners' contributions to sustainability transformation, there is a need to better understand the agency of commoners. Thus, this thesis shifts the focus from commons (resources, institutions) to commoning (actions, practices). The idea of commoning was conceived by Peter Linebaugh (2008), whose *Magna Carta Manifesto* analysed the historical evolution of legal collective rights in relation to struggles over subsistence commons. By doing so, he defended the idea that political and legal rights can only exist – be claimed, recognized and defended – when commons are alive in the day-to-day material reality of citizens.

In other words, both judicial rights and practices of commoning are important in the defence of political rights, which justifies the need to 'keep the word [common] as a verb, an activity [commoning], rather than as a noun, a substantive [commons]' (ibid., p. 279). Thence, Linebaugh set the basis for a political reading of the commons, which was lacking in the mainstream – Ostrom-inspired – work on the subject.

*Commoning scholars* – notably from the Community Economies Collective (e.g. Roelvink et al. 2015, Gibson-Graham et al. 2016a, Diprose et al. 2017) and independent writers and activists (Bollier 2014, Öztürk et al. 2014, Bollier and Helfrich 2015, Ruivenkamp and Hilton 2017, Bloemen and de Groot 2019) – have developed a model of agency that goes beyond portraying commoners as the rational appropriators of commons resources and now victims of capital and its 'progress'. Generally, commoners' actions are understood as driven ethically and morally by a wish to put the common good and long-term sustainability at the centre of their lives.

Within these ethics and values, however, the commoners' agency is *relational*, influenced by their (power) position in the network of relations and their daily interactions with others. This relational understanding of agency and community transcends the usual divisions between self and community, between the human and non-human, allowing the development of a richer understanding of agency, one that is able to better incorporate the manifold political, social, moral, and affective dimensions of agency (Nightingale 2011).



### 1.1.1. Zooming in: agency of commoners in community forests

From among the wide range of different resources that are commoned – such as digital platforms, urban food and housing arrangements – this thesis looks at what has been referred to ‘*community forests*’. Primarily situated in the Global South but also expanding in North America and Europe, community forests are woodlands to which local communities have legally enshrined rights to manage and use. They belong under the broader category referred to in terms of community-based natural resource management (CBNRM).

The term ‘CBNRM’ dates back to legal schemes from the 1980s and 1990s, when a trend of decentralizing natural resource governance was promoted in response to a global call for subsidiarity in development and conservation projects (Ribot et al. 2006, de Koning and Cleaver 2012, Lund 2016) and a renewed interest in commons stimulated by Elinor Ostrom’s research. Although obviated many times by commons’ researchers, the devolution of these areas to local communities has been the result of long term struggles by communities organizing social movements for the recovery of their ancient customary rights over lands and resources (Goldman 1998, García-López and Antinori 2018).

Most of the time, policies on community forests have not taken into consideration local practices, customs or social dynamics, leading to undesired outcomes, conflicts and implementation failures. Most community forests in the Global South have the objective of stopping deforestation and promoting sustainable forestry, involving the local community and supporting the livelihoods of the rural poor (Gibson et al. 2000, Chhatre and Agrawal 2009). However, research demonstrates that only some community forests perform well in terms of social and ecological indicators.

Many studies have shown how community forests can perpetuate *power inequalities* within and across communities and actually deliver poorer *ecological outcomes* as compared to forests that are (co-)managed by private owners and/or the authorities (Agrawal and Chhatre 2007, Arts and de Koning 2017, Skulska et al. 2020b). It has also been shown that the most vulnerable are usually excluded and unable to benefit (Agarwal 2010, Ingram et al. 2015). The formal institutional schemes of community forests, such as community assemblies and the protocols for forest management, have been ‘captured’ by ‘elites’ and used to exclude less powerful actors, who may be illiterate. Thus, it is argued, community forests are reproducing and even exacerbating the pre-existing power inequalities (Agarwal 2001, Nightingale 2005, García-López 2019).

In terms of *community participation*, empirical studies are showing that many community forests promote exclusionary politics based on specific identities and side-lining resident-

based political representation, such as local government (Ribot et al. 2008, Lund 2016). Community forests have been used by state agents and regional elites to enforce their territorial power upon citizens, defining, over time, the type of forestry practices that communities should aim to develop. This leaves little space for communities to develop their local livelihoods and express their identities (Li 2002, Seijo 2005, Sikor and Lund 2010). Instead, it contributes to installing hegemonic principles, practices and perspectives on forests, helping states to reproduce their authority over local people and forests (Ribot et al. 2006, Basnyat et al. 2019, Pokharel et al. 2020).

In Europe, meanwhile, the context of this thesis, where traditional and subsistence economies have been ‘left behind’, community forests (and other types of landed, non-forested commons) suffer from low involvement or only *passive participation* (e.g. Brown 2006, Marey-Pérez et al. 2010, 2014, Gatto and Bogataj 2015, Premrl et al. 2015, Sandström et al. 2016, Serra and Allegretti 2020). This lack of interest has been linked to the introduction of logics at odds with local social dynamics, incorporating both established traditions and new community practices and values (e.g. where shepherding is excluded, local specificities and institutions are ‘simplified’ or new desired functions, such as the conservation of cultural heritage, go unincorporated) (Brown 2006, Ingram et al. 2015). The passive (non-)participation threatens the continuation of commons and sometimes leads to the installation of extractive logics and degradation of forests (Serra and Allegretti 2020, Skulska et al. 2020a).

While the above research shows how the implementation of community forests is problematic in many aspects, however, most studies have side-lined and simplified the *agency of communities*. Usually portrayed as victims or selfish appropriators, communities are not seen as agents, as groups or collectives that may want to engage in and even initiate programs of local institution building. This has obscured the ways in which commoners engage with community forest institutions, not only preventing appreciation of how the policies and legislation regarding community forests have been influenced by previous communities’ struggles and ancient practices but also how their engagement with these program can generate new citizen capacities, demands and subjectivities that might eventually overcome institutional failures (Fleischman and Solorzano 2018).

Indeed, one of the biggest criticisms of mainstream theories of the commons has been the rational model of agency, which tends to homogenize as well as demonize communities. In line with the old thinking on commons, communities receiving community forest programs are imagined as composed by atomized rational actors entering into interactions for a specific purpose (i.e. the appropriation of resources). Critical commons scholars have shown how this is far from true (Cleaver and De Koning 2015, Millner et al. 2020). In fact, actors act consciously and unconsciously following a variety of

social and moral imperatives beyond resource appropriation and also depend on unequal power dynamics. Thus, formal institutions regulating community forests *are* shaped by local actors and *do* acquire new meanings and serve multiple purposes beyond resource appropriation – including the reproduction of the communities’ (typically unequal) social dynamics (Ribot and Peluso 2003, Cleaver 2012, Hall et al. 2013).

For example, community assemblies can be arenas enabling political representation (Rutt 2015), and operate as platforms advocating for broader citizenship or democratic rights (Hecht 2011, Bose 2013, Grant and Le Billon 2019). Yet, mainstream studies (using Ostrom’s institutional design principles, have obviated until very recently the political engagements of communities and their role in the emergence and maintenance of the commons. As mentioned, communities can self-organize into social movements to defend their rights and autonomy as well as to build their capacity to manage local resources (Villamayor-Tomas and García-López 2018).

Finally, by regulating the direct management of forests, community forests programs nurture new *relations between community members and forests* (or, more generally, with the non-human world). For example, Shingh (2015) showed how commoners’ caring practices in Indian community forests were key to the forging of affective ties to forests similar to those created with pets or family and that these ties created a *subjectivity as commoners*, which explained their collaborative and caring behaviour in respect to nature.

This study and others that followed (e.g. Angé et al. 2018, Haggerty et al. 2018, Singh 2018a, 2018b, Nightingale 2019) have shown that communities’ practices of management and care for nature can nurture new subjectivities that not only generate more respectful behaviour for nature but can create new avenues for collective action against extractive developments and for the defence of nature more broadly (Villamayor-Tomas and García-López 2018, Tyagi and Das 2020, García-López et al. 2021).

As I will show in Section 1.2 below, looking at commoning – process of people building a commons – affords a better understanding of the relationships between community forests (their institutions, histories and socio-natures) and the agency of the commoners. So far, only a few studies have investigated community forests through the lens of commoning, most of which have been situated in the Global South (e.g. García López et al. 2017, Nightingale 2019). These studies have shown how commoning is a socio-natural process as the practices of commoners have both ecological and social aims and outcomes; yet, it is always a partial achievement, since, as noted, it is affected by broader political-economic contexts and power dynamics that lead to the inclusion of certain, privileged identities and subjectivities and the exclusion of others (Euler 2018,

Nightingale 2019, González-Hidalgo 2021, García-López et al. 2021). In this vein, these studies underline the need for further theoretical development to better account for the power-led contradictions and ambivalences of commoning (Esteves 2017, Nightingale 2019) and to develop methods better able to capture commoners' relationships with nature, or the *more-than-human world* (Singh 2018b, Nightingale 2018, 2019).

### 1.1.2. Aims and objectives of the thesis

The agency of commoners remains a key area still not well developed; to address this gap, I employ a commoning lens in this thesis to develop an integrated model of agency. As mentioned earlier, commoning connects the commons discourse with sustainability transformations—commoning is not just an alternative (to the state and the market) approach to management resources but a practice and an ethic that helps to imagine new relationship to our environments and our communities.

Further elaborating on the work of such authors as Singh (2018b), Nightingale (2019) and García-López et al. (2021), I conceptualise commoning in this thesis as a socio-natural process of reconnecting communities to forests. This includes fostering caring and responsible attitudes towards forests that create political more-than-human communities. This approach denaturalizes forests, turning the human-forest relationship itself into the main object of study. Commoning socio-natural practices in forests contribute to the (re)production of communities in terms of livelihoods, but they also (re)create identities, cultures and political subjectivities. Socio-natural practices are thus 'affective', indicating how commoners, communities and forests are co-constituted through commoning practices.

The main question that guides this research is the following:

- How does commoning help us to better understand and enhance the agency of commoners in community forests and their contribution to sustainability transformations?

The purpose of this overarching question is to focus on the development a model of agency that better explains why and how people engage with community forests and the practices, meanings and outcomes that emerge from this. In this way, the relevance and role of community forests – or better, the commoning initiatives emerging within these contexts - to sustainability transformations can be analysed and discussed in a critical manner. The focus is thus the agency of commoners and the in-between process by which forest and commoners are co-constituted; it does not include ecological measurements that quantify forest change.

As explained below (Section 1.3.1), this subject is explored through a *case-study* research approach in historical, Germanic-origin community forests in north-western part of the Iberian Peninsula (the Galicia region of Spain and the north of Portugal). This area has a paradigmatic type of community forest dating from the Middle Ages, and the local residents in specific areas (most often parishes) become co-owners of the attached forests.

These community forests were expropriated mostly during the last century and only devolved to communities during the 1970s. Through history, they have been sites around which commoning initiatives have emerged, although not yet investigated from a commoning lens. Within this area, I investigate three community forest case studies: O Carballo (Friol municipality, Galicia), Teis (Vigo municipality, Galicia) and Ansiães (Amarante municipality, Northern Portugal). They are employed for a theoretical, methodological and empirical exploration of the following research sub-questions:

- How does the agency of commoners in community forests relate to sustainability transformations? Why does a commoning lens matter in analysing this relationship?
- Which dimensions of commoning and intervening processes/outcomes are relevant to understanding the emergence and dynamics of commoning initiatives in community forests? How ‘transformative’ are these initiatives and which challenges, contradictions and ambivalences do they reveal?
- How can a commoning lens inform the design of participatory action research (PAR) to support commoners’ engagement with community forests? Which new insights about commoning, community forests and sustainability transformations does the PAR implementation reveal?

The first sub-question explores the *theoretical perspectives* on commons and sustainability transformations, while exploring the empirical reality of community forests in the case study area to contextualize the theoretical review and illustrate the theoretical findings with empirical examples.

The second, sub-question is answered through an *empirical analysis* of the three case studies. This focuses on commoners’ daily practices and struggles around *forest management*, including a historical examination of community practices of collaboration, conflict, negotiation within the community and with external actors.

The third sub-question is addressed by exploring the design and implementation of *participatory action research* (PAR), applied in the case-study in North region of Portugal (Ansiães). PAR is applied to better understand – and support – participation in commoning, by developing an innovative and creative methodology that gathers the

*affective more-than-human entanglements* between commoners and the forest.

Together, the three sub-questions contribute to the development of a relational and more-than-human understanding of commoners' agency in community forests. This is needed to advance our appreciation of the processes explaining the emergence and dynamics of forest commons, as well as the reasons why people engage with and participate in collaborative endeavours taking care and responsibility for forests and nature generally. More broadly, the thesis engages with debates on the capacity and role place-based initiatives in driving sustainability transformations (Chapter 6).

This research was part of the SUSPLACE programme, a Marie Skłodowska-Curie Actions Innovative Training Network (ITN) analysing 'sustainable place-shaping practices' in Europe.<sup>3</sup> SUSPLACE focused on the role of researchers in supporting place-shaping practices and sustainable, transformative change. As discussed in Section 1.3 (below), research on sustainability transformations aims to analyse practices and solutions while contributing to sustainability transformations.

## **1.2. Towards an integrated framework to study forest commoning**

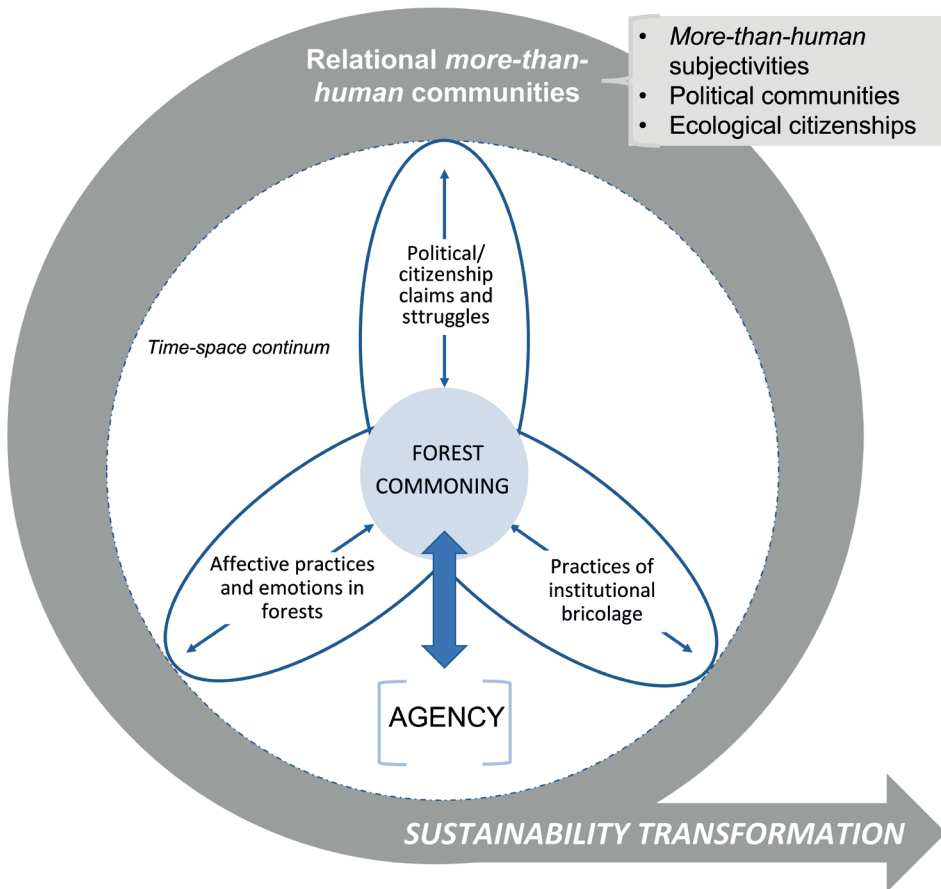
The following presents the *integrated framework* used here to study commoning in the context of community forests. Depicted in Figure 1, it is inspired by the framework for *sustainable place-shaping* developed by Horlings (2018) and adapted for the study of forest commoning as a *place-based* transformative practice. As in Horlings' framework,<sup>4</sup> Figure 1 shows how the agency of commoners – in this case, community forest commoning – involves three interrelated processes located within a time-space continuum, namely 1) practices of institutional bricolage; 2) affective practices (in forests), and 3) political/citizenship claims and struggles.

---

<sup>3</sup> At [www.sustainableplaceshaping.net](http://www.sustainableplaceshaping.net)

<sup>4</sup> Horlings (2018) presented sustainable place-shaping practices at the centre of a framework composed by three interrelated practices (re-grounding, re-appreciating and re-positioning practices). These three processes are situated in a time-space continuum, shaping and being shaped by power dynamics that relate to wider historical socio-political dynamics.





**Figure 1.** Theoretical framework of the thesis, as further developed from a preliminary framework presented below (Chapter 2).

The framework shows forest commoning as linked to agency and how forest commoning is affected and informed by the differentiated agency of commoners *beyond* forest appropriation and care. Not all commoners will engage in commoning in the same way or to the same degree, which will entail unexpected outcomes, also impacting the continuity of the forest commoning initiative and its outcomes. As mentioned, forest commoning is understood as a set of practices that foster more-than-human community relations and subjectivities, but the process is always affected by power dynamics. As a result, the process is always *ambivalent*, it creates both inclusions and exclusions that need to be critically analysed.

In the following section, I describe in more detail the different components of the framework through two entry points: 1) commoning as a place-based transformative practice and 2) forest commoning from the perspective of intervening processes and outcomes.

### 1.2.1. Commoning as a place-based transformative practice

For many decades, the concept of place has not been considered amenable to a sustainability transformation analysis. Equated to 'local', the transferability of the results of place-based research to other places or larger scales has been questioned, and sustainability research looked at processes at higher scales (from regional to global). Places were just localities affected by larger social-ecological dynamics. Over the last decade, however, place has caught the attention of sustainability researchers due to an increased awareness that sustainability transformations need to consider endogenous resources, and local values and culture as well as the agency of people in places (Franklin and Marsden 2015, Horlings 2017, Horlings et al. 2018).

Sustainability research has adopted a *relational understanding* of places, inspired by Massey (1991, 2004) and Escobar (2008), among others. This relational understanding defines places as stretching beyond geographical or administrative boundaries, both affected by and shaping broader scales (Horlings 2018). Thus, place is never just local but is the result of cross-scalar intersections of relations (between human and non-human subjects and across scales and time). This relational perspective accounts for the agency of people in places, with their creativity, values, meanings and worldviews, as the key engine of transformation. Places are not just victims of wider processes, such as globalization, but people in places struggle against global forces, which affects their building of 'territories of difference' (Escobar 2008). Further, taking the relationality of places seriously means acknowledging how the global is built by the multiplicity of practices in places. In the words of Massey (2004, p. 11), 'places are also the moments through which the global is constituted, invented, coordinated, produced'.

While agreeing on the above, place-based research has often put the burden of transformation on community initiatives while liberating more powerful actors, such as states, from their responsibility (see e.g. Goodwin 2019). However, there are reasons to think that communities can fail to affect higher scales and are limited by structural constraints. Beyond community engagement, a change of broader political economies and of structures and systems that constrain communities is needed (O'Brien and Sygna 2013a, Blythe et al. 2018).

Place-based research can identify the structures that *limit* sustainability transformations and need to be changed. The implementation of policies and practices can only find its most direct expression in places, where the multiple practices, values, interests and also flows and networks across scales converge (Balvanera et al. 2017, Horlings 2018). Thus, looking at the successes and failures of community place-based initiatives can help to understand the *local complexity* of doing transformation along with its variability across contexts (Balvanera et al. 2017). Moreover, even when 'failing', place-based initiatives can

illuminate important barriers for transformative change and bring counter-hegemonic discourses and practices to the political and policy agenda (e.g. García López et al. 2017, Puello-Socarrás and Martín 2020) .

Finally, this study of place-based community practices is situated in a ‘*performative ontology*’ (Gibson-Graham 2008). A performative ontology holds that research creates reality by choosing what to study, what to show and share, and what to neglect (Cameron and Gibson 2005). Julie Graham and Katherine Gibson (a.k.a. Gibson-Graham), who coined the term, argued that critical social research has contributed to the neglect of community initiatives as viable objects of inquiry by showing how communities are inevitably oppressed by structural factors. Consequently, they argue that choosing to investigate community place-based initiatives that are potentially contributing to social well-being and environmental regeneration can make these initiatives more ‘real’ (Gibson-Graham 2008; pp. 6). In this way, the research is itself contributing to new discourses in which places matter and communities can bring about fair, locally adapted sustainable solutions to social-ecological challenges (Horlings 2018).

In line with this, a performative ontology involves participatory methods seeking to produce knowledge (with communities) that unveils *obviated and marginalised realities* and helps people and society to see a space of *empowerment and possibility* (Cameron and Gibson 2005, Gibson-Graham 2008, Safri 2015). Such participatory action-oriented research is in line with emerging participatory and transdisciplinary solution-oriented approaches in sustainability sciences (Wittmayer and Schöpke 2014, Popa et al. 2015, Bartels and Wittmayer 2018, Horlings et al. 2019). However, a performative ontology is less concerned with co-creating solutions to specific problems than with the process of unveiling realities that can empower communities (e.g. relationships with non-humans not previously acknowledged or marginalised un-paid practices contributing to a community’s economies) (Cameron and Gibson 2005, Gibson-Graham and Roelvink 2010, Cameron et al. 2014, Gibson-Graham et al. 2016b). Still, as a type of participatory research (Lang et al. 2012, Wittmayer and Schöpke 2014, Popa et al. 2015), a performative approach requires transparency regarding the political normative implications of research – our positionality, normativity, and practices – in order to navigate among scientific demands, theoretical debates and practical needs of research participants.

### 1.2.2. Forest commoning: intervening process and outcomes

Analysis of the community forest literature and case studies reveals three key dimensions of commoners’ agency that are important for sustainability transformations. These are 1) *practices of institutional bricolage* creating institutional arrangements for a collective and inclusive use, care and management of forests; 2) *affective practices* in forests to

create meaningful socio-natures, 3) *political and citizenship claims and struggles* to assure community autonomy and representativeness in broader governance systems.

### *Practices of institutional bricolage*

As mentioned, *institutions* (and institutional design) have been studied by many commons' scholars. Understood as the rules of the game shaping actors' behaviours, Elinor Ostrom unveiled eight institutional design principles that make collective management of resources viable on the long run.<sup>5</sup> Institutional design principles are not a panacea – their implementation does not necessarily imply good outcomes – and they do not explain all the variability encountered on the ground (Ostrom 2011). Yet, updated by Cox et al. (2010), they are still valid as a reference point in analysing institutions and investigating the configurations of institutional designs and pathways that communities follow in establishing working institutions (Basurto 2013, Le Tourneau and Beaufort 2017, Villamayor-Tomas and García-López 2018).

As stated, however, the model of agency underlying the mainstream school of commons is limited and so also is the understanding of institutional change (see Chapter 2). Contrary to the mainstream approach which understands institutions as external 'things' (structures, rules, norms) balancing self-interest, this thesis takes the practice-based approach to institutions inspired by the *critical institutionalism* school (Cleaver and De Koning 2015, Whaley 2018).

The critical institutionalism approach to institutions emphasizes the examination of how institutions come into being and are (re)produced over time and space, in this case by commoners' embodied relational agency (Cleaver and De Koning, 2015). Institutions are defined here as dynamic and fuzzy assemblages of meaningful practices animated by actors' practices. Institutions are thus 'ritual mechanisms' (Douglas 1986) that order societies and explain relationships. This practice-based approach can better account for the agency of commoners in building institutions as it recognizes the *relative permanence* and *malleability* of institutions.

---

5 Ostrom's institutional design principles: (1) defining user and resource boundaries (clear boundaries between users/non-users and resource system/rest of the environment); (2) setting practices that are congruent with local conditions (appropriation and provision rules are congruent with local social and environmental conditions, and the inputs are proportional with the benefits obtained by the resource users), 3) the participation of individuals affected by the operational rules in modifying the rules (existence of collective-choice arrangements); 4) monitoring users and the resource (mechanisms to supervise the appropriation and provision levels of the users and the conditions of the resource), and related designing 5) graduated sanctions (appropriators who violate operational rules are likely to be sanctioned in proportion to the severity of the violation); and 6) conflict-solving mechanisms (appropriators have access to low-cost conflict resolution mechanisms); further, commoners 7) need to have a minimal recognition of rights by external governmental authorities (the rights of appropriators to self-organize are recognised and allowed); and 8) are organized in nested enterprises (appropriation, provision, monitoring, enforcement, conflict resolution and governance activities are organized in multiple layers of decision making).

Institutions are always in the making by people's interactions, from which emerge the institutional practices, arrangements, and relations. This process is identified as *institutional bricolage* (de Koning and Cleaver 2012, Cleaver and De Koning 2015). Institutional bricolage stresses that institutions cannot be crafted or designed; rather, they are the result of the 'necessary improvisation' of daily practice (de Koning and Cleaver 2012; pp. 5). Institutions emerge by patching together, consciously or unconsciously, the social, cultural and political practices and resources available to them based on the logic of dynamic adaptation (Cleaver 2012, Cleaver and De Koning 2015). Manifestly, the implementation of institutions is not a linear process: their establishment requires them to be socially legitimated. Institutional bricolage explains this legitimation through 'institutional leakage' or analogy; for example, a patriarchal order in the family may 'leak' also to other social structures, such as community assemblies or religious beliefs, leading to similar models of behaviour across different arenas of life (Cleaver 2012).

The idea of institutional bricolage encourages us to understand commoning as always partial, contradictory, and ambivalent. While commoners may be driven by a certain set of ethics and values, they address their everyday challenges by piecing together (consciously and unconsciously) a variety of different institutional arrangements. In this reworking of the existing arrangements, they innovate, but they also reproduce undesired power dynamics and unsustainable human-nature relationships. The result of commoning as institutional bricolage is that institutions are neither completely new nor completely traditional but rather *dynamic hybrids* combining elements of the modern and traditional, the formal and informal.

Bricolage also affords an account of the different *degrees* of agency of those involved, for example, in terms of unequal benefits, while exploring how commoning results in inadvertent exclusions. In the context of community forests, researchers have usually studied the exclusionary effects of regulatory formal institutions (Agarwal, 2001; Nightingale, 2019). They have generally not investigated how new formal institutions combine with existing community logics and how the resulting hybrid logics produce new dynamics of inclusions and exclusions. Analysing institutional arrangements from the perspective of institutional bricolage allows us to identify the variable capacities, opportunities, and unequal power of participants to shape institutions and the unequal opportunities to benefit from their outcomes. As a result, the bricolage approach also enables us to explain the contestation and conflicts involved in commoning.

### *Affective practices in forests*

Our relationships with nature has always been at the core of sustainability research. The *social-ecological systems* (SES) framework (Ostrom et al., 1994, p. 37; Ostrom, 2007) coupled ecological and social systems for the first time, revealing their inter-

dependence, unpredictability and non-linear dynamics, as well as highlighting nature's contributions to human well-being (MA 2005, Brauman et al. 2019). Yet, by focusing on the dynamics of the system (SES self-organization), this framework has side-lined the agency of humans and inner dimensions of sustainability (the strategic action guided by values, meanings, interests, worldviews, etc. (Westley et al. 2013). While some SES researchers are beginning to incorporate agency and values (Masterson et al., 2017; Westley et al., 2013), *feminist nature-society studies* – which examine (gendered) everyday practices to explain the workings of power, environmental conflicts and struggles and care for nature (Sultana 2011, Nightingale 2013, González-Hidalgo and Zografos 2019, Tyagi and Das 2020) – appear to be better equipped to facilitate our understanding of human-nature interactions.

Central to feminist nature-society studies, including feminist sociology, geography, and political ecology, is the idea that our relations to nature and one another produce *subjectivities*. Subjectivities are generally understood as the 'subject positions' in which individuals are drawn by the effect of different vectors of power (gender, class, ethnicity, identities). As explained by Rose (1996 p. 37, in Grant and Le Billon 2019), subjectivities the '*infolding of exteriority*'. This infolding emphasises the role of practices in the internalization of power, as each experience is incorporated in the existing subjectivity. Subjectivities are attached to particular identity-based performances – as a father, a child, a fisherman, a commoner, a woman, a dutiful citizen – but they are reproduced and shaped through practices. While in some instances power relations of domination discipline and repress subjects, at other moments, oppressive structures make people to reject their 'subjection' and open up possibilities for resistance and the production of new subjectivities (Holston 2009, Lamarca 2015, Nightingale 2018, Grant and Le Billon 2019).

Contrarily to the SES distinction and separation of a social and an ecological component, feminist researchers underline the need to bridge nature-culture divides through concepts such as the socio-natural and more-than-human (Gibson-Graham and Roelvink 2010, Latimer and Miele 2013, Nightingale 2019). Generally, these terms are used in critical social sciences to think about socio-ecological systems in a non-binary, non-anthropocentric manner (Haraway 2010). Rather than just a cognitive exercise, anthropologists long ago recognized the explanatory value of considering socio-natures in understanding indigenous cultures. Socio-natures become visible in kinship relations established not only among humans but also with non-human species, creating social worlds of mutual responsibility (Escobar 2008, Brierley 2020).

Beyond indigenous cultures, feminist nature-society studies provide new models of agency that include the everyday *affective and emotional entanglements* with the non-

humans. Using *affect theory* (see Chapter 5), agency is understood as emerging from more-than-human ‘*assemblages*’ of relations (Tsing 2015, Singh 2018a, García-López et al. 2021). Agency is seen as distributed across components – human and non-human, material and immaterial – while enacted by a particular body in a continuous process of becoming.<sup>6</sup> Applied to forest commoning, affect theory shows how practices of care for forests – patrolling forests, picking up dead and dried wood, etc. – do not just shape forests but also constitute people’s and communities’ subjectivities. The collective care for ecosystems produces more-than-human subjectivities characterized by a sense of interdependence and ‘being-in-common’ with nature (Singh 2018b). While material needs may be an initial motivator, these more-than-humans subjectivities and belongings better explain *long-term* community conservationist behaviours (e.g. Singh 2015, Angé et al. 2018, Haggerty et al. 2018).

Unlike other concepts used to study the inner dimension of sustainability (e.g. values), emphasis on the *affective practices* in subjectivities shifts the focus from effect (of values) to the processes and relationships through this emerges (as conservationist values and empowered subjectivities). This approach is considered pertinent in the context of the Anthropocene (Gibson-Graham and Roelvink 2010) in order to recover people’s lost ecological knowledge and memory of nature supporting their lives (Plumwood, 2009).

The above does not imply an idealist conception of commoning communities, as Nightingale (2011 p. 22) argues: ‘the presence of strong communitarian relations does not necessarily lead to commoning for all, nor does it necessarily foster nurturing relations with non-humans’. As commoning and the resulting socio-natural relations are always imbued with relations of power, even the most well-intentioned commoning endeavour will inevitably prioritize some relations and subjectivities over others, producing exclusions and inclusions (Nightingale 2019).

Moreover, collaborative and caring behaviours can be hindered by anxiety and distress (Nightingale 2011, Diprose 2016). For example, Nightingale (2013) explains how, despite their strong attachments to the sea and collaborative behaviour with other boats, fishermen elicit self-fish individual attitudes towards fish extractions when confronted with uncomfortable policy settings for quotas. Together with subjectivities, *emotions* are thus an important component for explaining the diverse rationalities enacted in specific contextualized interactions (Nightingale 2011, González-Hidalgo 2021).

<sup>6</sup> Individuals are not considered finite (bounded) entities, but as always being contaminated by others (Tsing 2015) or as ‘becoming with’ others (Latour 2004, Haraway 2010).

*Political and citizenship claims and struggles*

Finally, the framework applied in this thesis includes *political and citizenship claims and struggles* as an important element linking forest commoning to sustainability transformations. It is widely accepted now that ecological destruction and social inequality result from the same economic and political structures. Any intervention aiming at sustainability transformations must thus tackle the intersectionality of these problems. Commoning does so by proving a *model for resource use*, and a *participatory model of citizenship*.

Research reveals that community forests are *political terrains* where negotiations, struggles and conflicts occur not only around natural resource access but also around the access to democratic, social or political rights (i.e. the power to claim, assert and enjoy these rights). Communities use forests to reassert their authority as citizens by (re)building socio-natural relations associated with more emancipatory, empowered and politically conscious identities and subjectivities (Vandergeest 2003, Bolaños 2011, Elmhirst 2011, Peluso and Vandergeest 2011).

The socio-natural relations of the commons and forest commoner subjectivities can create political communities when people lack representative forms or when extractive and undemocratic developments and policies threaten their valued socio-natures (Hecht 2011, Singh 2015, García López et al. 2017, Tyagi and Das 2020). In these situations, commoners have ‘stood up’ for forest protection – to defend their subjectivities as women, rubber tappers or Amazonian dwellers. When there is a lack of legitimate democratic structures, forest protection is used as a demonstration of their citizenship and the concomitant ‘right to claim rights’ (Grant and Le Billon 2019).

In order to study the linkages between political mobilization and forest protection, this thesis uses *post-national* conceptualizations of citizenship. Citizenship is defined as a *collective subjectivity*, expressing the political meaning of persons ‘belonging to a certain community’ (Lund 2016); as a subjectivity, citizenship is performed through every-day practices and struggles to acquire or maintain and exercise rights (Llano-Arias 2015). This definition portrays citizenships as variable and attached to different belongings that go beyond the nation and may be associated with claims to specific rights and different political struggles. In the context of sustainability, the concept of *ecological citizenship* has emerged. This includes the citizen’s right to a clean environment, as well as their trans-boundary responsibility to care for the planet through pro-environmental behaviours (Macgregor 2014, Sinreich and Cupples 2014).

By joining commoning to citizenship debates, this thesis contributes to an emergent literature that explores the *community performance of ecological citizenship*. This is regarded



as an urgent need, since techno-managerial fixes to solve current complex environmental problems are increasingly replacing political negotiation, contestation and struggle (Bäckstrand 2003, Nightingale 2005). This current development puts questions of justice, participation, and democracy to one side, leaving the management and administration of the environment to experts (Swyngedouw 2010). The experts are typically professionals employed by state and private organisations with a variety of motivations and values that might be quite disconnected from or contrary to local knowledge and needs. In the words of Macgregor (2014, p. 107), ‘the only political arrangement that will work in conditions of radical uncertainty – such as the ecological crisis – is a democratic one where the voices of as many citizens as possible participate in public debate, and where citizens accept responsibility for improving human–nature relationships’.

In fact, current policies tend to treat forest management as a technical endeavour defining strict protocols that reproduce extractive forestry practices; they typically involve local people in the sense of ‘giving them a say’ but deny sufficient autonomy and political rights to communities at the higher levels of decision-making (Pokharel et al., 2020). Linking community forests to citizenship through forest commoning is instrumental to an acknowledgement and better understanding of the political struggles around community forests as well as the strengths and limitations of communities in respect to the strengthening of democracy through commoning.

### 1.3. Methodology: a place-based participatory research

Overall, this thesis takes a *place-based approach* based on *local case-studies*. A *multi-method approach* is employed to adapt this to the different contexts, including participant observation, in-depth interview and informal conversations along with focus groups and workshops combined with creative methods for participatory engagement. A case-study approach is ‘an empirical inquiry that investigates a contemporary phenomenon within its real-life context’ (Yin 1994, pp. 6-9). Case-studies are especially suitable for exploratory questions (e.g. why and how questions) over which the investigator has little or no control (Yin 1994). There are various epistemological choices justifying this approach, the most fundamental of which is ontological.

The thesis is rooted in an ontology that recognizes the world as a complex adaptive system, fully embracing its unpredictability and the intentional role of humans in shaping developments. Thus, it recognizes the limitations of science in predicting and its reduction of phenomena to a series of law-like generalisations. Within this perspective, research insights are *context-specific* – specific mechanisms can trigger one outcome in one concrete context and another in a different one – and *co-constructed* – by the researcher and the subjects of research – as part of an *intersubjective research process* that

is imbued by power relations (Crang and Cook 1995, Saunders et al. 2009, Bygstad and Munkvold 2011, Brouwer and Woodhill 2015)(Brouwer and Woodhill, 2015).

In line with place-based sustainability research (Section 1.2.1), the theories and methods chosen reflect important *normative choices* that are taken when engaging with theories, places and communities (Horlings et al. 2019). As such, this thesis is normatively grounded on the idea that new types of communities organized around principles of care for nature, interdependency and participation are needed to support sustainability transformations.

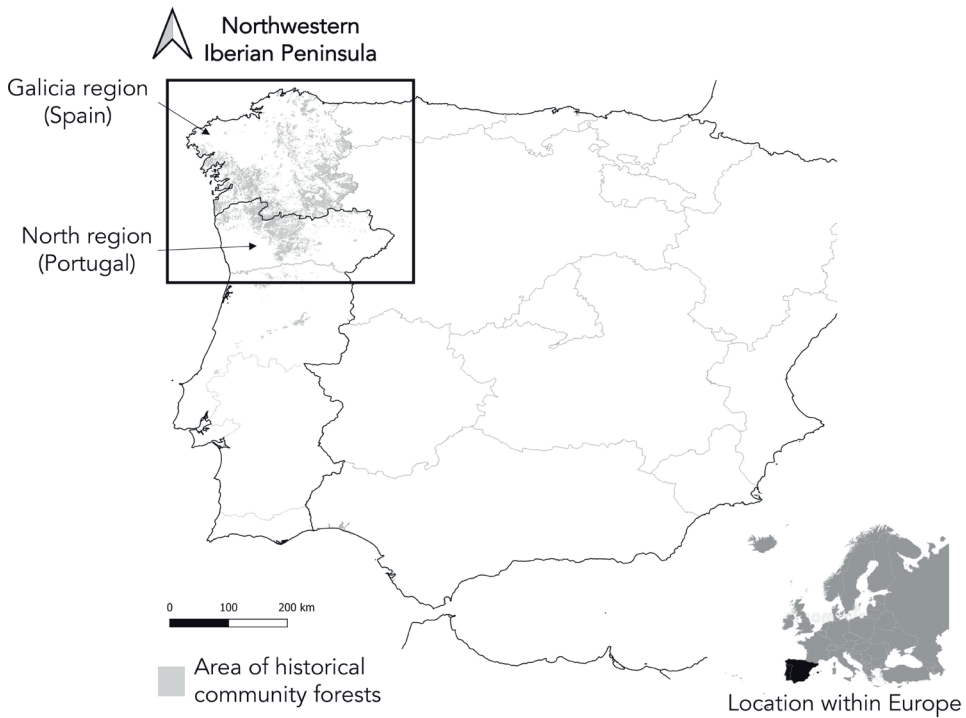
While we derive some common conclusions across cases (see Chapter 6), this thesis was not designed to systematically compare the different cases. Rather, the research approaches adopted in each case were adapted to the commoners' *specific needs and challenges*, as perceived and in line with the practices of participatory sustainability research (Franklin and Blyton 2012). By analysing the needs and challenge of each case, different *dimensions of commoning* were unveiled, contributing to the building of a theoretical framework over time through an iterative and inductive research process—going back and forwards between empirical data and theory. The results across the cases are used in Chapter 6 to reveal *mechanisms of commoning* (the why and how people engage with community forests), thus contributing to theory-building and addressing the overarching research question.

### 1.3.1. Setting the context: historical forest commons in north-western Iberia

The thesis studies community forests in the north-western Iberian Peninsula, specifically in the Galicia region in Spain and northern part of Portugal. In this broad area, there are historical community forests covering some 25% of the Galician territory and 13% of Portugal (mostly located in the north) (Figure 2). These historical community forests may be regarded as paradigmatic (in Europe) insofar as they have existed since the Middle Ages and are linked to traditional agrarian systems in a various ways, including the traditional usage of patches of forest, shrub lands and pastures for firewood, crop manure, livestock-rearing and bedding (Bravo and De Moor 2008, Lopes 2014). Expropriated during the 19<sup>th</sup> and 20<sup>th</sup> centuries, many were reforested by state agents following the 'forest regime' in Europe (Skulska et al. 2020c).<sup>7</sup> Since then, with the post-WWII democratization process, several countries have devolved ancient rights to communities and introduced regulations that involve various participatory formal arenas and stakeholders (municipalities, state forest services, etc.).

---

<sup>7</sup> The history of the forest regime begins with the development of the first Forest Code in France in 1827; it was a legal regime, can be defined as a set of special rules for the management, exploitation and enforcement of public and community forests, and it operates as a set of norms necessary not only to create, operate and preserve forest resources but also to create and maintain forest cover, control water, protect the floodplain and reduce drylands and mountainous soil erosion risks (in Skulska et al. 2020).



**Figure 2.** Location of study area (north-western Iberian Peninsula).

The historical community forests in Galicia and Northern Portugal are quite similar. This is rooted in the area's history as having constituted a joint kingdom or region many times in history until Portugal independence in 1143. Remnants of this shared cultural past include language – as West Ibero-Romance languages, Galician and Portuguese are agnates – and the similar socio-spatial organization of the two territories. For example, the parish is an important geopolitical unit across the study area, very often superseding the of the municipality in terms of cultural and social importance.<sup>8</sup> Moreover, unlike other historical community forests in Europe, which tend to have a Roman origin, these have a Germanic origin. While Roman-like historical commons have evolved into collective private properties (defined collectivity) or municipal properties (managed/used by residents), Germanic-like commons are characterized by the recognition of community ownership for those who live in the area to which the common land is ascribed (thus, people lose rights when moving away).

While quite unique in terms of their Germanic nature, the Galician and Northern Portugal forests have endured the historical path of many other historical community forests in

<sup>8</sup> The parish had a customary personality and vitality for centuries due to the territorial dispersion, isolation and little industrial and urban development of the populations in both territories (Farfía Tojo 1980).

Europe involving nationalization and reforestation. They were formally regulated and devolved to communities after the fall of the military regimes, in 1974 in Portugal and the year after in Spain. Both military regimes had promoted the reforestation of common lands with maritime pine and the development of an industrial eucalyptus forestry sector for paper pulp production (Rico Boquete 1995, Serra, R., Barca, S. and Meira 2015). As a result, the forests become terrains of conflict and struggle between populations with different interests and with state agents. Many communities resisted as state reforestations expropriated local people's means of subsistence and competed with their subsistence agricultural activities (grazing, growing cereals, collecting firewood for cooking and heating, picking gorse shrubs for animal bedding, making manure and using other resources like medicinal herbs and for building materials (Balboa López 1990)). Common lands were inserted in a traditional agro-silvopastoral system, where the gorse shrubs (a nitrogen fixing plant dominating many common lands at that time) were crucial for the fertilization of subsistence crops (mostly cereals) (Brouwer 1993, Barros and Sánchez 2018). As a result, the reforestation provoked conflicts and occasionally led to deaths (Brouwer 1995, Rico Boquete 1995, Bauer 2005, Freire Cedeira 2011).

In both countries, current legislation attributes historical commons to parishes and establishes the main community duties, responsibilities and decision-making structures; there are only small differences between countries in this regard (see Copena Rodríguez 2018). In Spain, community forests are legally referred to 'communal woodlands in joint ownership' (*montes vecinales en man común*). The 1968 law establishing the new legal status treated them as private collective property protected by four conditions: the land 1) could not be divided, 2) or inherited or unalienated (i.e. traded or sold), 3) is imprescriptible (i.e. land historically used as common land will always be considered as such) and 4) has immunity from seizure.

In contrast, the Portuguese legislation used the traditional name (*baldios*) – literally 'wasteland' – which was recognised in the national constitution as community property (beyond the public-private binary). In both countries, common lands can be managed either autonomously or in co-management with the state forest services.<sup>9</sup> In the latter situation, communities continue to be organized by a governing board and a community assembly that decide how to invest the percentage of earnings given to them by the state forestry activities. Generally, earnings are reinvested in the parish/forest, although in Spain, the law allows communities to divide earnings among households.

---

9 In the case of Portugal, there is a third arrangement, one in which communities are not constituted and the parish government takes on the management responsibilities; in this situation, again, the parish can manage the community forest autonomously or in co-management with the forest state services.

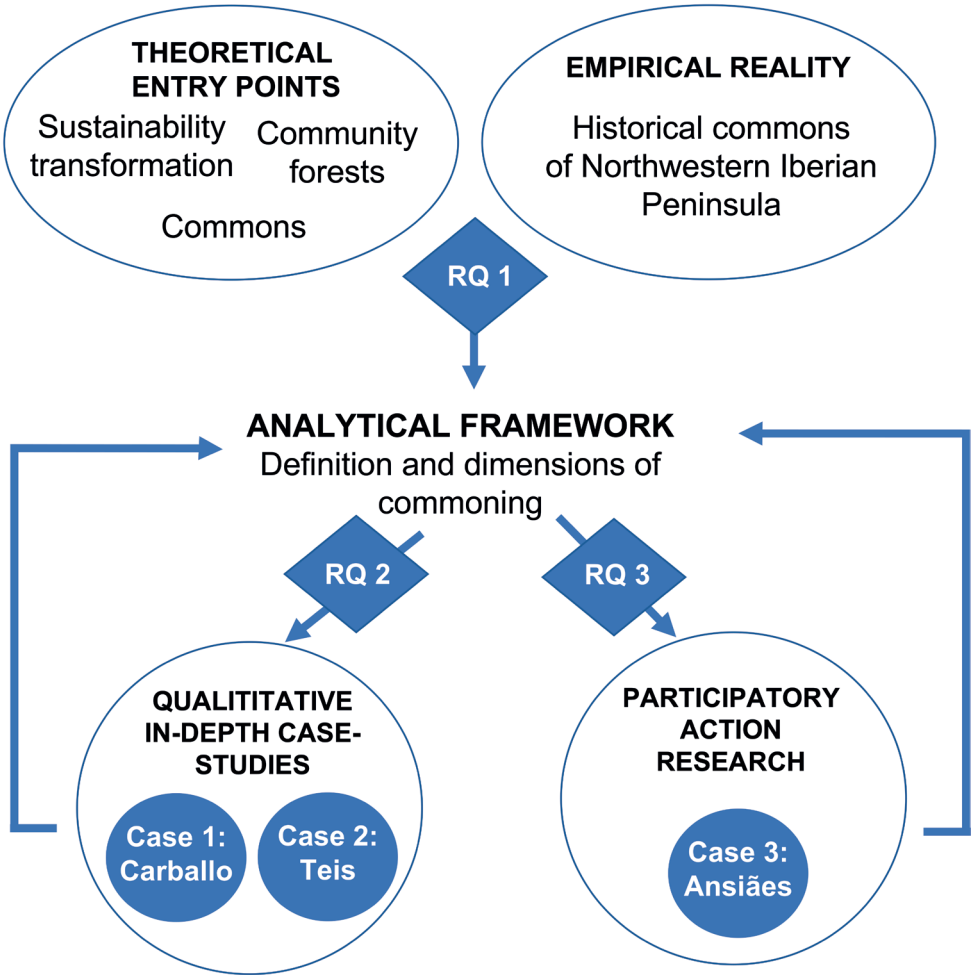
#### 1.4. Case study selection and characteristics

For this thesis, I have selected communities engaged in forest commoning processes – developing community forest practices with the aim of supporting the community – as opposed to communities co-managing community forests with state forest services. To select the cases, the following two criteria were established: 1) communities organize and manage the forests autonomously without the co-management agreement with state forest services, and 2) communities have been developing forest practices (with governing board and community assemblies) with the aim of satisfying material and/or immaterial community needs.

In order to identifying potential cases, a total of nine interviews and meetings with key actors in Galicia and North Portugal were held. These were with regional and national umbrella associations, researchers in the field, several communities identified by interviewees as successful in terms of the selection criteria and a public servant working with communities.

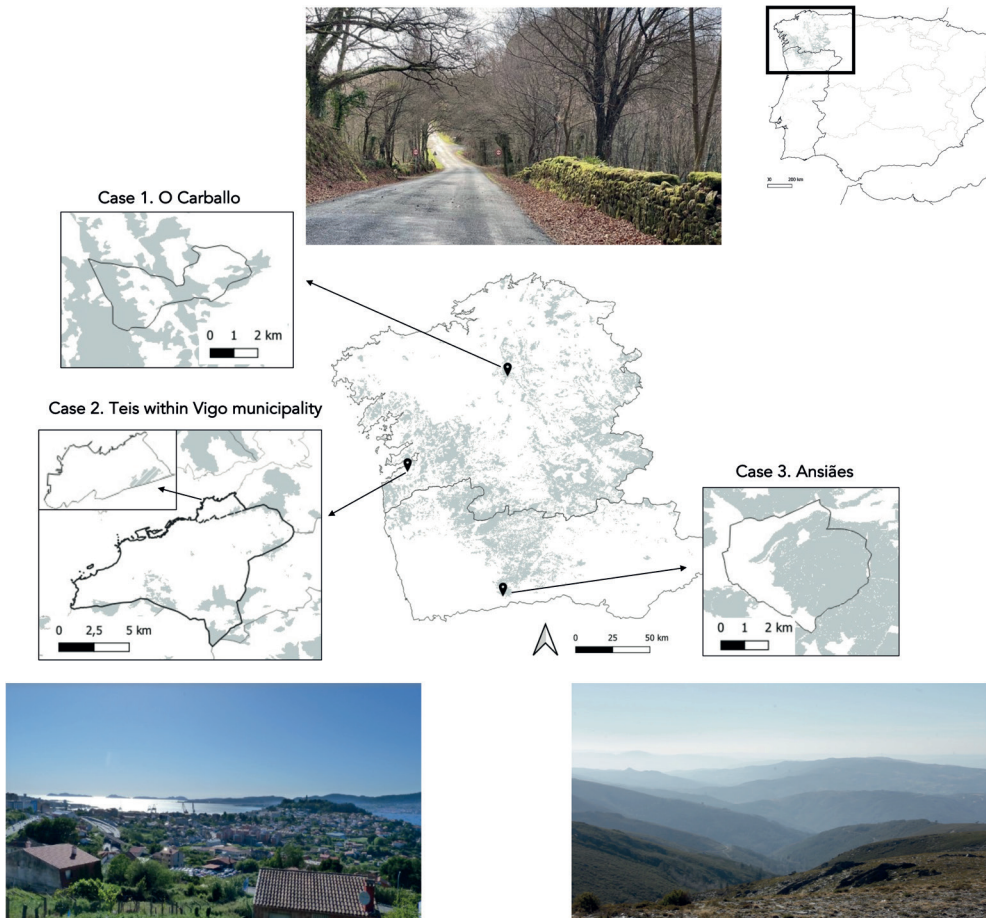
From these interviews, I learnt that Galicia's communities complied more often with the selection criteria than did the Portuguese communities. In Portugal, community forests were mostly run on the basis of a co-management agreement with forest services, state extractive forestry practices dominated and community participation was low (Baptista 2010, Serra and Allegratti 2020). In contrast, communities in Galicia have generally taken full responsibility for their community forests for more than ten years, and they have developed activities to satisfy their needs and desires as a community while caring for forests, such as protecting community culture and identity and activating community relations (Marey-Pérez et al. 2010, Caballero 2015, Alló and Loureiro 2016, Copena Rodríguez 2018, Cidrás et al. 2018).

As a result, I selected two cases with a long commoning trajectory in Galicia to study how commoners' agency is revealed in community forests (Research Question 2). The experiences from these cases informed the design of the third case study: a PAR in Ansiães parish in Portugal. This explored research approaches and methodologies to better capture and promote the commoning of socio-natural relations with forests (Research Question 3). Figure 3 shows the relationship between the three case-studies, the theoretical framework and the specific research questions (above, Section 1.1.2).



**Figure 3.** Overview of the methodological approach of the thesis.

The selection of the two cases in Galicia was informed by the aim of maximizing variability in terms of rural–urban dynamics, productive and conservationist focus, and the types of challenge the community experience (see below). This allows adds more complexity to the analysis of commoning. The aim of the PAR applied in the Portuguese case is to explore research approaches that could promote practices of commoning in community forests of Portugal, while understanding the challenges of doing so. All three cases serve to answer Research Question 2 (explore the practices, the institutional arrangements and relations emerging from forest commoning), but, the longer trajectory of the cases in Galician allows for a deeper exploration of commoning challenges and successes. Figure 4 shows the location and images of the three cases finally selected, which are described in more detail in the following sections.



**Figure 4.** Location and images of the three case studies.

#### *Case 1. O Carballo (Friol, Galicia)*

O Carballo parish has a community forest of 444 hectares of reforested area and 250 hectares of non-forested pastures allotments. There are 12 settlements in the parish with 145 inhabitants (77 men and 68 women) in 2001, of whom 61 (42%) were over 65 years old.<sup>10</sup> It is located in Lugo, a province with a marked rural character. Agriculture is the most important economic activity in the parish with almost half (48%) of the total population employed in this sector, followed by the services sector with almost a third (32%).

The parish suffers from the rural depopulation, abandonment and degradation of customs and community relations related to the decline of the traditional economies. In this context, in 2006 the community broke the co-management agreement with the forest

<sup>10</sup> <https://www.ine.es/>



services on the imitation of activities and projects in their community forest to activate the community (commoning). The activities developed sought to provide a space of socialization and learning to build the community's social relations and culture. This was enacted by organizing festivities around ancient customs and creating multifunctional economic activities in the community forest, such as agro-silvopastoral projects (in which forestry is integrated with livestock production) and honey production. However, the continuation of the commoning community is challenged by internal conflicts and insufficient levels of participation.

*Case 2. Teis (within Vigo municipality, Galicia)*

The parish of Teis has a community forest of 52 hectares. Officially, Teis has 2,265 inhabitants (out of the 287,912 inhabitants in Vigo municipality), but local associations claim a population of around 30,000 inhabitants (10% of the Vigo population), as the city of Vigo has spread into Teis parish territory over the years. Thus, located at the periphery of the city of Vigo, the dynamics of Teis go hand-by-hand with the dynamics of the municipality.

Between 1960 and 1980, Vigo received migrants from all over rural Galicia to feed an emergent industrial sector. Teis was one of the parishes with the highest industrial growth. As a result, residents suffered high urban sprawl and the degradation and enclosure of public space. In this context, as the construction of a highway threatened the community forest, and a commoning initiative emerged in 1994 that focused on regenerating the native woodlands. The community forest has become an arena to care for marginalized and excluded citizens and make claims for their right to care for the commons in the city. As a result, the main challenge they face is their conflicts with the municipal council and other related administrations. Therefore, a multi-scale analysis of (communal) forest practices is introduced into the case study to compare the dynamics and relationships between Teis parish and the municipality.

*Case 3. Ansiães (Amarante, Portugal)*

Ansiães parish is located in the municipality of Amarante. The parish has ten settlements concentrated at the valleys of two different rivers (the Marão and the Póvoa). With 888 inhabitants in 1991, the 2021 census counted 516 inhabitants, just over a third (190, 37%) of whom were 65 years old.<sup>11</sup> With an area of around 2500 hectares, the community forest is hilly, contains deep valleys and mountains – the highest peak reaches 1,400 metres above sea-level. Ansiães suffers from rural depopulation and aging, the ongoing reduction and disappearance of services (e.g. schools) and jobs (e.g. water company), and abandonment of cultural social life and festivities.

---

11 <https://www.ine.es/>



A group of six forest workers, co-funded by the state, work for the community forest for forest maintenance work, mainly for wildfire prevention, but people feel detached from it. Resident used the *baldio* to collect firewood, but other uses were minor and carried out by external private initiatives that pay a rent for the use of the *baldio* resources (wind energy, goat shepherding, and honey production). As a result, the community decided to break the community forest co-management agreement in 2016 to develop activities aimed at transforming the *baldio* into the engine of the community, for example, by creating new jobs. However, the community forest still suffers from poor community engagement.

### 1.5. Data collection and analysis: a progressive contextualization

Fieldwork research was done in the two years between February 2017 and February 2019 and included semi-structured interviews, participant observation, focus groups, a workshop and a community event. The implementation of fieldwork comprised several rounds of visits (interviews and participative observations) alternated with desk research (qualitative analysis and theoretical groundwork) until a contextualized theoretical framework was defined and no new information being gathered. The last field visit was in February 2019, although contact with the communities was maintained until the completion of the analysis and writing process to contextualize argumentation and gain any updates of their developments.

The first round of interviews were exploratory interviews with experts, umbrella organizations and communities in the two regions (Galicia and Northern Portugal). These first interviews served to build a first contextualized theoretical framework and research design, including the selection of the case studies. Once the case studies were selected, a second round of fieldwork focused on the two cases in Galicia. In both cases, the research started with interviews of the members of the governing board, as they were the commoning leaders and main promoters of relevant activities. These interviews provided an overview of the community forests' project objectives, activities, and historical trajectories. They also revealed their relations with other institutions and actors. Finally, a timeline with milestones was prepared, including the network of actors enabling or hindering forest community actions.

I continued the fieldwork by interviewing other legal commoners with different ways of participating – that is, commoners who would usually attend the general community assemblies, other household members, and commoners engaged in productive activities within the community forests (e.g. shepherding). The governing board gave this information for O Carballo, while in Teis, a questionnaire was distributed in a general assembly.

Once the information was gained, a stratified random selection of commoners was applied, including equivalent ratios of participative/non-participative commoners, sex, age, and place of residence within the parish. Interview protocols explored commoners' current and past practices, opinions on recent commoning activities and reasons (not) to engage in activities as well as opinions and desires related to the historical community forests. The interviews lasted between one and two hours and were conducted until data saturation.

In O Carballo, saturation was reached with 20 households (including 10 women and 18 men), while in Teis it was attained with 15 commoners (out of 39). The methods were adapted to each context. In Teis, a multi-scale analysis included interviews with actors outside the legal community but identified as hindering or collaborating with community activities. The interviews were audio-recorded, transcribed and qualitatively coded using NVivo software (QSR International Pty Ltd., 1999–2009). The coding processes were begun by coding material according to research questions and building coding trees to develop a sense of the investigated processes.

The third phase of the research involved the design and implementation of the PAR implemented at Ansiães. The design was inspired by the results (theoretical and empirical) of the previous cases in Galicia, in which the affective relations with the forests were identified as key for motivating and informing commoning practices. The PAR comprised a total of 10 semi-structured interviews with representative members of the community, 11 video interviews with 11 elders (over 80 years old) focusing on affective stories, the collection of 15 people's written stories of affective experiences in the *baldio*, participant observation, two focus groups, a workshop and a community event.

The focus groups conducted with the main participants of the PAR (12 people) was intended to reflect upon the whole process, to discuss the impact of the different activities on their engagement and to gather participants' views of the *baldio* and the community. The interviews and focus groups were recorded, transcribed and coded per question using NVivo. The elders' video stories were integrated into a video of nearly an hour (51' 12").<sup>12</sup> This video was presented in a community event co-organized with PAR participants, in order to open reflections and develop discussions regarding the future of the *baldio*.

---

12 At <https://www.youtube.com/watch?v=P2bqjvDDFwQ>

## 1.6. Outline of the thesis

This research process, together with results, discussion and conclusions are documented in the six chapters of this thesis. Chapter 1 has introduced the relevance of the research. It has first introduced the main theoretical gaps, the aims and research questions, and gone on to explain the key concepts (theory), context of the case-studies (empirical context) and methodological approach employed.

Chapter 2 explores theories on commons and sustainability aiming to define a transformative research agenda for historical commons. It theoretically and empirically explores the role of historical (reforested) commons in creating human and more-than-human communities and describes the practices behind them. The main argument is that by studying processes of challenging the dominant subjectivities of separateness, we can go beyond informing ecosystem management in historical commons. This type of research can potentially strengthen embryonic communities and promote the creation of new ones. Institutional bricolage is proposed as a useful concept to study commoning practices. The theoretical framework presented in Chapter 2 established the theoretical basis for the research design of the thesis and was further enriched with the advancement of the research, leading to the complete framework presented in Section 1.2 (Figure 1).

The following three chapters analyse the three case studies, focusing on one of the dimensions of commoning presented in Figure 1. Chapter 3 focuses on the diverse practices of institutional bricolage to study how participation in commoning is influenced by formal institutions. Forest commons research has usually studied the exclusionary effects of formal institutions or the way formal institutionalisation catalyses new avenues of collective action and power resistance. Few studies have investigated the ways in which new formal institutions are combined with *community logics* and how the resulting *hybrid logics* produce new participation dynamics, inclusions, and exclusions. Understanding commoners as bricoleurs supports the analysis of institutional change and participation in a way that is sensitive to power inequalities within a community. Exploring non-participation through the lens of bricolage allowed us to see how the authoritative *state forestry logic* leaks into the commoning project, which obstructs participation and put sustainability at risk.

Chapter 4 focuses on how participation in commoning is affected and affects citizenship performances as an entry point to explore conflicts with public authorities and challenges to maintain community autonomy in community forests. While there are numerous articles reporting on the pitfalls of community forests at a national or local level, few studies have analysed the *mid-to-long-term impacts* of community forests in nurturing *novel forms of citizenship* (Fleischman and Solorzano 2018). This paper aims to fill this

gap by exploring how the process of taking care of forests collectively shapes citizenship and the political tensions that emerge in the process. This is achieved by unravelling the forest management practices and broader citizenship struggles in the periphery of Vigo municipality (Galicia, Spain). By looking at the interlinkages between citizenship and forest management at the communal and municipality levels, I seek to explain why state authorities often hesitate to give communities autonomy in community forests and the strategies used to retain power over communities and forests. The aim is to unveil how emerging political tensions result from *clashing citizenships* and how this impacts *community autonomy*.

Then, Chapter 5 investigates how affective relations to forests (and related emotions) influence participation. Informed by previous chapters, it focuses on exploring the role of affects and emotion in strengthening community relations around a reforested common land recently devolved to the community. To this end, the chapter implements a PAR in a historical community forest (*baldio*) suffering from low levels of community engagement in North Portugal (Ansiães, Amarante). This PAR taps into the past and present through affective stories experienced by people in the forest commons to reveal the diverse *affective relations and emotions* that attach the community to the *baldio*. Thus, the chapter is able to capture the affective historical entanglements that need to be mobilized in a commons, bringing empirical evidences on the relationality of agency and empowerment.

Finally, Chapter 6 presents the discussion and conclusions of the thesis. It gives the key empirical results of the thesis, focusing on the empirical results related to *commoners' agency*: different *dimensions of commoning* (why and how commoners engage) and *intervening processes and outcomes* that explain the emergence and dynamics of commoning initiatives in the different cases. The results are then discussed in the light of previous theories on commoner's agency, empirical work on community forests (and other types of CBNRM), and current debates on sustainability (place-based) transformations. The chapter ends by pointing to practical recommendations, not only for policymakers engaging with community forests, but also for communities, practitioners and researchers engaging with communities in activities and processes of commoning.





***This chapter was published as:***

*Nieto-Romero, M., S. Valente, E. Figueiredo, and C. Parra. 2019.  
Historical commons as sites of transformation. A critical research agenda to study  
human and more-than-human communities.  
Geoforum.*





# Chapter 2

**Historical commons as sites of transformation. A critical research agenda to study human and more-than-human communities**

*“Responding to the challenges of the Anthropocene is not simply about humans finding a technological or normative fix that will control and restore the earth. It is about human beings being transformed by the world in which we find ourselves”*

*- Julie Graham (1945 – 2009) and Katherine Gibson (1953-) (a.k.a. Gibson-Graham),  
Australian feminist economic geographers*

## ABSTRACT

The most critical question for sustainability research is how to facilitate transformative change. Yet, the academic scope of historical commons' research is limited to institutional design and environmental sustainability. In this paper we argue for a transformative research agenda for historical commons focused on the study of processes building humans and more-than-human communities. We start by reviewing three commons schools, namely the mainstream and critical institutionalism and the community economies collective, and assess how these relate to sustainability and to theories on agency, community and change. We then define a research agenda taking a political and critical ontology of the community economies collective, and a phenomenological epistemology of critical institutionalism. We follow by characterising the underlying practices building humans and more-than human communities by showing three ideal stages of commoning found in our empirical cases in the north-western Iberian Peninsula (Spain and Portugal). Finally, we end by presenting a guiding framework for analysing processes of building communities in historical commons. In conclusion, we encourage further exploration of underlying practices that widen humans' interdependency and inter-being and call for action-research projects and experimental methods that promote transformative encounters between humans and nature. Our framework is a first attempt to inspire researchers of historical commons to actively engage in unravelling the full potential of historical commons as sites of transformation.

**Keywords:** Commoning, Institutions, Community, More-than-human, Transformation Sustainability



## 2.1. Introduction

Historical commons, referring to the familiar commons of history revolving around multifunctional plots of land, with arable land, grasslands, shrublands or/and woodlands, or with other natural resources, such as water or fisheries have inspired much of the contemporary research in commons. However, while other types of commons such as social, business or digital commons (see Bollier, 2014: 133) have transcended Ostrom's views of what commons mean and serve for, – e.g. Time Banks (Diprose, 2016), Ecovillages (Esteves, 2016), Community Supported Agriculture (Vivero Pol, 2015), or open source software projects (Barron, 2013; Bradley, 2015) – historical commons research seems to remain anchored to a scope of ecosystem management which defines commons as a collective property system or even as common-pool resource systems (Alló and Loureiro, 2016; Caballero, 2015; Domínguez García et al., 2014; Gómez-Vázquez et al., 2009; Grupo dos Comúns, 2006; Lopes, 2008; Marey-Pérez et al., 2010). A transformative research agenda requires that historical commons' research go beyond ecosystem management and be studied under the lens of larger sustainability transformations (Blythe et al., 2018; Göpel, 2016; O'Brien and Sygna, 2013; Popa et al., 2015).

The UNEP (2012), among others (see Göpel, 2016; O'Brien and Sygna, 2013), has claimed that sustainability transformation is beyond rules and incentives, and that only a change of human systems of meaning, mindsets, worldviews and subjectivities can bring the scale of change needed for the so-called Anthropocene. Capra and Mattei (2015), Gibson-Graham and Roelvink (2010), Haraway (2010) and Rauschmayer (2017), among others, argue that the key worldview deeply responsible of the Anthropocene is the belief that humans are autonomous individuals, separated from each other, as well as from nature and other conditions of their existence. Challenging this worldview implies questioning the “deeply embedded premises of our [economic and political] systems” (Bollier, 2014: 147). Any management or governance intervention that does not challenge this underlying subjectivity will continue reproducing the ‘business-as-usual’ system (Göpel, 2016). We see commoning as one way to challenge this system.

Commoning strengthens and widens the sociality of human beings among themselves and with other non-humans and nature (Parra and Walsh, 2016), enhancing humans to feel and behave collectively in an inter-related way with other human (Fournier, 2013; Sandström et al., 2017) and non-human species (Bresnihan, 2015; Gibson-Graham et al., 2016b). This subjectivity has been referred to as “inter-being” (Rauschmayer, 2017). When nurturing inter-dependency, humans form communities of humans and non-humans (Gibson-Graham et al., 2016b; Singh, 2018). To our knowledge there are few studies exploring changes in subjectivities in historical commons (Agrawal,

2005; Nightingale, 2011; Sandström et al., 2017; Singh, 2018, 2013), despite the fact that it is the cornerstone for any sustainability transformation. In most research on historical commons, cohesive communities are seen as a “tool” or incentive to achieve environmental and social sustainability. Instead, in this paper communities are seen as both the “tool” and the “objective” of environmental and social sustainability. To build communities is an end in itself, which, as seen above, relates to a subjectivity of inter-being and thus has transformational potential. As stated by Stephen Gudeman: ‘[W]ithout a commons, there is no community; without a community, there is no commons’ (Gudeman (2001:27) in Gibson-Graham et al., 2016a: 196). Yet, to our knowledge, there is a lack of comprehensive descriptions of the underlying patterned practices that describe human and more-than-human communities. Without a more explicit characterization of communities, it is difficult to critically assess how and to what extent commoning manages or not to build these communities.

This paper explores theories on commons and sustainability to define a transformative research agenda for historical commons. The paper theoretically and empirically explores the role of historical commons in creating human and more-than-human communities and describes the practices behind them. Our main argument is that by studying processes of challenging the dominant subjectivities of separateness, we can go beyond informing ecosystem management in historical commons. This type of research can potentially strengthen embryonic communities and promote the creation of new ones (Gibson- Graham et al., 2016a).

The following section starts by reviewing three commons schools – the mainstream institutionalism (MI), the critical institutionalism (CI) and the community economies collective (CEC) – exploring how these three schools understand commons in relation to sustainability, and the theories on agency and community used to look at commons dynamics. From this literature review, we conclude that a transformative research agenda for historical commons needs a CEC ontology and a CI epistemology. In order to do so, a view of agency as relational and institutions as patterned practices needs to be adopted. Section three mobilizes empirical material generated as part of an EU Horizon 2020 Marie Curie ITN project SUSPLACE (April 2016–March 2019). We use data from historical commons located in Northern Portugal and North-western Spain to illustrate and substantiate our theoretical arguments, notably to characterize human and more-than-human communities based on underlying commoning practices. Section four builds upon this characterization of communities to build a framework to guide the task of critically studying processes of building human and more-than-human communities. This framework gives an original commoning definition for historical commons and highlights important practices building communities. In the conclusion section, we argue that our framework can enhance a critical and potentially transformative research

agenda in historical commons, and we call for empirical studies that further expand our knowledge on the type of practices involved in building human and more-than-human communities and of experimental methods that promote them.

## **2.2. The sustainability problem of the commons**

### **2.2.1. The sustainability problem of the commons**

Historical commons existed in Europe since the Middle Ages, a period when many territories had lands that were used or managed by communities (Bravo and De Moor, 2008; Lopes, 2014). Historical commons, also referred to as common lands when involving land held in common, provided specific communities with the natural resources they needed to make their living (De Moor, 2011). These rights started to be abolished at the end of the 18th century, when ideas of the Industrial Revolution and the virtues of private property permeated the organization and legislation of the territory (Bravo and De Moor, 2008). Only a few historical commons remain till present day and these are formally regulated through legal frames instituted during the 20th century. Beyond customary rights, legal frames suggest specific rights and duties for using and benefiting from these lands as a community (e.g. Bryden and Geisler, 2007; Caballero, 2015; Kluvánková-Oravská and Chobotová, 2006; Mantescu and Vasile, 2009; Paletto et al., 2012; Premrl et al., 2015).

Most research in historical commons makes use of the theories within mainstream institutionalism (MI) and critical institutionalism (CI). For both MI and CI, commons' resource systems are defined as collective property rights regimes (Table 1), resource systems where communities have the power to exclude outsiders from the use of the resource system (Table 1). Elinor Ostrom was the first to define these as different from an open access system where excludability is absent or very difficult (Schlager and Ostrom, 1992). Although MI and CI differ substantially in their theories on agency and communities (see Section 2.2), they both rely on studying the management of ecosystems – and their inner working and outcomes in terms of environmental sustainability or community well-being (e.g. Ostrom, 2005; Cleaver, 2012; Arts et al., 2013; McGinnis, 2014).

MI seeks to provide answers for sustainable ecosystem management, highlighting that unspecified or ill-designed institutions (in regard to elements such as access or use and management) are the main problems for sustainable management (Table 1). Thus, MI research results in principles that guide institutional crafting for balancing humans' tendency to maximize individual material gains, reduce uncertainty and foster reciprocity and trust for the sustainable management of ecosystems (Cox et al., 2010; Ostrom, 1990) (Table 1). In parallel to the development of MI, CI was born as an alternative claiming that institutions cannot be strategically redesigned (Cleaver, 2012;

de Koning and Cleaver, 2012; Hall et al., 2013). Instead, CI research shows the variety of outcomes delivered by institutions looking at historical political- economic contexts, larger socio-political dynamics and invisible workings of power affecting access to resources (Table 1) (e.g. Cleaver and De Koning, 2015; Cleaver and Franks, 2005; de Koning and Cleaver, 2012; Ribot and Peluso, 2009).

Later on, and influenced by the advances of resilience thinking and social-ecological systems (i.e. Folke, 2006; Olsson et al., 2006; Walker et al., 2009), MI engaged with the study of the dynamics of social- ecological systems (Ostrom, 2009). The focus remained on ecosystem management and was criticized for being apolitical (Diprose, 2015; Kaika, 2017), anthropocentric, focused exclusively on human needs and agency (Herman, 2016), and for not challenging important deep structures of thought (i.e. the separation between humans and nature) (Gibson-Graham et al., 2016b).

For the Community Economies Collective (CEC), commons are not resources systems nor property rights regimes. For the CEC, any material or immaterial resource within the environment (such as water, air, food, etc.) or within the community (such as knowledge, language, cooperation and information), can potentially be widely used and (re) produced for the sustenance of life (Bollier and Helfrich, 2012). Thus, commons are understood better as “commoning”, as a process of negotiation – or more often a struggle – of access, use, benefit, care, and responsibility for the wide and shared benefit of communities (Gibson- Graham et al., 2016a). The CEC claims that the sustainability problem lies in the current economic paradigm which, through private property and individual capital accumulation, encloses the commons that are essential for humans (Capra and Mattei, 2015; Mattei, 2012). It is through commoning that resources– either under a private, public or common property regime– can become a system favouring wealth for humans and non-humans. Commoning (re)produces a social organization system formed by communities of users and producers defining modes of use, production and circulation of these resources (De Angelis and Harvie, 2014; Euler, 2018).

Understanding commons as practices of commoning allows for seeing the commons as something that occurs here and now, anytime humans voluntarily self-organize to take responsibility and care of shared resource– e.g. via unpaid housework, volunteering, practices of neighbourhood associations, etc. – and thus, as something that can be promoted and strengthened (Bollier, 2016; Euler, 2018; Safri, 2015). The CEC’s research goal is not to explain but to identify, propose and strengthen commoning processes through proposing new and wider relations via action research projects (Table 1) (e.g. Cameron et al., 2014; Diprose, 2016; Safri, 2015). Through this, the CEC

opens a new research agenda beyond ecosystem management directed to tackling the underlying reasons of the unsustainability of the Anthropocene (Gibson-Graham, 1996; Gibson-Graham and Roelvink, 2010).

Commoning for the CEC consists of a “different way of seeing and being” (Bollier, 2014), and of a “transformative paradigm” (Bollier, 2016) supporting greater participatory control over shared resources and community life. Thus, the CEC ontology, which understands commons as commoning, transforms commons research into a political and critical project for promoting sustainability transformations (Jhagroe, 2018; Kemmis et al., 2014a). Looking at processes of commoning is political and critical. Commoning highlights that any type of resource can be commoned and any person, including researchers, can participate in commoning processes; it also defines the unsustainability problem as the responsibility of an economic-political system that encloses shared resources via privatization and marketization (Table 1).

**Table 1.** Research within the three schools on commons. The sections highlighted in grey refer to concepts that support a transformative research agenda for historical commons.

	Mainstream Institutionalism (MI)	Critical Institutionalism (CI)	Community Economics Collective (CEC)
Some references:	Dietz, 2003; Cox, 2010; McGinnis, 2014; Ostrom, 1998, 2005, 2009	Claver, 2012; Hall, et al. 2010; McCay, 1998; Ribot & Peluso, 2009, Whaley, 2018	Graham-Gibson, 2016; Bollier, 2014; Fournier, 2013; De Angelis and Harvie, 2014; Singh, 2018
Definition of Commons:	A type of property right regime, a property system used in common with others, where users are co-equal in their rights to use, manage and exchange the resource.		It is <i>commoning</i> , a dynamic process of negotiating the rules for producing and reproducing commons resources for all.
Sustainability problem attributed to:	Imperfect or ill-designed institutions affecting resource access and environmental sustainability.	The historical and broad political-economic context, social dynamics and power, affecting resource access and environmental sustainability.	Capitalism, which uses and encloses the commons, including nature. This political-economic paradigm is responsible for the Anthropocene.
Researcher's role:	To predict/propose new <i>crafted</i> institutions to improve outcomes (environmental & social sustainability)	To identify why outcomes occur in each context (providing only an explanation, sustainability is not the direct focus)	To identify, propose and strengthen embryonic commoning-communities (action research projects focused on transformative change for sustainability)
Agency:	Bounded rationality, seeking individual benefits (but are fallible, have different preferences and strategies). Collaboration and competition exist.	Agency is relational. Individuals are guided by embodied, moral, emotional or social rationalities. Collaboration and competition exist.	Agency is relational. Individuals are relational emergences responding to the world. They tend to cooperate, although anxiety, struggle and conflict are inherent to negotiations.
Definition of Community:	Local, bounded to a territory, and defined by the aggregation of individual actors' behaviours ( <i>Local community</i> )	Built through interactions maintaining shared beliefs and values ( <i>Identitarian community</i> )	Built through interactions maintaining relations of <i>being-in-common</i> ( <i>Interdependent and more-than-human community</i> )
Actions that bring change:	Commoners' strategically design institutions for collective action (Institutional design)	Commoners' piece together different arrangements via conscious and unconscious everyday practices (Institutional bricolage)	Commoners' engage voluntarily and morally in negotiations of co-existence

### 2.2.2. Theorizations on agency and communities

MI developed a theory of agency in which commoners are capable of self-organizing and devising norms and rules to produce common goods (Ostrom, 1990). This was revolutionary at a time where other collective choice theories (e.g. Hardin, 1968; Olson, 1965) portrayed humans as rational and self-interested, and supported the need for external coercion mechanisms of the market or state. Yet, the MI approach is still based on rational choice theory: humans are still understood as seeking to maximize material benefits, yet bounded to available information and embedded in contexts shaping their individual cost-benefit calculus (Ostrom, 2005). The rational assumption has normative and political implications. By not taking historical and broad political economic contexts into account, MI usually blames local actors and institutions for undesirable developments, and suggests “institutional fixes” to communities even if local institutions were not the problem in the first instance (McCay and Jentoft, 1998). Instead, CI and the CEC schools look at commoners in relation to social, political and historical trends of society at large to understand that most of the time commoners are victims of larger socio-political struggles over resource enclosures and development paradigms rather than responsible of resource depletion (Gibson-Graham et al., 2016a; Goldman, 1998; Saunders, 2014). Although both CI and the CEC share this political view on the commons, they build upon different theoretical grounds for understanding agency and communities.

Both CI and the CEC schools understand agency as relational. Yet, while CI looks at how (community) relations drive individuals' actions, the CEC focuses on individuals' processes of becoming via their relationality to others, humans or non-humans. That is, following philosophers such as Bruno Latour, Nancy Jean-Luc, Val Plumwood or Gilbert Simondon, the CEC looks at processes of co-constitution and co-becoming arising with the sole experience of being in relation to others (Diprose, 2016; Gibson-Graham, 2006; Gibson-Graham and Roelvink, 2010; Roelvink and Gibson-Graham, 2009; Singh, 2018). The self is not seen as an autonomous subject acting in the world, but as a relational emergence responding to the world (Singh, 2018), questioning the principle of individuality of Western philosophy (Read, 2015 as cited in Singh, 2018).

Contrarily, CI acknowledges individuality but provides models of agency that recognize humans as driven by their relations to others and thus following ‘emotional’ ‘moral’ or ‘social’ rationalities beyond the economic (Cleaver and De Koning, 2015; de Koning and Cleaver, 2012; Whaley, 2018); humans are unconsciously guided by community norms, moral worldviews, relations of care, power dynamics, emotions and other physical embodied experiences (Agrawal, 2005; Cleaver, 2012; Lejano and Castro, 2014; Peters, 2004; Singh, 2013). Accordingly, CI also defines communities relationally: that is, built through social interactions and networks of communication which generate a

community with shared norms, explanations and values (Table 1), and bring forward a notion of community based on shared identity forming an ‘integrated whole’ (Durkheim 1964 as cited in McCay and Jentoft, 1998).

The CEC also defines a community relationally yet not based on a uniform identity. A community is diverse, open and ever-evolving (Diprose et al., 2017). Membership is not based on identity but on “appropriate use”, that is, a community involves all those willing to respect and negotiate the appropriate use of resources for their collective material and cultural survival (Diprose et al., 2017; Fournier, 2013). As Gibson-Graham (2006: 99) states, “a community involves those that engage in the ethical negotiations of co-existence for their economic being-in-common.” The process of building community is driven by humans’ intrinsic will to build meaningful social relations, yet this brings forth anxiety, conflict and struggle (Diprose, 2016; Gibson- Graham et al., 2016a) (Table 1). Negotiations involve humans and nonhumans (see Bresnihan, 2015; Gibson-Graham et al., 2016b). For the CEC, agency includes the non-human world – e.g. growth, the reproductive cycle, etc. (Bresnihan, 2015; Ruivenkamp and Hilton, 2012)– and as such, investigates how non-humans indirectly participate in negotiations via their affects on humans (Bresnihan, 2015; Singh, 2018, 2013). For example, the longer cycles of growth and decay in trees can link people to the past and the future, fostering the inclusion of inter-generational responsibility and sustainability concerns in decision-making and management (Herman, 2016).

As stated earlier, we argue that a transformative research agenda for historical commons needs a CEC ontology, including its approach to agency and community theorizations. An ontology based on CEC means accounting for the co-constitutions of the self and the community via relational processes, including relations to non-humans, which also involves the effect that relations have to individual’s actions. This ontology allows studying commoning as processes of building human and more-than-human communities. For the CEC, communities are relational, diverse, human and more-than human. This contrasts with the legal frames regulating historical commons which pre-define who is part of a community and its commoning negotiations– i.e. those living in a particular parish (Caballero, 2015) or municipality (Paletto et al., 2012), belonging to a genealogic group (Le Tourneau and Beaufort, 2017), or possessing land or other means (e.g. cattle) to use the resources system (Sanchis-Ibor et al., 2017; Sutcliffe et al., 2013). Yet, a CEC ontology allows to distinguish legal commoners, defined by law, from those commoners in practice, practicing commoning and forming communities. Legal commoners need to become commoners (see Singh, 2018), meaning subjects who see the environment and the community as a commons, and engage in commoning for their cultural and material survival. The question remains in regard to how exactly this new subjectivity occurs: how can legal commoners come to realize their inter-dependence or sense of



being-in-common with other humans and non- humans and behave as part of human and more-than-human communities? In the next section we explore how CI can help answering this question.

### **2.2.3. Critically studying human and more-than-human communities**

This section uses CI institutional theory to describe human and more-than-human communities as built by institutions. The institutional theory of CI is based on practice theory, which understands tangible practices as the building blocks constituting the social (Schatzki et al., 2001). For CI, institutions are not external “things” (structures) affecting behaviour (agency), as portrayed by MI; institutions are instead dynamic and fuzzy assemblages of meaningful practices (Cleaver, 2012: 45), or practical “ritual mechanisms” (Douglas, 1986), that maintain and recreate social relations. Practices are more than just actions, but refer to a repeatable set of doings, supported by particular sayings, or understandings of the world, that create particular relations (Schatzki et al., 2001 as cited in Kemmis et al., 2014b). Thus, institutions do not affect commoners but are themselves animated by commoners’ actions.

In line with Lejano et al. (2018), a view of institutions as practices is phenomenological: that is, it aspires to describe phenomena of how ‘institutions appear to us’ in their most genuine and faithful way. This view does not deny the power of strategic discourses and recognizes precognitive patterns of unconscious actions as shaping social construction (Lejano et al., 2018). This phenomenological approach allows to bridge otherwise separate fields, CI and the CEC schools, by understanding commoning as a process of institutional bricolage (e.g. Sandström et al., 2017). CI defines institutional emergence and change as processes of institutional bricolage. Institutional bricolage puts forward that institutions cannot be rationally crafted or designed, as they are the result of adaptive every-day practices through which actors creatively piece together different arrangements. Institutions are both the result of planned or improvised, conscious or unconscious action, and result from individuals patching together the social, cultural and political resources available to them based on the logic of dynamic adaptation (Cleaver and De Koning, 2015; de Koning and Cleaver, 2012).

This paper combines a CEC ontology with a CI epistemology via understanding agency as relational and institutions as the patterned practices building commons and communities (see shaded cells in Table 1). We argue that commoning, as the ongoing set of social practices, such as negotiation, mutual support, conflict, communication and experimentation, can be better understood in light of institutional bricolage. Commoning is not fully strategic nor fully unconscious; it is driven by moral and social relationalities, but is also shaped by unconscious actions that reproduce a certain social order. Institutions confer stability while they are in permanent change through strategic

behaviours, improvisation and adaptations. By identifying the institutions underlying human and more-than-human communities, researchers can analyse commoning progress. To do so, in the following section we explore how practices of commoning relate to community formation.

Commoning has been defined in numerous ways (e.g. Bollier and Helfrich, 2015; Euler, 2018; Gibson-Graham et al., 2016a; Ruivenkamp and Hilton, 2012; Swan and Cooper, 2013). For our study, we consider the three types of commoning practices identified by Fournier (2013): practices assuring resources are shared in common, are used for the commons and are producers of the common. We argue that these three dimensions of commoning practices help characterize the practices building human and more-than-human communities. First, commoning is a set of practices that assures that resources are shared in common. This involves all practices that allow the allocation of common resources to individual members. For example, in the famous commons case of Maine (USA) (see Schlager et al., 1992), commoning practices involve negotiating the permitted places to fish and the amount of catches allowed for each fisherman. Thus, practices within this dimension are related to dividing the common pie among individual appropriators for an equitable and fair access to resources (i.e. decision-making on rules for individual appropriation and practices of appropriation themselves).

A second dimension of commoning includes using resources for the common (Fournier, 2013), that is, for the community as a whole. For example, in the urban commons of Can Masdeu (Barcelona) (see Fournier, 2013), commoning practices involved producing but also cooking and eating food together; producing and consuming knowledge and skills (of organic gardening, building techniques, baking and so on) with the community of residents or, through the free workshops, with the broader public. Common resources were not allocated individually but were consumed for the common.

Finally, the third dimension of commoning refers to the production of resources of the commons. Commoning not only involves the allocation and collective consumption of resources, but most importantly the production (and reproduction) of commons resources. For example, Singh (2018) explains that practices in a common land in India—of patrolling forests, picking up dead and dried wood, etc.—nurtured commoners' capacities to act and respond in forests as a community. These practices produced knowledge of the plants that grew in forests and their use for subsistence, or of which trees should be grown or felled for timber, as well as the social relations necessary to take care of the forests by the joyful experiences with other humans (Fournier, 2013; Singh, 2018). They were producers of resources of the commons. In other words, by the act of “economic being-in-common” (Gibson-Graham, 2006), commoning (re)produces material resources (such as wood, crops, fish, etc. when (re)planting or respecting

periods of closed fishing) and immaterial resources (such as the networks of solidarity and reciprocity building a community, its skills, knowledge, etc.).

Commoning, with its three dimensions, can nurture a different mode of humanity (Plumwood, 2007: 1 as cited in Gibson-Graham and Roelvink, 2010), a new sociality or a new subjectivity that replaces the market rationale with the rational of human and more-than-human communities (Singh, 2018). This logic emerges from practices that produce a sense of interdependence and being-in-common with the rest of the world (Duffy et al., 2018; Singh, 2018). Feelings of being-in-common dim the boundaries between what defines the self, the individual, and 'the other', as other humans or non-humans affect the self (Haraway, 2010). Thus, analysing and promoting the formation of communities imply going beyond exploring practices of decision-making; to do so includes exploring all practices of socialization and interaction among humans and non-humans—like collective working, consumption of goods, festivities, etc.—which can support changes in subjectivities (Bollier, 2016; Fournier, 2013; Linebaugh, 2008; Sandström et al., 2017).

### **2.3. Commoning to build human and more-than-human communities**

This section examines the practices building human and more-than-human communities, by providing examples from four real historical commons in the North-western Iberian Peninsula. For this, we draw on Fournier's commoning dimensions (practices in common, for the common, and of the common) considering them as the institutions, as practices, building communities. We follow Kemmis et al. (2014b,a), who describe practices as action-thought complexes composed by sets of sayings, doings and relatings to characterize three types of ideal legal communities: household economy, human interdependent community and more-than-human community (Table 2). These three types of legal communities can be understood as three stages of commoning in historical commons. We discuss how each of the three stages relates to changes in subjectivities, in order to illustrate the transformative effects of human and more-than-human communities.

#### **2.3.1. Historical commons at North-western Iberian Peninsula**

At the beginning of the 20th century, northwest Spain and the north of Portugal had one of the largest surfaces of common lands in Europe. These common surfaces were a remnant of a Germanic property regime, dating back to the Middle Ages (see Lana, 2013), in which all neighbours in the parish enjoyed access to resources as long as they lived in the area. De facto informal rules, decided through community assemblies, set up the stage of accepted uses. Common lands were used at a household level and were key for family livelihoods, as a complement to traditional agricultural activities.

The land had a multifunctional use, with forests, shrublands and pastures, and uses involved family livestock raising and collection of basic goods, such as firewood for heating and cooking, manure to fertilize cereals fields, herbs, etc. (Baptista, 2010; Grupo dos Comúns, 2006).

A large part of the production and consumption of resources was collective. For example, shepherding was organized in a collective traditional system of *vezeiras* (in English, “shifts”). Similarly, potato or corn growing occurred on private land, but harvesting was collectively organized in exchange for a meal. Thus, although families held the means to access resources (e.g. land, cattle), collective work and consumption reproduced the networks of communication and social relations underlying communities. Using Fournier’s classification, practices to use resources for the commons maintained alive a human inter- dependent community (see shaded row in Table 2).

The Spanish and Portuguese military regimes (1936–1975 and 1926–1974, respectively) promoted the enclosure of historical commons. The traditional land use was replaced by Maritime pine and eucalyptus plantations for wood and paper pulp (Rico Boquete, 1995; Serra et al., 2015), leading to the eviction of peasants from their historical lands. This contributed to a profound rural transformation and a rural-urban migration also stimulated by the development of new industries and labour force demand in the country and in Europe (Serra et al., 2015; Veiras and Soto, 2011). After the military regime, common lands were devolved to the people and the first Common Land Law was passed.

**Table 2.** Three stages of commoning in historical commons and a characterisation of underlying practices of human and more-than-human communities.

Practice and Outcome	<i>Sayings</i>	<i>Doings</i>	<i>Relatings</i>
<b>Resources shared in common:</b> household economies	Resources to satisfy individual/household needs. Common lands are a storehouse of resources to be sold.	Collective allocation: general assemblies, decision-making for defining rules for use and management.	Vertical relations between households and market/state. Conflicts and mistrust among households. Market and state dependence. Excludability.
<b>Resources for the common:</b> a human interdependent community	Resources to satisfy community needs. Common lands are the means to produce and reproduce a community.	Collective production, use and reproduction: collective work and meals, shared knowledge, etc.	Horizontal relations between households. Reciprocity and solidarity relations. Market and state independence. Inclusiveness.
<b>Resources of the common:</b> a more-than-human community	Resources are to be shared with other humans and non-humans. Commoners belong to common lands.	Collective regeneration (of the self, the community and the environment): practices of care.	Horizontal relations between households and with non-humans. Transformation. Inclusiveness.

This restitution of rights arrived within a transformed context (e.g. new laws, the opening of rural economies to global markets and common lands forestation by the military regimes) and at a time when communities did not have the old relations and capacities of inter-dependency (Baptista, 2011; Grupo dos Comúns, 2006). As a result, despite the recognised rights, most communities did not want to take responsibility of common lands. Due to this, the Common Land law created the possibility of managing common land in partnership with the state. In any case (with or without partnership with the state<sup>13</sup>), the legal community have to vote for a governing board (with president, vice-president, treasurer and assembly's convenor) responsible for convening and facilitating two annual assemblies gathering all representing commoners (one per family).

In the case that communities partnered with the state (the majority), the forestry state service continued exploiting wood as done during the military regime. Yet, in this case the State share part of the wood revenues with the legal community. The governing board of the community is responsible for monitoring the accounts and for informing all legal commoners of the financial records; all legal commoners decide through assemblies what to do with the earnings (e.g. some would divide it per household, others would invest it in social infrastructures such as roads or schools). When commoners accepted total responsibility of the common land, the governing board meet monthly for organizing different activities, administers the accounts, and convene representing commoners to assemblies (at least twice per year). At the assemblies, the governing board informs the commoners of the annual accounts, while the assembly vote on proposals brought forward by the governing board.

Below we discuss present-day commoning processes in four historical commons: Teis (Pontevedra, Spain), Ramallosa (Pontevedra, Spain), O Carballo (Lugo, Spain) and Ansiães (Porto, Portugal). We draw attention to these commons because the four started commoning at different times: that is, they broke the partnership with the state and started negotiations for taking responsibility and care of their common lands by themselves. Ramallosa and Teis started commoning during the 90s, O Carballo in 2006 and Ansiães in 2016. Also, the commons are affected by different rural-urban drivers of change (e.g. urban sprawl vs. rural abandonment) and have different legal frameworks (Spanish vs. Portuguese). We base our discussion on fieldwork research conducted from November 2016 to July 2018 and comprised of 61 semi-structured interviews with commoners, key actors at the regional and national level of the regional or national common land organizations, and government representatives from the local and provincial levels. We use excerpts from these interviews to illustrate three theoretical stages of commoning in historical commons.

13 In Portugal there is still a third "way" by which the parish government takes At the beginning of the 20th century, northwest Spain and the total responsibility of the common land. In this case, commoners don't have any power and there is no governing board nor commoners' assemblies.

### 2.3.2. Processes of building communities: three stages

#### *Resources in common build a household economy*

We define a first stage of commoning as characterized by a legal community formed by individual household economies maintained by practices to share resources in common. In line with other literature (e.g. Marey-Pérez et al., 2014; Le Tourneau and Beaufort, 2017), our cases show how formal laws giving property rights, together with practices to manage resources in common (e.g. decision-making for defining uses and rules) are not enough to build communities and assure environmental sustainability. We have seen this to some extent at O Carballo and Ansiães cases. We describe below the underlying sayings, doings and relatings of these two cases.

Many commoners in both cases understand that common lands are shared resources to be used by households, that is, a common pie to be divided by households (Table 2), as expressed by a commoner of O Carballo:

*“People participate because they have the right to be part of the community, but they don’t have a common goal...their goal is I am in the community because I take advantage of it at the individual level. That is the problem, and that’s ... the key reason why it is so difficult to manage common lands, it’s key to understand why they don’t work, because ... people don’t come together for a common goal, they come together because there are some possibilities that I can take advantage of a resource that exists at an individual level” – commoner 1 (O Carballo common land, Galicia).*

Assemblies and gatherings to organise and divide resource units are not sufficient to build the necessary community relations and the family remains the main social sphere of interaction as well as a primary unit for production and use of resources (e.g. grazing patches divided per family for production and use, mushroom picking or firewood). In these types of communities, legal commoners are keen on excluding other people to use the common land, as this would mean to divide the ‘common pie’ into smaller pieces (Table 2).

In these instances, we found that legal commoners experience conflictual relations among each other. For example, the case of O Carballo reveals conflictive and distrustful decision-making and management. This relates to the fact that the surplus of the common land is divided into equal parts (by households) in the form of money at the end of the year. Mistrust stems from the suspicion of unequal benefit sharing and disagreement about possible economic activities to increase the size of the pie. In other cases (Ansiães), legal commoners feel a disinterest to participate in collective activities because their lives are not linked to the common land. As expressed by a commoner in Ansiães:

*“From the year 2000 on, we invested the earnings of the common land in a group of forest workers ... for bush cutting, maintenance of paths, fire-breaks... and now we have arrived at this situation ... do people need the common lands to live? I cannot say they need it. Today, their income does not come from the common land. People today are either retired or working for a company outside the parish or have a subsidy of some kind. The money that goes into our local communities is not money from the inside, it's from the outside. People have stopped depending on the common land as it was 100 years ago. Given the current situation, accelerated depopulation is occurring” – commoner 2 (Ansiães common land, North Portugal).*

In these cases, the underlying subjectivity of separateness and independence among humans and with nature remains unchallenged and so sustainability outcomes can be questioned. Commoners relate to the common land for the subsistence of their family unit. They use the commonland individually, with family means– e.g. cattle and labour – and sell the common resources to the market. The productive activities are usually subsidized, so commoners maintain a close relation to the market and the state.

As a consequence, social relatings are rather individualistic, or household-based, and market and state dependence dominate over horizontal relations among community members (Table 2). Activities organized at a community level are outsourced to paid workers and limited to industrial-like forestry activities– e.g. tree plantations and mechanical cleaning of the excess of biomass or opening of paths for machinery. As a result, sustainability can be considered at risk from a resilience perspective – e.g. the frequency and intensity of fires increases with large scale monospecific pine and eucalyptus plantations (Cordero Rivera, 2017), conflicts threaten resource governance and the continuity of community activities, and livelihoods are very instable due to market price instability which increases the risk of abandonment and emigration, as shown in the following:

*“Everybody tells you that there are subsidies of one thing or another, but there is little real help. No one feels supported... Prices are very bad and, getting worse and then I don't know... For example, here there is no increase of prices of agricultural products, so the prices of what we produce does not increase ... There are the same prices as 25 or 30 years ago, but costs do increase every year, I have to adapt, but I adapt very badly” – commoner 3 (O Carballo common land, Galicia).*

*Resources for the commons build an interdependent human community*

We define a second stage of commoning as characterized by a legal community forming an interdependent human community. This community structure is maintained when practices to use resources for the common dominate. We found that Ramallosa and, to some extent, O Carballo, had this structure. Beyond dividing the common land's economic surplus between households (O Carballo) or outsourcing collective work to paid workers (Ansiães), an interdependent human community involves a direct and more collective self-consumption of resources. In these cases, a multifunctional use of forests starts replacing monocultures, bringing back the model of the past, and replacing the industrial forestry model promoted by the state since the military regime. For example, the Ramallosa common land was covered by Eucalyptus plantations to supply the paper pulp industry. When legal commoners regained control, commoning involved recreating a multifunctional use of forests for the neighbours, as stated by an interviewee:

*“We reduced the eucalyptus, we increased the hardwoods and pine, we took a step towards the use of the resin and the fruits of the common land, to maintain the honey, the mushrooms. There was an evolution from when the common land belonged to the state who cut the wood with roads and tracks, but we are on the path of a multifunctional common land. – commoner 4 (Ramallosa common land, Galicia).*

In these cases, beyond general assemblies, the doings involved collective consumption of produced resources, as well as other social gatherings such as festivities and recreational activities in forests. For example, both Ramallosa and O Carballo started to organize an annual “Commoner’s day”, in which all commoners celebrated their belonging to the community and to the forest by being together with each other and the forest, by eating and dancing on the common land. In terms of sayings, commoners approach resources in their capacity to satisfy community needs, both material and cultural (Table 2). Practices of being together maintained networks of communication among community members, and generated the necessary interdependence, reciprocity and solidarity to manage resources in common. Thus, interdependent relations between humans and nature dominated these cases, as shown below:

*“We first promoted wood as an advantage for the neighbours. Everyone had the right to take a tractor full of firewood every year for their personal use. Honey production was understood as a product for the neighbours, not for sale, but we share all the honey we produce each year between us. Sometimes we have two kilos each, sometimes one... This creates a link, that is, people are thinking: I’m interested in the common land, because I benefit from it ...*



*there's a relationship. After this we make popular festivals in the common land to enhance this feeling with the nature" – commoner 4 (Ramalloso common land, Galicia).*

Although these communities still depend on markets, e.g. for selling wood or rents from leasing land for other productive uses, we consider multifunctionality as “an evolution” or change of paradigm and subjectivity: a change from an intensive forestry model to a model based on interdependent human communities that use multifunctional ecosystems to satisfy their needs. Furthermore, even though the law only recognises those officially living in the parish as legal commoners, and thus potential beneficiaries, we found that communities in these cases were keen to ‘open’ their common land to outsiders for trainings, social events, mushroom picking and recreation. These ‘openings’ came along with the creation of associations related to, but independent of, the common land formal organization. For example, O Carballo created a socio-cultural association to bypass the legal regulations to include activities beyond forestry activities and people beyond the parish inhabitants, as expressed by a member of O Carballo:

*“There were certain things that we started to value, that were no longer directly related to the common land, right? There were cultural things and things that escaped a bit of the main goal of the management of the common land. So, we created a parallel cultural association, with a special connection with the theme of the common land [...] and nowadays we have more members from outside the parish than from the parish” – commoner 5 (O Carballo common land).*

Thus, we found that when practices maintaining resources for the common dominate, inter-dependency among members of the legal community is strengthened reducing the individualistic relations, as shown below:

*“If I tell the truth, I was a bit of a loner, an individualist. Since I came to be part of the common land I have learned a lot. [...] it has modified me, my personality. It has made me more concerned about people in general, and to do things that benefit my surroundings. When I first came it wasn't exactly like that. Because the world you live in doesn't exactly orient you to worry about your village, a place where you don't have your loved ones. So, the fact of entering the common land like this allows me to try to understand the significance of the community, and talk to people; one ends up having a relationship with people one barely knew— commoner 1 (O Carballo common land)*

*Resources of the commons build a more-than-human community*

Commoning can also create more-than-human communities when practices to produce

resources of the common dominate, as we found in Teis. Practices to produce resources “of the commons” include the regeneration and care of ecosystems and communities. Alternatively stated, the doings include regeneration through caring for others, ourselves and the environment (Euler, 2018; Tronto and Fisher, 1990) (Table 2). Teis’ common lands’ activities are focused on regenerating native forest ecosystems via removing invasive species and planting native flora. Beyond allowing the regeneration of habitats for native flora and fauna, the forest is considered a “regeneration site” for humans as well. Commoners believe that humans can “heal” only if they reconnect with their culture and with ecological processes; they promote this reconnection via educational activities, guided visits and the collaboration with a drug treatment and social reintegration centre, as expressed in the following:

*“[Name of a worker of the common land] came from [a drug treatment and social reintegration centre] and now this guy has been socially reinserted. I know he’s a person who has been a drug addict, has tried everything but now he doesn’t relapse ... he is like a consolidated area without acacias [an invasive tree], it does not matter if you abandon it, it works by itself, it regenerates itself. The common land has helped many people to get ahead, and the nature aspect is the most spectacular, to see how an area regenerates itself, once you have removed the acacias... to see the birth of the little cherry trees around here and ... the fauna comes along, spontaneously, they come from other places, they recolonize, that is the incredible thing!” – commoner 6 (Teis common land)*

We found that when focusing on regeneration, a new subjectivity emerged where the boundaries between humans and nature are blurred, a subjectivity of inter-being (Rauschmayer, 2017). Commoners become nature and feel that they belong to the common land, with its fauna and flora altogether, related and linked:

*“I break duality, I am nature, from the moment I hear “nature and us is not the same” I think this is a misappropriation. We are nature. Between me and an oak there is no difference, do you understand? The pure interdependence, I exist because that oak exists, myself does not end where my skin ends, that is a lie. So those oxygen molecules that enter your nostrils, are you or not? ... and the water of your blood? When that water is running through the rivers, is it not that same water as the 75% of water that forms your body?” – commoner 7 (Teis common land, Galicia)*

Thus, we found that when commoning focuses on practices for the (re)production of the common (regeneration and care), it generates communities that are more-than-human. We see this change of subjectivity as transformative, as it challenges the logics

of separateness and monetary relationships between humans and nature. The Teis case shows that this new subjectivity of inter-being brings forward new avenues for collective actions beyond sustainable ecosystem management: “we want to demonstrate that we can turn around the disastrous forest policies of the last 70 years” (commoner 7, Teis case). Here commoner 7 is referring to the regeneration of forests and communities that not only conserves the ecosystem, but is also intentioned to challenge the policies responsible for the expansion of (exotic and unmanaged) forest tree plantations, which have increased fire frequency, and eroded local culture and biodiversity (Cidrás et al., 2018; Serra et al., 2015). Commoner 7 states:

*“I believe that we [the Galicians] are very fortunate because within a hurricane of dehumanized capitalism, etc., here people gather, they make joint decisions, with a property system without a clear line of which square metre belongs to one or belongs to another but everything belongs to everyone, and that property is open, you can become a commoner, it is an incredible concept nowadays... And beyond that, it is more, it is about the forest, because if the native forest survives, we will survive” – commoner 7 (Teis common land, Galicia).*

#### **2.4. A research agenda to critically study human and more-than- human communities**

The liberal reform of the nineteenth and twentieth centuries has been responsible for the enclosures of common lands in Europe— e.g. the privatization or nationalization (Pemán and De Moor, 2013) – and for the commodification of common lands’ resources – e.g. via the expansion of the belief that nature, knowledge, or other resources that were key for the material and cultural survival of communities can and should be trade for capital accumulation (Caffentzis and Federici, 2014; Capra and Mattei, 2015; Fournier, 2013). Thus, although some common lands have been devolved to local communities and even regulated bylaws (Bravo and De Moor, 2008), many lack the practices sustaining human and more-than-human communities (e.g. García Quiroga, 2013; Grupo dos Comúns, 2006; Marey-Pérez et al., 2014, 2010). Forming communities, we argue, de-commodifies commons lands’ resources “in the mind of people” (Fournier, 2013). As such this paper engages with the task of defining a research agenda and guiding framework for tackling what we think is an important challenge of today’s historical commons: to understand and promote how legal commoners can start to feel and behave as part of human and more-than-human communities.

### 2.4.1. A research agenda

We call for embracing a CEC ontology to take a critical and political stance, and a CI epistemology that follows practices of institutional bricolage. The scale, rate and intensity of humans' impact on the planet urges for research into the historical commons to bring not only lessons for ecosystem management but also to engage with the systemic and cross-sectoral debate about transformations (Blythe et al., 2018; Göpel, 2016; O'Brien and Sygna, 2013; Popa et al., 2015). Researchers supporting transformations need a critical stance to produce knowledge counteracting hegemonic discourses and practices (Jhagroe, 2018). By studying how commoning processes manage to replace dominant logics of separateness to logics of human and more-than human communities, researchers can unveil and challenge the underlying reasons of the Anthropocene (Gibson-Graham and Roelvink, 2010). Our research agenda calls for critical action research projects (Jhagroe, 2018; Kemmis et al., 2014a) with an explicit normative positioning: promoting those sayings, doings and relatings underlying human and more- than-human communities (Table 2). This way, researchers, together with communities, can propose and devise ways to strengthen practices conducive to building more-than-human communities (Table 2).

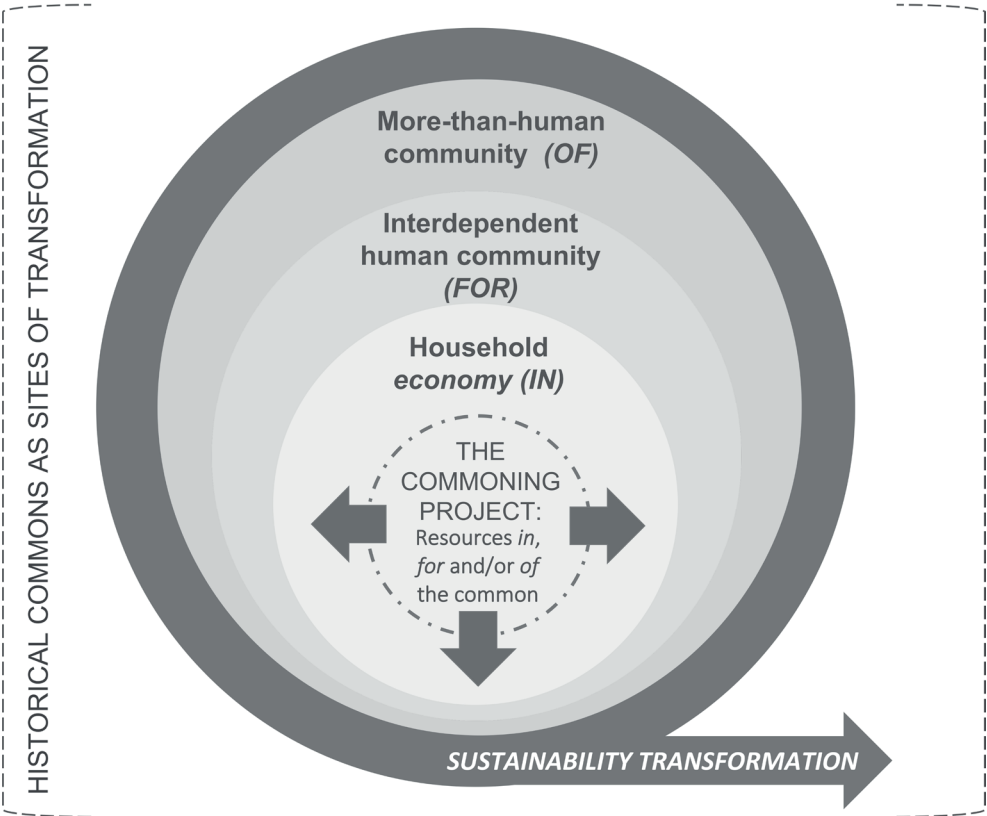
Such a research agenda can benefit from a CI epistemology to critically understand commoning practices and outcomes in light of institutional bricolage (Cleaver, 2012). Commoning cannot change dominant practices strategically without critically taking into account the path-dependencies and history of the system. Commoners can be understood as "bricoleurs" who build on available resources (both material and immaterial) and recombine them in novel ways through the logic of dynamic adaptation and improvisation. As "bricoleurs", commoners aggregate, alter and articulate laws and other resources at hand (see De Koning and Cleaver, 2012). This implies that path-dependency and change co-exist, or in other words, that change always contains some degree of path dependency. Bricolage allows to critically explore path-dependency and change, and can be used by commoners and researchers as a heuristic to reflect upon commoning processes (Olsson et al., 2017). Commoning, as a bricolage process, tries to actively break from the path-dependence of the system.

### 2.4.2. The guiding framework

This section puts forward a guiding framework to study commoning as processes of bricolage. The framework provides an original commoning definition allowing critical explorations of commoning practices, proposes and defines three idealized stages of commoning and puts forward a hypothesis on how changes in subjectivities occur which portray historical commons as potential sites for nurturing transformation (Figure 5).

**Commoning is defined as practices organized by a distinct project.** We have followed Kemmis et al.'s (2014b, a) characterization of practices, as formed by sayings, doings and relatings, to describe three stages of commoning in historical commons. Kemmis et al. (2014b,a) define a practice as a form of socially established cooperative human activity in which actions and activities (doings) are comprehensible in terms of characteristic discourses (sayings), whereby people and objects involved are distributed in characteristic relationships (relatings), and when this complex of sayings, doings and relatings 'hangs together' in a distinctive project (Kemmis et al., 2014b,a: 31). The project of a practice is whatever people answer to the question "what are you doing?" (Kemmis et al., 2014b: 31). This quality of 'hanging together' in a project is crucial for identifying the distinctiveness of particular kinds of practices (Kemmis et al., 2014b,a; 31). Following Kemmis et al. (2014b,a) and others, we define commoning as a type of practice composed by practices to share resources in, for and of the common (Fournier, 2013), with a distinctive project. This project is enhancing inter-dependency, creating an economy to satisfy community needs (human or/and more-than-human) and engaging in the ethical process of inclusively negotiating co-existence. Bearing this in mind, we define commoning in historical commons as the process by which members of the legal community voluntarily engage in practices to share resources in common, using them for the common, and/or producing resources of the common.

Contrarily to other definitions (e.g. Graham-Gibson, 2016; Bollier, 2016), we separate the elements of commoning practices (sayings, doings and relatings) to the project of the practice. As such, commoning practices (in, for and of) can be critically explored: are commoning practices reasonable and conducive to the intended and normative project? (see Kemmis et al., 2014a). Guiding questions to critically analyse commoning include: Which projects do legal commoners have? Which sayings, doings and relatings are organized around the different projects?



**Figure 5.** Framework to study processes of building human and more-than-human communities. Historical legalised commons become sites to enhance sustainable transformation through commoning

**Three stages of commoning.** Following Fournier (2013) the framework provides a model representing three stages of commoning in historical commons (Figure 5). Each stage is dominated by specific practices defined by specific sayings, doings, and relatings, which are described in Table 2. The last stage is when legal communities build a more-than-human community, which challenges deeply the current subjectivity of separateness of the Anthropocene by bringing humans together with nature through negotiations of co-existence. This three-stage model is an ideal one. In a real legal community, assemblages of different commoning practices (in, of and for the common) co-exist, and show contradictory aims and effects. Thus, within a legal community there are constellations of different types of communities (household- based, interdependent human or more-than-human). Yet, the ideal three stage model in Figure 5 serves to compare the practices found in the legal community (the dominant sayings, doings and relatings) and critically assess how the commoning-community– i.e. the community relationally built through commoning negotiations (Fournier, 2013; Gibson-Graham et al., 2016a)– can practice bricolage to change dominant practices.

**Historical commons as sites of transformation.** In line with Singh, (2018), we define this type of property as “sites of transformation”: places to cultivate more sustainable socio-economic paradigms, human-nature relations and subjectivities. Following the logic of bricolage, Figure 5 assumes that legal communities are likely to evolve from the stage of household economies to human interdependent, and only then can they evolve to more-than-human communities (Figure 5). For example, general assemblies to decide rules (resources in common), as well as collective consumption of resources (resources for the common) activate networks among the legal community. Only then can a legal community start forming an interdependent community (new relatings). Thereafter, through encounters with non-humans in collective work or other practices of being-in-common, the commoning-community can start feeling part of nature (Singh, 2018) (new sayings).

Following Figure 5, researchers and commoners seeking transformations in a legal community dominated by household economies will have to firstly promote practices for the commons (encounters between humans, beyond decision making). Only when a human interdependent community is created, can one aim for including non-humans by promoting and strengthening practices of the common. Although it is out of the scope of this paper, we propose that ways to support this evolution as a researcher is to bring relations to other humans and non-humans to the fore of discussion and reflection, through mapping or other methodological devices (e.g. Duffy et al., 2018; Safri, 2015; Singh, 2018, 2013; Wright, 2015).

## 2.5. Conclusion

The study of historical commons has mainly looked at practices of decision-making to manage and use sustainable ecosystems (practices to share resources in common). However, we argue that the kind of contemporary challenges brought by the so-called era of the Anthropocene need a radical approach to commons research that goes beyond institutions and environmental sustainability. Humans need to re-connect to the biosphere (O’Brien and Sygna, 2013) and to learn to take non-humans into account when deciding future social developments (Gibson-Graham et al., 2016b). Hence, new socio-economic paradigms based on logics of inter-dependence and inter-being have to be nurtured (Gibson-Graham and Roelvink, 2010; Göpel, 2016; Rauschmayer, 2017). We believe that historical legalised commons can be sites for nurturing this type of transformation.

We have defined a research agenda building on a CEC ontology and a CI epistemology which focuses on the question: how does commoning build (or not) human and more-than human communities? And how can researchers support a process of (re)

building communities that ends up including the more-than human world? For this, we provided a guiding framework for helping researchers implementing a critical and potentially transformative research agenda in historical commons. Our framework helps to further understand the type of practices involved in building human and more-than-human communities and thus, allowing transformative changes in subjectivities. Yet, we also call for action research projects with experimental research methods that can enable transformative encounters between humans and non-humans. Only then can researchers of historical commons participate in challenging the deep structures of the Anthropocene. We hope our framework helps or inspires other researchers to go beyond institutional designs for environmental sustainability and helps historical commons to achieve their full potential as sites of transformation.







***This chapter was published as:***

*Nieto-Romero, M., C. Parra, and B. Bock. 2021.*

*Re-building historical commons:*

*How formal institutions affect participation in community forests in Galicia, Spain.*

*Ecological Economics 188: 107112.*



# Chapter 3

**Re-building historical commons:  
How formal institutions affect  
participation in community forests  
in Galicia, Spain**

*They [state bureaucrats] bring the local people into a hall. They say ‘now you own ‘x’; they give them a little bit of background of what they must do now; tell the people that they are responsible; and then walk away”*

*- Elinor Ostrom (1933-2012), American political economist*

## ABSTRACT

There has been considerable research studying how the formal institutionalisation of community forests affects participation of local communities. This paper studies a historical commons in Galicia in order to provide insight into how formal institutions are enmeshed with a forestry logic and how this shapes community participation in historical commons in Europe. More specifically, we offer an alternative explanation for low levels of participation, which goes beyond the usual argument of the abandonment of traditional activities. We use an institutional bricolage framework to understand the causal mechanisms by which formal institutions shape participation patterns (both exclusion-inclusion dynamics and the type of participation, namely strategic or affective). Our results show that, during the first period of implementation, most powerful commoners aggregated exclusionary institutions to capture forestry benefits. Formal institutions incentivised the strategic engagement of commoners in exchange for a forestry ‘share’. Later, educated commoners accessed the governing board and aggregated more inclusive institutions that allowed affective engagement and higher levels of participation in the commons. This created new affective relations while creating new exclusions. We conclude by highlighting the responsibility of the State and regional government in installing a forestry profit-seeking and extractive mentality among commoners, which is problematic for an active participation.

**Keywords:** Commoning Participation Strategic Affective Commonland

### 3.1. Introduction

Since the 1990's, there has been considerable research studying participation dynamics in different forms of community forests- i.e. historical/indigenous/traditional commons or those emerging from new decentralised/participatory approaches to forest governance (Agarwal, 1997; Agrawal and Gupta, 2005; Basnyat et al., 2019; García-López, 2019; Lise, 2000; Lund, 2015; Nightingale, 2005; Ribot et al., 2006). Some of this research highlights how new 'logics' emerge when institutions for community forests are formally codified and locally implemented (i.e. Lund, 2015; Nightingale, 2005). Logics are socially constructed historical patterns of cultural symbols and material practices – including assumptions, values, and beliefs (Thornton et al., 2012: p. 2); they shape actors' frames, identities, and actions and explain people's behaviour in a particular social field (Ansari et al., 2013). Logics affect the type of participation supported as well as inclusion and exclusion dynamics.

Formal institutions can change local logics by introducing management objectives, uses and decision-making processes. Formal commons' institutions can be incompatible with and exclude local livelihoods, values and forms of organisation (Peluso and Vandergeest, 2001; Ramprasad et al., 2020; Serra and Allegratti, 2020; Skulska et al., 2020); favour elite-capture (Basnyat et al., 2019; García-López, 2019; Ribot et al., 2006); and further strengthen internal community inequalities based on gender, class, caste or ethnicity (Agarwal, 1997; Ingram et al., 2015; Nightingale, 2019). Formal institutions can also install 'passive entitlements' (Thompson, 2015): rights linked to specific membership criteria that disregard commoners' engagement in labour, exclude marginalised social groups such as women (Agarwal, 2001), and frame the participation of members as 'passive shareholders' (Sandstrom et al., 2016).

In the so called developing countries, research has highlighted how formal institutions regulating community-forests are imbued within a 'techno-bureaucratic' forestry logic (García-López, 2019; Lund, 2015). This logic is based on a 'forestry science' that emphasizes bureaucratic management procedures and standardised inventories aiming at a sustained yield of timber or other products. Yet, while forestry logics have reached most European historical commons (Lawrence et al., 2021; Skulska et al., 2020), their effect on the type of participation, exclusion and inclusion dynamics has not yet been explored.

Following the onset of enclosures during the 19th and 20th centuries, many historical commons in Europe have been devolved to communities and codified through diverse legislative mechanisms (Bravo and De Moor, 2008; Lawrence et al., 2021). This has allowed for the self-organisation of communities and the revitalisation of some commons



socialites (Sandström et al., 2017). Yet, previous research highlights the low involvement or passive participation in many historical commons in Europe (e.g. Brown, 2006; Gatto and Bogataj, 2015; Marey-Pérez et al., 2014; Marey-Pérez et al., 2010; Premrl et al., 2015; Serra et al., 2017). Some explanatory factors are the steep decline of the traditional economic functions and the failure of policies to incorporate new potential functions and values (e.g. recreation, emotional belonging and cultural heritage) (Brown, 2006; Short, 2008). Nonetheless, the mechanisms by which participation is influenced by formal institutions are complex and need further empirical inquiry.

This paper investigates a case of historical commons in Galicia (Spain), a region with large areas of historical commons (25%) that were devolved to communities and formally legislated during the 1970s after a massive state-led reforestation program (1941–1971) (Rico Boquete, 1995). We selected the ‘O Carballo’ commonland in Galicia as a case study as an innovative example of autonomous community governance. Since 2007, this community has successfully taken charge of all management responsibilities; it has implemented a multifunctional use of the commonland incorporating a wide range of productive and social activities in forests to sustain materially and immaterially the community. Yet, at the time of our fieldwork, the initiative experienced a lack of participation that endangered its continuation and survival.

In this research, we study how formal institutionalisation processes affect participation by looking at the practices of “institutional bricolage” (Cleaver, 2012) used by commoners to adapt the new formal institutions to local conditions and needs. Forest commons research has usually studied the exclusionary effects of formal institutions (Agarwal, 2001; Nightingale, 2019), or the manner in which formal institutionalisation catalyses new avenues of collective action and power resistance (Nightingale, 2005; Tyagi and Das, 2020). Yet, most research has not investigated the ways in which new formal institutions are combined with community logics, and how the resulting hybrid logics produce new participation dynamics, inclusions and exclusions. Understanding commoners as bricoleurs allows for analysing institutional change and participation in a way that is sensitive to power inequalities within a community.

This paper addresses the following questions. First, how do commoners ‘bricolage’ legal institutional arrangements? Second, which hybrid institutional logics emerge from bricolage processes, and how do these explain participation patterns? The first question addresses issues of agency and power within the community: the different strategies of institutional bricolage used, depending on the participants’ capacities and demands. The second question explores the logics resulting from the bricolage processes and their effect on the type of participation promoted and on the exclusion/inclusion dynamics (hereafter called participation patterns).

In the following section, we unpack the logics underlying participation by defining three types of participation practices (in, for and of the commons) often found in governing the commons, as well as two ways of participating in them (strategically or affectively). We then explain how institutional bricolage helps to explain how formal institutions affect participation. While acknowledging the importance of commoners' divergent capacity to participate, our results reveal how the codification of commons into formal institutions risks undermining the original logics of a commons. Our discussion problematises formal

forestry commons institutions linking our findings with current debates on common's participation and governance. We conclude by highlighting the responsibility of the State and regional government in installing a profit-seeking and extractive mentality among commoners, which is problematic for their active participation in the historical commons. We also call for more gendered sensitive research to understand how women are hindered in participating in the historical commons in contexts where they are not resource-dependent.

## **3.2. Theoretical background**

### **3.2.1. The logics of participation**

Research claims that commons-based policy reforms need to be understood in the context of an increasing neoliberal logic of environmental governance (Nightingale, 2005). Neoliberal logics are sustained by rational-based theories on human behaviour that have built up the idea of self-contained individuals; and on visions of nature as 'resources' (e.g. timber) that can be extracted and alienated from their constitutive social and ecological relations (e.g. the forest) (Tsing, 2015). As a consequence, participation in a commons has been understood as 'strategic' where autonomous and equal individuals rationally and instrumentally relate to each other through a reciprocal exchange to pursue their own interests and life plans (García-Barrios et al., 2013; Serra and Allegretti, 2020). Supported by a compelling body of literature inspired by affect theory (Singh, 2018; Wright, 2015), and nature-society studies (Haraway, 2010; Ingold, 2000; Plumwood, 2009), we rethink participation in a commons as affective.

Unlike rational-based theories, affect theory claims that there are never self-contained individuals, but all bodies suffer 'contamination' throughout their encounters with others (Tsing, 2015: p. 59). This means that interests and also body skills and capacities are constituted and change through encounter—e.g. a nose becomes a nose that distinguishes and enjoys certain smells when it interacts with particular entanglements of chemical volatile substances (Latour, 2004); a person becomes a surfer if it accepts to encounter the wave and learn to respond and act with it (Ruddick, 2010). In the context

of forest commons, people become commoners—people that care for the commons—when they acquire the knowledge, skills and social relations necessary to use and take care of the forest as a community (Singh, 2018).

Research on commons and environmental care is increasingly acknowledging the affective (and emotional) dimension of participation in the commons and for nature conservation (Ingold, 2000; Milton, 2002; Nightingale, 2011; Singh, 2013). Contrary to the mainstream rational-based approach to understanding motivation, Singh (2013) claims that participation in a commons may be initially motivated by the satisfaction of material needs, but that this alone falls short in explaining participation in the historical commons. Participation in community forest conservation can only be explained by the affective relations that people have developed over the years with forests through their embodied practices of care (Singh, 2013).

The above has three implications. First, that motivation to participate emerges in the ‘in between’ of people interacting with each other and with their environment, in the process of ‘learning to be affected’ by other humans and more-than-humans (Latour, 2004 in Gibson-Graham and Roelvink, 2010). Second, that motivation grows in and throughout the act of participating: by participating, people acquire responseability, meaning the ability to respond (Haraway, 2010). In other words, participation nurtures the capacities needed to engage more and better in environmental governance (see e.g. Fleischman and Solorzano, 2018). Third, that participation is not a burden: it is generally accompanied by a feeling of joy that emerges from the enhanced capacity to act with others (see e.g. Dennis and James, 2016; Sandstrom et al., 2017). Thus, affective participation is recognizable when practices are valued *per se*, such that people’s constitutive socio-nature relations are nurtured.

This paper seeks to understand if and how formal institutional logics affect how commoners participate in historical commons. We use Table 3 as an analytical frame to identify logics as composed by different types of practices (in, for and of the commons) and types of participation (strategic and affective). The types of practices are taken from Fournier (2013), who characterises three dimensions of commoning practices: (1) sharing resources in common, (2) using resources for the common, and (3) (re)producing resources of the common (Table 3). A commons is understood as a self-organised social and production system centred on the satisfaction of community needs and care of the commons (both community and resource system) (Euler, 2018; Gibson-Graham et al., 2016). A commons is built by the affective engagement of commoners (Singh, 2013). Yet, a pure ‘commons logic’ cannot be fully achieved in our current socio-political system (Euler, 2018). Thus, in a historical commons a ‘commons logic’ co-exists with other logics, and therefore with other types of practices and forms of participation.



### 3.2.2. The role of (hybrid) logics and bricolage practices

We use an institutional bricolage framework to identify the mechanisms—i.e. causal processes linking causes to outcomes (Beach and Beach, 2017)—by which formal institutions affect participation patterns. Commoners can be understood as ‘bricoleurs’ (Nieto-Romero et al., 2019a): they combine various institutional arrangements (legal, socially-embedded, etc.) to adapt to changing circumstances (such as changes in commons’ legislation; new commoning practices or environmental changes). They neglect some formal arrangements while mobilizing others. This process occurs consciously or unconsciously; in formal decision-making arenas or during their everyday practices. The result is a patchwork of institutions, a novel ‘texture’ of hybrid logics that serves their situation best.

The power commoners have to combine different institutional arrangements depends on their embodied agency giving them different capacities to participate (Cleaver and De Koning, 2015). Commoners will employ different strategies matching the ‘accepted ways of doing things’ in accordance to their own social category and they will have different capacities linked to bodily characteristics and associated recognised authority (Cleaver and De Koning, 2015). For example, status and power may be associated with particular forms of dress, demeanour and behaviour, and on the ability to be present (which may be hampered by social roles such as caring work in motherhood). Thus, while bricolage processes produce innovation and change, they also reproduce prevailing discourses, ideologies and power relations. This means that hybrid logics will suit some commoners better than others, shaping participation, exclusions and inclusions.

We use the three processes of bricolage defined in de Koning and Cleaver (2012)—aggregation, alteration and articulation—to identify institutional bricolage processes. Aggregation relates to the creative recombination of different institutional elements to satisfy diverse needs. These elements include: culture, routines, traditions, social norms, and expectancies or experience, by which the institutional arrangement itself serves multiple purposes. For example, de Koning and Cleaver (2012) describe an instance where a community in Bolivia, by aggregating new elements, used a formal management forest plan as a land property title.

**Table 3.** Analytical frame to identify institutional logics as composed by different practices done in common and types of participation.

Forms of commoning by Fournier (2013)	Type of practice done in common (form of participation)	Type of participation (reason of participating)
Organising in common	How much can be used and by whom? Delineation of legitimate users and the amount of resources they can use Collective allocation of common resources and users' responsibilities	
Organising for the common	What can it be used for? Definition of appropriate use Collective use and consumption of common resources.	Affective vs. strategic participation
Producing resources of the common	Collective production and reproduction of common resources (community or/and resource system)	

Alteration refers to the tweaking and tinkering of formal institutions to make them fit better within livelihood priorities or identities, which often involves changes or reinventions of local practices and traditions. While agregation strategies are more likely to be used by community leaders in a strategic way, alteration is usually used by individuals with a certain standing (having authority and access to resources) through practical improvisation. Finally, when local identities and traditions are strongly theathened by external logics, then articulation becomes more visible than alteration. It involves calmly but firmly distancing themselves from formal institutional arrangements, or actively revolting against them. This often results in a selective adherence to formal institutions and a resignification of culture and tradition (bounce off effect). Together, these three processes result in institutional arrangements that are messy, multipurpose and even contradictory.

3.3. Methodology

3.3.1. The research case

Galicia, a region in Northwestern Spain, has 25% of its territory under a type of property called Montes Veciñais en Man Comun [Neighbourhood Lands in Common Hands]. The Montes Veciñais en Man Comun, traditionally called *baldios* [waste lands], have been embedded in the social structure of rural Galicia from time immemorial. Before a state-led reforestation program (1941–1971), the monte [bush], was traditionally covered by gorse shrubs (*Ulex europaeus*), a nitrogen-fixing legume used in manure production for the crop fields (i.e. the gorse was used for the beds of animals, turning into manure when mixed with the faeces). Some areas were assigned to families and others remained ‘common’ for residents of the settlement.

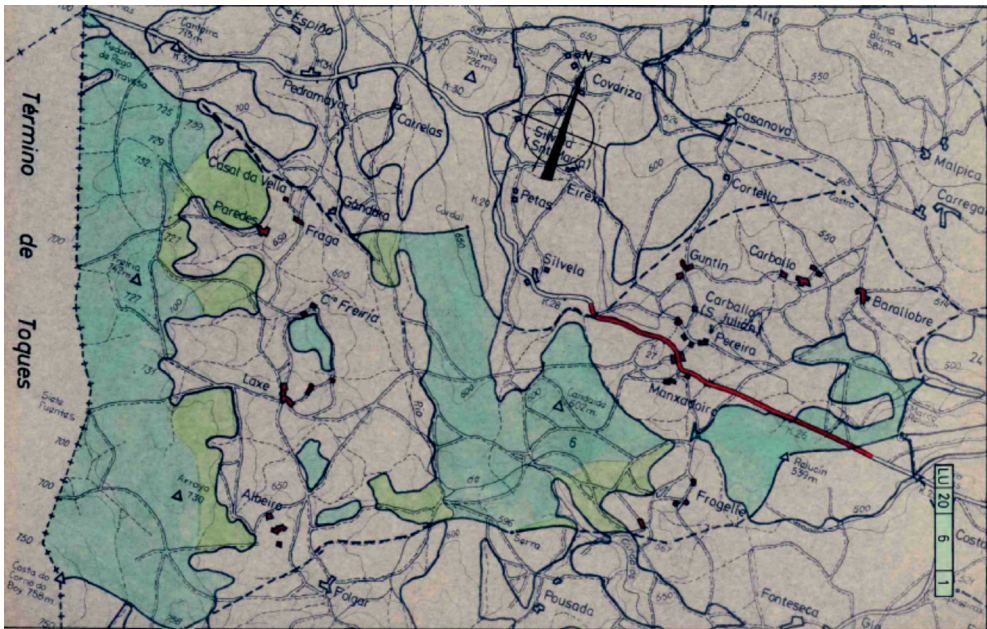
Current national and regional legislations recognise commonlands as a private collective

property of Germanic nature, without individual allotments. They are subject to conditions of indivisibility (ownership cannot be distributed among neighbours); inalienability (land cannot be traded or sold); imprescriptibility (land historically used as commonland will always be considered as such) and immunity from seizure. The formal codification of Galician commonlands introduced many institutional changes, such as forestry plans for reforested land, governance structures, the formal demarcation by parishes, and passive entitlements over commons' resources. Legislation also regulated that formal community assemblies had to be attended by one representative per household (hereon referred to as commoner representatives) and allowed communities to manage commons autonomously or in comanagement with regional forest services. Under the co-management option, the regional government returns 70% of the logging revenues to the communities (see Caballero, 2015 and Copena Rodríguez, 2018 for greater detail on the institutional legal framework).

Our study investigates how the formal codification of Montes Veciñais have affected the practices in O Carballo. In 2016, O Carballo had 145 inhabitants (77 men and 68 women). The 2001 census registered that 42,6% of total population were above 65 years old. Agriculture is the most important economic activity in the parish with 47,6% of the total population employed in this sector, followed by the services sectors (31,7% of the total population). The parish is composed of 12 settlements divided into two distinctive areas separated by a patch of forest (see Figure 5). Colloquially, people living in these areas are referred to as 'those from above' (left side) or 'those from below' (right side). While most of the area was reforested (444 ha), non-forested areas are mostly 'above' and used for pastures (250 ha).

### 3.3.2. Research methods

Field work took place from Feb. 2017 to August 2018 and included interviews and participant observation. Semi-structured interviews were conducted with 20 households (including 10 women and 18 men). Commoner representatives were interviewed, as well as other household members if present. In selecting the households, we first asked the governing board to identify the commoner representatives who were



**Figure 6.** Borders of O Carballo commonland as specified by its classification resolution issued in 1976. Source: Jurado Provincial de Montes Vcinales en Mano Comun de Lu (1976). Dark green corresponds to reforested areas, while light green is pastureland.

volunteering in community labour, and to group them into participative or non-participative commoners. We then applied a stratified random selection of commoners, including equivalent ratios of participative/ non-participative commoners and residents of different settlements within a parish.

Interview protocols explored commoners' current and past practices, opinions on recent commoning activities, reasons to (not) engage in activities as well as views and desires related to the historical commonland. Interviews were one to two hours long, and conducted until data saturation. Interviews were audio recorded, transcribed and qualitatively coded using NVivo (QSR International Pty Ltd., 1999–2009). We then undertook an inductive qualitative content analysis (Elo and Kynga's, 2008) focusing on periods corresponding to two major institutional changes: (1) the period 1976–2007 corresponding to the implementation of the formal institutions devolving them rights over commonlands, and (2) the period 2007–2018 corresponding to the start of commoning.

### 3.4. Results

#### 3.4.1. Background: O Carballo practices before formal institutionalisation

Before state reforestation, protocols for using the gorse common areas were imbricated within community sociality of each settlement. An area was assigned to each settlement. There were no formal decisionmaking arenas, but following the traditional rule, each family took what they needed from the commonland. Some areas were assigned to families and others remained 'common'. In the common areas, cattle, goats and sheep grazed freely, and any person could take the necessary firewood for cooking and heating their houses as well as any other complementary resources. Family plots were cultivated mainly with cereals. People benefited as far as they worked (active entitlement). Yet, they had different means (tools and animals) to satisfy their needs, so inequalities within communities were perpetrated; all and all, however, the community was in equilibrium. Ploughing, planting, harvesting and shepherding were done communally and affectively: commoners did not calculate strategically how much they contributed to others' plots, but community work nurtured their livelihoods, their sociality and culture. Proof of this is that community labour was linked to socio-cultural events and festivities. The different households in a settlement were like 'one house' with shared practices, as stated in by the following interviewee:

*"It was as if it was one unique property. We were more families than today, but it was as if we were only one, as if our properties were the same. Each family had theirs and we worked each other's plots, and grazed freely. We shared without asking for permission"- commoner (female, > 80 years old).*

In sum, practices in the three dimensions of family allocation, production and reproduction of the community's sociality and resource system were all interlinked.

With the start of the state-led reforestation program in 1941, native gorse areas and agricultural land for family use were replaced by industrial tree plantations of maritime pine and a state forestry logic was installed. Communities were forbidden to take their animals to pasture on the reforested areas. Dispossession was justified for enhancing 'productivity' of rural areas and gorse common areas were claimed as abandoned and inefficient. The commonlands became municipal property and only wood collecting was allowed with a permit. Foresters hired locals for plantation work. Residents living 'above' could survive as some unforested patches remained untouched. On the other hand, the reforestation process dispossessed nearly all the inhabitants 'from below' of most of their means of subsistence and many commoners had to emigrate.

### 3.4.2. The implementation of formal commons' institutions (1976–2007)

#### *Bricolage and participation in forested areas*

The transition towards democracy was followed by a social movement, concentrated in the urban centres of Galicia, which claimed back communities' rights over the 'monte'. A first national commonland law came into force in 1968 (Ley 52/1968) and was later updated in 1980 (Ley 55/1980). Later, the decentralization of political power in Spain implied that forests started to be governed by the regional authorities of Galicia, and a Galician commonland law passed in 1989 (Ley 13/1989). Legislation defined a formal governance structure with a governing board composed of a president, secretary and treasurer. The governing board had to convene at least one annual assembly attended by representatives from each household, which in turn had to establish the community bylaws. Furthermore, representatives had to elect a new governing board every four years.

Far from urban areas where conflicts with municipalities delayed registration processes, O Carballo registered their commonland quite early (in 1976) as a top-down legal obligation:

*“Well, obviously at that time, people could hardly go to school, those were other times, 1976, we were still very poor [...] It was almost forced on them like: ‘You have to organise yourself like this with the new bylaw and so on. Sign here and go’. It was imposed on us...” - commoner (male, 30–40 years old).*

They formed a governing board and approved a community by-law that was “a generic model for all Galicia and adopted everywhere. It was not something that was specifically tailored for us.”. In practice, a variation of the state forestry logic remained, giving rise to a forestry-shareholder logic by which commoners became shareholders of forestry earnings (Table 4). The Forest Law of Galicia obliged communities to have a ‘planning project’ based on a forest inventory that assured that the forest mass could sustain profits over time. This bureaucratic and technical process could not be done by communities and so, in most commonlands, the forest services continued to manage the forest areas of commonlands for decades. The governmental forest services commissioned the design of technical forestry planning projects to foresters. These had to then be approved at community general assemblies, although this was largely a bureaucratic procedure. Communities did not have the power to question the project’s aims, practices and underlying values and vision. The written aim of the O Carballo planning project was to ‘ensure the maintenance and stability of the afforested system’, to ensure a ‘sustained performance’ and ‘optimal utility’<sup>14</sup>.

<sup>14</sup> Source: Modificación del proyecto de ordenación M.V.M.C “de Carballo”- Parroquia de Carballo (Friol, Lugo) (2012). CERNA.

Participation in assemblies became the means to access forestry resources and as such, participation became strategic and exclusionary. Assemblies were convened annually with the sole aim of dividing the forestry income received by the forest services. The community now received 70% of the logging earnings, which were divided equally among commoner representatives. With the passive entitlements of forestry revenues, commoner representatives became shareholders of material benefits, disregarding the different needs or their active engagement. Passive entitlements were used to exclude others from community forestry earnings: the assembly decided that when building a new house, residents had to wait five years before officially becoming commoners and accessing the assembly. This caused various judicial complaints between residents. Additionally, women were excluded. The law specified that only one commoner from each household was able to assist assemblies. Yet, following the patriarchal family order, commoner representatives were always the eldest males of the family, which excluded women. By aggregating new rules, the formal representational system in assemblies allowed for further exclusions.

In the oldest pine forest, villagers ‘from above’ could continue their traditional activities. Residents ‘freely’ raised their cattle and worked sometimes together as in old times. Family flocks of sheep, goats and cattle grazed in humid pastures growing between pines from May to September. Finally, the unexpected growth of mushroom in state pine plantations brought a new activity to the community: mushroom picking. According to our interviewees, this was started by women in the 1970’:

*“We saw some women there on the banks of the rivers and wondered... what are they looking for? And nobody knew what they were looking for... Then we realise that they were picking mushrooms, and, at first, we looked for them only around here, at private properties because we thought there were none in the pine forests. Until later, some of us went up to the pine forests ...”- commoner (female, 50–60 years old).*

Excluded from the formal representational system, women reinvented traditions by picking new beings growing in the reforested commons. They built a new articulation of tradition while silently distancing themselves from formal forestry logics.

#### *Bricolage and participation in the unforested areas*

For the male residents ‘above’, the governmental forest management was viewed as an easy way to earn money while continuing some of their traditional subsistence activities without much interference. Following ‘use and custom’, the law allowed the leasing of non-forested patches to households. Male residents convened assemblies in a settlement to divide pasture areas instead of using the parish-based formal assemblies. Tradition



was reinvented: they used the idea of ‘equal shares’ of the law to start dividing the plots into equal parts per household. These commoners altered the (parish-based) formal governance structure mixing it up with elements of the traditional logic (i.e. settlement-based). As happened with formal general assemblies, only men were invited to this informal division: “the women never got to know these things” (Commoner, female, 50–60 years old).

The traditional logic intermingled with new logics of market production that came with adhesion to the EU in 1986. Tractors allowed families to plough and maintain larger areas without the need for collective labour. Farmers started to adapt and respond to the demands of markets by raising cattle for meat and milk. Family plots grew and cereal subsistence crops were replaced with artificially planted grasslands. Families fenced in their plots and even passed them as informal inheritance. As land became a marketable resource, conflict started to emerge. First, commoners started trespassing the traditional rule of using the common areas within their own settlement, provoking tensions and conflicts between households:

*“Because there [in a neighbouring settlement] was a plot where I had a grassland and when I took it, some people didn’t want me to take it. Some residents came to protest because I was using it [...] Well, if somebody needs it, then they can also take it” - commoner (male, 50–60 years old).*

To adapt to the new market demands, this particular commoner altered the traditional rules of ‘taking land following needs’ in a completely different context and expanded it to the whole parish. By calling upon tradition, this interviewee (maybe strategically, maybe unconsciously) justified the fact that he took land of the commonland without negotiating its possession with other residents at assemblies. In other words, he altered the traditional rule of taking land within his settlement, combining with elements of formal institutions (i.e. the parish perimeter), while rejecting others (i.e. the general assembly). Soon, because of new European sanitary compliance standards, cattle herds raised freely in pine forests disappeared.

### **3.4.3. The start of commoning (2007–2019)**

#### *Nurturing a Parish-commoning Logic*

In 2007, a new governing board motivated commoners to break the co-management agreement with the government and take full responsibility of the commonlands. The new governing board, composed of residents ‘from below’, wanted to go beyond the forestry use of land. They were ‘commoning’ because productive activities were the means to nurture the commons: by promoting a multifunctional use, they sought to nurture community sociality, culture and knowledge, as the following interviewee explains:



*“We understood that the community had to be alive [...], so we decided to start projects that assisted the recovery of customs, such as the use of cattle [...]. From there, we started social initiatives related to livestock activities [...]. The idea was to create gathering spaces with all these initiatives, where community members and other people get together, talk [...]. We call them parties, but they are associated with a more didactic component”- commoner (male, 30–40 years old).*

This shows how commoning was about creating spaces of socialisation and learning, and how productive activities took the normative scope of nurturing a culture linked to the commonland.

These commoning practices were allowed and influenced by formal regulations. Through the formal governing structure, the leaders of the commoning activities could access the governing board and take a more influential position within the community. This was possible because the president was a young male forest engineer perceived as ‘knowledgeable’ by other commoner representatives. Also, new activities could be introduced in the formally demarcated commons area. Following the formal parish-based perimeter, the governing board promoted the implementation of pig and horse raising within the forest, honey and resin production, as well as socio-cultural activities such as the ‘commoners’ day’, a traditional carnival, training courses on forest related topics (such as on wolves or forest thinning). Observing these dynamics, we have called this a parish-commoning logic (Table 4).

As in old times, decision-making and productive activities started to become intermingled with community sociality. For example, commoners implemented a silvopastoral system with native horses that would graze freely within the pines. This was to prevent fires by reducing the available biomass, while salvaging a native breed and an old custom. The horses later led to the organisation of a community festivity for the annual veterinary check-up (‘rapa das bestas’). The focus of all activities was to be ‘educational’ and ‘bonding’—e.g. to produce knowledge on costumes and on the commonland’s organisation and use, as well as nurturing bonds between residents. As a result, the social function of the commonland increased. The annual commoners’ day was the most popular and widely accepted activity in the commonland; it nurtured community relations and culture (with traditional games, food and dance). Reinvestments of forest earnings into festivities, but also for improving public spaces (including forests) contributed to rebuilding the affective links to the commonland, which had been lost after reforestation, as shown here:

Table 4. Logics within the community.

Type of practice	Traditional-community logic	Forestry-shareholder logic	Parish-community logic
Sharing resources in common	<ul style="list-style-type: none"><li>• Commoners are inhabitants of the settlement (with potentially inclusive, but unequal capacities to satisfy needs1)</li><li>• No formal governance or decision making: norms are socially and culturally embedded.</li><li>• Active entitlement: benefit 'earned' through labour.</li><li>• Appropriation is need-seeking, by families</li></ul>	<ul style="list-style-type: none"><li>• Commoners representatives are shareholders of resources (potentially exclusive)</li><li>• Formal decision-making to divide shares: <i>participation is strategic</i>.</li><li>• Passive entitlement: all residents have equal rights disregarding their needs &amp; labour.</li><li>• Appropriation is profit-seeking, by state or the community's governing board.</li></ul>	<ul style="list-style-type: none"><li>• Commoners are inhabitants of the parish (potentially inclusive).</li><li>• Active entitlement: all residents have to contribute to the community.</li><li>• Appropriation is need-seeking, by the parish community.</li></ul>
Using resources for the common	<ul style="list-style-type: none"><li>• Appropriate use linked to subsistence needs.</li><li>• Community is settlement-based</li><li>• Direct consumption: resources for community subsistence.</li><li>• Social gatherings and festivities linked to productive activities</li></ul>	<ul style="list-style-type: none"><li>• Appropriate use defined by planning project.</li><li>• Community is parish-based.</li><li>• No direct consumption: resources sold to the market; surplus divided by households.</li></ul>	<ul style="list-style-type: none"><li>• Formal decision-making to define appropriate use by the parish as a whole.</li><li>• Community is parish-based.</li><li>• Reinvestments for the common: resources sold to the market for reinvestment in forest, other public spaces and community activities.</li><li>• Social gatherings and festivities linked to productive activities.</li></ul>
Producing resources of the commons	<ul style="list-style-type: none"><li>• Families help each other in community labour</li><li>• Community labour maintains community sociality and culture: <i>participation is affective</i>.</li></ul>	<ul style="list-style-type: none"><li>• No volunteer labour; hired external employees.</li></ul>	<ul style="list-style-type: none"><li>• Community activities to maintain community sociality and culture: <i>participation is affective</i></li></ul>

We did not gather enough material to elaborate on the power imbalances of the community in the past. Yet, literature asserts that poorer families had less means to access to common resources (i.e. less cattle to graze), and the patriarchal family order probably influenced the tasks and uses allowed to women

*“We go for a walk in the commonland. Simply because of those paths, which are now prepared. We know that there are pigs, those horses, and I like to go there and see, ‘Fuck, look at that horse, look at that pig’, you know? Now we have a reason to go there, and before we couldn’t even access the paths. Anyway, what were you going to do there? If all the bush was abandoned then...there was nothing!”- commoner (male, 40–50 years old).*

The above shows how commoners ‘from below’ used to perceive the commonland as abandoned, since all their traditional activities were interrupted with reforestation. Commoning started revitalising their lost affective links. As such, community work was affectively motivated. By participating in community work, commoners became part of the community, as shown below:

*“While you’re here, as a commoner, we have to help. This makes you a real commoner and part of this community [...] And as a commoner, I would like to live from the commonland, and if we can all live well, great”- commoner (male, 40–50 years old).*

Furthermore, beyond creating social affective bonds, this commoner had the desire to ‘live from the commonland’ by raising family cattle together as in old times. We found this to be true only for poorer commoners with cattle and with a little private land. Only 11 (male) commoners out of 50 households volunteered to help the governing board one morning a month; most legal commoners benefited from community social activities, while not contributing to labour. Although women did not feel invited to these formal volunteer sessions, they did participate informally in community labour through kinship relationships: women ‘helped’ family men in harvesting, grazing and mainly with food in social events.

### *Bricolage and participation*

Since 2007, the aforementioned parish-commoning logic mixed up with elements from the forestry-shareholder logic. A ‘planning project’ was updated to mix forestry with other activities that had a social and cultural meaning (aggregation), e.g. livestock of local breeds. While doing so, the underlying technocratic aims and values around efficiency and technical knowledge of the planning project remained: the commonland produced ‘goods’ to be sold commercially to assure profitability. Yet the idea was to build a community ‘enterprise’ that could hire locals to improve community life conditions.

While appropriation and (re)investments was done by the parish as a whole, many spoke about commoning activities in the third person (‘they’), as if these activities belonged to the governing board. This suggests that parish-based appropriation was considered

illegitimate. For the first time, the forest area ‘above’ was fenced to keep the horses safe and one commoner had to stop bringing his cattle to the spring meadow. The forest areas ‘below’ were also fenced temporarily with a mobile fence system for pig raising. Likewise, the board started regulating access for mushrooming, asking external users and those commoners selling them commercially to purchase a license. While new inclusions and affective relations were created ‘below’, the (grazing and mushrooming) activities that were done by commoners ‘from above’ were affected and, in some cases, excluded.

This traditional family appropriation was mixed with elements from the forestry-shareholder and explains why most commoner representatives did not want to give up of their monetary shares. Commoners ‘from above’ called upon tradition to argue that the commonland had to contribute to their family economies, even when tradition was altered including profit-seeking and strategic aims:

*“How could this improve? We are taxed too much. In the end, we are losing almost everything to taxes... the taxes when we distribute are high, we can only but reinvest, and well... to feel motivated we have to make some profit, because if not ... people are not motivated so much. If people see a yearly benefit for the commonland, then this helps motivate them”- commoner (male, 40–50 years).*

This alteration allowed them to claim the legitimacy of dividing income from logging activities to support family economies. This strategic motivation around forestry activities contrasted with the affective engagement in their other family activities—shepherding, hunting or horse raising—suggesting that commoners internalised a forestry-shareholder logic only in reforested areas managed in common, even if contradicting their means of livelihoods as shepherds.

The shepherdess interviewed was the only commoner who complained about the loggings done in the forest. She complained that the logging and clearing of the area had changed the landscape she had known and valued:

*“For me, the pine forest is important. I go mushrooming there, and I am calm, I know it and I am well there, but if they [the governing board] cut it... [...] Look, only the clearing they [the governing board] do de-concentrates me, because I perceive it as another pine forest. Even worse if they cut everything ... How many years will it take to grow back the pines as they are now? I do not support it [the logging], because one can live equally fine without the 200 euros or 300 that we get annually, but at least we have the pines there!”- commoner (female, 50–60 years old.)*

The fact that she was excluded in the past (when commoners received the biggest shares in cash) could explain why she maintained an affective link to the forest. Her reaction was to take a distanced position from community activities while continuing her 'traditional' shepherding and mushrooming activities (articulation practices).

The result of the internalisation of a forestry-shareholder logic is that commoners voted negatively to the proposition of using the total surplus to hire locals as permanent personnel even when their shares were dwindling progressively. A new Forest Law (Ley 7/2012) required that at least 40% of the revenues of productive (forestry) activities should be reinvested. Together with a tax system that assigned higher taxation over households' sharing, the shares did not signify much for a family economy (200 euros/household/year in 2017). Only two or three commoners could be occasionally hired for maintenance work. Beyond this, most of the management work was outsourced to companies while the daily work was done by the governing board and their families (including women). The governing board became increasingly overloaded with the daily work. This triggered the resignation of one of the community leaders in 2019.

Over the years, the governing board started to separate the sociocultural activities not directly linked to the productive activities from the formal organisation of the commonland. The association had the aim of producing, valorising and sharing widely local rural culture. Instead of aggregating non-productive aims to the formal commonland organisation, they started distancing commoning activities from the commonland (articulation). This allowed them to reduce tensions, access non-profit public subsidies and invite people from outside the parish. Non-residents became members, participating in workshops and sociocultural events. Women were more involved in the association, even in directive positions.

#### *Participation in general assemblies*

The new governing board tried to turn general assemblies into the main arena for decision making and conflict resolution. Assemblies allowed more transparency, and equal division of land. The new governing board inventoried divided common land and invested in transforming the remaining common gorse areas into artificial pasture, improving land access. This entailed many conflicts as some areas were illegally privatised and passed on as inheritance. Residents 'from below' and the only shepherdess, who barely had access to unforested common areas in the past, progressively acquired access to common pasture areas.

The governing board started to convene the assembly at least three (most commonly four) times a year; notwithstanding, these assemblies never became totally functional and inclusive. Most commoner representatives were men (71%), and commoners rarely

brought ideas to the assembly. New activities for the commonland were most often proposed by the governing board. The board generally conducted a ‘feasibility study’, exploring how the activity could be implemented. If the study produced good results, then it was brought to the assembly for voting. Before voting, the board sometimes organised a meeting with appointed members in charge of communicating to the residents the forthcoming matters of the assembly.

Voting was done by a show of hands, so some claimed that the majority voted by following the crowd, while others justified their passive role saying the majority was the only thing that mattered. When speaking about the governing board, many interviewed commoners said “they [members of the governing board] know better than me” and “we need to just wait for another governing board.” Commoners thus assumed a passive role, explaining how this new governing board managed to obtain absolute majority in most activities proposed during that period. Despite this, some interviewees stated that they wanted more opportunities to discuss activities, which suggests they did not find assemblies suitable loci for doing so.

Formal institutions were pivotal in shaping participation patterns. On the one hand, commoners with different capacities engaged in different bricolage practices. Those having less power took a distant position while continuing their livelihood practices (articulation practices), whereas those in more powerful positions shaped dominant institutions governing the commonland through aggregations or alteration. The result of these practices was the practice of hybrid institutional logics, messy and contradictory, that provoked both inclusions and exclusions. The following section discusses further our results in light of participation literature.

### **3.5. Problematising formal forestry-based commons’ institutions**

#### **3.5.1. First period of implementation: exclusions and displacement of logics**

Our study suggests that the formal devolution of O Carballo commonland to communities was a top-down process enmeshed in the forestry policy of the regional government. In O Carballo, devolution was perceived as ‘an obligation’ and led to local elite capture. Despite the fact that formal institutions gave rights to all inhabitants, during the first period of implementation, male commoner representatives took revenues from the governmental forestry activities aggregating exclusionary rules that reduced the number of commoners and thus shares. They also aggregated the patriarchal family order to the formal community organisation excluding women. Unlike in Nightingale (2005) and Tyagi and Das (2020), we did not find any resistance from women. Instead, women distanced themselves from the commonlands’ formal structures.

The devolution under the terms of the Government has installed a problematic forestry-shareholder logic that shifted the logic of participation from affective to strategic. In the past, participation in community labour was affective. This is in line with other studies portraying participation in a commons as self-fulfilling and valued per se, in its ability to maintain participant's affective relationships to human and non-humans (e.g. Dennis and James, 2016; Sandström et al., 2017; Singh, 2018; Singh, 2013). Instead, the introduction of 'forestry shares' motivated a strategic participation only for allocating resources shared in common (Fournier, 2013). Commoners participated strategically in general assemblies in exchange of a share, while community labour was still very low and community conflicts increased.

Although there are some studies identifying a positive relation between activities' economic returns and participation (e.g. Marey-Pérez et al., 2015; Schlueter, 2008), our results are aligned with other contributions showing how monetary-based incentives can 'crowd-out' intrinsic local motivations to collaborate (Chervier et al., 2019; Rode et al., 2015). As found in Serra and Allegretti (2020) on historical commonlands in Portugal, the State forestry extractive practices have been internalised by communities to satisfy their short-term needs, displacing the constitutive affective links between commoners and their commonland. Later, this extractive mentality clashed with the commoning logic of the new governing board, breeding internal community conflict. This conflict can be interpreted as a clash of rationalities (see Dekker et al., 2020) on what the forestry resources should be used for. Rather than an isolated event, Marey-Pérez et al. (2010) showed how conflicts are a norm and not an exception in Galician communities.

### **3.5.2. Second period of implementation: commoning as a contingent process of bricolage**

Our results show how commoning is contingent on available resources, power and social relations; as such, it can be understood as a process of 'bricolage' in which commoners mix ethically-driven expectations and values with formal and informal institutions that build the 'frame' of plausible actions. Our case can be considered an example of commoning because the initiative was based on the principle of self-organisation whilst intending to satisfy community needs (Euler, 2018)—in terms of building social relations and culture and supporting livelihoods. Yet, institutional bricolage illustrates the complexities and contradictions of commoning. Some of the affective relations motivating volunteer participation were rebuilt while some family practices were affected (i.e. mushrooming), or even excluded (i.e. grazing).

While improving the functionality and inclusiveness of the commonland, we found that the aggregation of forestry logics influenced decisions towards technical criteria and commoners' avoidance of conflict hindered the collective negotiation of community

needs. A key principle of a commons is the negotiation of which and whose needs are to be satisfied (Euler, 2018). Overall, the start of commoning brought more transparency and balanced the extractive forestry aims that dominated during the first period of implementation. Yet, commoners preferred 'waiting for another governing board' rather than raising their needs and demands in general assemblies, and decisions were taken based on technical feasibility studies. This attitude can be attributed to a learned cultural attitude of survival originating from the dictatorship period where commoners had to accept the hierarchical power of State guards while articulating their traditional subsistence activities, risking being caught and punished. Commoners accepted the authority of the governing board, perceived as knowledgeable as it was composed of the most educated community members.

Moreover, despite the increased involvement of women in social community activities and events, formal general assemblies and community labour were still dominated by men. As found by Arora-Jonsson (2009) who investigated women's participation in a Swedish community forest as compared to an Indian one, women in our study did not see gender as 'an issue'. This can explain why their non-involvement in commonland' affairs were interpreted as a question of personal preference: women participated more in socio-cultural activities (e.g. in the association). While the re-entangling of both social and production activities could be more inviting for women, there is a need to question the idea of individual preferences as an explanatory factor for participation, as it obscures structural barriers to women's participation (Arora- Jonsson, 2009). Our participant observation did acknowledge that women had a bigger role in unpaid housework and were those cooking and serving food in social community events.

Rather than accusing commoning of being exclusionary or biased towards technical forestry logics, our study supports the idea that commoning is always a contingent achievement (Nightingale, 2019). Commoning is a process of acquiring response-ability (Haraway, 2010); it requires having particular capacities (Fleischman and Solorzano, 2018), such as community relations or negotiation skills, and affective relations (Singh, 2018). As these may have been eroded during state expropriation (see Serra and Allegretti, 2020), the biggest role of commoning historical commons is to rebuild a participatory culture and the affective links between communities and their commonland (Nieto-Romero et al., 2019a, 2019b). Although the role of historical commons in creating meaning in people's lives has been acknowledged (Lawrence et al., 2021; Sandström et al., 2017), we have shown here how legal instruments are prioritising the productive component of forests, rather than the immaterial ones such as community building.

In this regard, it is important to question the current hierarchical governance structure based on centralised governing boards, which, in our view, do not allow the nurturing of



existing and new affective relations. These structures are usually based on professionalised knowledge (Nightingale, 2005; Stavrides, 2015), furthering the influence of the wealthy and educated, and effectively excluding the poorer and less influential groups—such as women—from positions of power (Agarwal, 2001; Lane and Corbett, 2005; Saunders, 2014). It appears that in many parts of Europe, the governance models of historical commons were inspired by representative democracy, presumably influenced by post-war/post-dictatorship democratic reforms (e.g. Soto Fernández, 2016). Less hierarchical models, organised in a dialectic between centralised and dispersed boards and initiatives, together with a voting system based on consensus rather than majority, are potentially more inclusive although not without risks (see Esteves, 2017). They could help achieve autonomy and keep alive the affective relations of different groups (Zibechi, R. as cited in Stavrides, 2015).

### 3.6. Conclusion

This paper analysed how formal institutionalisation has impacted commoners' participation in a historical commons in Galicia by looking at the institutional bricolage practices commoners use to adapt institutions to local needs and contexts, and by studying how the resulting hybrid institutional logics has impacted patterns of participation (both exclusion- inclusion dynamics and types of participation). Our analysis allowed to identify the causal mechanisms by which formal institutionalisation affected participation. In the first period of implementation, formal institutions were altered by male commoners to benefit more from community resources, producing elite capture. During this period, most commoner representatives internalised a forestry-shareholder logic, by which participation for the common was strategically motivated to get a 'forestry share'. Later, the existence of a formal governance structure allowed educated commoners to take an influential position in the governing board and to aggregate practices based on a commoning logic. They were more inclusive and built new affective relations, while excluding some affective family practices. Yet, some elements from the state forestry logic were also aggregated: communities become managers of forestry incomes, while most work was outsourced to companies. Most commoners internalised a forestry-shareholder logic motivated by extractive and profit-seeking aims over forests. Ultimately, this was at odds with commoning and volunteer participation, hampering the full achievement of a commoning logic.

Our study provides an alternative explanation to the low levels of participation in historical commons in Europe. Rather than portraying commoners as rational and self-interested, our study shows how the implementation of formal institutions has changed dominant participation from being affective to strategic. Our results highlight the responsibility of forestry policies in community conflicts and in low levels of participation. State

expropriation and reforestation of commonlands over the last century was followed by intense conflicts between communities and the regional government (Bauer, 2005; Seijo, 2005) and culminated in a strong social movement in urban provinces for the legal recognition of commonlands (Soto Fernández, 2016). Yet, the Regional government used the formal institutionalisation of historical commons to perpetrate land control over forestry resources in remote rural areas (Soto Fernández, 2016). In line with Peluso and Vandergeest (2001), this study suggests that formal institutionalisation (through instruments such as ‘forestry shares’ and ‘planning projects’) has supported the naturalisation of forests (as forestry) in the minds of people. Once a forestry logic is naturalised, communities can be blamed for sub-optimal forestry management, low participation and even of being conflictual and self-interested (García-López, 2019). Instead, we argue that formal institutions have installed forestry shares that have contributed to the crowding-out of volunteer participation, and a management requiring considerable technical knowledge and navigation through multiple levels of bureaucracy. Finally, while gendered exclusions have been largely investigated in developing countries, more gender sensitive research is needed to understand how women are hindered to participate in contexts where they are not resource-dependent, and in cultures considered more egalitarian such as the European context.





***This chapter was submitted to:***

*the International Journal of the Commons as: Nieto-Romero, M.,  
García-López, G., Swagemakers, P., Bock, B. (submitted).*

*Communal forest management and citizenship: political tensions and clashing  
citizenships in an urban municipality in Galicia (Spain).*



# Chapter 4

**Communal forest management  
and citizenship:  
political tensions and clashing  
citizenships in an urban municipality  
in Galicia (Spain)**



*“Today we are faced with a challenge that calls for a shift in our thinking, so that humanity stops threatening its life-support system. We are called to assist the Earth to heal her wounds and, in the process, heal our own - indeed to embrace the whole of creation in all its diversity, beauty and wonder. Recognizing that sustainable development, democracy and peace are indivisible is an idea whose time has come”*

*- Wangari Maathai (1949-2011), ecologist*

## ABSTRACT

Communal forest management is an arena where expanded forms of democracy and citizenship emerge. This paper researches the effects of commoning forests on citizenship to explain the political tensions that emerge around communal forests in the municipality of Vigo in Galicia (Spain). We suggest that existing political tensions result from clashing citizenships built in interactions with the forest. We present a case study of a community forest in the periphery of Vigo city (Galicia, Spain), analyzing how citizenship changes with commoning and in relation to other political forest projects in the city. Our study reveals that a virtuous relationship between commoning and citizenship exists. Commoning forests was first motivated by citizens' claims for social and political rights in the city. Then, citizens' claims were articulated through new socio-natural identities built with forests. Commoning nurtured new affective relations to forests and more-than-human subjectivities through time, re-politicizing citizenship in new ways. A new form of citizenship around practices of communal care for people and forests (*care-tizenship*) emerged which clashed directly with the neoliberal citizenship enforced by the municipality. As a result of clashing citizenships, Teis CF suffered from a lack of public economic support and institutional neglect that threatened its continuity. Instead, the municipal council has strengthened its authority in the city as a legitimate actor in managing forests and controlling wildfires. Our study ends by emphasizing the importance of 1) economic autonomy and democratic practices to armour communities' autonomy and 2) turning visible the democratic implications of top-down technical forest management approaches.

**Keywords:** commoning, citizenship, care, forests, autonomy.

## 4.1. Introduction

Since Ostrom, communal forms of natural resource management have inspired natural resource policies. As part of communal approaches to natural resource management, local communities design their own rules and implement management practices autonomously. Studies have proven communal management's success in improving livelihoods and forest conservation; they also demonstrate that communal forms of management respond more adaptatively to forest dynamics, legitimate local customary uses, and social, and organizational systems (Arts, 2017). Yet, in many cases, policies for communal forest (CF) management - did not provide the promised autonomy to communities (Basurto 2013), denied communities to participate in higher levels of decision making (Pokharel et al., 2020), or used community management reforms to strengthen state authority and recentralize power (Ribot et al. 2006).

While there are numerous articles reporting on CF pitfalls at a national or community level, few studies have analyzed the mid to long-term impacts of CF in nurturing novel forms of citizenship (Fleischman and Solorzano 2018). This paper aims to fill this gap by exploring how the process of taking care of forests collectively shapes citizenship and the political tensions that emerge in the process. We do this by unravelling the forest management practices and broader citizenship struggles in the periphery of Vigo municipality (Galicia, Spain). By looking at the interlinkages between citizenship and (communal) forest management at the communal and municipality level, we seek to explain why state authorities often hesitate to give community autonomy in CFs, and the strategies they use to retain power over communities and forests. Our purpose is to unveil how political tensions that emerge are the results of clashing citizenships and how this impacts community autonomy.

In doing so, we employ the lens of commoning, which involves all negotiations about rules or protocols for forest access and use. More in general, commoning includes accepting responsibility for a resource, its care, and the distribution of benefits in ways that consider the wellbeing of others (Gibson-Graham et al. 2016a). The shift from commons (a noun) to commoning (a verb) underlines the creative, political and socio-natural work entailed in managing communal resources. As a socio-natural process, commoning practices involve "social" and "natural" objects and relations, affecting eco- and social systems simultaneously (Nightingale 2018). Studying (communal) forest management as a socio-natural and political process is instrumental for understanding how novel forms of citizenship emerge with the implementation of new policies and regulations of forest management (Sikor and Lund 2010, Vadjunec et al. 2011, Lund 2016), and how new environmental and political subjectivities emerge with engagement in communal forest care (Singh 2018b, Grant and Le Billon 2019).

We analyze the interlinkages between commoning forests and citizenship in its historical context, as embedded in broader citizenship struggles while accounting for the forest management projects of municipal actors. Our analysis is structured through the following research questions:

1. How and to what extent do historical citizenship claims motivate and influence forest commoning?
2. Which new forms of citizenship are nurtured through commoning?
3. Which other citizenships are promoted by other political actors through forest management, and how do these explain existing political tensions?

In the following, we present our theoretical framework (section 2) that defines how political tensions emerging from CFs can be explained through clashing citizenships. Section 3 presents our case study by describing how implementing a CF in Vigo city (Galicia, Spain) reconfigured socio-political structures and institutions across scales. Section 4 presents the results showing how commoning forests emerge in reaction to state oppression and the threat of the destruction of community sociocultures; we also demonstrate how citizenship changed throughout the process of commoning, bringing forward novel political belongings and ecological forms of citizenship. We conclude by discussing the insights generated by linking citizenship debates to commoning while highlighting the challenges of CFs to maintain autonomy in current contexts of (post-) and consensual environmental politics.

## **4.2. Communal forest management, citizenship and forest politics**

Forests are terrains of struggle and conflict for access to land and natural resources and political participation and citizenship. Generally, citizenship is defined as a collective subjectivity establishing the rights and responsibilities of individuals towards a community (Bose 2013). Furthermore, citizenship entails the recognition of membership in a meaningful political community (Lund 2016). Thus, struggles for citizenship are, generally, struggles for the recognition of membership and the ‘right to have ‘rights’ (Lund 2016, Casas-Cortes 2019a).

Citizenship is related to CFs because new political belongings and identities emerge with forests. Forest dwellers build socio-natural identities— as, e.g. ‘rubber ‘tappers’, ‘forest ‘extractivists’ or ‘forest ‘conservationists’ (Bolaños 2011, Singh 2013). These identities acquire political meanings when the conditions of their existence are threatened by agro-industries and other territorial developments (Hecht 2011, García López et al. 2017). As a result, communities implementing CFs do not only have access to economic and material resources but are instrumental in creating alternative ways of belonging that



politicize communities.

Indeed, research has shown how CFs are important arenas for civic participation and bottom-up democracy but constantly confront hegemonic socio-political systems (Rutt 2015, García López et al. 2017, Serra and Allegretti 2020). The implementation of CFs is a political process. It entails reconfiguring entrenched forms of authority and citizenship, which involves conflict and struggle. Indeed, states and other political actors have sought (through legislation and coercion) to recentralize their authority by enforcing particular forests- as professional forestry (Ribot et al. 2006, García-López 2019). Professionalized / technical forestry has often excluded local customary ‘ecosystems’ uses, knowledges and institutions (Nightingale 2005), while promoting market-based institutions that commodify nature (Singh 2015).

Understanding the links between citizenship and (communal) forest management helps better understand the above political tensions. Different types of citizenship co-exist, building complex configurations of (democratic) socio-political systems. The following characterizes two overall performances of citizenship emerging in relation to forests (Table 5): (1) A neoliberal, exchange-based performance where the state directs government with hierarchical logics of control of populations and territories/forests and (2) a commons, *care-tizenship*, characterized by organization, mobilization and collective self-government for sustaining/reproducing the life of territories.

**Table 5.** Two clashing citizenship build around CFs

Neoliberal exchange-based citizenship	Commons <i>care-tizenship</i>
<ul style="list-style-type: none"> <li>• Citizens as individual right-holders, entrepreneurs, and consumers.</li> <li>• Citizenship rights are given by state (vertical)</li> <li>• Government with legitimated authority, allied with economic actors</li> <li>• Ecosystem management as a technical apolitical process</li> <li>• Nature commodified</li> </ul>	<ul style="list-style-type: none"> <li>• Citizens belonging to political communities with rights and responsibilities.</li> <li>• Citizenship is collectively constructed (horizontal).</li> <li>• Governmental authority is contested, citizens claim their rights to care for the commons and be cared for</li> <li>• Ecosystem management as a political process of building meaningful socionatures.</li> <li>• Nature as part of the community</li> </ul>

#### 4.2.1. Neoliberal exchange-based citizenship

As a collective subjectivity, citizenship changes and evolves through time with citizens’ actions and struggles to exercise and achieve rights (Llano-Arias, 2015). National territorial citizenship is one of the many forms of socially constructed collective subjectivities. Referred to as exchange-based citizenship, national citizenship is built through mutual recognition and often material exchange between citizens and governmental authorities (Lund 2013). This implies that state does not have power *per se* but strategize to build a recognized authority. Sikor and Lund (2010) refer to this process as ‘contracts of ‘recognition’ through which governments define the criteria and

performances under which citizenship rights are enacted, and which provide citizens with rights while reinforcing the governmental role as an authorizer. In the words of Lund (2016): ‘the act of authorizing recursively authorizes the ‘authorizer’. As a result, exchange-based citizenship- consisting on claiming rights to state agents- incurs the risk of becoming a tool to strengthen public authority.

When it comes to ecosystem management, neoliberal policies – entwined with state-driven technical ecosystem management- reinforce state agents’ authority while reproducing exchange-based forms of citizenship. Neoliberal citizenship refers to performances in which state/government allies with economic actors that occupy a privileged place in constructing citizenships. Neoliberal citizenship positions citizens as individual right-holders, entrepreneurs and consumers (Macgregor 2014, Devine and Baca 2020). As a result, the responsibility of a healthy environment rests with individual lifestyle choices, including green consumption (Schindel Dimick 2015). In the meanwhile, neoliberal policies continue to support unsustainable modes of production and consumption, such as extractivism, nature commodification and the export of raw materials in the perspective of economic growth (Macgregor 2014). States/governments are urged to provide solutions to the current ecological crisis. By portraying nature as the enemy and avoiding debates that generate social unrest, states are managing to de-politicize ecosystem management and legitimate top-down techno-managerial solutions that reinforce their authority over the environment (Nightingale 2005, Swyngedouw 2010).

#### **4.2.2. Commons care-tizenship**

Commons-based citizenship involves establishing self-organized structures for assuring ‘citizens’ own material and immaterial living conditions. This involves all the negotiations necessary for establishing rules or protocols for access and use, for caring of and accepting responsibility for a resource and distributing the benefits in ways that consider the wellbeing of others (Graham-Gibson, 2016). In contrast to exchange-based citizenship, citizenship is collectively produced in the process of self-governing community matters in their own spaces. While governments-citizens traditional responsibilities become blurred, communities maintain their autonomy through bottom-up democratic practices (Starr et al. 2011).

As a bottom-up emergent process, ‘communities’ boundaries and belonging is not pre-defined by the state or fixed regulations based on identity. Belonging depends on participation on the ‘appropriate ‘use’, which involves practices of communal care and care for the commons. But socio-natural belongings are not fixed. Practices of forest care nurture alternative political belongings. Singh (2018) shows how daily practices of communal care for the forest (e.g. patrolling) produce affective ties with nature that are similar to those with pets or family (see also Singh, 2015, 2013). These affective ties

foster a subjectivity as *commoners* (Singh, 2018) as people who see the environment as a commons to be cherished, shared and cared for. Commoners' subjectivities include seeing themselves as part of the more-than-human entanglements that make life possible (Nieto-Romero et al. 2019).

Care does not only shape environmental subjectivities but is central to articulate commons-based citizenship. Many livelihoods struggle in defence of forest resources have transformed in social movements around care for forests. Rejecting the neoliberal market logics of professionalized forestry, commoners claim their rights and autonomy to decide the fate of forests as linked to their own wellbeing (Singh 2015, Villamayor-Tomas and García-López 2018). Similarly, care is at the centre of insurgent forms of commons-based citizenship in the urban context. Lamarca (2015; pp 171) speaks of “insurgent acts of being-in-common” against neoliberal policies that threaten the common urban space and exclude and marginalize certain citizens. By caring for the excluded and marginalized, commoners create new ‘citizens’ subjectivities around care (a *care-tizenship* was claimed and adopted by feminists Spanish anti-austerity movement) (Casas-Cortes 2019). Changing the word ‘city’ to ‘care’ (*care-tizenship*, *cuida-dania* in Spanish) is instrumental in creating a political belonging based on peer-to-peer care and horizontal relationships while claiming the state their right to have resources to care for the commons and be cared for.

### 4.3. Case study, materials, and research methods

#### 4.3.1. Case study: Teis CF and parish

Our case study on the *Montes Veciñais en Man Común* is located in the Galicia region (Northwestern Spain). Here, CF was reestablished after the fall of the Spanish Military Regime (1936-1975). The Spanish military regime had expropriated local communities of ‘*montes*’ vital resources, shifting the ownership of commonlands to the municipalities which then provided large areas for the national reforestation project (Rico-Boquete, 1995; Grupo dos Comuns, 2006).

Law 52 of 1968 and Law 55 of 1980 legally reconstituted the *montes* to the parishes as a collective property of Germanic nature<sup>15</sup>. As a result, all parish residents became co-owners organized in a governing board and a community assembly. As a result, the parishes have been arenas of a renegotiation of citizenship both through neighborhood parish associations and CFs. They have contested the duties of the municipality councils, claimed their ‘citizens’ rights, and acted as providers of essential services and infrastructures to the parish (Meijer et al. 2015).

15 Unlike other historical commons in Europe which have Roman origin, the origin of these areas is Germanic. Property rights under Germanic nature recognize communities’ ownership as long as they live at the areas where the commonland is ascribed.

We selected the Teis CF and parish located in the periphery of the city of Vigo because here, the renegotiation of authority and citizenship was particularly prominent. Between '1960' to 1980, Vigo received migrants from all over rural Galicia to feed an emergent industrial sector, extending the city towards the peri-urban parishes. Officially, Teis accounts for 2.265 inhabitants (out of 287.912 inhabitants of Vigo municipality), but local associations claim a population of around 30.000 inhabitants (10% of Vigo population), arguing that the city has conquered territory that belonged historically to the parish. The Teis parish has been one of the parishes with the highest industrial growth and has an extended history of citizen mobilizations, mainly during the last decades of the 20<sup>th</sup> century (Martínez 2003, 2011).

#### **4.3.2. Data gathering and analysis**

Fieldwork was implemented between February 2017 and February 2019, following a progressive contextualization. The implementation comprised rounds of field visits (interviews and participative observations) alternated with desk research (qualitative analysis and theoretical reasoning) until a contextualized theoretical framework was defined and no new information was gathered. The last field visit was in February 2019, but we maintained contact until August 2021 to improve our theoretical reasoning by clarifying empirical interpretations. In our first field visit, we interviewed the three commoning leaders who were part of the governing board and had been involved since the initiative's start in 1995. These interviews provided an overview of the CF project's objectives, activities, and historical trajectory. They also revealed their relations with other institutions and actors. Besides, we drew a timeline with milestones and the network of actors enabling or hindering their actions. We interviewed 15 (out of 39) representative commoners to understand their involvement and attachment to the initiative. In selecting respondents, we aimed for diversity in terms of sex, age, and place of residence within the parish. Finally, we interviewed six actors identified as part of the network (collaborating or hindering) by commoning leaders, among which a hired worker, a representative of the Teis community plan, the Teis neighborhood association,

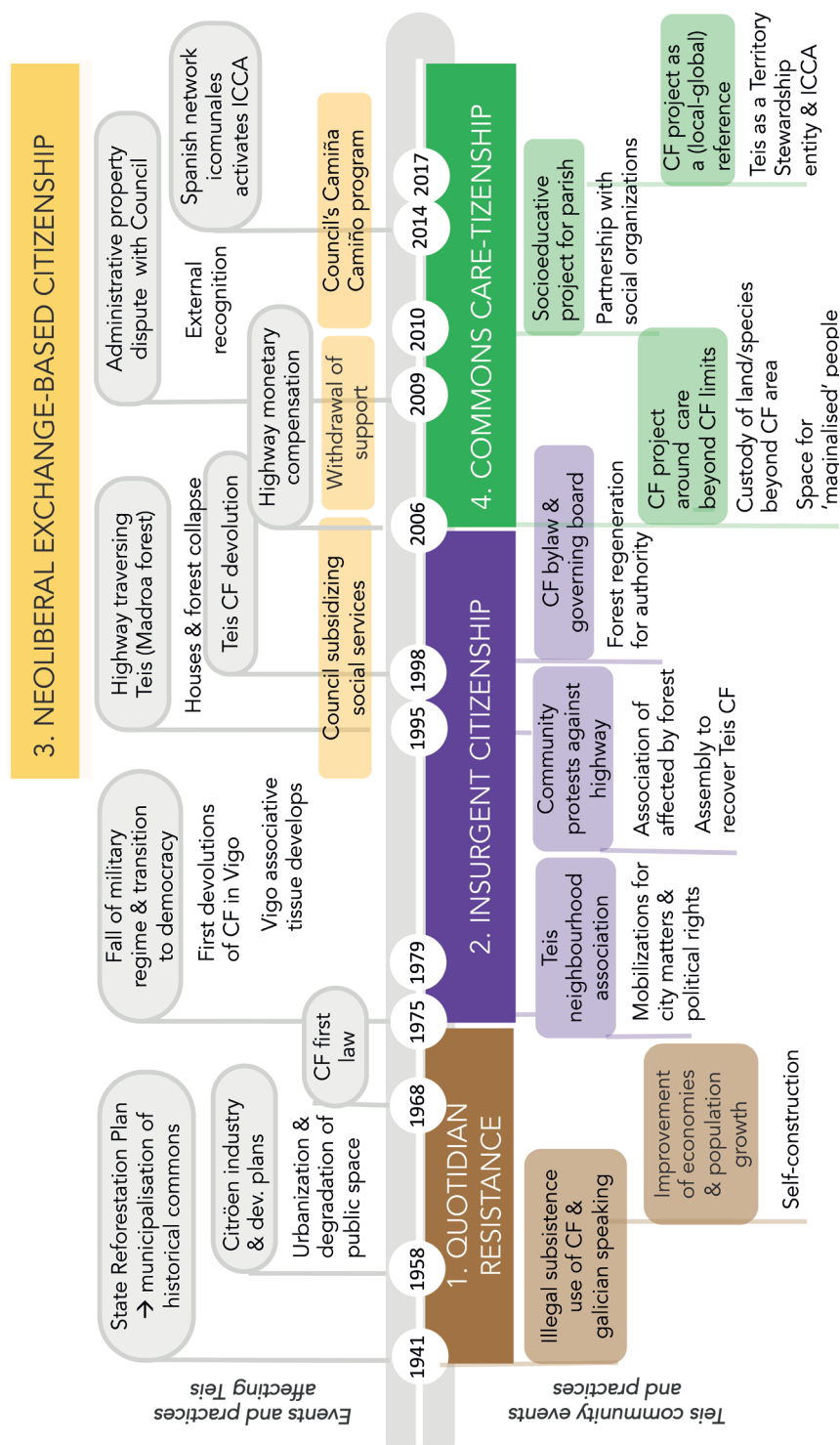
a law firm and the Municipal Association of commonlands of Vigo (Montes de Vigo), as well as two technicians of the regional forest services. The different respondents are referred to in the empirical material with the following codes: CL for commoning leaders, RC for representative commoners and CN for the commoning network.

We analyzed the transcripts using Nvivo (QSR International, 1999-2021) coding material under research questions and built coding trees to build a sense of the investigated processes.

#### 4.4. Citizenship and forest commoning practices and struggles in Teis

When we first visited Teis we were surprised by the central discursive position of forest health. We visited and studied other cases in Galicia where productive forestry activities were used to fund community activities and services in the parish or the subsistence of their neighbours (i.e. 'peasants' economies). Instead, the significance of forests in Teis was not related to the 'forest's 'productivity' but its role in citizens' struggle for political participation and community autonomy. This section will provide the empirical evidence explaining how this political project came into being in relation to – and clashing with – other political actors.

Our historical analysis identifies three main periods (Figure 1). The first period of daily resistance in reaction to the authoritarian military regime in Spain (1938-1975) that expropriated the commonlands. The second period of insurgent citizenship started during the transition to democracy when citizens went to the streets claiming political rights, and the Teis CF became a means for citizens to claim and acquire their rights. Finally, the third period of insurgent and ecological citizenships when the Teis CF struggles to maintain their autonomy in a context of institutional neglect and neoliberal environmental politics in the municipality.



**Figure 7.** Timeline summarizing main historical events affecting Teis community, and council (re)actions in relation to CFs and other civic associations in Vigo.

#### 4.4.1. Navigating oppression: quotidian resistance and insurgency

With the expropriation of the commonlands in 1938, the forests of Teis were reforested with highly productive forestry species (pines, eucalyptus and acacia), while local livestock practices were forbidden; also, the use of firewood was highly regulated and controlled even if it was the only source of fuel for cooking. The municipality became the central authority controlling resources and people. Residents had to ask permission to uproot the stump left by forest guards, while state forest guards would give firewood to wealthy or well-connected families. Yet, in a context of extreme need, residents illegally picked firewood, risking fines or other more severe sanctions. The municipal council started using the commonlands for municipal infrastructures such as a zoo and high voltage lines at the commonland (Madroa forest)- or rented it for private use- a football field and a dog kennel. In addition, the commonlands become an open-access 'landfill' where to discharge residual waters or residues of the city Vigo.

Local economies improved during the industrial development of Vigo. The establishment of the Citroën car-building industry in 1958 was followed by other harbours, ship, and car building industries, some of which were established in Teis. The relative improvement of households' economies enabled the maintenance of some autonomy through peasant agricultural practices among those residents who had access to fallow land (inherited or bought). The process of building their house was a *'life project'*, engaging community and family work and building a *'sense of property'* and culture of *'vizinhanza'* (neighbourhood belonging) and community worth (*CLI*). Self-construction allowed them to invest little by little so they did not pay mortgages, do subsistence agriculture, remain out of the geese of public authorities and illegally use the commonland (both forbidden at the time). For many practising their local Galician language was part and parcel of their expression of independence and autonomy.

During this period, Teis undergone a 'disorganized' and 'unplanned' urbanization. The self-constructed houses were not connected to basic infrastructures such as electricity and water, and infrastructures such as train lines, highways, and polluting industries had degraded Teis' public space. After the fall of the military regime, citizens in Teis went to the streets to claim social rights such as water supply, drainage, road construction and asphaltting, and political rights related to the democratization of institutions and social life. As Holston (2009, 2019) describes it, the same structures of social inequality were those catalyzing insurgency in the rupture marked by the end of the military regime. Teis inhabitants felt *'discriminated'* by the Vigo municipality, which installed all infrastructures undesired in the city itself in the Teis region while ignoring their need to be connected to basic urban services. While protesting against their lack of decent living conditions, the young residents also called for freedom.

Supported by a strong feeling of belonging and a sense of autonomy, the Teis neighbourhood association, was founded in 1976 to harness citizens' claims around city matters. Only later, in 1995, this association started organizing the mobilizations to defend the Madroa forest, which was threatened by the construction of a highway. This highway going from Rande to Puxeiros traversed the parish through the Madroa forest. Residents saw the highway works as threatening their quality of life. When the dynamite explosions used to build the highway started damaging people's homes, citizens went to the streets in large demonstrations, which were violently repressed by the police. In the words of a commoner, *'it was like a war between Romans and tribal populations'* (CL1). Later, forest hill started collapsing. Desperate, residents started demanding the construction of a "fake tunnel"<sup>16</sup> that would stabilize the slope turning their mobilization efforts to the health of the forest. As one of the commoning leaders described, the 'knife into the forest' awakened social awareness and a movement to protect and recover it:

*"It [the highway] was a stab, a knife that they stabbed, a knife into the forest and the slope was so high... [...] And well, almost 600 metres of tunnel were made. Did you go through the Madroa tunnel? That's what awakened most social awareness... let's say"- CL2.*

They created the 'association of those affected by the Madroa forest' (Asociación de Afectados do Monte da Madroa) and organized a first community assembly with the neighbourhood association's support. They started claiming communal property of the forestry, which involved collecting historical proofs of ownership and elder' oral testimonies. In 1998, 52 ha of the Madroa forest were declared community forest, a community bylaw was created, and a governing board was elected by community assembly. In the first community bylaw, commoners already defined their orientation towards improving the health of the forest, linking the forest and residents' wellbeing:

*"The amputation of a very important part of the bush due to the construction of the highway [...] had terrible consequences for the future of the forest and the neighbours in general [...] This, predetermines the focus of the community on the tenacious struggle of restoring and regenerating the forest, being this the main objective to accomplish by the commoners and by those who represent them"- Bylaw of Teis community, 1998*

---

16 The process and technical details of the 'fake tunnel' are well described in (Nárdiz Ortiz et al. 1998).



The word ‘amputation’, usually used for body parts, denotes an understanding of the forest as an integral part of residents. They had grown with the forest, picked firewood (illegally), and spent time there with family and friends. It was ‘their playground’ (RC2) and part of their life stories (RC3). In 2006 they finally received compensation for the expropriated land, which enabled them to hire permanent workers to work in the forest every day. In the words of a commoner: *“the highway destroyed a part of the forest, but joined neighbours and funded the regeneration works”* (CL2).

#### 4.4.2. Communal forest care and emergent citizenships

Over the years, Teis CF implemented projects for regenerating the habitat for native species such as the *gold-striped salamander* (*Chioglossa lusitanica*) and the European stag beetle (*Lucanus cervus*), associated with a rich symbology in the popular Galician culture (i.e. this beetle was associated to magical properties, and present in numerous songs and legends). This socio-natural identity built with the forest was not only Galician but specific to the Teis parish and in contrast to the identity of Vigo. They defined themselves as a ‘tribe’ that ‘resists the ruling power’ and ‘struggle’ to speak Galician.

Caring for the forest was a means to reassert this identity and a way to perform and enact their authority as citizens by doing something different from what public authorities promoted in forest legislation (forestry), and strengthening their own socio-natural identity, as the following commoner explains:

*“We have the salamander, the amphibians, which... here at the level of Galician culture there is a lot of witchcraft, evil eye, air, frog, all that, we also have the vacaloura [European stag beetle] that was already the steering wheel, the horns of it were hung to avoid the evil eye. In other words, these are our species that have been lost due to poor management of our forests. They were our waters. It [Teis CF] is something we want to recover, it’s something that has to do with all that...”* – RC1

One commoner described the CF as “a visible stain” (CL3) in the middle of governmental led plantations of pines and eucalypti. By creating a different forest –that could be identified as a native forest that changes with seasons<sup>17</sup>-- they wanted to show people that pines and eucalypti were there because “someone had planted them” (CL3), denaturalizing and politicizing public forestry. CF also became a space to socialize differently, acquiring new citizens’ skills and capacities. In a context where arenas for direct democracy and participation were lacking, commoners of Teis started to take decisions collectively “in a property system that is open, where any new resident can join” (CL3). Observing, being

<sup>17</sup> Pines, eucalypti and acacia are evergreen species.

in, and acting upon the forests allowed them to develop their' own ways' of managing forests and to build their authority by learning the skills, capacities and knowledge that enabled them to act as a commoner:

*“One has to know a little about everything [for being a commoner]. In the community forest, one learns a lot about life ... For example, here, you have to know more or less how a tree behaves, ... how a brush cutter works, reading texts... [...] You realize when the years go by that you don't have specific training, but you know the things, you realize that you have many “flight hours”. To know when we can work, when we can't, when the benefits are superior to the costs, ...this is the experience .....seeing how the ecosystem change over the years, observation ... “ - CL3*

Regeneration did not follow general technical procedures and standards but was fed by observing nature and grounded in the belief that *“nature is wise and gives you the solution for everything”* (CL2). For example, they started using biocides to remove acacias, so they progressively developed their own technique, reproducing species' competition for sunlight using shadow. The method included self-designed tools to pull out acacias mechanically and planting native trees in high density to shadow acacias. While public subsidies promoted native tree plantations in separated rows to allow machinery, Teis plantations imitated natural ecosystem regeneration processes. Higher densities also created a forest more friendly to fauna.

Practices of care for forests progressively nurtured their values and self-esteem as commoners- i.e. people who see nature as a commons to be cherished, shared and nourished through practices of care (Singh 2018b). The wonders of nature – e.g. discovering how trees grow, how they help other species to grow and are transformed by animals - were described as key to reaffirming their *“values”* and acquiring the necessary *“self-esteem”* to be a commoner (CL1). Specifically, they saw themselves as part of the forest ecosystem network, participating in caring for the ecosystem as other beings did (e.g. the oak that gives habitats and food to other beings in the forest). They also expanded their caring practices to other humans and non-humans, far beyond CF boundaries: they saved trees that had been cut in other places or harmed animals and gave them a home. They also became custodians of neighbouring private forest patches in a situation of abandonment. In the same way, the forest became a space where those humans *“marginalized by society”* would have a place to *“grow”* in the sense of solidifying values, self-esteem, as well as skills and knowledge by receiving volunteers and workers from treatment programs for drug addiction, or persons with disabilities. In the words of the president of the CF:

*“Before the commonland could be used by a farmer who had a cow and was poor, and they had the same right to use it so they didn’t die of hunger. Today these benefits change; today society needs more quality spaces that can give people a reference to help them walk. so that they know that not everything is bad, that beauty, that there are things that can help [...] we believe that if this space can help other people with their lives, get self-esteem, feel useful, and be held by values. Because well, beauty is like this, beauty usually does this... Sometimes beauty is what softens the hardest person in the world”- Eduardo García, president of Teis CF*

Over the years, Teis CF has built an organizational model around social and environmental care. The primary hired worker, ex-drug consumer and homeless person referred to his pleasure in working in the woods every day and seeing the fauna that he used to see in his childhood but had since disappeared. By caring for the forest, the community also cared for him. In other words, Teis CF has become a space where to practice a *care-tizenship* for both forests and people. This caring politics was fully embodied in 2010 when they started a socio-educative project in collaboration with the Community Plan of Teis. As this association coordinated the social work and associative tissue of the parish<sup>18</sup>, Teis’ CF collaborated with it to develop a socio-educational program involving all the schools in the parish. They first worked with children in elementary school, including a guided sensory trail through the forest. Later, the project focused on teenagers from the professional career who *“have been excluded from the educational system”* (CN1), expanding to the whole school community (teachers, parents, etc.). In line with the aims of Teis CF, the program seeks to unveil human interdependency to forests by facilitating affective experiences in forests. Their long-term goal was to empower the school community to become commoners too, so a critical mass could be mobilized to claim state agents for their right to care for forest ecosystems. In sum, Teis CF revealed as an arena where commoners could perform their authority by implementing their own ways of managing and caring for the forest and communities and by doing so, nurturing new political and more-than-human belongings around care (*care-tizenship*).

18 The Community Plan of Teis emerged through self-organization of Teis residents, health and education professionals to fight against the prominent problem of drug addiction among the young population of Teis during the 1990’. It focused on drug addiction prevention by strengthening the social tissue and networks of support for residents in the parish. With time it became the main transversal organization articulating all the civic demands and needs in Teis.

#### 4.4.3. Tensions between neoliberal and care-based citizenship

*“A project of this type rubs directly against this and begins to unravel your eyes [...] This is a small CF, a peri-urban CF; there are few options here; everyone should agree with our project, right? And it’s not like that, why? Because there are some interests, not everyone agrees...landscape should remain grey, uniform, monolithic...and these types of different examples, almost histrionic, make certain groups of powerful, economic actors nervous. So, there is no direct denial, but there is a silent but very effective lack of support. All this is difficult to prove when you are in a distance zone; when we go to a friction zone, it begins to tear down walls. It’s like a cow arriving at the slaughterhouse. When we start to cut the meat suddenly we see the guts, it seemed like muscles, but no, these are the guts”- CL3*

During our first visit to Teis, Manuel, the former president and current secretary of the community, described the Teis CF project as a “train crash”: it ‘crashed’ against the project of Vigo city characterized by a neoliberal policy of housing and economic development, as well as against the regional forest services, who “*could not conceive planting trees without logging them*” (CL3). The following section describes how the crash between the political project of the municipal council (hereafter referred to as council) and the project of Teis CF translated in a situation of institutional blockage and neglect towards Teis community. The conflict started as a property conflict- i.e. 70.000 m<sup>2</sup> of CF were occupied by municipal infrastructures. However, the council never resolved the conflict and involved Teis in an endless legal dispute that lasted for more than ten years and has exhausted the commoning leaders and budget of the Teis CF project. As the following will explain, the conflict goes beyond the material/economic value of the occupied land and includes a political struggle about the municipal council’s wish to reinforce its power over forests and citizens. To prove our argument, we historically analyze how the council reacted to and collaborated with CFs in Vigo since the recovery process identifying two critical moments in which the council has tried to incorporate CFs and related social collectives of the city. We also illuminate Teis CF struggles to maintain its autonomy while engaging with the council.

A first critical event occurred during the 1990’, when the municipal council started subsidizing neighbourhood associations and other social collectives in the city to develop the services lacking in the city. With the municipal council’s financial support of the collectives’ socio-cultural and political activities and their delivery of local public services, the social collectivities were incorporated within formal government institutions, which came with a loss of their political role as agitators and facilitators of profound political debates (Martinez, 2003; pp. 689). Moreover, the austerity reforms that accompanied

the economic crisis in 2008 reinforced the authority of the council as the associations started to compete for the few available resources, and a network of clientelism emerged, as the following describes:

*“Then a network of clientelism was created, that is, the associative movement depended on subsidies... The sports, and the culture all depended on subsidies. Then the politicians started cutting, of course... it conditioned the ‘yes’ or the ‘no’. So if the collective didn’t have money to do the festivity that they used to do in the past, what does it? Well, they tell the mayor to come to inaugurate the festivity; you organize a tumult of a hundred or two. All the social acts organized by social groups become big hype of a political stage, where in the end the politician gives a speech and looks and observes how they invest their money, with the number of people who can potentially be votes, never valuing the quality”- CL1*

The second period of council politics came to the fore when the council incorporated environmental planning into its political agenda. Funded by the post-crisis municipal ‘Employment Plan’, the council supported the project ‘Camina Camiño’ (Walk the Trail) of the umbrella organization of CFs in Vigo – the Mancomunidad of Vigo (hereafter referred to as Mancomunidad). The funding allowed CFs to hire personnel for forestry and path maintenance. At the same time, the council started discussing the practices that CFs should engage in. More in particular, the council wanted CFs to plant standard native species that would render the forest more accessible for citizens, develop guided trails and walking activities, and other recreational events for Vigo’s citizens. Co-funded by big companies (Eroski, Decathlon, Corte Ingles, etc.), these events attracted 300 to 1000 participants; CF events became, hence, also successful advertisements for companies and the council itself. Moreover, as the following quote from an actor within Teis network explains, the council was interested in the economic and political returns of the project:

*“Because they realize that it is profitable, that we are already exceeding... because we have already 350, 700, we have already spent more than a million euros....” [it’s profitable] In the sense of the visibility that is given to the forest, the work that is being done in the sense of forest fire prevention, forest management, footpaths... . So from 2012 on we have a steep growth, that now we’re maintaining [...] So we all are under the umbrella of the Mancomunidade de Montes de Vigo, and it is very beneficial for all the parishes. [...] Because the forests are a jewel, it is the jewel of the city- CN2*

Through this project, the council acquired visibility and political authority while reinforcing an exchange-based neoliberal form of citizenship. The project claimed the engagement for the communal forests of invisible commoners as part of the city's CF through the logo "Montes de Vigo" (which translates as Vigo's Forests). This logo erased the word 'community' from the original name of the CF umbrella organization Mancomunidad- which contains the word 'community'. Instead, it gave visibility to the council (Figure 7 and 8), blending all CFs in one '*forest of the city*' (CN2). The role of citizens was to consume the '*natural and cultural heritage*' (from the council's website) that had been previously marked and categorized by the council, turning citizens into consumers instead of commoners. This legitimated the council as the key provider of environmental services while reducing the scope of commoners' participation in environmental management.

The citizenship promoted by the council clashed with the politics and citizenship of Teis CF and strained their engagement with the council. While accepting the council's funding for hiring their forest worker, Teis commoners did not allow the council to organize events in their forest. Instead of opening the CF to a universal 'citizen', Teis commoners opened the CF to commoners of the parish and generally to particular '*persons with interest in knowing it*' (CL1). The massive influx was considered a threat to the forest ecosystem and their autonomy, as they disagreed with the values and politics of the council's project:

*"We can't open the forests [to the municipal council] because this is what we are doing or want to do the others [other CFs in Vigo]. And simply to take a picture because everything is politicized. Everything is connected. And above all, if one wants to present a serious project, it's very hard to move on but if it's to launch one of these 21-day projects, everything will go smoothly. Because what is at stake is that the gentleman [the president of the council] do the opening with the flag, and he can take the picture"- CL1*

The Teis CF position did not go unnoticed by the council. While giving visibility to Montes de Vigo, the council turned Teis politically invisible. The petitions of Teis CF to negotiate a rental fee for the occupied territories went ignored for a decade, silently blocking Teis financially and institutionally. As shown in section 4.4.2, Teis CF socio-natural practices nurtured a commons more-than-human *care-tizenship* that contrasts with the council's neoliberal, standardized socio-natural practices. Thus, the CF represented a threat to the council as it challenged its authority.

Through their collaboration with CFs, the council has strengthened its authority, controlling and neutralizing the insurgency of CFs in Vigo and turning forest

management into a technical endeavour to deal with fire risk. In October 2017, a wildfire burnt 600 hectares of forest in Vigo, including CFs, causing panic among Vigo's citizens. The council reacted by identifying the non-native tree species as the cause of the fires, literally as "*gun powder*", and by proposing the installation of a green corridor of native species as the solution that will "*save*" its citizens. In partnership with the Mancomunidad, the corridor would cross CFs and small-holding private properties and would serve as a firebreak to shield the city against fires. The corridor has not been implemented five years later, but the council has become a key actor in the political debate around forest management<sup>19</sup>, furthering the council's visibility and authority over forests and citizens<sup>20</sup>.



**Figure 8.** Image taken from the website of the Mancomunidad de Vigo.

As a result of the above, Teis commoners struggle to maintain a critical mass that can govern the CF and to warrant sustainable funding of their activities. Teis commoners have turned their attention toward national and international networks to acquire economic and institutional support. While being a member of the regional umbrella organization in Galicia (Organización Galega de Comunidades de Montes), they recently joined the Spanish network of Territory Stewardship and the global network ICCA - Indigenous Peoples' and Community Conserved Territories. While these networks give them visibility and political representation, they do not provide the material support Teis CF needs to sustain its activities over time. Moreover, as forests are high on the political agenda of Galician policymakers because of the risk of wildfire, technical forest policies are increasingly legitimated socially despite its negative democratic implications. Teis CFs seem to be at a crossroad between engaging with forest state policies and subsidies or risking the disappearance of their activities unless they manage to become economically independent.

<sup>19</sup> The project has catalyzed a political dispute between the council and the regional forest services, who have mutually accused themselves in the media. While the council accuses the regional government of blocking the project, the regional forest service claims that the council should comply their basic responsibilities of supporting forest biomass clearing in private properties in Vigo first.

<sup>20</sup> Last May 2019, the major Abel Caballero started its fourth consecutive mandate as a major Vigo getting absolute majority for the second consecutive mandate





Figure 9. Picture of a walking guided tour in Teis CF for teenagers (left) and the flyer of the Camiña Camiño program of Montes de Vigo (Council and Mancomunidad). (right).

4.5. Discussion and conclusions

This study case unveils the political tensions around the implementation of CFs by looking at clashing citizenship emerging from (communal) forest management in the municipality of Vigo (Galicia, Spain). By showing the relationships between practices of commoning forests and citizenship, the following discusses the implications of our insights into community autonomy in CFs.

The case of Teis underlines the virtuous relationship between commoning forests and citizenship, suggesting the importance of CFs as arenas to nurture alternative and expanded forms of democracy. Teis CF was part of citizens’ political engagement and a vehicle to reassert citizens’ political authority (through forest management and direct democracy). The engagement for better living conditions and against the destruction of the forest politized citizens to reestablish and regenerate CF. However, through time commoning nurtured new affective relations with the forest and more-than-human subjectivities, re-politicizing citizenship in new ways. Commoners performed



a care-citizenship that enlarged their caring community beyond CF borders (caring for marginalized or excluded persons) and transcended human-nature boundaries (caring for injured plants or animals). Although this citizenship was meaningful locally, Teis community have not yet managed to influence entrenched forms of authority at higher levels of governance. Yet, our case does demonstrate how clashing citizenships explain political tensions around CFs. In line with other researchers (Sikor and Lund 2010, Lund 2016), we showed how the conflicts emerging from CF were far beyond forest economic/material resources but were citizenship struggles. The project of Teis CF promoted communal and ecological ways of being a citizen that clashed directly with the neoliberal exchange-based citizenship that the council was trying to enforce. While Pokharel et al. (2020) point to the importance of deliberative spaces of representation at higher levels of governance to assure the community's autonomy in Nepal CFs, our results point to the importance of economic autonomy in our case.

As Goodwin (2019) and Basurto (2013), our study also unveils a tension between governmental economic support and community autonomy. While Teis CF's dissenting voice was ignored, those conforming voices have acquired social visibility, economic resources and recognition (e.g. through Montes de Vigo). This tension was reflected in our case by some communities' readiness to accept the councils' subsidies while implementing state-driven projects and technical fixes to forest management that reproduced. The council used subsidies to obscure the political work of communities, having detrimental effects for the impact of CFs for democracy. Beyond democratic implications, technical fixes are unlikely to solve highly political problem of wildfires in this area (Seijo 2005, Serra and Allegretti 2020).

Our study identifies essential opportunities of CFs concerning communities' autonomy in environmental governance. Communities' full autonomy is both unrealistic and unfair, as the burden of ecosystem management and public service delivery may remain in the hands of those most in need and unable to pay for the services (Cumbers 2015, Goodwin 2019). Thus, while recognizing that engaging with the state will always entail mutual recognition between those *authorizing* and those being *authorized* (Lund, 2016; Sikor, 2010), we agree that CFs should neither be purely self-organized nor entirely state-led (Cumbers 2015, García-López and Antinori 2018). Instead, different forms of autonomy can be maintained through community-based democratic practices. Commoners in Teis highlighted the need to reinforce their project through values (of common care, care for forest, and inclusiveness of those excluded and marginalized by society). This is in line with Starr et al. (2011), who, studying self-government practices of the Zapatista and the Landless movements from Mexico and Brazil, revealed how these movements received state funding, while managing to 'armor' their autonomy through their values (grounded on emancipatory education) and differentiated forms of

politics (grounded on listening).

As found in the literature (Basurto, 2013; Villamayor-Tomas and García-López, 2018), Teis CF has also tried to compensate for the lack of local institutional support by partnering with national and international social movements and networks. Through these, Teis CF have found external recognition and visibility but did not manage to get economic resources to sustain their activities over time. However, in a context where wildfire risk is increasingly legitimating top-down technical approaches to forest management, the institutional/economic neglect of Teis CF is likely to continue or even worsen. Moreover, other research shows that engaging with non-state actors is not a panacea as the same logics of professionalization and apolitical management can be established (Villamayor-Tomas and García-López 2018, Asher 2020). We thus call for more research looking at specific democratic practices and conflicts across scales that allow to engage with (non-)state actors and/or assure economic support while maintaining autonomy.

Finally, our study also shows how the council avoided the confrontation with Teis while silently neglecting them. As other studies have shown (Swyngedouw 2010), avoiding conflict and dissent is a political strategy to depoliticize civic participation and environmental management. Thus, we join other researchers that claim that conflict and dissent is needed to challenge non-democratic forms of authority and to build robust, fair and democratic participatory environmental governance institutions (Swyngedouw 2010, Nightingale 2018, Grant and Le Billon 2019). We call for more research that highlights the democratic implications of top-down technical forest management approaches.





***This chapter was submitted to:***

*the journal Conservation & Society*

*Nieto-Romero, M., Parra, C., Valente S., Bettina, B. (submitted).*

*Affective mapping to rebuild the commons?*

*A Participatory Action Research in a historical community forest*



# Chapter 5

**Affective mapping to rebuild  
the commons?  
A Participatory Action Research in a  
historical community forest**



*“Today we are faced with a challenge that calls for a shift in our thinking, so that humanity stops threatening its life-support system. We are called to assist the Earth to heal her wounds and, in the process, heal our own - indeed to embrace the whole of creation in all its diversity, beauty and wonder. Recognizing that sustainable development, democracy and peace are indivisible is an idea whose time has come”*

*- Wangari Maathai (1949-2011), ecologist*

## ABSTRACT

Community-based forest policies are being implemented all around the world, but the engagement of local communities is not always ideal. This sought to explore the role of affective relations and emotions in incentivizing participation. This paper narrates the Participatory Action Research (PAR) experience conducted in a rural community with low levels of participation (Ansiães, north Portugal). Ansiães is a mountainous parish district with a *baldio* (a historical commonland) of 2500 ha that underwent strong state interventions during the last century, followed by a progressive withdrawal, loss of employment and rural abandonment. The PAR consisted on an affective mapping to collect affective stories linked to the commonland (presented in written form and videos) as well as a large community event. The PAR approach allowed to better understand and mobilize community affects and emotions around the forest-*baldio* and promoted collective experiences of *being-in-common*. This shaped the way participants perceived their roles and responsibilities towards the *baldio*. We call for more research investigating the opportunities of PAR and creative methods in recovering, expanding and strengthening humans’ relationality in contexts where affective more-than-human entanglements are weak.

**Keywords:** affective practices, emotions, participation, community-based forest policy

## 5.1. Introduction

The ‘commons turn’ in forest management was supposed to improve the health of forests, while providing benefits and livelihood opportunities to populations (Arts and de Koning 2017, Lawrence et al. 2021). Yet, forest commons policies usually consist of a fixed package of regulations that assumes that an abstractly defined ‘community’ will voluntarily engage in management duties and take decisions inclusively in a way that forest management will support the community and benefit them all. The reality is that power relations, conflicts and social inequalities exist within communities, and market and state logics permeate community practices and relations (Millner et al. 2020). As a result, policies have failed to engage people as foreseen, resulting in situations of unequal benefits within community members, recentralisation of power by states agents or communities’ low engagement in forest management duties (Basnyat et al. 2019, Nieto-Romero et al. 2021).

This paper looks into situations in which commoners have rights but do not engage with forest commons, resulting in situations of abandonment or underuse (Lopes et al. 2013, Takamura et al. 2021). These situations occur when local livelihoods are no longer linked to the regulated forest commons (because subsistence traditional economies have been abandoned, or/and reforestation has shaped potential uses), and new uses that sustain the community have not been developed yet because of depopulation or other drivers. While historical commons can provide resources and new opportunities for supporting local economies, engagement in ‘commoning’ is a complex process influenced by historical processes affecting community relations, formal regulations, power relations but also affective relations and emotions (García-López and Antinori 2018, Nightingale 2019).

This paper aims at understanding the role of affective relations and emotions in strengthening community relations around a reforested commonland recently devolved to the community. For this aim, we implemented a PAR (Participatory Action Research) in a *baldio* (a historical community forest) suffering from low levels of community engagement in North Portugal (Ansiães, Amarante). The approach of this PAR tapped into the past and present affective stories experienced by people in the forest commons to reveal the diverse community affective relations and emotions attached to the *baldio*. *Baldios* are historical regulated common lands of Germanic origin by which all residents in the parish have access to the resources of the commonlands, as long as they live there. They were devolved to local communities in 1976 (Lei 39/76), but the customary practices and relationships between the *baldio* and the community were eroded after a long period of expropriation and reforestation by the Portuguese military regime (1938–76). As other rural communities in the area, the Ansiães community suffers

depopulation and ageing linked to the abandonment of traditional economies and public disinvestment (Baptista, 2010; Elisabete Maria Melo Figueiredo and Antonio Raschi, 2013), while holding considerable resources in common (2500 ha).

While the notion of community has been widely criticised (as mentioned above), we align with the idea that a relationally built ‘community’ is the building block of any functioning ‘commons’ (Nieto-Romero et al. 2019). In contrast to essentialist views, a community is understood here as built through practices and feelings of being-in-common (García-López et al. 2021). In this respect, recent research is showing how affective relations and emotions play an important role in the process of building and strengthening community relations, and for motivating engagement in the communal management and care for forests (commoning) (Nightingale, 2011; Clement, 2019). This paper analyses the life-course of the PAR experience from its design to its closure, reflecting on its impact in terms of new associations and feelings of being-in-common that emerged through the different activities facilitated. In doing so, we further understand how affective relations and emotions can be mobilised and contribute to creating ‘community’. Our paper focuses on the following research questions:

1. Which community associations existed around the *baldio* prior to the PAR? How do these explain (non)participation?
2. Which new associations and feelings of being-in-common with the *baldio* and to others did PAR facilitate (if at all)?
3. Which new insights on (non-)participation were reached through the implementation of PAR?

In section 2, introduces affect theory and describes how PAR can benefit from literature on affect and emotions in the context of participation and forest commons. Section 3 gives an overview of the PAR methodology. In section 4, we present the results and outcomes of the affective mapping applied. Section 5 discusses the process of participatory and community-based forest management, considering the literature and providing methodological guidance to researchers and practitioners to incentivize engagement in these contexts. In the conclusion, we present two key learnings: first, that personal affective relations and emotions to forest commons, even if strong, are not sufficient to mobilize participation; it is the affective experience of being-in-common, of sharing affective belonging, that nurtures commoning as a collective engagement. Second, by sharing personal affective experiences with forest commons, PAR can mobilize such feelings of being-in-common and, by doing so, develop a collective sense of responsibility and care.



## 5.2. Bringing affective relations and emotions to PAR

There is an increasing awareness that to truly understand a particular social-ecological process, the best way is to try to change it. Sustained by this principle, Participatory Action Research (PAR) can be generally defined as the process in which researchers collaborate with a group or community of interest (as ‘co- inquirers’) to develop interventions and learn from the process (Bartels and Wittmayer 2018). Engaging with vulnerable and marginalised individuals or communities, PAR is concerned with the democratisation of scientific process as a means to enhance participants’ well-being, emancipation and empowerment (Brydon-Miller et al. 2003). In line with this, process-based (also called relational) outcomes acquire particular relevance in PAR (Bartels and Wittmayer 2018, Horlings et al. 2019). As several theoretical angles for understanding change and empowerment in PAR exist, this section gives theoretical grounding to our ‘affective approach’ to PAR.

The interest in affects and emotions in the study of nature-society relationships has been enhanced by the turn to affect in social sciences and humanities (Wetherell 2015). Inspired by Deleuze, Simondon and Spinoza, among other philosophers, affect has been defined as a property of all bodies, which are not understood as finite entities but indetermined and always in becoming (Singh 2018b, 2018a). In this context, affect is described as a pre-cognitive relational phenomenon, a visceral energy, a force, or an intensity emerging in the in-between of bodies (Latimer and Miele 2013). These intensities traverse individual subjects and put them into motion (Latour 2004). This way, affect theory gives a novel perspective on agency as relational and emergent from the ‘assemblages’ of relationships and materialities. Agency is seen as distributed across components—human and non-human, material and immaterial—while enacted by a particular body in continuous ‘becoming’<sup>21</sup>. This gives new light to how we understand empowerment, collaboration and our relationships with nature.

Indeed, a rich body of work referred to as ‘affective ecologies’ have used affect theory to explain how empowered subjectivities as nature care-givers cannot be isolated from the affective work of the community. This research gives evidence to how the commons and the commoner are co-constituted through affective relations that link nature, society and the self (Singh, 2018b). In other words, every day affective community practices, including community labour, but also gatherings, meetings and rituals as generative moments of being-in-common, are the centre of commoning and conservation initiatives (e.g. Angé et al., 2018; Haggerty et al., 2018). While this suggests that

21 To explain this, Latour (2004) gives the example of a ‘nose’ as a *body* with the the potential to differentiate chemical substances with smell, but that only acquires nose’s capacities through learning *with* these chemicals

affective encounters perform ‘community’ and are at the core of collective endeavours, the work on emotions gives further insights into the mechanisms by which affective encounters potentiates togetherness.

While modern usage generally confound affects and emotions, here we subscribe to the idea that affective practices contain emotions. Following psychosocial theories on affect, we define affective activity as a form of social practice attached to particular ‘canonical emotional styles’ (Wetherell, 2015; pp. 147). As a practice, affective moments are patterned by past ‘assemblages’ but are also continuously re-worked. Emotions such as shame, anger, sorrow and joy emerge from these affective moments and are important registers that inform future actions, but also for non-verbal communication and collective sense making. Thus, emotions can both reinforce existing assemblages or contribute to creating new associations as they allow for interpreting and intensifying a collective endeavour as shared and meaningful for the group (Pratt 2012). For example, while fear, shame and embarrassment generally lead to inaction and norm following (Morales and Harris 2014), emotions can be mobilised and shared to potentiate collective action. For example, rituals were used by Mapuche communities in Chile to share sorrow or anger as a way to lighten up collective resistance to their loss of land sovereignty (González-Hidalgo 2021). Likewise, pride and joy emerging from practices of civic initiatives fuel collaboration and generate the necessary energy for mobilisation (Clough 2012).

Going back to the topic of non-participation in regulated community forests, the above literature has several implications for the design of our PAR. The first is that patterns of (dis-)engagement can be better understood analysing affective practices and associated affective relations and emotions. The second is that new opportunities to reconnect people with each other and the forest can emerge by facilitating affective moments where emotions can be shared and emotional currents intensified. Indeed, what has been less explored in the above literature is how researchers can capture these affective entanglements, and (more importantly in our case) how (and with what impact) to mobilize them in places where commons have been enclosed for so long that they have become weak or invisible for most of the community.

In the context of community development projects and research, participatory mapping has acquired popularity as a method capable of showing and strengthening intangible and invisible aspects of community life (Lydon 2003, Jeannotte 2016). From arts to geography or psychology, maps are used to study and represent the geographic nature of stories and their relationship with places (Caquard and Cartwright 2014). Increasingly, the emotional and affective dimension of maps is recognised, as well as the power of mapping emotions for social and political purposes (e.g. personal or collective healing processes) (Caquard and Cartwright 2014). While oral, written and audio-visual stories

can be mapped, videos acquire particular significance when capturing and returning emotions and affective narratives (which not only include words, but images and locally meaningful ‘ways of telling’) (Pieroni et al. 2007). In line with participatory mapping approaches and PAR process-based outcomes, producing the maps is not an end, but spatial affective experiences are inputs to do ‘emotional work’ (Morales and Harris 2014). As we showed above, emotions can create collective resonance, non-verbal understanding and meaning, fuelling learning, feelings of being-in-common and thus collective action (Pratt 2012).

### 5.3. Methodological approach

#### 5.3.1. The PAR case study: the Ansiães *baldio* and its community

The *baldio* of Ansiães is located in the municipality of Amarante, between the cities of Porto and Vila Real in northern Portugal. Expropriated in 1916 for state reforestation, the *baldio* was only devolved in 1976 in the transition towards democracy. With an area of around 2500 ha, the terrain is hilly, contains deep valleys and mountains—with the highest peak reaching 1400 m above the sea-level. While the valleys were appropriated by families for private agriculture, since time immemorial the *serra* (mountains) has been left for the commons, for communal herding, firewood collection, other uses linked to agricultural activity and religion worship (Miranda 2016). Customarily, any person living in the parish could use resources. Today, the *baldio* follows forest and *baldio* regulations, which establish that any person living in the parish becomes a ‘commoner’ and can use resources and participate in community decision-making assemblies. Yet, the *baldio* suffers from little community engagement and, as other rural interior areas in Portugal, the parish suffers from depopulation and aging. The parish contains ten settlements concentrated at the valleys of two different rivers (Marão and Póvoa river). With 888 inhabitants in 1991, the 2021 census counted 516 inhabitants (37% of which were 65 years old) (Source: Instituto Nacional de Estatística, IP – Portugal).

#### 5.3.2. Data gathering and analysis

This paper examines the process and outcomes of the PAR on the core team - in terms of enhanced feelings of being-in-common and responsibilities towards the *baldio*. The core-team was composed by 12 persons: five persons participating in the formal institutional structures of the *baldio* (coded with a P for participating), and seven persons who did not participate prior to this project (coded with a NP for not participating) (see Annex 1). The group was heterogenous enough, comprising different ages, sex, and villages within the parish. The paper draws on interviews and descriptions of events taken from the main researcher’s field-work notebook. It also draws on two focus groups conducted with the core-group members before the closing of the project to reflect back upon the whole process and to discuss the impacts of the different activities on their engagement

and on their views of the *baldio* and the community. Focus groups were recorded, transcribed and coded per question using NVivo.

The methods implemented with the core-team included the collection of affective places through a ‘mapping kit’, workshops and a community event (see section 4). Other methods engaging different people in the PAR (not described in detail in section 4 because they are not the focus of the analysis) include: 10 semi-structured interviews with representative members of the community and video interviews with 11 elders (over 80 years old). Elders’ video stories were used as input for an event facilitated and organised with the core-team (see section 4), whereby an integrated video of 51’ 12” was produced<sup>22</sup>. A bottom-up coding process was used for video edition, covering the following themes (and organised chronologically): the history of state forestry-*baldio*, personal life stories, history and experiences before the dictatorship, state forestry work and experiences, other uses of *baldio* work and experiences, joy, poverty and community during the dictatorship and current sorrows. Following these charged stories of suffering, the video concluded with stories of the core-team and their affective relations to the *baldio*—in order to open reflections and discussions regarding the future.

## 1.2. Doing community through PAR

A historical contextualisation of the Ansiães *baldio* community is needed to explain the dynamics of participation and collaboration at the start of this research. Before expropriation, the Ansiães *baldio* provided residents with basic resources for survival (such as firewood for cooking and house heating), but also afforded the possibility to complement their subsistence agriculture by raising and selling livestock (caprine, bovine and sheep) and other resources such as *carqueja* (a bush that was used for bread ovens). State reforestation started in 1916, and expropriated the *baldio* in 1938. From then on, commoners became day workers of state forestry plantations, enduring low salaries, high job uncertainty and harsh conditions. Residents had to ask for authorisation from state forest services to collect firewood or other resources, and the livestock was completely forbidden and subjected to a fine from forest guards. Commoners also worked in wolfram and tin mines—exploited intensely in that period to feed the demands of the second world war. In the 1960’s, reforestation works and mines came to a stand-still and many residents moved away and emigrated. The Ansiães *baldio* community is thus marked by its history of difficult, dangerous and highly volatile work (depending on external socio-economic drivers) and by emigration.

The situation of external dependence did not change with the *baldio* devolution in 1976. After a first period of curious participation in *baldio* institutions, engagement of

---

22 <https://www.youtube.com/watch?v=P2bjvDDFwQ>

residents in *baldio* matters substantially reduced as the *baldio* stopped being a source of cash or employment. As the traditional economy linked to the *baldio* had disappeared with state reforestation, residents decided that state forestry services continued to manage the reforested *baldio* because, in the words of the president: *“the state continued on the ground with the personnel, with the machines, etc... and we had nothing, it would be a great irresponsibility...with nothing, from one moment to the next we received this. The best option was co-management”*.

From one day to the next, residents had the responsibility of managing 2500 ha without any resources, so the best option was to let the state forestry services do it. State forestry practices continued relatively unchanged, but now commoners received forestry earnings (and the earning from renting/leasing land) and these could be invested in improving life conditions of parish residents. Namely, these were invested to improve infrastructures (such as local roads, school, park) and to support cultural associative life in the parish. Only from 2000 on, motivated by a continued withdrawal of state forest management activities, commoners felt sufficiently prepared to take initiative in *baldio* matters beyond these investments. A team of five forest workers were hired with a program subsidised by the state (*sapadores florestais*). They also joined a development program of an association of *baldios* (ACEB) that gave training to improve commoners' skills in technical forest management and entrepreneurship.

Realizing the threat of emigration, in 2016 the *baldio* broke the co-management agreement with state forest services and took autonomous responsibility of the *baldio* to potentiate activities that would create local employment. Still, when we started our research in 2018, lack of participation threatened the sustainability of the project. As expressed by the vice-president: *“in a few years the youth will leave, working, the old people will also leave, and then? What will happen? This is what anguishes me, consumes me the most, that's it... afflicts me the most, that's it...”*

The “anguish” or anxiety caused by the disappearance of the community was present in most interviews. Since its devolution, the *baldio* community has had three presidents; the current one has not changed since 1993 because of a lack of candidates. Participation in community assemblies was also weak. On average, only 10-30 residents assisted and all were men.

### 5.3.2. Preparing the ground

In light of the context described above, our project inquired (through interviews or informal conversations) into why people did (or did not) participate in the *baldio*, and what the *baldio* meant for them. These suggested that legal commoners cognitively knew that the *baldio* was theirs—defining what the *baldio* was in legal terms—but they did

not *feel* it was theirs. This was evident in all our interviews. For example, a 30 year old resident wasn't sure what exactly the *baldio* was and felt no need to participate as the president was doing "*a good management of the forest*". This was not the only case in which interviewees preferred to speak about the 'forest', and suggested they did not need it, even though they went there for walks or firewood (generally, commoners visit the *baldio* in warm seasons, for bathing firewood collection). While complaining about the lack of employment and their need to emigrate, people did not see their participation in the *baldio* as a potential source of employment for the parish.

The above disassociation from the *baldio* contrasts with its rich cultural history when, especially during the 1990's, the *baldio* funded vibrant community activities (i.e. events of folk dance, a traditional music group (tuna), theatre, cinema, sports, etc). Organised by local associations, this lively culture and cooperation disappeared in the 2000's when 23% of population emigrated (mainly to France). The cultural association was transformed into an elderly care association (ProgreDir), the traditional music group members are now above 70 years old, and a cultural youth association organizing music, theatre, photography and sports (Acti-jovens) disappeared. Young residents only have a football team and the parish festivity is organised 'for the emigrants' who return to visit in summer. Thus, a feeling of demotivation exists among those who have stayed. One male resident describes how important Acti-jovens was in all his life as a meeting place and how "*now it's the failure of participation; I'm giving my name, so the association won't be cancelled. That's why we are scalded with the low participation of people, with the lack of interest*".

The above explains a situation whereby residents feel no interest in participating in community activities. People did not think they need the *baldio*, nor do they feel responsible for it. This situation was worsening as other arenas of community life and relationality were disappearing with depopulation. In contrast to this, we found that commoners who were engaged in the *baldio* described it with love and pride referring to the beauty and the richness of the serra (mountains). When asking why they participated, two answered that through time they had developed "an enjoyment" in participating in *baldio* matters:

*"Commoner is something we've gotten used to and it's a source of pride because in part we feel that it is a space that we can enjoy. And we have some sensitivity to that, we don't like to harm it, we don't like to see fires... so whoever is born with this, begins to internalize a taste, an addiction to the baldio, a passion"- president of the baldio.*

As such, we confronted the challenge of understanding how affective relations and emotions towards the *baldio* could be mobilised to strengthen a felt sense of community

around the *baldio*, and how this could motivate members to potentiate commoning. As informed by theory (see section 2), we assumed that shared affective experiences in the *baldio* could generate feelings of being-in-common and a more generative environment for engagement. Our draft PAR methodology focused on gathering affective stories experienced in the *baldio*, including community workshops and events to share these stories to facilitate meaningful collective experiences of being-in-common.

First, we discussed the draft with community members (both formally and informally in cafés and casual encounters). In doing so, we realised that the focus should be on elders' stories (above 80 years old), as they were the last people that had worked in the *baldio*; their stories were valued immaterial heritage that had not yet been collected. We then decided to include two ways of gathering stories. The first method invited community members in general to choose a place that was meaningful for their lives or where they had lived a particularly important experience in their life, take a picture and write the story behind it. For this, we provided them with a 'mapping kit' (see Figure 9). The second method invited elders to tell their affective stories, recording them in video (considering their limited mobility). While the main researcher guided the interviews, we hired a person for filming. Interview questions covered themes of what they did in the *baldio*, what they liked most, their favourite places and most cherished memories; these were open conversations.





**Figure 10.** Mapping kit containing: 1) notebook with prompt sentences 2) detailed instructions, 3) a map of the baldio to mark their favourite place, and 4) objects to indicate the place (i.e. yellow string to mark their place and a jar to collect objects of the place).

Among those choosing an affective meaningful place ( $n=15$ ), 12 volunteered to participate in the core-team. The following describes two moments of the PAR process; i) a workshop with the core team where their affective stories would be shared and used to think about the future, and ii) a community event co-organised by the core team where a moment of community togetherness was facilitated through activities and the video exhibition with elders' affective stories. While describing the process and outcomes of these two moments, we provide evidence of how these created meaningful moments of being-in-common that strengthen group associations around the *baldio* and how it affected participation.

#### 5.4.2. Sharing affective stories

People were invited (through flyers and posters and informal conversations) to participate in two presentation sessions in two different areas of the parish. A website and a Facebook page were developed (<https://maraominhaserra.wordpress.com/>), where news of the project was shared. After writing their story, the core team was invited to



a workshop that aimed to create an initial collective reflexive moment around their affective relationship to the *baldio*: affective stories were shared and listened to carefully, and values and resources contained in those stories were identified. By sharing affective experiences and identifying common resources and values, this activity sought to reveal both the diversity of the *baldio* in terms of affective experiences, while highlighting the group's commonalities and strengths.

From the 12 commoners' stories, five persons chose places meaningful to their current practices, and seven chose places meaningful for past affective experiences (detailed description of participants in supplementary material). In all cases, affective stories evoked strong emotions (of love and pride but also sorrow) and sensations (the breeze, the sounds of the river, the smells of the forest, etc.). In the words of a participant, this first part of the workshop allowed them to "*know the baldio in a different way*". Most recalls of this event point to the "*union*", "*motivation*", and the "*feeling of sharing*". The following shows evidence on how the event constituted an affective moment where feelings of togetherness were activated.

First, sharing stories awakened dormant affective entanglements between people and the *baldio* that had not been previously shared in interviews. While stories were personal, they also described collective affective entanglements of the community with the nature of the *baldio*. All participants chose an experience spent with others (or a community historical event), and some highlighted explicitly how the place was important as a group. For example, the forest worker P5 chose a place where he spent most of the time in summer for fire surveillance, explaining: "*I'm always here with my fellows, so I choose this place not only for myself, but also for my colleagues as we spend a lot of time there*". Similarly, NP6 chose a fountain he made near the valley river, saying that he goes there when he has a little free time "*to think and rethink of the people who helped me transform this fountain into this place that is so special to me. I've spent many extraordinary moments with my friends and family here in this place. Here I forget all my problems, what problems, or many or few, everyone has them*". Generally, the *baldio* was described as a place of rest and enjoyment with family and community. Personal experiences of peace and connection with nature emerged as a link to memories with others. One member describes the smell of the river, connected to memories of friends "*that we will never forget*", as well as sounds "*of blue dragonflies passing in their silent flight*" and of the river water "*hitting the small and giant stones, combining moments of harmony and relaxation*" (NP3).

The *baldio's* nature was described as beautiful, or "*deserving admiration of its strength*" (NP3), because of people's affective entanglements with it (which transcended the individual). Indeed, descriptions of the community were entwined with descriptions of the *baldio* as the following shows: "*you feel the strength of granite and the people of*

*this mountain*” (NP3). Community’s entanglements with the *baldio* travelled across generations informing current affective relations. For example, commoners P3 evoked pride when choosing a bridge of the old road traversing the *baldio* because it represented how ancestors used to build infrastructures respecting the shape of the mountain. He compared this with the new highway tunnel that has perforated the mountain and caused terrible damaged to the *baldio* water springs: *“the respect for nature and the Serra do Marão that our ancestors had...is something that currently doesn’t happen”*. Similarly, another commoner (P1) felt pride for the strength of commoner’s ancestors who battled on several occasions against people who tried to appropriate the *baldio*.

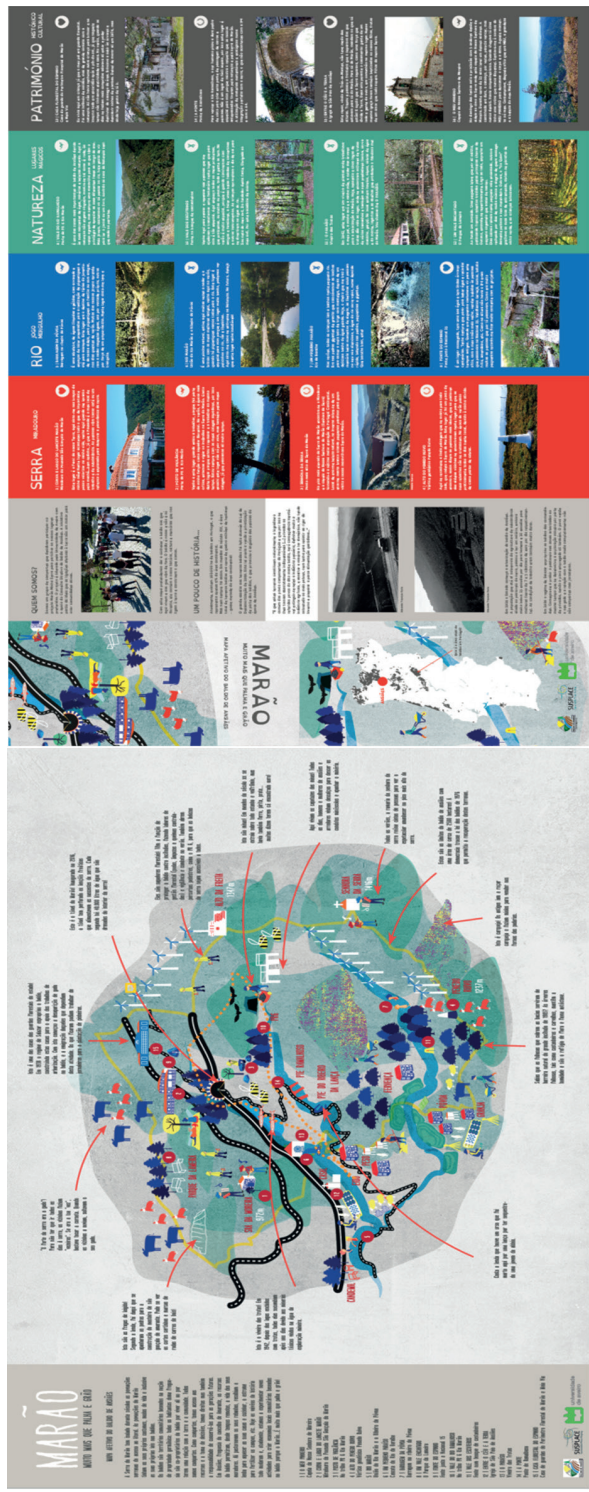
Core members describe the experience of mapping and sharing their affective meaningful places as important for linking their personal affective experiences to an experienced sense of being-in-common: *“Expressing myself felt very good.... everyone could participate a little bit in our commons...to choose my place... Tomorrow my grandchildren...I will leave a plaque there to mark the name of the place and they can say that it was their grandfather’s, and NP5 who participated in this. So for me it was important, very important”* (NP6). In the same conversation, another member highlights the shift she experienced through the process:

*“When I thought of the baldio, I thought of the hills, the mountains... not the commons, the people... after the project, this feeling awoke in me... I was part of associations, church groups, the parish, and I never made my small contribution to the baldio, to contribute with whatever it is. Sometimes just an idea, an opinion, is important...now I want to give everything to create a new reality. For the fact that the future of the community itself depends a lot, for the most part, on the baldio. It doesn’t depend on the parish, it doesn’t depend on the municipality, it doesn’t depend on anyone else, it depends on the commons”- NP2.*

Choosing a place was an important symbolic activity for feeling part of the *baldio*-community. In other words, in a context where most collective activities in the *baldio* had disappeared, affective mapping connected participants’ personal affective experiences in the *baldio* to the collective experience of the *baldio* community. But this was not the only activity of being-in-common that mattered for creating new associations between core-team members. After sharing affective stories and identifying resources and values contained in them, the group was sub-divided in three groups to design and organize experiences of togetherness around the *baldio* for the broader community that could be implemented on the day of the exhibition of the video with elders’ stories. As the following will show, the combination of activities was important to create an affective collective experience of togetherness, which potentiated associations among the group around a felt sense of being-in-common around the *baldio* (Box 1).

**BOX 1. The printed affective map of the *baldio***

After the workshop, an affective map was developed that joined the meaningful affective places chosen (verso) and references to places identified by elders (recto). The core-team contributed to the different drafts of the map, suggesting changes and additions.



### 5.3.4. Being-in-common: a community event around the *baldio*

The PAR culminated in the day-long event entitled ‘Encounters with the *baldio*.’ Designed, organised, and managed by the core team, the event involved several interactive activities, a communal meal, a video-exhibition and debate. The day of the event the core-team members expressed nervous excitement, feeling deep ownership over the unfolding of the activities: “*we reached a stage in which we identified ourselves with the project, felt linked to it; we all had enormous concrete tasks to carry out and we had that obligation to reach the end and to do it well*” (NP4).

The day was sunny, festive and inviting. We [researchers] and the public were welcomed to form a circle in the village square and to pass around a ball of wool that would join us all in a net (Figure 10, top left). With the ball of wool in our hands, we introduced ourselves and talked about why we were there. Many references to the *baldio* were made (to support the *baldio*, to know the *baldio* more, etc.).

We then made our way to a small cottage near the river built by the core-team in the course of one month, in order for the public to “*taste traditional food that we have here in our Marão*” (NP7); the cottage addressed the fact there was no space in the village where farmers (subsistence or small farmers) could sell their products and recalling the affective stories linked to sharing food. Next was a native tree planting activity highlighting the importance of the *baldio* and the forest. As we reached the site, we were greeted by the festive music of a local band from a neighbouring village, which had spontaneously volunteered to play for the event, and which reminded people of the past (“*it was a very unusual day because there was a party atmosphere*”, P4).

The main gathering was a collective lunch, a meal of local ‘forgotten’ products (wine, mushrooms, meats and cold cuts produced for self-consumption or for external commercialisation but not sold locally). Music, food and wine brought collective being-in-common, reminiscent of past community gatherings—a togetherness that was not trivial. A core team member describes how the organisational process and the day-event ignited motivation and hope for the future:

*“We now have a group that came together and did things, which leads us to believe that the Ansiães community can come together; if they can come together we can survive [...] sometimes something is needed to start and awaken other interests and bring people here, and I think that that is already happening [...] fixing populations will be the next step, but that’s it, with the recovery, investing in the centre of the village, in the houses... Your project came to help start a buzz, to raise awareness, to dynamize...,”* (NP2)



**Figure 11.** Pictures of the video exhibition day called ‘Encounters with the baldio.’

After having lunch together, we moved to the video-exhibition which was held in a social centre. More people joined, including the elders in their nineties who remembered the venue being used in the past as a community cinema and theatre: now it was coming back to life, but this time to tell their *own* stories. After a short introduction, lights dimmed, and a local singer and shepherd opened the floor for other elders’ voices with a gripping poem about life during Salazar’s regime (*“All my life I devoted to work, completing gruelling tasks. To this day, I don’t miss it, that incredible fascist period; my body was weary, yet I had little to eat. I had nothing to call my own in that era of poverty...”*)

Elders’ voices recalled the time when the baldio was expropriated by the state, and people worked in the state forestry plantation and private mines in the baldio. The following interviewee recalls: *“You couldn’t even pee in the forest. If they saw me, I would be fined. You had to have a ticket in order to pick a few twigs to fire the fireplace”*. Affective stories of the baldio told of pain and suffering resulting from situations of oppression and social inequality. They endured hardship and exhaustion from carrying heavy minerals and from the effects of extreme meteorological conditions:



*“We walked on the snow barefoot, since we couldn’t walk with sabots, as we didn’t have footwear like today. We had sabots and we’d tear them; we would take them off and walk barefoot back home, we were soaked to the bone, dripping wet. At home, we hung our clothes to dry by the fire. Our feet would seem to explode, due to the heat of the fire. Those were terrible times. We suffered a lot.”*

Elders’ affective stories revealed how state expropriation was felt in the body of people. Suffering was accepted with resignation. Although interviewees referred to this work as “slavery”, they did not see it that way at that time. Only those who knew how to read could emigrate to find better jobs. Those who stayed were subjected to very uncertain working conditions. They described how jobs were intermittent, so they had to “*follow jobs*” from one place to the other, and how they were badly paid. Stories revealed that strong internal community ties helped them cope with daily suffering, as community work was remembered as a time of joy: “*our bellies played guitar but those were times of joy. We sang up and down the mountains. Singing back and forth... There was joy, but hunger as well*”.

After the video screening, chairs were gathered in a circle and people were asked to write their ‘wish’ for the *baldio* on a sticky notes, which were then displayed on a mural. A time for debate was opened with these words of an elder: “*if the baldio gave ‘bread’ [referring to livelihood possibilities] to Salazar [Portuguese dictator], why not to us?*”. People reflected on this question: some explained they felt obliged to emigrate because of the lack of job opportunities (highlighting a common theme that came found in the ‘wishes’ for the *baldio* to support people’s settlement by creating jobs); others emphasised the need to ‘keep’ the forest for its health benefits (pure air and oxygen). But most importantly, the video had created a feeling of togetherness that translated in a silence tempered with smiles, quiet conversations and some hugs between neighbours. The event was closed with the well-known song dedicated to the ‘serra do Marão’, played (again spontaneously) by the local band.

Unpacking the event, the core team explained just how important this event had been for them (and we guess also for the broader community of residents). They highlighted the video as providing a historical legacy of yet-undocumented lived history (both for the parish and broader mountain community), and for revealing, through the testimonies of elders, the harsh conditions, honesty, resistance, humour and joy of their narrations. One member claims that he *needed* the video and compares the act of hearing elders’ stories to choosing his own affective place in the *baldio*:

*“For me it [the video] made me realise just how much people needed this, and how much I myself needed this..... [...] What we saw of the old ladies talking about the mountains is the same thing as listening to our grandchildren saying look, my grandfather participated in that, look at his place... Looking at the ladies’ stories is a little like seeing ourselves in a few years” (P4).*

When asked why he needed it, he said that the video “*reveals the life of the community as linked to the work in the mountains*”, suggesting that the elders’ affective stories re-connected him to the historical community’s affective entanglements with the *baldio*, revealing the community and his own capacities. Others also described the video as an important resource to motivate serra communities to continue to believe in their capacities and share their experiences more widely. Looking at the past also reasserted values of cooperation and community: “*The video is fantastic and is a historical record to keep, because these generations have no idea.. In the past, there was a lack of material goods, but there was a will to do things, and things were valued*” (NP3).

At the closing of the PAR project, the core-team expressed a sense of togetherness, a desire and need to continue organizing things and to “*not let this die*” after the researchers’ departure (P2). The project created “*dynamism in the community. [...] And on another note, more related to this group, it was the union, I think the union makes the strength*” (P4).

But did this experience of togetherness change the patterns of participation in the *baldio*’s formal structures? We know that after the project ended, NP6 (who had said in previous conversations that the project changed his view of the *baldio*, see section 4.2.), started to participate more in community assemblies. In contrast, NP2 (who also had said that the project had changed her felt sense of responsibility towards the *baldio*) did not change her participation patterns. While we cannot be certain of the particular reasons, we know that structural gendered barriers influence women’s participation (e.g. family burdens). In previous conversations, NP2 mentioned how she participated in the PAR because it was important for herself, beyond home duties such as child care (“*It was a scape, a personal motivation, that is to say, I was doing something that fulfilled me and not others*”, NP2).

This suggests again that participation is an affective endeavour animated by the affective relationships created in the act of participating itself. In this context, as low community energy persisted because of depopulation, people highlight the importance of somebody taking a position of leadership and motivating the group. This may also be the reason for which, once we left the area, the engaged group dissolved (at least temporarily). Thus, overall, we cannot say that the project changed the patterns of participation, yet as NP3 acknowledged earlier, it created “*a buzz*” and alighted a “*hope*” that can have unforeseen

and unpredictable effects. NP3 later renovated two old abandoned houses in the village as guesthouses, refurbishing them with old tools and materials; he thereby provided the parish its first tourism structure, also showcasing old community customs (such as the roasting of chestnuts with pine needles, or the removal of corn leaves as a community event involving music and food). We cannot say that this initiative was solely the result of NP3's participation in the PAR, but we can say that the PAR reaffirmed her values and gave the project a collective scope.

## 5.4. Discussion and conclusions

Our paper examined a PAR methodology that mobilised affects and emotions to better understand (non-)participation in the context of a recently devolved historical forest commons (*baldios*). While the turn to affect and emotions in nature-society studies is bringing rich evidence of the relationality of agency and empowerment, what has been under explored in this emerging field is how researchers can capture affective entanglements, how to mobilize them in places where commons have been enclosed and with what impact. The following discusses our findings in light of the literature on commons and participation, identifying key implications of our results for forest commons policy making and management. We close by pointing to the main limitations of our study and directions for future research.

### 5.4.1. Activating affective entanglements with creative methods

While agreeing that 'affect is a quality of life that is beyond cognition' and 'inexpressible' (González-Hidalgo and Zografos 2019), our PAR showed how affective relations can be gathered and mobilised through simple activities such as asking for meaningful experiences and cherished memories and places to be shared. The affective stories gathered in this study contained embodied experiences in the *baldio* (the breeze, the sounds of the river, the smells of the forest, etc.) and evoked emotions such as pride, relaxation, love, joy, suffering and sorrow (for both elders and core-team members). Consistent with a relational understanding of emotions, emotions were indicative of the affective entanglements between humans and non-humans. For example, pride of the *serra's* nature was associated with the identity and character of a community that had endured the harsh conditions of dwelling in the mountains.

Affective mapping did not only capture existing affects but writing and sharing affective stories awakened and intensified dormant affective entanglements. Mapping affective places was an important symbolic exercise to link personal life stories with the experiences of the community. This is similar to Rivera Lopez et al.'s (2018) findings, engaging indigenous communities in Mexico in expressing their relationship with a threatened native maize through art-works (embroidery, drawings and paintings). By doing so,



people awakened their felt linkages to the maize; in the words of a participant: “It was like I was asleep. Maize gives us everything and now I see how important our native maize is and I’m more aware of its value over hybrid maize” (Rivera Lopez et al., 2018: 9). While we used a different method, similar assertions were made by our core-team members suggesting that creative expression (through storytelling or other artworks) can unveil and strengthen affective more-than-human entanglements even when these are socially neglected or threatened.

We found it particularly revealing to hear how the elders’ video was described as a personal and community *need*, and how hearing elders’ experiences connected people to their own capacities and values. This *need* speaks directly to the fact that commons are commoners are co-constituted in time frames that exceed the span of one generation (Arendt, 1958 in Hufford, 2016; Singh, 2018a). By watching the video, people could collectively recognize their ancient affective entanglements, and this reconnected them with their own capacities and values for dwelling the serra.

One of the critiques of the turn to affects and emotions in research on natural resource management is that it may romanticise community, while obscuring the more political aspects (Singh 2018a). Far from this, our collection of affective stories unveiled the highly political history of oppression. Elders’ stories evoked suffering and pain, informing us about how they experienced political censure and the expropriation of the *baldio* in their skins. Emotional suffering and distress around natural resource access can discipline subjects and make them internalize oppression and violence (Morales and Harris 2014, González-Hidalgo 2021). This internalisation of oppression through suffering may explain why elders did not perceive their situation as slavery, rarely referred to land expropriation, and instead emphasised the joy of community work.

Affective stories also unveiled gendered issues about participation. While we had engaged in more traditional interviews with women prior to the PAR (in this and other case studies in the area), this was the first time that such gendered barriers (family burden) came to the fore. For example, in Nieto-Romero et al.’s (2021) study of a *baldio* in Galicia (north-western Spain), women rather justified their non-engagement as a personal preference. Asking affective stories opens persons’ visceral and emotional responses (Duffy et al. 2018), which may be the reason why we can gain access to the more unconscious workings of power.

#### **5.4.2. Implications for forest and commons policy and management**

In Europe, while legislation has devolved historical forest commons to local communities (Lawrence et al. 2021), the historical affective entanglements between communities and the commons have not yet been recognized nor documented. The documentation of past

affective community practices is not only important to ‘conserve our heritage’ but is key for the reconstitution of the commons (Hufford 2016). Even when expropriation has interrupted old customs, commoning initiatives emerging after devolution build upon customary practices adapting and reinterpreting them to present needs and contexts (Sandström et al. 2017, Nieto-Romero et al. 2021). Moreover, sharing emotions (of joy but also distress, anger and sorrow) around lost affective entanglements to the commons foster community’s relationality, hope and healing from suffering from land enclosure and oppressions (Haggerty et al. 2018, González-Hidalgo 2021). This means that historical affective entanglements not only motivate engagement but also empower people to fight and care of their own constitutive affective relations.

The above has practical and policy implications. The commons cannot be re-constituted simply with legislation devolving rights, nor with policies that exclusively support technical management projects — clearing the excess of biomass, adequate planning of productive and nature conservation areas — but affective entanglements across generations need to be documented and awakened. While many creative methodologies can be used, documenting elders’ practices in the commons appear particularly urgent as they confer belonging for new generations and can be a portal to the historical and complex social-ecological entanglements between commoners and the commons (Hufford 2016). In this context, the medium of video can capture all the affective physicality (Haggerty et al. 2018), including locally meaningful ways of telling, including intonation, speech and gestures (Pieroni et al. 2007). Affective mapping can unveil what is valued but threatened, motivating and preparing people to think of more pragmatic actions for the management and planning of forests.

#### **5.4.3. Limitations and future research directions**

One limitation of the PAR (also expressed by the core-team during the focus groups) was the limited number of people involved. Our study was designed to involve 30 people in the place-story activity and in workshop/focus groups, but in the end only 15 people became involved in these, and 12 participated in the core-team. While writing was a friendly way of expression for those who participated, it may have inhibited the participation for some. Indeed, Mark and Boulton (2017) and Rivera Lopez et al. (2018) highlight the importance of including culturally sensitive creative methods. In our study, orally transmitted music and poems appeared as a popular artistic expression that was underexplored. Moreover, other more collective ways of gathering stories could have been less demanding (e.g. organizing collective walks to visit and record affective place-stories).

This being said, we experienced a growing interest in the project as time passed, which suggests that people need time to establish trust with PAR research. Thus, a longer

preparation and engagement period would have allowed us to better contextualize the method while allowing people to join progressively as they learned about the project—yet, this was incompatible with the timings and typology of the research project (see Horlings et al., 2019).

Despite these drawbacks, our affective PAR brings to light important lessons for researchers and practitioners struggling to incentivize engagement in contexts where communities' relations to forests are weak. Altogether, our PAR highlights the importance of using affective experiences and emotions to engage, motivate and empower people. We found that the affective research activity itself brought energy and hope for the future, motivating the core team of the PAR. Yet, once we left the area, the affective experiences of being-in-common facilitated were not enough to sustain action, suggesting that the outcomes of our PAR were not enough to change entrenched forms of engagement. We thus conclude that actions over a longer period are needed to counteract demotivation and fear caused by depopulation. We call for more research investigating the opportunities of PAR and creative methods in recovering, expanding and strengthening humans' relationality in contexts where affective more-than-human entanglements are weak.







# Chapter 6

**Discussion and Conclusion**

*'I asked him if the land belonged to him. He answered no. Did he know whose it was? He did not. He supposed it was community property, or perhaps belonged to people who cared nothing about it. He was not interested in finding out whose it was. He planted his hundred acorns with the greatest care'*

*- Jean Giono (1895-1970), French writer*

## 6.1. Introduction

During my first year as a PhD student, I witnessed the most tragic year in my study area in term of wildfires: some 392,000 ha were burnt, and 201 persons died in wildfires in Portugal and Galicia (Lombao 2018, San-Miguel-Ayanz et al. 2021). Unfortunately, this was not an isolated event and the north-western Iberian Peninsula can be considered today one of the most vulnerable areas to forest wildfires in Europe. The frequency of wildfires has increased for several reasons, including rural depopulation and the abandonment of traditional subsistence economies, the difficulty of managing the excess of biomass within a highly reforested territory dominated by private small-scale forest holders (which are often unknown), reduced state intervention and the increased detachment of populations from forests. Moreover, the region suffers from increasing heatwaves of due to climate change, which makes wildfires difficult to suppress once they have started.

Forests and wildfires have become a subject of social and political debate; new legislation is being developed, civic initiatives for post-fire forest regeneration have emerged and seminars on forests and wildfires have been organized by several civil, research and policy institutions. When starting my thesis on forests, I was a participant of the many of the actions, debates and seminars. I realized that most debates (even in academic contexts) treated ‘forests’ as natural categories and blamed local owners and communities for poor management (unless they were receiving public economic incentives) or for being negligent (using fire for cleaning the fields, making barbeques, etc.).

As mentioned in the introduction (Chapter 1), I realized that this discourse lacked a political reading on how forests had been produced or shaped through history – by practices of the state, the market and other socio-political actors – and how these processes have affected today’s relations to forests and community agency. There was neither a deep questioning of the model of land-use – which is dominated by monospecific forestry stands (eucalyptus or pines) planted for productive purposes and responsible for the increased fire risk as well as the loss of biodiversity and cultural heritage due to landscape homogenization (Bassi and Kettunen 2008, Cordero Rivera 2017, Cidrás et al. 2018).

As my study was on community forests, I also realized that these policy programmes assumed that an abstractly defined ‘community’ would voluntarily engage in management duties. Again, communities were blamed for not participating in forest management and for rent-seeking behaviour without questioning the current composition of forests (mostly reforested with pines) and communities (suffering from depopulation, sociocultural disintegration and with strong, internal power inequalities). As noted, most research had studied legal frameworks and institutions, so there was a lack of

understanding of the daily practices (and struggles) of commoners when rebuilding their relationship to forests after the devolution of these areas by the state. Supported by sustainability theory (Chapter 2), I understood that studying the historical reasons and drivers of human's disconnection from nature and pathways to reconnect people to nature were key to realizing sustainability transformations.

By taking a commoning lens, this thesis has focused on the agency of commoners in exploring the historical and political human-forest interactions in community forests. The purpose of exploring community agency from a commoning perspective was to develop a model of agency that could better explain why and how people engage with community forests in north-western Iberia and describe related emergent practices, meanings and outcomes. By doing this, the relevance and role of commoning initiatives around community forests could be critically discussed in terms of their contribution to sustainability transformations. At a more practical level, the purpose of exploring agency was to investigate whether and how the above discourses blaming communities for forest abandonment could be themselves problematized and which ways of supporting communities (beyond economic incentives) might follow from this.

In the following, I first present the key results of this thesis, focusing on those findings related to commoners' agency: dimensions (why and how commoners engage), intervening processes and outcomes. Then, I discuss these findings in the light of other studies on community forests (and other types of CBNRM). In so doing, I compare how the findings of this thesis differ, complement, and/or add to previous theories on commoner's agency and to previous debates on the role of communities on sustainability transformations. I also point to practical recommendations, not only for policy-makers engaging with community forests, but also for communities and practitioners engaging with communities in activities and processes of commoning.

These 'tips for action' are not blueprints for action indicating what to do, but a grouping of the more practical takeaways from this research in a form that can be easily accessed by non-academics. The intent is to go beyond policy designs and recommendations by providing insights that are useful for lifting and expanding commoning communities. Finally, this chapter closes with a reflection on the overarching question guiding this PhD research – *How does commoning help to better understand and enhance the agency of commoners in community forests and their contribution to sustainability transformations?* – pointing to limitations and opportunities for further research.



## 6.2. Key findings from the case-study research

The empirical analysis of cases revealed the place-based diversity of commoning practices giving a broad perspective on commoners' agency. Overall, the three cases revealed that agency is a context-specific and relational process. There was great diversity among the cases in terms of practices, intervening processes and outcomes. Each commoning initiative had emerged in unique circumstances (including rural depopulation, citizen's struggles in the transition towards democracy, community disintegration in terms of cultures and socio-natures). As a result, community forest practices had acquired different meanings, with different aims, practices and thus outcomes. Despite these differences, however, key aspects of commoners' agency were identified, which are described below.

<b>Finding 1</b>
Commoning emerged in reaction to entrenched citizenship regimes.

In each of the three cases, commoning was animated by specific persons, people who used the governing board position driven both by their ethical commitments, and also by their capacities, skills and power. Nevertheless, the emergence of commoning cannot be understood looking at these individuals in isolation; their actions emerged in reaction to certain socio-political citizenship regimes and the associated forms of authority.

In Teis (Chapter 4), the defence of the forest started when the forest was threatened by the construction of a highway and commoners stood up for the defence of their right as citizens to a liveable public space. Also, in a context where governments were not sufficiently accountable, commoners used the regeneration of the native forest to reclaim their *political rights* (to participate in decision-making process about developments that affect them). These citizenship claims were not only discursive but also *performative* – the people developed their authority as citizens by practicing a more democratic and ecological citizenship through their direct decision-making processes and by changing the type of forest, regenerating the ecological relationships of typical Galician forests.

In O Carballo (Chapter 3), the devolution of community forests was a top-down 'obligation' to begin with. However, in reaction to the practices of the state forestry services – which were considered of little benefit for the community and untenable given the rural depopulation – the commoners took on full responsibility for their forest. This constituted an initiation of commoning; the commoners claimed their right to manage forests to fight depopulation and support the community. Although they did not frame it this way, the commoners' new responsibilities inevitably reconfigured state-society relations and thus citizenship.

As a result, *citizenship* was a key dimension of commoning. Commoning involved establishing self-organized structures that guaranteed the citizens’ material and immaterial living conditions while also engaging with the state authorities for conditions to enable this.

<b>Finding 2</b>
Commoning entailed the reinterpretation of historical socio-natures to address current needs and challenges; then, affective ties created informed commoning.

As the traditional subsistence practices practiced before expropriation had been abandoned and state-driven forestry practices determined the primary land use, commoning entailed the reinterpretation of historical (ancient) socio-natures. In both cases in Galicia (Chapters 3 and 4), the *historical socio-natures were reinterpreted*, mixing old symbols and practices with new meanings seeking to *simultaneously tackle social and ecological community challenges* (showing the socio-natural nature of commoners’ agency).

In the case of O Carballo – suffering depopulation and social disintegration – this path meant introducing traditional practices from the beginning of the twentieth century (before state expropriation) with the aim of developing a multifunctional forest to support community livelihoods and rebuild community culture. Customary practices (e.g. livestock rearing) had to be reinterpreted and adapted to current situations: livestock species were introduced in forestry stands instead of pasturelands. This led to the design of innovative fencing systems to ‘shepherd’ the animals in specific areas and also control the forest biomass – and prevent wildfires. These new productive activities were linked to a desire to create spaces of socialization and learning. Commoners organized community work and social activities (trainings and festivities) around productive activities, mixing the social and ecological aims and practices (Chapter 3).

In the case of Teis – suffering from urban sprawl and degradation of the public space – the commoning path took a very different direction. Following the introduction of democracy, the local people recalled their pre-Roman, Celtic Galician past to give meaning (at least in their discourse) to their actions focused on the regenerations of the native Galician forest. The Galician forests was also attached to affective experiences of seeing fauna and playing with trees in their infancy.

Over time, commoning forged *new affective ties* with neighbours, the forest and place that guided commoning in new ways. The past did not predefine the commoning trajectory but served as an important starting point and motivator. Thereafter, the community forest practices created new affective relations developing new capacities, demands and

subjectivities as commoner-citizens, as the following quote of a commoning leader in O Carballo case shows:

*To tell the truth, I was a bit of a loner, an individualist. Since I came to be part of the common land, I've learned a lot. [...] It's modified me, my personality. It's made me more concerned about people in general and to do things that benefit my surroundings. When I first came, it wasn't exactly like that because the world you live in doesn't exactly push you to worry about your village, a place where you don't have your loved ones. So, entering the common land like this helps me to try to understand the significance of the community and talk to people; one ends up having a relationship with people one barely knew.*  
Commoner 1 (O Carballo common land)

The above (and other quotes found in the chapters) shows how commoners' agency is affective; that is, the *engagement is constitutive of people's and communities' identities and even bodily characteristics* in terms of their different knowledges, capacities and (response-)abilities towards others, to other members of the community, but also their places and forests. This *affective dimension of agency* was central in each of the three cases. At Teis, the engagement with community forests promoted an more-than-human subjectivity in which commoners felt part of the socio-ecological relationships of the forest ecosystem (feelings of *being-in-common*). These subjectivities and emotions were evident in the many instances where the commoners compared themselves with and related affectively to the different species of the forest.

The above emphasizes the importance to the engagement in commoning of *feeling part of a socio-natural community*. The engagement with community forests in the different cases studied was a way of building and maintaining relations with forests that supported the community in both material ways (e.g. providing residents with jobs and resources) and also immaterial ones (e.g. further to their importance for claiming and exercising citizenship rights, the forests were also crucial to the rebuilding of community culture, identity and belongings). In turn, new citizenship performances emerged through time as commoners created new affective relations between forests and communities, politicizing forest management in new ways.

It thus seems unsurprising that, in the Ansiães case, where the governing board has opted for the continuation of state-forestry practices, the community is uninterested in community forest matters, even though forestry earnings have paid for important parish infrastructures. Community forest practices needs to be symbolically aligned with the historical trajectory and community culture, identities and subjectivities. Without the alignment of socio-natures, the material support of the Ansiães community (the building

parish infrastructure) failed to motivate commoning.

This suggests that monetary incentives alone fail to motivate participation. In the O Carballo case (Chapter 3), it was shown how monetary ‘forestry shares’ crowded out the more affective motivations to participate, potentiating instead strategic and extractive relationships with community forests associated with a passive participation.

<b>Finding 3</b>
Commoning actions were counter-hegemonic while also flawed.

The above affective ties to forests created through engagement allowed commoners not only to adapt better to their daily challenges (to maintain their motivation and acquire the necessary capacities and skills to care for the forest) but also to broaden the scope of their practices of commoning. Through time, Teis has become an arena both of forest regeneration and also the nurturing of an ecological type of *citizenship performed through care (care-tizenship)*. This citizenship consisted of caring for marginalized, excluded and threatened humans and non-humans as a counter-hegemonic performance of the current socio-political and educational system.

By practicing care for both human and non-human others, the commoners created a new political belonging based on *peer-to-peer care* and *horizontal relationships*. This implied a (re)claiming of the responsibility of the state to assure the conditions that allowed for the commons to care and be cared for, also *reconfiguring state-society relations*. The counter-hegemonic character was evident on the recognition that the current socio-political system was unable to care for people and nature; thus, the community forests provided a viable societal model to change the system and thus *tackling the roots of social-ecological crisis*.

Yet, commoning appeared as *a process full of challenges, contradictions, and ambivalences*. Although commoning leaders’ actions were ethically driven and focused on community-thriving, commoners’ inevitable engagement with the state entailed risks. State subsidies and legislation reproduced certain practices (Chapter 3) and their authority over citizenship, *controlling communities’ political claims* and *eroding community autonomy* (Chapter 4). Moreover, commoning leaders had to take a position of power in the governing board (the law defined that a democratically elected board was responsible for daily decisions), while other commoners exerted a passive role and women were generally excluded.

A lack of governmental support and a law that turned the practices in community forests highly hierarchical, technical and bureaucratic together explain the difficulty

of engaging new people in roles of responsibility. Finally, a culture of consensus, and a lack of mechanisms for conflict resolution made positions of responsibility very unattractive because of the risk of entering in conflict with neighbours as well as with public administrations. In O Carballo, conflicts arose with the changing socio-natural relations, which included some commoners while excluding others. Some conflicts were visible in the first years, but most were latent: commoners did not raise their concerns in general assemblies, instead accepting the power of the governing board without actively supporting their activities (Chapter 3).

In Teis (Chapter 4), commoning was first motivated by the conflict of the highway; this gave the first motivation and energy to commoning. Thereafter, the political tensions with the municipality of Vigo (Galicia, Spain) were latent. Without an arena in which to negotiate and solve the conflict, it did not manifest directly but rather became translated in a lack of support to the commoning activities of Teis.

#### **Finding 4**

Affective mapping revealed how commoners' identities, capacities and values were grounded on historical socio-natures

The centrality of affective relations in commoning in Galician cases, inspired the development of an affective PAR approach in a third case study (collecting and sharing meaningful experiences and cherished memories). In line with a performative approach to science (see section 1.2.1), the approach sought to unveil the socio-natural relations among commoners and community forest in order to make them more real, exploring their effects in enhancing feelings of *being-in-common* and participation.

Affective stories chosen by research participants showed how participants' own identities, were linked to *multi-generational socio-natural relations with the community forest*. Affective stories contained and related the natural elements (e.g. the river, the forest, the mountain), the community's historical socio-natures (ancient uses and relations to nature), and the people's current character and identity.

The PAR also allowed a clearer sight of how historical socio-natures have a role not only for guiding commoning practices (as above) but also in *empowering the community*. Historical socio-natures (even when these were revealed as highly oppressive and evoked suffering along with joy) unveiled the capacities, values and struggles of their ancestors to dwell the serra. These stories of historical socio-natures *empowered participants* as it connected them with their own capacities, values and knowledges.

<b>Finding 5</b>
The activities facilitated within PAR produced the community emotional resonance, helping to recognize individual affective experiences as collective.

*Affective mapping* was key to reproducing, strengthening and ‘healing’ (oppressive) affective ties in ways that motivated feelings of being-in-common and responsibility for the community forest. The video was particularly important to capture meaningful non-verbal and verbal expressions and emotions, catalysing emotional and empowering responses in the audience. Also, mapping affective places and events by sharing stories orally were important symbolic exercises linking personal life stories with the experiences of the community.

The power of the mapping approach lay in its capacity to produce a community’s emotional resonance – *sharing emotions collectively* assisted the recognition of experiences as collective. While the mid- to long-term effects of PAR are difficult to assess, the PAR did not catalyse a mobilisation after the PAR ended.

**6.3. Theoretical and methodological contributions to understanding and studying commoners’ agency and sustainability transformations**

Building upon the above findings, this section engages with available theory to develop four key contributions arising from the thesis.

<b>Contribution 1</b>
Affective relations/practices with nature are entangled with historical socio-natures and central to commoning.

Many articles on community forests emphasize the salience of the resources in terms of communities’ dependence (i.e. for their livelihoods) (Schlueter 2008, Lopes et al. 2013). These studies suggest that material and economic incentives are needed when communities do not take advantage of resources for their livelihoods. Far from this, the results reported here (above) suggest that *participation in nature care and the governance of forest* is intrinsically linked to *immaterial aspects of the community* (as *community culture, identity and belonging*). This is aligned to recent studies pointing to the importance of non-material aspects for motivating commoners and sustaining commoning, such as identity, which are linked to self-determination and the autonomy claims of local and indigenous communities (Escobar 2001, Patnaik et al. 2017, Sandström et al. 2017, Villamayor-Tomas and García-López 2018).

In Europe, Lawrence et al. (2021) recently reviewed community forests in Europe

acknowledging how commoners emphasized how their engagement and their newly created relations to forests gave meaning to their lives. Similarly, studies that look at nature's contribution to people are acknowledging the importance of relational values in explaining nature conservation (Chan et al. 2016). Contrary to intrinsic and instrumental values, relational values highlight how the value humans give to nature is intimately linked to the places' identities, cultures and histories. This research adds to this research while providing more detail on how non-material relational reasons to protect nature emerge and are sustained over time.

## **BOX 2. Tips for action related to the contribution one.**

Contribution one suggests that engagement will be strengthened in community forests if the type of forest produced is locally meaningful for community members.

**Policy-makers:** It is important to consider the relationships people already have with nature/forest. To improve the implementation and enforcement of (conservation) policies, try to align objectives with local practices, cultures and identities.

**Commoners/practitioners:** It is important that technical criteria for implementing a project are subordinated to community decisions based on needs. Try to facilitate community decision-making processes around needs. Ascertain what community members need to live well together and which activities/uses implemented in forests can satisfy those needs. (Needs include material aspects – providing jobs/resources for living, preventing wildfires, etc. – and immaterial ones – allowing to exercise citizenship rights and community culture, identity, belongings, etc.) Then, define the ways forests can be used by people (even outsiders) to satisfy those needs.

While agency is usually understood as an attribute of stand-alone individuals, one of the key contributions of this thesis is that commoner's agency cannot be understood in isolation from (historical) interactions between humans and non-humans. The work on affective ecologies (Angé et al. 2018, Haggerty et al. 2018, Singh 2018a) is relevant here. As mentioned in Chapter 5, affective ecologies describe how agency, while activated through particular individuals, is distributed among human and non-human objects. The results gained from this thesis support an affective understanding of agency, thus: *agency emerges from more-than-human assemblages of relationships while enacted by a particular body in continuous becoming with others* (Singh 2018a).

It has been recounted (above) that commoners' actions were found to be motivated at first by more-than-human relations spanning generations and scales and also how individuals and communities created new affective relations through their engagement with forests that shaped their actions and shaped them over time (acquiring new

knowledge, skills, and subjectivities). This affective understanding of agency can be understood through Ingold’s (2000) explanation of activities of hunter-gatherers: beyond the extraction of resources, hunter-gatherers’ activities in forests are ways of perceiving and relating to their environment, ways of spending time in forests to nurture (affective) ties, knowledges and skills. In other words, commoners, communities and the commons are co-constituted in time spans that surpass a single generation (Hufford 2016, Singh 2018b).

Historical socio-natures connected commoners to their ancestors, moulding community forests both to the reproduction of communities’ culture, identity and belongings but also to their own capacities and values. Yet, these historical socio-natures were not a blueprint for action but were re-signified to comply with current needs and challenges (Sandström et al. 2017). This does not mean that instrumental reasons to participate in community forests were not important, as it has also been shown how commoners *did* care for the material contributions (job creation, livelihood support, etc.). Nevertheless, the cases studied in this thesis showed how commoning (re)connected forestry productive activities with immaterial and social aspects of the community (Fournier 2013). *Through commoning the main objective of communal activities became the (re) production of the community* (not the production and utilization of forestry resources). As a result, *commoning needs to be historical and affectively grounded*.

Contribution 2
There is a transformative and virtuous relationship between forest commoning and citizenship; this relationship leads to the emergence of an ecological citizenship based on care ( <i>care-tizenship</i> ).

The relationship between citizenship and community forests is not new. As mentioned in the introduction, studies have shown how community forests’ institutions are used by commoners to claim and perform citizenship rights (e.g. Bose 2013, Rutt 2015), or contrarily, by states/governmental elites or bureaucrats to reassert their authority over forests and communities (e.g. Li 2002, Basnyat et al. 2019). Like other studies, this thesis has shown how the initial motivation – and energy – of the commoning studied emerged in response to entrenched forms of public authority associated with certain citizenship regimes. Commoners stand up as insurgent citizens against the structures of power that oppress them, destroy and enclose their commons (Singh 2013, Tsavdaroglou et al. 2019, Puello-Socarrás and Martín 2020).

Yet, beyond this, Chapter 4 shows how intimate, affective practices of care for forests promote new forms of ecological citizenship and emerge alongside affective ties to the forests. As mentioned in the introduction, ecological citizenship has become a key theme



in green political thought (Macgregor 2014, 2016). As environmental problems take on an increasingly global scale, it seems important to consider concepts of citizenship that extend national debates on rights and responsibilities to a global scale in order to facilitate a shared, co-responsibility for the Earth and a fair distribution of essential resources for life (Macgregor 2014, Sinreich and Cupples 2014). Most conceptualizations of ecological citizenship lack empirical explorations of the ways ecological citizenship are nurtured, and assume a neoliberal lens that places the burden of ecological redemption on individuals and private (consumption) practices.

This thesis conceptualizes a *commons-based ecological citizenship* and shows ways in which this is acquired and nurtured. Inspired by the Spanish anti-austerity indignados movement (Casas-Cortes, 2019; Tsavdaroglou et al., 2019), Chapter 4 characterized this commons-based ecological citizenship as *care-tizenship* (*cuida/dania*). This citizenship consists of performances based on caring for marginalized and excluded human and non-human others as well as communal care for the commons. Care becomes a counter-hegemonic practice as it emerges in reaction to socio-political systems that are incapable of caring for the citizenry and responsible for the degradation of commons.

### **BOX 3. Tips for action related to the contribution two.**

Contribution two suggests that engagement with community forests can nurture the affective relations to forests – as well as associated knowledge, skills, and subjectivities – that foreground an active participation in environmental governance.

**Policy-makers:** As participation enhances further participation, allow for diverse forms of engagement with community forests. Different boards and initiatives within a legal community can co-exist and coordinate in non-hierarchical governance models (from Stavrides, 2015).

**Commoners/practitioners:** Ensure people have possibilities to engage. Organise volunteer activities (e.g. planting, uprooting invasive species, cleaning the river) and social events in community forests (games, communal festivities, gatherings, guided walking trials, etc). Rotational and mandatory shifts in roles of responsibility may also help.

As new affective ties to forests and community are created, caring practices extend from caring for forests to caring for an more-than-human community. This is similar to the notion of a ‘care-network’: ‘care as a practice demands that care-givers attend to *care networks* – the webs of interrelations, connections, and dependencies that affect the life and well-being of the primary object/subject of care’ (Krzywoszynska 2019, p. 664). As new affective relations are built with the forest, commoners expand the care network to

other interrelated humans and non-humans beyond the boundaries of the community forests, connecting local caring practices to the global social-ecological crisis.

As a result, *care-tizenship* is not only ‘local’ but connects caring practices to global social-ecological crisis, expanding relations of care to an open, relational and more-than-human community. In other words, a more-than-human community is built through socio-natural caring relationships (caring and being cared for) in which nature becomes an active agent of the process of care.

This was evident in Teis case (Chapter 4), in which the forest solidified values and capacities of people engaged in caring for them, showing the interdependent and reciprocal relationships between both the subject and object of care. Similarly, Sinreich and Cupples (2014) show how caring for forests allows citizens not only to prevent hillslopes and flooding as well as address poverty but further to create democratic forms of political engagement.

While connecting local social and ecological concerns to global ones, the particular forest or place appears as an important actor in the making of participatory democracy. Democracy cannot be conceptualized abstractly, but rather ‘requires rootedness in particular problems and places’ (Escobar 2001; 168). The empirical results of this thesis have shown the affective more-than-human entanglements through which democratic schemes emerge. This has also provided further evidence on the ways in which demands, skills and capacities for participating in environmental governance are acquired (Fleischman and Solorzano 2018). Beyond participation in decision-making processes regarding forests, *empowered forms of citizenship are acquired through affective relations* with them. Forests solidify values and nurture citizens’ authority and capacities (this thesis), suggesting the importance of community forests as arenas that can nurture alternative and expanded forms of democracy (Grant and Le Billon 2019).

<b>Contribution 3</b>
Commoning is not merely a bottom-up process but involves actors across various spatial scales including the state (state agents, structures, policies, legislation, etc.).

This thesis develops new understandings of the responsibilities of communities and the state with regard to commoning. As mentioned at the beginning of this chapter, communities are typically held responsible for the successes and failures of community forests, or, at most, as the victims of top-down practices and regulations. Instead, this thesis has unveiled how *commoning emerges from processes that are both bottom-up and top-down*. The empirical findings reported here have shown how commoning involves various political actors across different scales. For example, commoners need to engage

with the state – through compliance with legislation and supportive mechanisms – and this engagement can both support and restrain commoning. Whereas legislation may provide for community involvement in forestry management, excessive bureaucratic and technical legislation can undermine community processes, shifting community priorities away from the reproduction of communities and satisfaction of local needs (this thesis).

#### **BOX 4. Tips for action related to the contribution three.**

Contribution three suggests that commoning needs democratic practices that nurture emancipatory forms of citizenship and autonomy.

**Policy-makers or commoners/practitioners:** Focus on (pro)active policies/activities that focus on empowerment, and (citizenship) capacity- building (see e.g. Millner et al. 2020). For example:

- Establish community educational programs (that include young audiences)
- Encourage documentation and debates around historical socio-natures, including past uses and relations between commoners and forests, which can be empowering.

**Commoners/practitioners:** Implement differentiated forms of politics (e.g. avoid voting majorities, and instead nurture deliberation and listening) (from Starr et al. 2011).

Most research on community forests understands the process of building a commons as a uniquely bottom-up process, placing the burden of sustainability on communities while liberating state agents from their responsibilities and participation (in the becoming of forests and communities). As Bray (2013) and García-López and Antinori (2018) have noted community forests need much more than just the recognition of community rights. The state should support communities, as it is widely responsible for the dynamics of disintegration and disaffection with forests. This means not only recognizing rights (in legal documents) but also helping communities to exercise those rights. Active policies and programs that focus on empowerment and capacity building are key (see e.g. Millner et al. 2020). Beyond technical trainings, such a capacity-building should involve affective and emotional aspects. In this respect, it has been shown how the complex depth of historical entanglements between commoners and forests and facilitating discussions around these are a key to activating empowerment and reconstituting the commons.

Commons authors (e.g. Pokharel et al. 2020) usually claim a need for the creation of nested decision-making arenas where communities can be represented at higher levels of governance. Our research suggests that this is not enough, however, as these arenas can

be co-opted, or not influential. Few studies have focused on which democratic practices are performed in these multi-level structures of decision making, and how they maintain (if at all) community autonomy. An exception is Starr et al. (2011) who described the multi-level democratic practices of Zapatistas in Mexico, identifying how community members are required to volunteer a year in representational roles for the community and how this generates belonging and learning, and allows for the nurturing of shared, democratic values and practices.

Along with Starr and others (Llano-Arias 2015, Villamayor-Tomas and García-López 2018, Goodwin 2019), this thesis suggests that autonomy needs to be *performed* through democratic practices, not only among community members, but also with state agents and broader social movements. In a context where a consensus politics is undermining processes of deliberation and contestation, a community’s democratic practice includes practices that *re-politicize environmental governance* and *control the accountability of the state* (see below).

<b>Contribution 4</b>
Conflicts are not only inevitable but necessary for commoning; conflicts re-politicise environmental governance which is key for sustainability transformations

Conflicts have been a core topic of research of commons, and forests have been studied as terrains of struggle due to different claims to rights, (livelihood) uses and management priorities. Ranging from mild wars of words to violent confrontations, conflicts around forests have been treated by commons researchers as lose–lose situations and manifestations of governance failure (Eckerberg and Sandström 2013). As indicated by Ostrom’s Institutional Design Principles, in the absence of low-cost conflict resolution mechanisms (e.g. legitimate court systems and arbitration to mediate between parts), CBNRM schemes often have sub-optimal outcomes (overexploitation of resources, non-compliance with rules, etc.) or even to situations of violence (Cox et al. 2010).

While agreeing that solving conflicts is important, this thesis gives a more nuanced understanding of the role of conflicts in community forest and more broadly for sustainability transformations. In line with political ecologists, I hold that conflicts are not only negative outcomes of governance but the (normal) dynamics of communities and social groups. Beyond harmonious collaboration, communities are built through relational and embodied experiences of collaboration but also difficulties, conflict and even experiences of violence (Grant and Le Billon 2019, González-Hidalgo 2021). In other words, conflicts are not only the result of resource access and use issues but also constitutive of communities, shaping the coming together and falling apart of groups, as well as their power dynamics and authority. This was evident in Teis (Chapter 4),

where it was the threat of forest destruction that mobilized the local population against public administrations, creating a new *political community* around the protection and regeneration of forests.

Clearly, conflicts can spur mobilization around and even care for forests and the commons. Equally, though, *latent conflicts* (hidden and silent) can be detrimental for community forests. In contrast with those conflicts expressed through dramatic confrontations and public attention, latent conflicts can undermine collaborative behaviours and displace community active participation. In the case of O Carballo (Chapter 3), latent community conflicts were associated with a lack of active participation in community matters (Chapter 3). At the same time, the absence of a visible conflictual issue can ‘extinguish the flame’ of conflict-based mobilisation. This was evident in Chapter 4, where the municipal council ignored the conflict and demands of the Teis community while engaging in partnerships linked to other community forests to implement state-driven technical projects in forests that increased their political visibility and authority.

Aligned with the commoning literature, this thesis defines conflict – or rather the process of unveiling conflictual claims and outcomes – as an intrinsic part of the processes of commoning and sustainability transformations. Conflicts are not only inevitable but are also necessary as they mean that the political consequences of different choices have been deliberated (who loses and who wins or whose socio-natures, values and subjectivities are excluded/included). Suppressing or neglecting conflicts is undesirable because ‘the specificity of pluralist democracy is precisely the recognition and the legitimation of conflict’ (Mouffe, 2013: 7 in Buizer and Kurz 2016).

This is important as there is a general trend (mainly in the Global North) to depolitize public and environmental affairs (Swyngedouw 2010, Nightingale 2018). Entwined with processes of neoliberalization and ecological modernization, the depolitization of environmental governance reduces political participatory processes to the attainment of consensus. Consensus is reached by making ‘nature’ the cause of current crises (e.g., the forest is causing wildfires) while offering apolitical technical fixes for them (e.g., ‘cleaning’ forests, planting native species) (Swyngedouw 2010, Buizer and Kurz 2016). Yet, as this thesis has also shown, technical fixes can have detrimental consequences for democracy, as it can reinforce existing patterns of social [and ecological] exclusion (Cooke and Kothari 2001).

Sustainability transformations cannot be controlled or managed but will only emerge from political negotiations, value-laden choices and struggles over different political subjectivities and socio-natures (Nightingale 2018). As a result, facilitating commoning in community forests is important to generate *ecological citizens* capable of unveiling the

conflicts around environmental governance, thus re-politicizing the ‘management’ of current social-ecological crisis.

<b>Contribution 5</b>
Place-based sustainability research is scientifically and socially meaningful, but requires time and institutional support

Place-based approaches to science emerged in reaction to the domination of theories describing place-based community initiatives as either under the hegemonic structural conditions of globalisation or else resisting them (Chapter 1). Graham-Gibson (2008, p. 6), pioneered the call for a *performative re-reading* of community place-based initiatives as viable objects of inquiry, calling researchers to investigate them to make them more ‘real’. Taking this argument further, the present thesis has contributed to making commoning initiatives and their relational and more-than-human agency more real. Through the PAR and documentary exhibitions, debates and presentations this research has facilitated (see annex 2), it has surely contributed to making communities’ affective relations with forests more visible, counteracting the dominant technical views on community forests.

Moreover the fact of *choosing* these communities as cases was a turning point for the communities themselves (all three referred to this during interviews). Taking into account that authority always requires recognition (Lund, 2016), researchers participate in giving authority to the initiatives by recognizing the work they do through the research process. Chapter 5 showed how a PAR can reveal the important values and capacities of communities, contributing to their empowerment. This implies the need for self-reflection on who or what is given authority through the research process and who is being excluded by it (see Section 2.4, below).

Moreover, choosing to investigate commoning initiatives – as part of a performative place-based approach to science – was also scientifically rewarding. Contrary to understandings of places as local, backward and traditional, all three cases revealed cross-scale processes and relations that added complexity and made them interesting sites affording insights in the study of transformative pathways of change. As mentioned (Contribution 4), the cases revealed the struggle and micro-politics involved in forest management, re-politizing environmental governance and making the forest a contested terrain where transformations occur.

It is true that the performative and participatory research facilitated did not promote the scale of changes required to change behaviours. While participatory research – post science, mode 2, transdisciplinary, citizen science or action research – are promoted and funded by scientific institutions, there is an increase awareness that individual innovation

in research methodologies are insufficient to harness sustainability transformations (Fazey et al. 2020). Inserted in a three-year mobility program on ‘sustainable place shaping’, this thesis (as many others) was intended to design transformative methods and engage communities in the research process (beyond writing a Ph.D.). For this, time and institutional support are essential.

*Time* is needed to design a contextualised participatory approach based on more recent theories of change (Feola 2015, Jhagroe 2018), to co-create a respectful research approach based on reciprocity (Horlings, 2019) and to develop transparent communication channels during the research process (Brydon-Miller et al. 2003, Kemmis et al. 2014, Jhagroe 2018). This requires that we take on different roles as researchers (reflective and self-reflective scientist, knowledge broker, process facilitator and change agent) and engage in cycles of reflection and action to navigate between theory and practice (Wittmayer and Schöpke 2014, Bartels and Wittmayer 2018). In the case of mobility programmes (such as the one that funded this research), the researcher needs to be aware of the language and other cultural specificities of the place before engaging in action (Horlings et al. 2019). Meeting these ‘requirements’ is difficult and demands experience and a supportive team of researchers with different backgrounds and sensitivities.

Summarizing, conflicts may arise in the attempt to meet both societal and scientific requirements that impact negatively on the wellbeing and health of academicians, especially young researchers. Beyond publications, citations, contributions to conferences and funding, young researchers are increasingly required to have a positive impact on people, the economy and the environment, which increases the pressure they are under and consequent vulnerability to mental disorders (Nature’s Editorial Team 2019).

To avoid this and facilitate transformative change, long-term partnerships between academic institutions and places and communities beyond the duration of an individual (Ph.D.) project are needed (van der Leeuw et al. 2012, Fazey et al. 2020). Provision of appropriate infrastructures for this within universities and research groups (in terms of institutional support and governance) would allow a sharing of the burden of transformation, contributing to the well-being of researchers while improving the impact of (place-based) participatory research for sustainability.

#### **6.4. Concluding remarks, limitations, and suggestions for further research**

This thesis started with the following research question: *How does commoning help to better understand and enhance the agency of commoners in community forests and their contribution to sustainability transformations?* This section reflects upon the findings and

contributions above to answer that question, notes some limitations of the study, and indicates directions for future research.

Exploring processes of commoning in the three communities studied revealed the highly political work of commoners. Community forest policies are typically biased towards technical forestry practices and processes that ignore the particular identities, capacities and socio-natures of communities. Contrary to this, a commoning approach allows us to understand how the agency of commoners is linked to the (re)production of communities. Indeed, when engaging with community forests, these north-west Iberian commoners were not just managing forests. They were recovering lost and threatened socio-natures and performing new citizenships – by participating in decision-making processes and taking responsibility for their community, where this included the forest. As a result, commoners' activities in community forests sought to produce a different kind of forests and communities by aligning forest practices and uses to the needs, identities and cultures of the community, which, in turn, politicized forest management and the communities. That is, commoning fundamentally changed forests at the socio-natural level – that is, in terms of the social-ecological systems constituted by ecological and social objects, practices and relationship that are inseparable and imbued with power and thereby creating political, more-than-human communities

The commoning perspective enabled the research to go beyond institutional designs for sustainable ecosystem management and study the agency of commoners as a place-based practice contributing to sustainability transformations. On the positive side, local people's engagement in community forests produced not only more empowered forms of citizens and collaborative and caring practices for people but also caring practices towards forests. At the same time, however, the transformation of place through commoning was revealed as flawed, ambivalent and sometimes contradictory. Some extractivist relations towards forests were reproduced (Chapter 3), commoners 'failed' to influence higher levels of governance (Chapter 4) and struggled to create an inclusive forum for community participation or a system for the collective satisfaction of needs (Chapters 3, 5). This pointed to context-specific barriers for place-based sustainability transformations. Specifically, how place-based transformations entail conflicts alongside collaboration and inclusion with exclusions.

The community practices of the three cases (places) studied challenged (in different degrees) prevalent state-society relations, subjectivities in relation to nature and the regimes of authority and power responsible for the degradation of ecosystems and social inequalities. Community forests allowed people to engage in the value-laden socio-natural negotiations of *living well together*. These negotiations and the emerging (political) subjectivities are key to re-politicizing the management of ecosystems. Specifically, the



cases unveiled important issues around social justice and democracy that are routinely dismissed in discourses around environmental governance and even sustainability.

The commoning lens also allowed for the design of a PAR that unveiled important affective relations, values and capacities of communities. As commoning, the research process produced failures and successes: it did not manage to involve all the people as imagined or account for all the power dynamics, but it is today remembered by the community and their network as an important achievement. As mentioned, engaging with communities is a highly sensitive process that needs researchers to be very conscious of relationships (of power) within the place and of our own positionality within these. Looking back and considering my own knowledge and capacities at the start of this project, I can say that the conditions for this to happen were absent.

As an outsider (a highly educated Spanish person from Madrid), I was unaware of the local histories and social dynamics prior to my engagement. As a result, I prioritised the governing board (which I assumed as developing place-shaping sustainable practices). This interaction – or bias – guided the research approaches in the first two cases (in Galicia). As a result, the perspectives of women and other non-engaged commoners, were insufficiently explored. This was ‘corrected’ in the course of fieldwork and in the last case study developed. In that, the third case (Chapter 5), methods were adapted to allow a strong involvement of the community, including women. Even so, the methodology ignored several social dynamics, such as the importance of music as a artistic expression, whose inclusion or emphasis may have enabled further engagement. The more wealthy families also may have been overengaged (as they tend to have more time for engagement and also more confidence and understanding of the project). These biases may have been reduced with more resources, such as a research team, which could have facilitated an open reflection of power dynamics during the course of fieldwork and then the development of methods of engagement tailored for specific groups.

Since commoning, place-based (participatory) research can be defined as a process of ‘learning to be affected’ (Latour, 2004), researchers engage with places and communities, acquire new knowledge, capacities, affective relations and response-abilities in the process and ultimately they are transformed by it. As described in Horlings et al. (2019), self-transformation in place-based research is a process that occurs through our *embodied* engagement as researchers, by engaging with critical theories related to sustainability and transformations (head), reflecting on one’s own normative position as a researcher (heart), experimenting with methods grounded in one’s own values (hands) and engaging in places as a human beings open to developing response-ability (feet).

While these process-based outcomes are quite legitimate – and are important for

sustainability transformation – it is important to analyse how participatory research is integrated and supported within (Ph.D.) research programs and institutions and the conflicts arising from attempts to meet scientific and social requirements. Further integration of place-based participatory research within academic institutions and research teams would allow for the networks, knowledge and relationships of trust created in the course of the research to be fed into subsequent projects.

All these outcomes, positive and negative, are important for sustainability transformations. As a sustainable transformation calls for changes to the deep structures and values that underpin humans' unsustainable relations to nature (O'Brien and Sygna 2013b, Bieling et al. 2020), the study of commoning can reveal pathways that nurture caring and responsibility relations with places, including nature and communities. Moreover, one of the critiques of the sustainability transformation mentioned in the introduction (Chapter 1) is the lack of empirical analysis and studies of transformations in specific places (Balvanera et al. 2017, Blythe et al. 2018). This lack is related to the co-option of the transformation discourse by policy actors to support specific (technical) solutions without engagement in a political debate. This thesis has shown specific, place-based paths of transformations, highlighting the role of the agency of commoners and the various dynamics – challenges, contractions, and ambivalences – involved.

Finally, this thesis has opened some new avenues for research. First, while gendered exclusions have been largely investigated in the Global South, more gender sensitive research is needed to understand how women are hindered in relation to their participation in community forests (and how to enhance their participation) in contexts where communities are not resource-dependent and cultures that are more egalitarian, such as in western Europe (Chapter 2). Second, the need to nurture ecological citizens demands more research on the specific democratic practices (across scales) that maintain the active and inclusive participation of commoners in community forestry as well as accountable and fruitful relationships with state agents (Chapter 4). Third, in a context where humans' interdependent relations with nature are rare and threatened, there is a need to explore how research approaches can help to recover, expand and strengthen our more-than-human relationality (Chapter 5). It is also important to study how PAR and creative methods are implemented – its challenges, successes and failures – which includes looking at how long-term research partnerships between academic institutions and communities emerge and are sustained by research teams.

In conclusion, this thesis has adopted a commoning lens to reveal how commoners' agency emerges from more-than-human and multi-generational assemblages of relationships. The different chapters made visible the interlinkages between practices of care for forests and community building, empowerment, and democracy. Moreover, a

performative approach allowed the study to go beyond advancing theories on agency and contribute to advancing people's capacities for engaging in transformative change – that of the participants and communities and also of myself as a sustainability researcher. My aspiration for this research is that it can inspire communities, practitioners (including researchers) and policy-makers to see forests as much more than (forestry) resources. Community forests can be terrains that nurture our interdependency with other humans and non-humans and thus contribute to the development of new democratic practices that help us to live well together and care for the common.







# **Appendix**

**References,  
Annexes,  
Scientific summary,  
Acknowledgements / Agradecimientos,  
Publications,  
Biography**



## References

- Agarwal, B. 2010. Does women's proportional strength affect their participation? Governing local forests in South Asia. *World Development* 38(1): 98–112.
- Agarwal, B., 1997. Environmental action, gender equity and women's participation. *Dev. Change* 28, 1–44. <https://doi.org/10.1111/1467-7660.00033>.
- Agarwal, B., 2001. Participatory exclusions, community forestry, and gender: an analysis for South Asia and a conceptual framework. *World Dev.* 29, 1623–1648. [https://doi.org/10.1016/S0305-750X\(01\)00066-3](https://doi.org/10.1016/S0305-750X(01)00066-3).
- Agrawal, A., 2005. Environmentality. *Curr. Anthropol.* 46, 161–190. <https://doi.org/10.1086/427122>.
- Agrawal, A., and A. Chhatre. 2007. State involvement and forest co-governance: evidence from the Indian Himalayas. *Studies in Comparative International Development* 42(1–2): 67–86. <https://doi.org/10.1007/s12116-007-9004-6>
- Agrawal, A., Gupta, K., 2005. Decentralization and participation: the governance of common pool resources in Nepal's Terai. *World Dev.* 33, 1101–1114. <https://doi.org/10.1016/j.worlddev.2005.04.009>.
- Alló, M., and M. L. Loureiro. 2016. Evaluating the fulfillment of the principles of collective action in practice: A case study from Galicia (NW Spain). *Forest Policy and Economics* 73: 1–9. <https://doi.org/10.1016/j.forpol.2016.08.002>
- Alló, M., Loureiro, M.L., 2016. Evaluating the fulfillment of the principles of collective action in practice: a case study from Galicia (NW Spain). *For. Policy Econ.* 73, 1–9. <https://doi.org/10.1016/j.forpol.2016.08.002>.
- Angé, O., A. Chipa, P. Condori, A. C. Ccoyo, L. Mamani, R. Pacco, N. Quispe, W. Quispe, and M. Sutta. 2018. Interspecies respect and potato conservation in the Peruvian cradle of domestication. *Conservation and Society* 16(1): 30–40. doi: 10.4103/cs.cs\_16\_122
- Ansari, S., Wijen, F., Gray, B., 2013. Constructing a climate change logic: an institutional perspective on the “Tragedy of the Commons”. *Organ. Sci.* 24 (4), 1014–1040. <https://doi.org/10.1287/orsc.1120.0799>.
- Arora-Jonsson, S., 2009. Discordant connections: discourses on gender and grassroots activism in two forest communities in India and Sweden. *Signs (Chic.)* 35, 213–240. <https://doi.org/10.1086/599259>.
- Arts, B., and J. de Koning. 2017. Community forest management: An assessment and explanation of its performance through QCA. *World Development* 96: 315–325. <http://dx.doi.org/10.1016/j.worlddev.2017.03.014>
- Arts, B., Behagel, J., Koning, J., Turnhout, E., 2013. *Forest and Nature Governance – A Practice Based Approach*. Springer, World Forests XIV. ISBN: 978-94-007-5113-2
- Asher, K. 2020. *Fragmented Forests, Fractured Lives: Ethno-territorial Struggles and*

- Development in the Pacific Lowlands of Colombia. *Antipode* 52(4): 949–970.  
<https://doi.org/10.1111/anti.12470>
- Bäckstrand, K. 2003. Civic science for sustainability: Reframing the role of experts, policy-makers and citizens in environmental governance. *Global Environmental Politics* 3(4): 24–41. DOI: 10.1162/152638003322757916 .
- Balboa López, X. 1990. *O monte en Galicia*. Vigo: Edicions Xerais. ISBN: 9788475074740
- Balvanera, P., R. Calderón-Contreras, A. J. Castro, M. R. Felipe-Lucia, I. R. Geijzendorffer, S. Jacobs, B. Martín-López, U. Arbieu, C. I. Speranza, B. Locatelli, N. P. Harguindeguy, I. R. Mercado, M. J. Spierenburg, A. Vallet, L. Lynes, and L. Gillson. 2017. Interconnected place-based social–ecological research can inform global sustainability. *Current Opinion in Environmental Sustainability* 29: 1–7.  
<https://doi.org/10.1016/j.cosust.2017.09.005>
- Baptista, F. O. 2010. *O Espaço Rural. Declínio da Agricultura*. Lisboa, Portugal: Celta Editora. ISBN 978-972-774-269-1
- Baptista, O., 2011. Os baldios. Autonomia e desenvolvimento local. In: 1o Congresso Europeio Das Áreas Comunitárias, 23 e 24 Setembro 2011. BALADI, Vila Real, Portugal.
- Barron, A., 2013. Free software production as critical social practice. *Econ. Soc.* 42, 597–625. <https://doi.org/10.1080/03085147.2013.791510>.
- Barros, L., and D. Sánchez. 2018. Territorios en común. Casas con fume, montes sen lume. Galicia: Asociación Frouma.
- Bartels, K. P. R., and J. M. Wittmayer. 2018. *Action Research in Policy Analysis. Critical and Relational Approaches to Sustainability Transitions*. London and New York: Routledge. DOI: 10.1177/009539977600800205
- Basnyat, B., Treue, T., Pokharel, R.K., 2019. Bureaucratic recentralisation of Nepal’s community forestry sector. *Int. For. Rev.* 21, 401–415. <https://doi.org/10.1505/146554819827906861>.
- Bassi, S., and M. Kettunen. 2008. *Forest Fires: Causes and Contributing Factors in Europe*. EPRS: European Parliamentary Research Service. Belgium. Retrieved from <https://policycommons.net/artifacts/1338057/forest-fires/1946257/> on 07 Nov 2022. CID: 20.500.12592/3nmq51.
- Basurto, X., 2013. Linking multi-level governance to local common-pool resource theory using fuzzy-set qualitative comparative analysis: Insights from twenty years of biodiversity conservation in Costa Rica. *Glob. Environ. Chang.* 23, 573–587. doi:10.1016/J.GLOENVCHA.2013.02.011
- Bauer, R.L., 2005. Economic differentiation and the divided responses of Spanish Galician farmers to reforestation of the commons under Franco. *Soc. Sci. Hist.* 29, 175–205. <https://doi.org/10.1215/01455532-29-2-175>.
- Beach, D., Beach, D., 2017. *Process-tracing methods in social science*. Oxford Res.



- Encycl. DOI: 10.1093/acrefore/9780190228637.013.176
- Bieling, C., U. Eser, and T. Plieninger. 2020. Towards a better understanding of values in sustainability transformations: Ethical perspectives on landscape stewardship. *Ecosystems and People* 16(1): 188–196. DOI: 10.1080/26395916.2020.1786165
- Bloemen, S., and T. de Groot. 2019. *Our Commons : Political Ideas for a New Europe*. editors. S. Bloemen and . T. de Groot. Amsterdam: Institute of Network Cultures. ISBN 978-94-92302-35-9
- Blythe, J. L., J. Silver, L. Evans, D. Armitage, N. Bennett, M. . Moore, T. H. Morrison, and K. Brown. 2018. The dark side of transformation: Latent risks in contemporary sustainability discourse. *Antipode* 50(5): 1206–1233. <https://doi.org/10.1111/anti.12405>.
- Bolaños, O., 2011. Redefining identities, redefining landscapes: Indigenous identity and land rights struggles in the Brazilian Amazon. *J. Cult. Geogr.* 28, 45–72. doi:10.1080/08873631.2011.548480
- Bollier, D., 2014. *Think like a Commoner. A Short Introduction to the Life of the Commons*. New Society Publishers. ISBN 978-1-55092-559-3
- Bollier, D., 2016. Commoning as a transformative social paradigm. *The Next System Project*.
- Bollier, D., and S. Helfrich. 2015. *Patterns of Commoning*. Amherst, Massachusetts: The Commons Strategies Group in cooperation with Off the Common Books.
- Bollier, D., Helfrich, S., 2012. *The Wealth of the Commons: A World Beyond Market and State*. The Commons Strategy Group.
- Bose, P., 2013. Individual tenure rights, citizenship, and conflicts: Outcomes from tribal India's forest governance. *Forest Policy and Economics*. 33, 71–79. doi:10.1016/j.forpol.2012.09.016
- Bradley, K., 2015. Open-Source Urbanism: Creating, Multiplying and Managing Urban Commons. *FOOTPRINT* 91–107. doi: 10.7480/footprint.9.1.901.
- Bradshaw, C. J. A., P. R. Ehrlich, A. Beattie, G. Ceballos, E. Crist, J. Diamond, R. Dirzo, A. H. Ehrlich, J. Harte, M. E. Harte, G. Pyke, P. H. Raven, W. J. Ripple, F. Saltré, C. Turnbull, M. Wackernagel, and D. T. Blumstein. 2021. Underestimating the Challenges of Avoiding a Ghastly Future. *Frontiers in Conservation Science* 1: 9.
- Brauman, K. A., L. A. Garibaldi, S. Polasky, C. Zayas, Y. Aumeeruddy-Thomas, P. Brancalion, F. DeClerck, M. Mastrangelo, N. Nkongolo, H. Palang, L. Shannon, U. B. Shrestha, and M. Verma. 2019. Chapter 2.3. Status and Trends – Nature's Contributions to People (NCP). In: *Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (eds. Brondízio, E. S., J. Settele, S. Díaz, and H. T. Ngo). P. 76. IPBES secretariat, Bonn, Germany.
- Bravo, G., De Moor, T., 2008. The commons in Europe: from past to future. *Int. J. Commons* 2, 155–161. <https://doi.org/10.18352/ijc.98>.

- Bresnihan, P., 2015. The more-than-human commons: from commons to commoning. In: Kirwan, S., Dawney, L., Brigstocke, J. (Eds.), *Space, Power and the Commons: The Struggle for Alternative Futures*. Routledge, New York, pp. 20.
- Brierley, G. J. 2020. What Does It Mean to Find the Voice of the River? In: *Finding the Voice of the River*. Pp. 1–28. Cham: Springer International Publishing.
- Brouwer, H., and J. Woodhill. 2015. *The MSP Guide*. Wageningen, the Netherlands: Centre for Development Innovation.
- Brouwer, R. 1993. Between policy and politics: The forestry services and the commons in Portugal. *Forest and Conservation History* 37(4): 160–168.
- Brouwer, R. 1995. *Planting Power: The Afforestation of the Commons and State Formation in Portugal*. Eburon: Delft, The Netherlands.
- Brown, K.M., 2006. New challenges for old commons: the role of historical common land in contemporary rural spaces. *Scottish Geogr. J.* 122, 109–129. <https://doi.org/10.1080/00369220600917412>.
- Bryden, J., Geisler, C., 2007. Community-based land reform: lessons from Scotland. *Land Use Pol.* 24, 24–34. <https://doi.org/10.1016/j.landusepol.2005.09.004>.
- Brydon-Miller, M., D. Greenwood, and P. Maguire. 2003. Why Action Research? *Action Research* 1(1): 9–28.
- Buizer, M., and T. Kurz. 2016. Too hot to handle: Depoliticisation and the discourse of ecological modernisation in fire management debates. *Geoforum* 68: 48–56. <http://dx.doi.org/10.1016/j.geoforum.2015.11.011>
- Bygstad, B., and B. E. Munkvold. 2011. In search of mechanisms. Conducting a critical realist data analysis. In: *Thirty Second International Conference on Information Systems*. Shanghai.
- Caballero, G. 2015. Community-based forest management institutions in the Galician communal forests: A new institutional approach. *Forest Policy and Economics* 50: 347–356. <https://doi.org/10.1016/j.forpol.2014.07.013>
- Caffentzis, G., Federici, S., 2014. Commons against and beyond capitalism. *Community Development Journal* 49:S1: i92-i105.
- Cameron, J., and K. Gibson. 2005. Participatory action research in a poststructuralist vein. *Geoforum* 36(3): 315–331. doi: 10.1016/J.GEOFORUM.2004.06.006
- Cameron, J., Gibson, K., Hill, A., 2014. Cultivating hybrid collectives: research methods for enacting community food economies in Australia and the Philippines. *Local Environ.* 19, 118–132. <https://doi.org/10.1080/13549839.2013.855892>.
- Capra, F., Mattei, U., 2015. *The Ecology of Law: Toward a Legal System in Tune With Nature and Community*. Berett-Koehler Publishers, Inc. Currents Book.
- Caquard, S., and W. Cartwright. 2014. Narrative cartography: From mapping stories to the narrative of maps and mapping. *Cartographic Journal* 51(2): 101–106. <https://doi.org/10.1179/0008704114Z.000000000130>
- Casas-Cortes, M., 2019. Care-tizenship: precarity, social movements, and the deleting/

- re-writing of citizenship. *Citizensh. Stud.* 23, 19–42. doi:10.1080/13621025.2018.1556248
- Chan, K. M. A., P. Balvanera, K. Benessaiah, M. Chapman, S. Díaz, E. Gómez-Baggethun, R. Gould, N. Hannahs, K. Jax, S. Klain, G. W. Luck, B. Martín-López, B. Muraca, B. Norton, K. Ott, U. Pascual, T. Satterfield, M. Tadaki, J. Taggart, and N. Turner. 2016. Opinion: Why protect nature? Rethinking values and the environment. *Proceedings of the National Academy of Sciences* 113(6): 1462–1465.
- Chervier, C., Le Velly, G., Ezzine-de-Blas, D., 2019. When the implementation of payments for biodiversity conservation leads to motivation crowding-out: a case study from the cardamoms forests, Cambodia. *Ecol. Econ.* 156, 499–510. <https://doi.org/10.1016/J.ECOLECON.2017.03.018>.
- Chhatre, A., and A. Agrawal. 2009. Trade-offs and synergies between carbon storage and livelihood benefits from forest commons. *Proceedings of the National Academy of Sciences* 106(42): 17667–17670. doi: 10.1073/pnas.0905308106
- Cidrás, D., Lois-González, R.-C., Paül, V., Cidrás, D., Lois-González, R.-C., Paül, V., 2018. Rural Governance against Eucalyptus Expansion in Galicia (NW Iberian Peninsula). *Sustainability* 10, 3396. <https://doi.org/10.3390/su10103396>.
- Cleaver, F. 2012. *Development Through Bricolage. Rethinking Institutions for Natural Resource Management*. London and New York: Routledge. ISBN 9781844078691
- Cleaver, F.D., De Koning, J., 2015. Furthering critical institutionalism. *Int. J. Commons* 9, 1. <https://doi.org/10.18352/ijc.605>.
- Cleaver, F.D., Franks, T.R., 2005. *How institutions elude design: river basin management and sustainable livelihoods*. University of Bradford. Bradford Centre for International Development. BCID Research Paper, No. 12.
- Clough, N. L. 2012. Emotion at the Center of Radical Politics: On the Affective Structures of Rebellion and Control. *Antipode* 44(5): 1667–1686. <https://doi.org/10.1111/j.1467-8330.2012.01035.x>
- Cooke, B., and U. Kothari. 2001. *Participation : the new tyranny?* London, UK: Zed Books. ISBN: 0027-8424
- Copena Rodríguez, D., 2018. Montes Veciñais en Man Común e Baldios: Unha análise comparativa das propiedades comunitarias de Galicia e Portugal. *Sémata Cien. Soc. e Human.* 30, 85–104. <https://doi.org/10.15304/s.30.5379>.
- Cordero Rivera, A., 2017. Large scale eucalypt plantations associated to increased fire risk. *PeerJ Prepr.* 5. <https://doi.org/10.7287/peerj.preprints.3348v1>.
- Cox, M., Arnold, G., Villamayor, S., 2010. A Review of Design Principles for Community- based Natural Resource Management. *Ecology and Society* 15(4): 38.[online] URL: < [http:// www.ecologyandsociety.org/vol15/iss4/art38/](http://www.ecologyandsociety.org/vol15/iss4/art38/) >.
- Crang, M., and T. Cook. 1995. *Doing Ethnographies*. Norwich: Geobooks. doi:

- 10.1063/1.2756072
- Cumbers, A., 2015. Constructing a global commons in, against and beyond the state. *Sp. Polity* 19, 62–75. doi:10.1080/13562576.2014.995465
- De Angelis, M., Harvie, D., 2014. The Commons. In: Parker, M., Cheney, G., Fournier, V., Land, C. (Eds.), *The Routledge Companion to Alternative Organization*, pp. 280–294. ISBN 9781138386174
- de Koning, J., Cleaver, F., 2012. Institutional bricolage in community forestry: an agenda for future research. In: Van Bommel, S., Ros-Tonen, M.A.F., Verschoor, G.M., Arts, B. (Eds.), *Forest People Interfaces; Understanding Community Forestry and Biocultural Diversity*. Wageningen Academic Publishers. <https://doi.org/10.3920/978-90-8686-749-3>.
- De Moor, T., 2011. Dossier « Le champ des commons en question: perspectives croisées » – From common pastures to global commons: a historical perspective on interdisciplinary approaches to commons. *Natures Sci. Sociétés* 19, 422–431. <https://doi.org/10.1051/nss/2011133>.
- Dekker, L.A.G., Arts, K., Turnhout, E., 2020. From rationalities to practices: understanding unintended consequences of CBNRM. *Conserv. Soc.* 18, 137–147. [https://doi.org/10.4103/cs.cs\\_19\\_29](https://doi.org/10.4103/cs.cs_19_29).
- Dennis, M., James, P., 2016. User participation in urban green commons: exploring the links between access, voluntarism, biodiversity and well being. *Urban For. Urban Green.* 15, 22–31. <https://doi.org/10.1016/j.ufug.2015.11.009>.
- Devine, J.A., Baca, J.A., 2020. The Political Forest in the Era of Green Neoliberalism. *Antipode* 52, 911–927. doi:10.1111/anti.12624
- Diprose, G., 2016. Negotiating interdependence and anxiety in community economies, *Environment and Planning A*. Minneapolis. doi: 10.1177/0308518X16638659.
- Diprose, G., K. Dombroski, S. Healy, and J. Waitoa. 2017. Community economies: Responding to questions of scale, agency and indigenous connections in Aotearoa New Zealand. *Counterfutures* (4): 167–183. <https://hdl.handle.net/10092/100197>
- Diprose, K., 2015. Resilience is futile. *Soundings* 58, 44–56. <https://doi.org/10.3898/136266215814379736>.
- Domínguez García, M.D., Swagemakers, P., Copena Rodríguez, D., Covelo Alonso, J., Simón Fernández, X., 2014. Collective agency and collaborative governance in managing the commons: the case of “A Serra do Galiñeiro” in Galicia, Spain. *Spanish J. Rural Dev.* V, 49–63.
- Douglas, M.T., 1986. *How Institutions Think*. Syracuse University Press. Syracuse, New York. doi: 10.2307/2069673.
- Duffy, M., Gallagher, M., Waitt, G., 2018. Emotional and affective geographies of sustainable community leadership: a visceral approach. *Geoforum*. <https://doi.org/10.1016/J.GEOFORUM.2018.09.005>.
- Eckerberg, K., and C. Sandström. 2013. Forest conflicts: A growing research field.

- Forest Policy and Economics 33: 3–7. doi: 10.1016/j.forpol.2013.05.001
- Elmhirst, R. 2011. Migrant pathways to resource access in Lampung's political forest: Gender, citizenship and creative conjugality. *Geoforum* 42(2): 173–183.
- Elo, S., Kyngäs, H., 2008. The qualitative content analysis process. *J. Adv. Nurs.* 62, 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
- Escobar, A. 2001. Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20(2): 139–174. [https://doi.org/10.1016/S0962-6298\(00\)00064-0](https://doi.org/10.1016/S0962-6298(00)00064-0)
- Escobar, A. 2008. *Territories of difference: place, movements, life, redes*. Durham, USA: Duke University Press. ISBN-13. 978-0822343271
- Esteves, A. M. 2017. Radical environmentalism and “commoning”: Synergies between ecosystem regeneration and social governance at Tamera ecovillage, Portugal. *Antipode* 49, 357–376. <https://doi.org/10.1111/anti.12278>.
- Euler, J., 2018. Conceptualizing the commons: moving beyond the goods-based definition by introducing the social practices of commoning as vital determinant. *Ecol. Econ.* 143, 10–16. <https://doi.org/10.1016/j.ecolecon.2017.06.020>.
- Fariña Tojo, J. 1980. *Los asentamientos rurales e galicia*. Madrid: Instituto de Estudios de Administración Local.
- Fazey, I., N. Schöpke, G. Caniglia, A. Hodgson, I. Kendrick, C. Lyon, G. Page, J. Patterson, C. Riedy, T. Strasser, S. Verveen, D. Adams, B. Goldstein, M. Klaes, G. Leicester, A. Linyard, A. McCurdy, ..., and H. R. Young. 2020. Transforming knowledge systems for life on Earth: Visions of future systems and how to get there. *Energy Research and Social Science* 70(September): 101724. <https://doi.org/10.1016/j.erss.2020.101724>
- Feola, G. 2015. Societal transformation in response to global environmental change: A review of emerging concepts. *Ambio* 44(5): 376–390. DOI 10.1007/s13280-014-0582-z
- Fleischman, F., Solorzano, C.R., 2018. Institutional supply, public demand, and citizen capabilities to participate in environmental programs in Mexico and India. *Int. J. Commons* 12, 162–190. <https://doi.org/10.18352/ijc.849>.
- Folke, C., 2006. Resilience: the emergence of a perspective for social–ecological systems analyses. *Glob. Environ. Chang.* 16, 253–267. <https://doi.org/10.1016/j.gloenvcha.2006.04.002>.
- Fournier, V., 2013. Commoning: on the social organisation of the commons. *M@n@gement* 4, 433–453. <https://doi.org/10.3917/mana.164.0433>.
- Franklin, A., and P. Blyton. 2012. *Researching sustainability: a guide to social science methods, practice and engagement*. London, UK: Routledge. ISBN: 1317972716
- Franklin, A., and T. Marsden. 2015. (Dis)connected communities and sustainable place-making. *Local Environment* 20(8): 940–956. doi: 10.1080/13549839.2013.879852

- Freire Cedeira, A. 2011. En Defensa de lo Suyo: Propiedad Forestal y Conflictividad Social Durante el Franquismo: Los Montes Vecinales de Cerceda. Galicia: Fundación Juana de la Vega. ISBN-13: 978-84-9887-648-2
- García López, G.A., Velicu, I., D'Alisa, G., 2017. Performing Counter-Hegemonic Common(s) Senses: Rearticulating Democracy, Community and Forests in Puerto Rico. *Capital. Nat. Social.* 28, 88–107. doi:10.1080/10455752.2017.1321026
- García Quiroga, F., 2013. Desde la desarticulación al presente de los montes vecinales en mano común en Galicia. *Teknokultura. Rev. Cult. Digit. y Movimientos Soc.* 10, 155–176. ISSN: 1549 2230
- García-Barrios, R., Alavez-Vargas, M., Skulska, I., 2013. La Forestería Comunitaria: Un espacio privilegiado para otra ecología de poderes y saberes, SCRAM—Crises, Gestão de Risco e Novos Arranjos Socio-Ecológicos para Florestas: Uma Perspetiva Dos Estudos Sobre Ciência e Tecnologia (Final Report. Coimbra, Portugal).
- García-López, G. A., U. Lang, and N. Singh. 2021. Commons, commoning and co-becoming: Nurturing life-in-common and post-capitalist futures (An introduction to the theme issue). *Environment and Planning E: Nature and Space* 4(4): 1199–1216.
- García-López, G.A., 2019. Rethinking elite persistence in neoliberalism: foresters and techno-bureaucratic logics in Mexico's community forestry. *World Dev.* 120, 169–181. <https://doi.org/10.1016/J.WORLDDEV.2018.03.018>.
- García-López, G.A., Antinori, C., 2018. Between Grassroots Collective Action and State Mandates: The Hybridity of Multi-Level Forest Associations in Mexico. *Conserv. Soc.* 16, 193–204. doi:10.4103/cs.cs\_16\_115
- Gatto, P., Bogataj, N., 2015. Disturbances, robustness and adaptation in forest commons: comparative insights from two cases in the southeastern Alps. *Forest Policy and Economics.* 58, 56–64. <https://doi.org/10.1016/j.forpol.2015.03.011>.
- Gibson-Graham, J. K. 2008. Diverse economies: Performative practices for 'other worlds'. *Progress in Human Geography* 1–20. doi: 10.1177/0309132508090821
- Gibson-Graham, J. K., A. Hill, and L. Law. 2016b. Re-embedding economies in ecologies: Resilience building in more than human communities. *Building Research & Information* 44(7): 703–716. doi: 10.1080/09613218.2016.1213059
- Gibson-Graham, J. K., and G. Roelvink. 2010. An Economic Ethics for the Anthropocene. *Antipode* 41(S1): 320–346. *Antipode* 41, 320–346. <https://doi.org/10.1002/9781444397352.ch15>.
- Gibson-Graham, J.K., 1996. *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy.* University of Minnesota Press. Pages: 348
- Gibson-Graham, J.K., 2006. *A Postcapitalist Politics.* University of Minnesota Press. ISBN: 978-0-8166-9843-1

- Gibson-Graham, J.K., Cameron, J., Healy, S., 2016a. Commoning as a postcapitalist politics. In: Amin, A., Howell, P. (Eds.), *Releasing the Commons: Rethinking the Futures of the Commons*. Routledge, pp. 192–212. ISBN: 9781315673172
- Gibson, C. C., M. A. McKean, and E. Ostrom. 2000. *People and forests: Communities, institutions, and governance*. editors. C. Gibson, . M. McKean, and . E. Ostrom. Cambridge, Massachusetts, and London, England: The MIT press.
- Gilmore, A. 2017. The park and the commons: Vernacular spaces for everyday participation and cultural value. *Cultural Trends* 26(1): 34–46. doi: 10.1080/09548963.2017.1274358
- Goldman, M. 1993. Tragedy of the commons or the commoners' tragedy: The state and ecological crisis in India\*. *Capitalism Nature Socialism* 4(4): 49–68. <https://doi.org/10.1080/10455759309358565>
- Goldman, M., 1998. Inventing the commons: theories and practices of the commons' professional. In M. Goldman (eds). *Privatizing Nature: Political Struggles for the Global Commons*. New Brunswick, NJ: Rutgers University Press.
- Gómez-Vázquez, I., Álvarez-Álvarez, P., Marey-Pérez, M.F., 2009. Conflicts as enhancers or barriers to the management of privately owned common land: a method to analyze the role of conflicts on a regional basis. *For. Policy Econ.* 11, 617–627. <https://doi.org/10.1016/j.forpol.2009.09.001>.
- González-Hidalgo, M. 2021. The ambivalent political work of emotions in the defence of territory, life and the commons. *Environment and Planning E: Nature and Space* 4(4): 1291–1312. doi: 10.1177/2514848620961737
- González-Hidalgo, M., and C. Zografos. 2019. Emotions, power, and environmental conflict: Expanding the 'emotional turn' in political ecology. *Progress in Human Geography* 44(2): 235–255. doi: 10.1177/0309132518824644
- Goodwin, G., 2019. The problem and promise of coproduction: Politics, history, and autonomy. *World Dev.* 122, 501–513. doi:10.1016/J.WORLDDEV.2019.06.007
- Göpel, M., 2016. The Great Mindshift. <https://doi.org/10.1007/978-3-319-43766-8>.
- Grupo dos Comúns, 2006. *Os montes Veciñais en Man Común*. Xerais. ISBN: 9788497824446
- Grant, H., Le Billon, P., 2019. Growing Political: Violence, Community Forestry, and Environmental Defender Subjectivity. *Soc. Nat. Resour.* 32, 768–789. doi:10.1080/08941920.2019.1590669
- Haggerty, J. H., E. L. Rink, R. McAnally, and E. Bird. 2018. Restoration and the Affective ecologies of healing: Buffalo and the Fort Peck tribes. *Conservation and Society* 16(1): 21–29. doi: 10.4103/cs.cs\_16\_90.
- Hall, K., Cleaver, F., Franks, T., Maganga, F., 2013. Critical institutionalism: a synthesis and exploration of key themes (No. 63), *Environment, Politics and Development Working Paper Series*, Environment, Politics and Development Working Paper Series.



- Haraway, D., 2010. When species meet: Staying with the trouble, Environment and Planning D: Society and Space. SAGE Publications. UK: London, England. doi: 10.1068/d2706wsh.
- Hardin, G.J., 1968. The tragedy of the commons. *Science* (80-). 162, 8. doi: 10.1126/science.162.3859.1243.
- Hecht, S.B., 2011. The new Amazon geographies: Insurgent citizenship, “Amazon Nation” and the politics of environmentalisms. *J. Cult. Geogr.* 28, 203–223. doi: 10.1080/08873631.2011.548500
- Herman, A., 2016. ‘More-than-human’ resilience(s)? Enhancing community in Finnish forest farms. *Geoforum* 69, 34–43. <https://doi.org/10.1016/j.geoforum.2015.12.005>.
- Holston, J. 2009. Insurgent Citizenship in an Era of Global Urban Peripheries. *City & Society* 21(2): 245–267. doi: 10.1111/j.1548-744X.2009.01024.x
- Horlings, L. G. 2018. Politics of connectivity: The relevance of place-based approaches to support sustainable development and the governance of nature and landscape. In: *The SAGE Handbook of Nature* (ed. Marsden, T.). Pp. 304–324. SAGE Publications Inc.
- Horlings, L. G., D. Roep, and W. Wellbrock. 2018. The role of leadership in place-based development and building institutional arrangements. *Local Economy: The Journal of the Local Economy Policy Unit* 33(3): 245–268. doi: 10.1177/0269094218763050
- Horlings, L. G., M. Nieto-Romero, S. Pisters, and K. Soini. 2019. Operationalising transformative sustainability science through place-based research: The role of researchers. *Sustainability Science* 1–18. doi: 10.1177/0269094218763050
- Hufford, M. 2016. Deep commoning: public folklore and environmental policy on a resource frontier. *International Journal of Heritage Studies* 22(8): 635–649. doi: 10.1080/13527258.2016.1186103
- Ingold, T., 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. Routledge, London and New York. <https://doi.org/10.1017/CBO9781107415324.004>.
- Ingram, V., Ros-Tonen, M.A.F., Dietz, T., 2015. A fine mess: Bricolaged forest governance in Cameroon. *Int. J. Commons*. 9, 41. <https://doi.org/10.18352/ijc.516>.
- IPBES. 2019. Summary for policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services. Bonn: IPBES.
- Jeannotte, M. S. 2016. Story-telling about place: Engaging citizens in cultural mapping. *City, Culture and Society* 7(1): 35–41. <http://dx.doi.org/10.1016/j.ccs.2015.07.004> 1877-9166/©
- Jhagroe, S. 2018. Transition scientivism: on activist gardening and co- producing transition knowledge ‘from below.’ In: *Action Research in Policy Analysis*. Critical

- and Relational Approaches to Sustainability Transitions (eds. Bartels, K. P. R. and J. M. Wittmayer). Routledge. London and New York.
- Kaika, M., 2017. 'Don't call me resilient again!': the New Urban Agenda as immunology or what happens when communities refuse to be vaccinated with 'smart cities' and indicators. *Environ. Urban.* 29, 89–102. <https://doi.org/10.1177/0956247816684763>.
- Kemmis, S., Mclaggart, R., Nixon, R., 2014a. *The Action Research Planner. Doing Critical Participatory Action Research*. Springer, Singapore Heidelberg New York Dordrecht London. doi: 10.1007/978-981-4560-67-2.
- Kemmis, S., R. Mclaggart, and R. Nixon. 2014. *The Action Research Planner. Doing Critical Participatory Action Research*. Singapore Heidelberg New York Dordrecht London: Springer. ISBN: 9814560677
- Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grooterboer, P., Bristol, L., 2014b. *Changing Practices, Changing Education*. Springer. ISBN: 9789814560467
- Klúvánková-Oravská, T., Chobotová, V., 2006. Shifting governance. Managing the commons: the case of Slovenský Raj National Park. *Sociologia* 38 (3), 221–244.
- Krzywoszynska, A. 2019. Caring for soil life in the Anthropocene: The role of attentiveness in more-than-human ethics. *Transactions of the Institute of British Geographers* 44(4): 661–675. doi: 10.1111/tran.12293
- Lamarca, M.G., 2015. Insurgent acts of being-in-common and housing in Spain: Making urban commons? *Urban Commons Mov. Beyond State Mark.* 165–177. doi:10.1515/9783038214953-011
- Lana, J.M., 2013. The “concurrence” and “hierarchization” of rights to property: the case of public lands in Spain. In: Beaur, G., Schofield, R., Chevet, J.M., Pérez-Picazo, T. (Eds.), *Property Rights, Land Markets and Economic Growth in the European Countryside (Thirteenth-Twentieth Centuries)*. Brepols, Turnhout, Belgium and COST, pp. 123–138.
- Lane, M.B., Corbett, T., 2005. The tyranny of localism: indigenous participation in community-based environmental management. *J. Environ. Policy Plan.* 7, 141–159. <https://doi.org/10.1080/15239080500338671>.
- Lang, D. J., A. Wiek, M. Bergmann, M. Stauffacher, P. Martens, P. Moll, M. Swilling, and C. J. Thomas. 2012. Transdisciplinary research in sustainability science: practice, principles, and challenges. *Sustainability Science* 7(S1): 25–43. doi: 10.1007/s11625-011-0149-x
- Latimer, J., and M. Miele. 2013. Naturecultures? Science, Affect and the Non-human. *Theory, Culture & Society* 30(8): 5–31. <https://doi.org/10.1177/0263276413502088>
- Latour, B., 2004. How to talk about the body? The normative dimension of science studies. *Body Soc.* 10, 205–229. <https://doi.org/10.1177/1357034X04042943>.
- Lawrence, A., Gatto, P., Bogataj, N., Lidestav, G., 2021. Forests in common: learning

- from diversity of community forest arrangements in Europe. *Ambio* 50, 448–464. <https://doi.org/10.1007/s13280-020-01377-x>.
- Le Tourneau, F.-M., Beaufort, B., 2017. Exploring the boundaries of individual and collective land use management: institutional arrangements in the PAE Chico Mendes (Acre, Brazil). *Int. J. Commons* 11, 70. <https://doi.org/10.18352/ijc.589>.
- Lejano, R., Castro, F., 2014. Social dimensions of the environment: the invisible hand of community. *Environ. Sci. Policy* 36, 73–85. doi: <https://doi.org/10.1016/j.envsci.2013.07.012>
- Lejano, R., Guo, J., Lian, H., Yon, B., 2018. *A Phenomenology of Institutions: Relationality and Governance in China and Beyond*. Routledge, New York. ISBN 9781138667365
- Li, T. M. 2002. Engaging simplifications: Community-based resource management, market processes and state agendas in Upland Southeast Asia. *World Development* 30(2): 265–283. doi: 10.1016/S0305-750X(01)00103-6
- Linebaugh, P., 2008. The Magna Carta Manifesto. *Liberties and commons for all*, Journal of Chemical Information and Modeling. University of California Press, California. doi: 10.1017/CBO9781107415324.004.
- Lise, W., 2000. Factors influencing people's participation in forest management in India. *Ecol. Econ.* 34, 379–392. [https://doi.org/10.1016/S0921-8009\(00\)00182-8](https://doi.org/10.1016/S0921-8009(00)00182-8).
- Llano-Arias, V. 2015. Community knowledge sharing and co-production of water services: Two cases of community aqueduct associations in Colombia. *Water Alternatives* 8(2): 77–98.
- Lombao, D. 2018. El 80% de las 62.000 hectáreas arrasadas por los incendios de 2017 en Galicia ardieron en dos días de octubre. *elDiario.es*. [https://www.eldiario.es/galicia/hectareas-arrasadas-incendios-galicia-ardieron\\_1\\_2169798.html](https://www.eldiario.es/galicia/hectareas-arrasadas-incendios-galicia-ardieron_1_2169798.html)
- Lopes, J., 2008. Gestão dos terrenos comunitários do noroeste da península ibérica : muito estado e pouca participação. In: Congresso de Estudos Rurais (III CER). UAlg, Faro, Portugal.
- Lopes, L. F. 2014. *Advanced Studies on Mainland Portuguese Common Lands and Forests*. Vila Real. PhD thesis, Universidade de Trás-os-Montes e Alto Douro
- Lopes, L. F. G., J. M. R. dos Santos Bento, A. F. A. C. Cristovão, and F. O. Baptista. 2013. Institutionalization of common land property in Portugal: Tragic trends between “Commons” and “Anticommons.” *Land Use Policy* 35: 85–94. <https://doi.org/10.1016/j.landusepol.2013.05.007>
- Lund, C., 2016. Rule and Rupture: State Formation through the Production of Property and Citizenship, *Development and Change*. doi:10.1111/dech.12274
- Lund, J., 2015. Paradoxes of participation: the logic of professionalization in participatory forestry. *For. Policy Econ.* 60, 1–6. <https://doi.org/10.1016/J.FORPOL.2015.07.009>.
- Lydon, M. 2003. *Community Mapping The Recovery (and Discovery) of our Common*

- Ground [1] Maeve Lydon. 57: 1–32.
- MA. 2005. Millenium Ecosystem Assessment. <http://www.maweb.org/en/index.aspx>.
- Macgregor, S. 2016. Citizenship: Radical, Feminist, and Green. In: *The Oxford Handbook of Environmental Political Theory* (eds. Gabrielson, T., J. M. M. Cheryl Hall, and D. Schlosberg). Pp. 1–16. Oxford University Press.
- Macgregor, S., 2014. Ecological citizenship, in: Heijden, H.-A. van der (Ed.), *Handbook of Political Citizenship and Social Movements*. pp. 107–132. doi:<https://doi.org/10.4337/9781781954706>
- Mantescu, L., Vasile, M., 2009. Property reforms in rural Romania and community-based forests. *Rom. Sociol.* 7, 95–113. doi:Editura Polirom.
- Marey-Pérez, M.F., Calvo-González, A., Domínguez-Torres, G., 2014. Are the communal forest owners involved in the management of their lands?: a qualitative analysis for the case of Galicia (Spain). *Bosque* 35, 207–215. <https://doi.org/10.4067/S0717-92002014000200008>.
- Marey-Pérez, M.F., Díaz-Varela, E., Calvo-González, A., 2015. Does higher owner participation increase conflicts over common land? An analysis of communal forests in Galicia (Spain). *IForest* 8, 533–543. <https://doi.org/10.3832/ifor1060-008>.
- Marey-Pérez, M.F., Gómez-Vázquez, I., Díaz-Varela, E., 2010. Different approaches to the social vision of communal land management: the case of Galicia (Spain). *Spanish J. Agric. Res.* 8, 848. <https://doi.org/10.5424/sjar/2010083-1287>.
- Mark, G., and A. Boulton. 2017. Indigenising Photovoice: Putting Māori Cultural Values Into a Research Method. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 18(3). doi: 10.17169/FQS-18.3.2827
- Martínez, M. 2003. Mutaciones del asociacionismo en una ciudad post-industrial. *Zainak. Cuadernos de antropología-etnografía* 2: 1142.
- Martínez, M. 2011. The Citizen Participation of Urban Movements in Spatial Planning: A Comparison between Vigo and Porto. *International Journal of Urban and Regional Research* 35(1): 147–171. <https://doi.org/10.1111/j.1468-2427.2010.00956.x>
- Martínez, M., 2003. Mutaciones del asociacionismo en una ciudad post-industrial. *Zainak. Cuad. Antropol.* 2, 1142.
- Massey, D. 1991. A Global Sense of Place. *Marxism Today* (June): 24–29.
- Massey, D. 2004. Geographies of responsibility. *Geografiska Annaler: Series B, Human Geography* 86(1): 5–18. doi: 10.1111/j.0435-3684.2004.00150.x
- Mattei, U., 2012. First Thoughts for a Phenomenology of the Commons. In: *Wealth Commons A Wolrd Beyond Mark & State* (Ed: Bollier, D, Helfrich, S.). The Commons Strategy Group.
- McCay, B.J., Jentoft, S., 1998. Market or community failure? Critical perspectives on common property research. *Hum. Organ.* 57, 21–29. <https://doi.org/10.17730/humo.57.1.372712415k227u25>.

- McGinnis, M.D., 2014. Social-Ecological System Framework : Initial Changes and Continuing Challenges Social-ecological system framework : initial changes and continuing 19. doi: 10.5751/ES-06387-190230.
- Meijer, M., Díaz-Varela, E., Cardín-Pedrosa, M., 2015. Planning practices in Galicia: How communities compensate the lack of statutory planning using bottom up planning initiatives. *Spanish J. Rural Dev.* 65–80. doi:10.5261/2015.GEN1.08
- Millner, N., I. Peñagaricano, M. Fernandez, and L. K. Snook. 2020. The politics of participation: Negotiating relationships through community forestry in the Maya Biosphere Reserve, Guatemala. *World Development* 127: 104743. <https://doi.org/10.1016/j.worlddev.2019.104743> 0305-750X/Crown
- Milton, K., 2002. Loving nature. Towards and ecology of emotion. In: *Journal of Chemical Information and Modeling*. Routledge, London and New York. <https://doi.org/10.1017/CBO9781107415324.004>.
- Miranda, A. 2016. *Marão Minha Serra. Ansiões e o seu baldio ao longo do tempo*.
- Morales, M. C., and L. M. Harris. 2014. Using subjectivity and emotion to reconsider participatory natural resource management. *World Development* 64: 703–712. Doi: 10.1016/j.worlddev.2014.06.032
- Murray Li, T. 2010. Indigeneity, Capitalism, and the Management of Dispossession. *Current Anthropology* 51(3): 385–414.
- Nárdiz Ortiz, C., S. Hernández Fernandez, I. Español Echaniz, and A. Pérez Alberti. 1998. De la trinchera al falso túnel . El paso de la autopista del Atlántico por el monte de A Madroa en Vigo. *Revista de Obras Públicas* Marzo(3:374).
- Nature's Editorial Team. 2019. The mental health of PhD researchers demands urgent attention. *Nature*. *Nature* (575): 257–258. <https://doi.org/10.1038/d41586-019-03489-1>
- Nieto-Romero, M., Parra, C., Bock, B., 2021. Re-building historical commons: How formal institutions affect participation in community forests in Galicia, Spain. *Ecol. Econ.* 188, 107112. doi:10.1016/J.ECOLECON.2021.107112
- Nieto-Romero, M., Valente, S., Figueiredo, E., Parra, C., 2019b. Historical commons as sites of transformation. A critical research agenda to study human and more-than-human communities. *Geoforum* 107. <https://doi.org/10.1016/j.geoforum.2019.10.004>.
- Nightingale, A. 2013. Fishing for nature: The politics of subjectivity and emotion in Scottish inshore fisheries management. *Environment and Planning A: Economy and Space* 45(10): 2362–2378. doi: 10.1068/a45340
- Nightingale, A.J., 2005. The Experts Taught Us All We Know: Professionalization and Knowledge in Nepalese Community Forestry. *Antipode* 37, 581–604. doi:10.1111/j.0066-4812.2005.00512.x
- Nightingale, A.J., 2011. Beyond design principles: subjectivity, emotion, and the (Ir) rational commons. *Soc. Nat. Resour.* 24, 119–132. <https://doi.org/10.1080/08941920903278160>.

- Nightingale, A.J., 2018. The socioenvironmental state: Political authority, subjects, and transformative socionatural change in an uncertain world. *Environ. Plan. E Nat. Sp.* 1, 688–711. doi:10.1177/2514848618816467
- Nightingale, A.J., 2019. Commoning for inclusion? Commons, exclusion, property and socio-natural becomings. *Int. J. Commons* 13, 16. <https://doi.org/10.18352/ijc.927>.
- O'Brien, K., Sygna, L., 2013. Responding to Climate Change: The Three Spheres of Transformation. *Proc. Transform. a Chang. Clim. Int. Conf. Oslo*, 19-21 June 2013 16–23.
- Olson, M., 1965. *Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press, Boston, MA.
- Olsson, P., Gunderson, L., 2006. Shooting the rapids: navigating transitions to adaptive governance of social-ecological systems. *Ecol. Soc.* 11(1): 18. [online] URL: < [http:// www.ecologyandsociety.org/vol11/iss1/art18/](http://www.ecologyandsociety.org/vol11/iss1/art18/) >.
- Olsson, P., Moore, M.L., Westley, F.R., McCarthy, D.D.P., 2017. The concept of the Anthropocene as a game-changer: a new context for social innovation and transformations to sustainability. *Ecol. Soc.* 22. <https://doi.org/10.5751/ES-09310-220231>.
- Ostrom, E. 2000. Reformulating the Commons. *Swiss Political Science Review* 6(1): 29–52. Doi: 10.1002/j.1662-6370.2000.tb00285.x
- Ostrom, E. 2007. A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences of the United States of America* 104(39): 15181–7. doi: 10.1073/pnas.0702288104
- Ostrom, E. 2011. The Future of the Commons. *Radical History Review* 2011(109): 101–107. doi: 10.1215/01636545-2010-017
- Ostrom, E., 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press. ISBN: 0521405998
- Ostrom, E., 2005. *Understanding Institutional Diversity*. Princeton, NJ: Princeton Univ. Press, Princeton and Oxford. doi: 10.1017/CBO9781107415324.004.
- Ostrom, E., 2009. A general framework for analyzing sustainability of social-ecological systems. *Science* 325, 419–422. <https://doi.org/10.1126/science.1172133>.
- Ostrom, E., P. Theory, and D. C. Washington. 1999. *Self-governance and forest resources*. CIFOR, OCCASIONAL PAPER NO. 20. Bogor, Indonesia.
- Ostrom, E., R. Gardner, and J. Walker. 1994. *Rules, games, and common-pool resources*. Michigan publishing. doi: 10.3998/mpub.9739
- Öztürk, M., J. Jongerden, and A. Hilton. 2014. Commodification and the Social Commons: Smallholder Autonomy and Rural–Urban Kinship Communalism in Turkey. *Agrarian South: Journal of Political Economy: A triannual Journal of Agrarian South Network and CARES* 3(3): 337–367.
- Paletto, A., de Meo, I., Ferretti, F., 2012. The influence of common property rights

- on forest management policy: a case study in Sardinia region, Italy. *For. Stud./Metsanduslikud Uurim.* 56, 16–26. <https://doi.org/10.2478/v10132-012-0002-8>.
- Parra, C., Walsh, C., 2016. Socialities of nature beyond Utopia. *Nat. Cult.* 11, 229–238. <https://doi.org/10.3167/nc.2016.110301>.
- Patnaik, A., G. Ruivenkamp, and I. J. Jongerden. 2017. Marginalized community, space of commons and autonomy: The case of the Deccan Development Society in South India. *Journal of Rural Studies* 53: 173–181. DOI: 10.1016/j.jrurstud.2017.05.019
- Peluso, N. L., and P. Vandergeest. 2011. Political ecologies of war and forests: Counterinsurgencies and the making of national natures. *Annals of the Association of American Geographers* 101(3): 587–608. doi: 10.1080/00045608.2011.560064
- Peluso, N.L., Vandergeest, P., 2001. Genealogies of the political forest and customary rights in Indonesia, Malaysia, and Thailand. *J. Asian Stud.* 60, 761–812. <https://doi.org/10.2307/2700109>.
- Pemán, M.L., De Moor, T., 2013. A tale of two commons. Some preliminary hypotheses on the long-term development of the commons in Western and Eastern Europe, 11th– 19th centuries. *Int. J. Commons* 7, 7–33. <https://doi.org/10.18352/ijc.355>.
- Peters, P.E., 2004. Inequality and social conflict over land in Africa. *J. Agrar. Chang.* 4, 269–314. <https://doi.org/10.1111/j.1471-0366.2004.00080.x>.
- Pieroni, P., M. Galli, and G. Brunori. 2007. Montemagno stories: Narratives and videos as tools to facilitate re-construction of sustainable localities. *The Journal of Agricultural Education and Extension* 9(1): 21–31. doi: 10.1080/13892240385300051
- Plumwood, V. 2009. Nature in the active voice. *Australian Humanities Review* (46): 113–129.
- Pokharel, K., Karki, R., Ojha, H.R., Gentle, P., Acharya, D., Banjade, M., Paudel, D., 2020. State-community relations and deliberative politics within federal forest governance in Nepal. *Int. For. Rev.* 22, 370–381. doi:10.1505/146554820830405609
- Popa, F., Guillermin, M., Dedeurwaerdere, T., 2015. A pragmatist approach to transdisciplinarity in sustainability research. *Futures* 65, 45–56. <https://doi.org/10.1016/j.futures.2014.02.002>
- Pratt, K. 2012. Rethinking community: Conservation, practice, and emotion. *Emotion, Space and Society* 5(3): 177–185. <https://doi.org/10.1016/j.emospa.2011.08.003>
- Premrl, T., Udovc, A., Bogataj, N., Krč, J., 2015. From restitution to revival: a case of commons re-establishment and restitution in Slovenia. *For. Policy Econ.* 59, 19–26. <https://doi.org/10.1016/j.forpol.2015.05.004>.
- Puello-Socarrás, J. F., and C. J. Martín. 2020. The two faces of the common? Communal forms of government from below as counter-hegemonic alternatives. *Ephemera*

- 20(1): 17–49. ISSN: 20521499
- Ramprasad, V., Joglekar, A., Fleischman, F., 2020. Plantations and pastoralists: afforestation activities make pastoralists in the Indian Himalaya vulnerable. *Ecol. Soc.* 25, art1 <https://doi.org/10.5751/ES-11810-250401>.
- Rauschmayer, F., 2017. Transition to Sustainability as Interbeing-or: from oncology to ontology. In: Meadowcroft, J., Banister, D., Holden, E., Langhelle, O., Linnerud, K., Gilpin, G. (Eds.), *What Next for Sustainable Development? Our Common Future at Thirty*, pp. 1–15.
- Ribot, J. C., A. Chhatre, and T. Lankina. 2008. Introduction: Institutional choice and recognition in the formation and consolidation of local democracy. *Conservation and Society* 6(1): 1–11.
- Ribot, J.C., Agrawal, A., Larson, A.M., 2006. Recentralizing while decentralizing: how national governments reappropriate forest resources. *World Dev.* 34, 1864–1886. <https://doi.org/10.1016/j.worlddev.2005.11.020>.
- Ribot, J.C., Peluso, N.L., 2009. A theory of access\*. *Rural Sociol.* 68, 153–181. <https://doi.org/10.1111/j.1549-0831.2003.tb00133.x>.
- Rico Boquete, E. 1995. *Política forestal e repoboacións en Galicia, 1941-1971*. Santiago de Compostela: Universidade de Santiago de Compostela.
- Rivera Lopez, F., F. Wickson, and V. Hausner. 2018. Finding CreativeVoice: Applying Arts-Based Research in the Context of Biodiversity Conservation. *Sustainability* 10(6): 1778. doi: 10.3390/su10061778
- Rode, J., Gómez-Baggethun, E., Krause, T., 2015. Motivation crowding by economic incentives in conservation policy: a review of the empirical evidence. *Ecol. Econ.* 117, 270–282. <https://doi.org/10.1016/J.ECOLECON.2014.11.019>.
- Roelvink, G., Gibson-Graham, J.K., 2009. A postcapitalist politics of dwelling: ecological humanities and community economies in conversation. *Aust. Humanit. Rev.* 46, 145–158.
- Roelvink, G., K. St. Martin, and J. K. Gibson-Graham. 2015. *Making Other Worlds Possible. Performing Diverse Economies*. Minneapolis: University of Minnesota Press.
- Ruddick, S., 2010. The politics of affect: spinoza in the work of Negri and Deleuze. *Theory, Culture & Society.* 27, 21–45. <https://doi.org/10.1177/0263276410372235>.
- Ruivenkamp, G., and A. Hilton. 2017. *Perspectives on Commoning: Autonomist Principles and Practices (In Common)*. Bloomsbury Publishing.
- Rutt, R.L., 2015. Reconceptualizing the Social Contributions of Community Forestry as Citizenship. *Int. For. Rev.* 17, 326–339. doi:10.1505/146554815815982611
- Safri, M., 2015. The Politics of Mapping Solidarity Economies and Diverse Economies in Brazil and the Northeastern United States. In: Roelvink, G., Martin, K. St., Gibson- Graham, J.K. (Eds.), *Making Other Possible Worlds*. University of Minnesota Press, Minneapolis, pp. 296–321.



- San-Miguel-Ayanz, J., T. Oom, D., Artes, D. X. Viegas, P. Fernandes, N. Faivre, S. Freire, P. Moore, F. Rego, and M. Castellnou. 2021. Forest fires in Portugal in 2017. In: *Science for Disaster Risk Management 2020: acting today, protecting tomorrow* (eds. Casajus Valles, A., M. Marin Ferrer, K. Poljanšek, and I. Clark). Pp. 413–431. Luxembourg: Publications Office of the European Union.
- Sanchis-Ibor, C., R. Boelens, and M. García-Mollá. 2017. Collective irrigation reloaded. Re-collection and re-moralization of water management after privatization in Spain. *Geoforum* 87: 38–47. doi: 10.1016/J.GEOFORUM.2017.10.002
- Sandström, E., Ekman, A.-K., Lindholm, K.-J., 2017. Commoning in the periphery? The role of the commons for understanding rural continuities and change. *Int. J. Commons* 11, 508. <https://doi.org/10.18352/ijc.729>.
- Sandström, S., Poudyal, M., Lejon, S.B., Lidestav, G., 2016. Absent neighbours and passive shareholders – The issue of residency and involvement in the management of a forest common. *J. For. Econ.* 24, 205–217. <https://doi.org/10.1016/j.jfe.2016.05.003>.
- Saunders, F.P., 2014. The promise of common pool resource theory and the reality of commons projects. *Int. J. Commons* 8, 636–656. <https://doi.org/10.18352/ijc.477>.
- Saunders, M., P. Lewis, and A. Thornhill. 2009. Understanding research philosophies and approaches. In: *Research Methods for Business Students*. Pp. 106–136. Marlowe (UK): Prentice-Hall.
- Schatzki, T.R., Cetina, K.K., Von Savigny, E., 2001. *The Practice Turn in Contemporary Theory*. Routledge, London and New York.
- Schindel Dimick, A., 2015. Supporting youth to develop environmental citizenship within/against a neoliberal context. *Environ. Educ. Res.* 21, 390–402. doi:10.1080/13504622.2014.994164
- Schlager, E., Ostrom, E., 1992. Property rights regimes and natural resources: a conceptual analysis. *Land Econ.* 68, 247–265. <https://doi.org/10.2307/3146375>.
- Schlueter, A., 2008. Small-scale European forestry, an anticommons? *Int. J. Commons* 2, 248. <https://doi.org/10.18352/ijc.42>.
- Seijo, F., 2005. The Politics of Fire: Spanish Forest Policy and Ritual Resistance in Galicia, Spain. *Env. Polit.* 14, 380–402. doi:10.1080/09644010500087665
- Serra, R., Allegratti, G., 2020. Democracies in common places : stories from baldios and ‘fire-tales’ in Portugal. *Sci. del Territ.* 8. doi:10.13128/sdt-11790
- Serra, R., Barca, S. and Meira, T., 2015. Eucalyptus monoculture and common lands, Portugal [WWW Document]. *Environ. Justice Atlas*. URL: <https://ejatlas.org/print/eucalyptus-monoculture-and-common-lands-portugal>.
- Serra, R., Rodrigues, E., García-Barrios, R., 2017. Mushrooming communities: a field guide to mycology in the community forests of Portugal. *Sustainability* 9, 1–17. <https://doi.org/10.3390/su9060924>.

- Short, C., 2008. The traditional commons of England and Wales in the twenty-first century: meeting new and old challenges. *Int. J. Commons* 2, 192. <https://doi.org/10.18352/ijc.47>.
- Sikor, T., Lund, C., 2010. Access and property: A Question of Power and Authority. *Polit. Possess. Prop. Auth. Access to Nat. Resour.* 40, 1–22. doi:10.1002/9781444322903.ch1
- Singh, N. M. 2018a. Introduction: Affective Ecologies and Conservation. *Conservation and Society* 16(1): 1–7. doi: 10.4103/cs.cs\_18\_33
- Singh, N. M. 2018b. Becoming a Commoner: The commons as sites for affective socio-nature encounters and co-becomings. *Ephemera theory & politics in organization* 17(4): 751–776. ISSN: 14732866
- Singh, N.M., 2013. The affective labor of growing forests and the becoming of environmental subjects: Rethinking environmentality in Odisha, India. *Geoforum* 47, 189–198. <https://doi.org/10.1016/j.geoforum.2013.01.010>.
- Singh, N.M., 2015. Payments for ecosystem services and the gift paradigm: Sharing the burden and joy of environmental care. *Ecol. Econ.* 117, 53–61. doi:10.1016/j.ecolecon.2015.06.011
- Sinreich, L., and J. Cupples. 2014. Collaborating with a muddy road and an ailing forest: The construction of ecological citizenship in San Francisco Libre, Nicaragua. *Journal of Latin American Geography* 13(3): 63–85. doi: 10.1353/lag.2014.0044
- Skulska, I., M. C. Colaço, S. Aggarwal, H. Didier, M. do L. Monteiro, and F. C. Rego. 2020a. Assessment of Portuguese Community Forestry using the Voluntary Guidelines on the Responsible Governance of Tenure and FAO Community-Based Forestry Framework. *Society and Natural Resources* 33(1): 101–121.
- Skulska, I., I. Duarte, F. C. Rego, and C. Montiel-Molina. 2020b. Relationships Between Wildfires, Management Modalities of Community Areas, and Ownership Types in Pine Forests of Mainland Portugal. *Small-scale Forestry* 19(2): 231–251.
- Skulska, I., Montiel-Molina, C., Rego, F.C., 2020c. The role of forest policy in Mediterranean mountain community lands: a review of the decentralization processes in European countries. *J. Rural. Stud.* 80, 490–502. <https://doi.org/10.1016/J.JRURSTUD.2020.10.033>.
- Soto Fernández, D., 2016. Conflicto ambiental, transformaciones productivas y cambio institucional. Los comunales de Galicia (España) durante la transición a la democracia Environmental conflict, productive transformations and institutional changes. In: *The Galician Commons*, pp. 105–121. <https://doi.org/10.4422/ager.2012.05.HALAC>.
- Starr, A., Martínez-Torres, M.E., Rosset, P., 2011. Participatory democracy in action: Practices of the Zapatistas and the Movimiento Sem Terra. *Lat. Am. Perspect.* 38, 102–119. doi:10.1177/0094582X10384214

- Stavrides, S., 2015. Common space as threshold space: urban commoning in struggles to re-appropriate public space. *Footprint* 9–19. <https://doi.org/10.7480/footprint.9.1.896>.
- Steinberger, J. K., W. F. Lamb, and M. Sakai. 2020. Your money or your life? The carbon-development paradox. *Environmental Research Letters* 15(4): 044016.
- Sultana, F. 2011. Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict. *Geoforum* 42(2): 163–172. doi: 10.1353/lag.2014.0044
- Sutcliffe, L., Paulini, I., Jones, G., Marggraf, R., Page, N., 2013. Pastoral commons use in Romania and the role of the Common Agricultural Policy. *Int. J. Commons*. DOI: <http://doi.org/10.18352/ijc.367>
- Swan, A., Cooper, N., 2013. Innovative funding methods for rural communities and their water pumps. *Water Resour. Rural Dev.* 1, 17–26. <https://doi.org/10.1016/j.wrr.2013.07.002>.
- Swyngedouw, E., 2010. Apocalypse forever?: Post-political populism and the spectre of climate change. *Theory, Cult. Soc.* 27, 213–232. doi:10.1177/0263276409358728
- Takamura, G., T. Nishide, Y. Kanazawa, and M. Hayashi. 2021. Bundle of Rights Reversed: Anticommons in a Japanese Common Property Forest Due to Legalization. *International Journal of the Commons* 15(1): 259–275.
- Thompson, M., 2015. Between boundaries: from commoning and guerrilla gardening to community land trust development in Liverpool. *Antipode* 47, 1021–1042. <https://doi.org/10.1111/anti.12154>.
- Thornton, P., Ocasio, W., Lounsbury, M., 2012. The institutional logics perspective. In: *A New Approach to Culture, Structure and Process*. Oxford University Press.
- Tronto, J.F., Fisher, B., 1990. Toward a feminist theory of caring. In: Abel, N.E., Nelson, M. (Eds.), *Circles of Care* (pp. 36–54). SUNY Press.
- Tsavdaroglou, C., C. Giannopoulou, C. Petropoulou, and I. Pistikos. 2019. Acts for refugees’ right to the city and commoning practices of care-tizenship in Athens, Mytilene and Thessaloniki. *Social Inclusion* 7(4): 119–130.
- Tsing, A.L., 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton.
- Turnhout, E., P. McElwee, M. Chiroleu-Assouline, J. Clapp, C. Isenhour, E. Kelemen, T. Jackson, D. C. Miller, G. M. Rusch, J. H. Spangenberg, and A. Waldron. 2021. Enabling transformative economic change in the post-2020 biodiversity agenda. *Conservation Letters* 14(4): e12805.
- Tyagi, N., Das, S., 2020. Standing up for forest: a case study on Baiga women’s mobilization in community governed forests in Central India. *Ecol. Econ.* 178, 106812. <https://doi.org/10.1016/J.ECOLECON.2020.106812>.
- Vadjunec, J.M., Schmink, M., Gomes, C.V.A., 2011. Rubber tapper citizens: Emerging places, policies, and shifting rural-urban identities in Acre, Brazil. *J. Cult. Geogr.*

- 28, 73–98. doi:10.1080/08873631.2011.548481
- Van der Leeuw, S., A. Wiek, J. Harlow, and J. Buizer. 2012. How much time do we have? Urgency and rhetoric in sustainability science. *Sustainability Science* 7(S1): 115–120. doi: 10.1007/s11625-011-0153-1
- Vandergeest, P. 2003. Racialization and citizenship in Thai forest politics. *Society and Natural Resources* 16(1): 19–37.
- Vandergeest, P. 2006. Empires of forestry: Professional forestry and state power in Southeast Asia, Part 1. *Environment and History* 12(1): 31–64.
- Veiras, X., Soto, M.A., 2011. La conflictividad de las plantaciones de eucalipto en España (y Portugal). *Análisis y propuestas para solucionar la conflictividad ambiental y social de las plantaciones de eucalipto en la península Ibérica*. Greenpeace.
- Villamayor-Tomas, S., García-López, G., 2018. Social movements as key actors in governing the commons: Evidence from community-based resource management cases across the world. *Glob. Environ. Chang.* 53, 114–126. doi:10.1016/j.gloenvcha.2018.09.005
- Vivero Pol, J. L. 2015. Transition Towards a Food Commons Regime: Re-Commoning Food to Crowd-Feed the World. In: *Perspectives on Commoning. Autonomist Principles and Practices* (eds. Ruivenkamp, G. and A. Hilton). Pp. 325–379. London: Zed Books.
- Vivero Pol, J.L., 2015. Transition towards a food commons regime: re-commoning food to crowd-feed the world. SSRN Electron. J 10.2139/ssrn.2548928.
- Walker, B.H., Abel, N., Anderies, J.M., Ryan, P., 2009. Resilience, adaptability, and transformability in the Goulburn-Broken Catchment, Australia. *Ecol. Soc.* 14 12.
- Westley, F., O. Tjornbo, and L. Schultz. 2013. A theory of transformative agency in linked social-ecological systems. *Ecology and Society* 18(3): 27.
- Wetherell, M. 2015. Trends in the Turn to Affect: A Social Psychological Critique. *Body and Society* 21(2): 139–166.
- Whaley, L. 2018. Critical institutional analysis and development (CIAD) framework. *International Journal of the Commons* 12(2): 137–161.
- Whaley, L., 2018. The critical institutional analysis and development (CIAD) Framework. *Int. J. Commons* 12, 137–161. <https://doi.org/10.18352/ijc.848>.
- Wittmayer, J. M., and N. Schöpke. 2014. Action, research and participation: Roles of researchers in sustainability transitions. *Sustainability Science* 9(4): 483–496. doi: 10.1007/s11625-014-0258-4
- Wright, S., 2015. More-than-human, emergent belongings. *Prog. Hum. Geogr.* 39, 391–411. <https://doi.org/10.1177/0309132514537132>.
- Yin, R. K. 1994. Discovering the future of the case study method in evaluation research. *Evaluation Practice* 15(3): 283–290.

## Annexes

### Annex 1: Table with the participants of the Marão minha serra PAR project

Participant code	Sex and age	Participation & profession
P1	Man, ≈ 70 years old	President of the governing board, subsistence farmer
P2	Man, ≈ 50 years old	Vice president, worker at a public trout nursery within baldio limits
P3	Man, ≈ 40 years old	President of the community assembly, civil construction sector
P4	Man, ≈ 30 years old	Assistant in community assemblies, farm business entrepreneur
P5	Man, ≈ 50 years old	Forest worker hired by the baldio since 2000, subsistence farmer
NP1	Woman, ≈ 50 years old	Subsistence farmer and worker
NP2	Woman, ≈ 30 yearsold	Bank employee
NP3	Woman, ≈ 40 years old	Resident in a nearby city, coming to the parish every weekend with her family
NP4	Man, ≈ 40 years old	Resident in a nearby city, coming every weekend with his family
NP5	Woman, ≈ 15 years old	High school student
NP6	Man, ≈ 60 years old	Free-lance worker in the construction sector
NP7	Man, ≈ 60 years old	President of the parish, hotel employee

## **Annex 2: Presentations, documentary exhibitions and debates around the Marão Minha Serra PAR project.**

The documentary produced during the Marão Minha Serra PAR was presented on five cities in the year following year its production:

- Open documentary exhibition and debate at the University of Aveiro, Aveiro.
- *Open documentary exhibition and debate at the Biblioteca Municipal de Vila Real, Vila Real*
- *Open documentary exhibition and debate at the Associação para a criação do Museu Eduardo Teixeira Pinto - Casa da Granja, Amarante*
- Documentary exhibition in the context of the international cinema festival of *Paisagens – Festival Internacional de Cinema, Sever do Vouga*
- Documentary exhibition in the context of the international cinema festival of *Festival de Cinema de Avanca, Avanca.*

The Marão Minha Serra project was also presented by invitation at:

- “Sarau comunitario em Ansiães”, 2022. Presentation in the context of a Roundtable about community tourism in Ansiães. Organized by Stay to Talk- Instituto de Imersão Cultural.
- “Ciclo A Hora da Floresta”, 2021. Title of communication: Marão minha serra: ativando as ligações afetivas à floresta e ao baldio. Organized within the project “Participação comunitária na construção de uma floresta resiliente e multifuncional” (consórcio F4F - Forest For Future ) coordinated by CFE ad by VOUZELAR - Associação de Promoção de Vouzela.
- World Commons Week, 2019. Local event titled: Investigação-ação com comunidades de baldios. Oportunidades e desafios para a regeneração do rural. Organized in the context of the World Commons Week organized by the International Association for the Study of the Commons, and co-organized in collaboration researchers from the CES-University of Coimbra and ISA-University of Lisbon. <https://wcw2019.iasc-commons.org/>
- COMBART conference, 2019. Title of communication: Envolver os cidadãos através de histórias. Um vídeo- documentário sobre uma comunidade (e o seu baldio) na Serra do Marão.
- *TRANSECO. Economias transformadoras em debate. Presentation and documentary exhibition in the context of a roundtable on the topic: “Commons”. Organized by the Associação Gato Vadio, Porto. <https://www.facebook.com/events/754250341710018/754250345043351/>*

## Scientific summary

The challenges of the current Anthropocene require that research move from studying sustainability solutions to exploring and enhancing processes of transformative change - hence, to *sustainability transformations*. Sustainability transformations generally refer to fundamental changes that tackle the roots of ecological degradation and social inequality. This involves going beyond changes in specific sectors (political, social, economic, etc.) and resource systems (food, energy, forest, etc.) and radically changing the values, mindsets and subjectivities underlying our relations with our environments, our communities and nature.

Within this context, the *commons* has been established as a key organizational system, a practice and an ethic that can potentially inspire and enable sustainability transformations. The commons is both a system to manage resources collectively and sustainably and also a political and social model involving the direct participation of end-users and their collective negotiation of co-existence and care for the common, which is treated as the activity of *commoning*. To date, only a few empirical studies have investigated how and why commoners engage in building *commons systems* and what their contribution is to sustainability transformation.

In order to further address this issue, my thesis explores the practices and process of commoning in three case studies of *community forests*. Community forests are woodlands that local communities have legally enshrined rights to manage and use. Studies of community forests generally lack a focus on commoning, on how commoners' agency plays out in practice, with most studies focusing on cases in the Global South. Thus, this thesis studies community forests in the northwestern part of the Iberian Peninsula (western Europe) considering the following overarching research question: *How does commoning help us to better understand and enhance the agency of commoners in community forests and their contribution to sustainability transformations?*

Further elaborating on the work of such authors as Singh (2018b), Nightingale (2019) and García-López et al. (2021), I take commoning to be a *socio-natural* and *relational process* that involves both *social* and *ecological* objects and relationships. This understanding of commoning *denaturalizes* forests, looking instead at how forests' socio-natures, histories and institutions influence and are influenced by processes and outcomes of commoning. Such a relational understanding transcends the usual divisions of self and community and human and non-human, allowing the development of a richer understanding of *agency*, one that is able to better incorporate its manifold political and social and also *moral* and *affective* dimensions.

The thesis uses three in-depth case studies to study the *mechanisms of commoning* in a variety of contexts within the study area. The north-western part of the Iberian Peninsula (the Galicia region of Spain and the north of Portugal) is chosen as a paradigmatic historically and culturally-defined region where significant areas of historical, Germanic-origin community forests exist. The three cases selected comprises different contexts and commoning practices tackling varied challenges such as rural depopulation or urban sprawl, community and forest degradation. These are O Carballo (Friol municipality, Galicia), Teis (Vigo municipality, Galicia) and Ansiães (Amarante municipality, Northern Portugal). The cases are thus employed for a theoretical, methodological and empirical exploration of commoning processes. The following set of research sub-questions are considered:

- How does the agency of commoners in community forests relate to sustainability transformations? Why does a commoning lens matter in analyzing this relationship?
- Which dimensions of commoning and intervening processes/outcomes are relevant to understanding the emergence and dynamics of commoning initiatives in community forests? How ‘transformative’ are these initiatives, and which challenges, contradictions and ambivalences do they reveal?
- How can a commoning lens inform the design of participatory action research (PAR) to support commoners’ engagement with community forests? Which new insights about commoning, community forests and sustainability transformations does the PAR implementation reveal?

A *multi-method approach* is employed that includes participant observation, in-depth interviews, and informal conversations, along with focus groups and workshops combined with creative methods of participatory engagement. The research followed an iterative and inductive process – going back and forth between empirical data and theory – which enabled the identification of different dimensions of commoning over time, thus building an enriched theoretical framework.

In response to the main research question, three significant conclusions were drawn:

- First, while agency is usually understood as an attribute of stand-alone individuals, one of the key contributions of this thesis is that commoner’s agency cannot be understood in isolation from (historical) interactions between humans and non-humans. Commoners’ actions were found to be motivated at first by more-than-human relations spanning generations and scales. Through time, individuals and communities created new affective relations through their engagement with forests that shaped their actions and shaped them over time (acquiring new knowledge, skills, and subjectivities). Thus, the results gained from this thesis support an



affective understanding of agency, thus: agency emerges from more-than-human assemblages of relationships while enacted by a particular body in continuous becoming with others.

- Exploring processes of commoning in the three communities studied also revealed the highly *political* work of commoners. When engaging with community forests, north-west Iberian commoners were not just managing forests. By participating in decision-making processes and taking responsibility for their communities, including the forests, they were *recovering lost and threatened socio-natures* and *performing new citizenships*. Thus, the thesis supports the idea that forests solidify values and nurture citizens' authority and capacities, suggesting the importance of community forests as arenas that can nurture alternative and expanded forms of democracy.
- Third, the commoning lens allowed for the design of a *participatory action research* (PAR) approach that unveiled important community relations, values, and capacities. The affective mapping both revealed the less visible dimensions of agency (the more-than-human entanglements influencing actions and unconscious power dynamics) and also motivated engagement and produced the feelings of *being-in-common* associated with active engagement in community matters. Engaging with communities was revealed as a highly sensitive process that requires researchers to be very conscious of relationships (of power) within the place and of our own positionalities within these.

Finally, this thesis has opened three avenues for research:

- First, a better understanding of the agency of commoners needs approaches and methods that are more gender-sensitive; gendered research is not well developed, especially in contexts where communities are not resource-dependent.
- Second, this research revealed that commoning is always contradictory and ambivalent, produces exclusions within the community and involves risks to commoners' autonomy from state agents. Thus, there is a need for further investigation into which democratic practices (across scales) can maintain the active and inclusive participation of commoners and accountable and fruitful relationships with state agents.
- Third, the involvement of commoners in the PAR did not change their participation in the community forest in the short term, unveiling a difficulty for participatory/transdisciplinary research in bringing about transformative change. Thus, sustainability researchers need to further document how PAR and other related transdisciplinary approaches are implemented – its challenges, successes, and failures, including how long-term research partnerships between academic institutions and communities emerge and can be sustained.

In conclusion, this thesis has provided some significant insights for theory as well as for practice in the context of sustainable place-based transformations, commons, and community forests research. Revealing the *mechanisms of commoning* is necessary for the development of alternative ways (beyond economic incentives) of promoting community participation in *caring* and *governing* (themselves and their environments). The research has also shown specific, place-based paths of transformations, highlighting the role of the agency of commoners and the various dynamics – challenges, contractions and ambivalences – involved. Finally, the whole thesis design has followed a *performative ontology*, directing attention to marginalized realities (i.e. the transformative potential of commoning, and the affective dimensions of human agency). It also showed how PAR, together with creative methods (e.g. affective mapping), can be effective and rewarding.

## Acknowledgements

I am deeply grateful for the support I received from my mentor Bettina Bock from Wageningen University. Our conversations in the many online meetings have enlightened me on many occasions. Thank you for your close accompaniment especially during this last very intense year, where the agenda of deadlines and meetings helped me move forward and finally to hand in my doctoral thesis.

Certainly, this PhD would not have been the same without the guidance of Constanza Parra from KU Leuven, who agreed to mentor me even before becoming my formal supervisor. My time with her team – full of young researchers as passionate and sometimes lost as me – has truly helped steer and support me. I am also grateful for the online meetings with her, which have guided me in writing the different chapters, as well as for putting me in contact with the juniors of the team, especially Liliana Lozano Flores, Natalia de Mello and Carmen Rodriguez, whom I sincerely hope to see again soon.

I am grateful to my supervisors of the SUSPLACE project, Sandra Valente and Elisabete Figueiredo (University of Aveiro) for giving me the opportunity of discovering the *baldios* and living in Portugal. A particular thanks to Sandra for introducing me and guiding me to the sociological and political reality of forests in Portugal, as well as for assisting me with fieldwork and data analysis.

I must also thank my dear *comuneras* and *comuneros*, without whom this PhD would not even make sense. Thank you for opening the doors of your homes and sharing your history without even knowing me (sometimes with good food on the table). I am especially grateful to José Manuel and Lito from O Carballo for teaching me the meaning of community in such an experiential way. Your honesty and commitment has always left me speechless. From Teis I have to thank especially Eduardo, for being a living encyclopaedia of the neighbourhood workers' movement, Manuel for the passionate walks in the forest, and Alfonso for the countless conversations about the meaning of our ephemeral presence in this world. Finally, I would like to thank my Ansiães colleagues (Alexandre, Américo, Arménio, David, David, Eduarda, Fernando, Judite, Lucilia, Nelo, Norberto, Rosa) as well as the neighbours of Murgido for sharing their affective memories. Your stories are part of me today.

To all my colleagues at SUSPLACE, for making a project an unforgettable journey, and especially to my 'Once Upon the Future' team, Alessandro, Angela, Anastasia, Kelli, and Lorena. I am grateful to all those that supported me at different points in standing up for myself and facing this learning journey. To my office mate in Aveiro, Catarina, my

house mates Cristianne and Joana, and my neighbour in Lisbon Diogo. I also want to thank to *my boss* Marta Varanda and therapist Esther Velázquez who have meant a lot for my personal and professional growth during these last two years in Lisbon.

I extend my thanks to all those who contribute to me being who I am, and without whom I would have abandoned the doctorate a long time ago. To my mother Gloria and my father Juancho, for giving me the security I need by believing in me, for their tireless support on trips and moving houses, but above all for the example they give me as they move forward in life as more vulnerable, serene, and happy. To my sister Cecilia, for being that fairy godmother who always appears when I need her, and my mirror who shows me who I am. And to my brother Alejo, for always showing his love in a subtle way when I needed it most. Thanks to the sisters I chose, Olga and Leire, and finally, to Oscar, for being my biggest fan and synonymous for home, wherever he is.

Finally, thanks to all those who have decided to come to my defence. To my aunties Berti and Carmen, my uncles, Pepe and Nacho, my cousin Celia, my university friends, Ines and Johanna, and the rest of friends and colleagues. I feel fortunate to have them with me in this especial day.

## Agradecimientos

Agradezco profundamente el acompañamiento como orientadora principal de Bettina Bock de la Universidad de Wageningen. Nuestras conversaciones, siempre en reuniones online, me han dado luz en muchas ocasiones. Gracias especialmente por este último año más intenso, donde la agenda con *deadlines* de entregas y reuniones me ha ayudado a avanzar hasta llegar a la entrega.

Ciertamente este doctorado no tendría sido el mismo sin la orientación de Constanza Parra de la KU Leuven, quien aceptó orientarme antes de ser mi oficialmente mi orientadora. Mis estancias en su equipo, lleno de jóvenes investigadoras tan apasionadas y a veces perdidas como yo, han sido un verdadero alivio y timón guía. Agradezco igualmente las reuniones online con ella las cuales me han ido guiando en la escrita de los diferentes capítulos, así como por ponerme en contacto con las *juniors* del equipo, especialmente con Liliana Lozano Flores, Natalia de Mello y Carmen Rodríguez, a quienes espero de corazón volver a ver pronto.

Estoy agradecida a mis orientadoras del proyecto SUSPLACE, Sandra Valente y Elisabete Figueiredo (Universidad de Aveiro) por haberme dado la oportunidad de descubrir los *baldíos* y vivir en Portugal. Un especial agradecimiento a Sandra por haberme introducido y guiado en la realidad sociológica y política de las *florestas* en Portugal, así como con el trabajo de campo y análisis de datos.

No puedo dejar de agradecer también a mis queridas comuneras y comuneros, sin los cuales este doctorado ni siquiera tendría sentido. Gracias por abrirme las puertas de vuestras casas y compartir vuestra historia sin apenas conocerme (a veces con buenos manjares en la mesa). Agradezco especialmente a José Manuel y Lito de O Carballo por enseñarme el sentido de la comunidad de manera tan vivencial. Vuestra compromiso y honestidad me ha dejado siempre sin palabras. En Teis tengo que agradecer especialmente a Eduardo, por ser una enciclopedia viva de movimiento obrero vecinal, a Manuel por los paseos apasionados por el bosque, y a Alfonso por las inúmeras conversaciones sobre el sentido de nuestra presencia efímera en este planeta. Finalmente, agradezco a mis compartes de Ansiães (Alexandre, Américo, Arménio, David, Eduarda, Fernando, Judite, Lucília, Nelo, Norberto, Rosa), así como las vecinas y vecinos de Murgido por compartir sus memorias afectivas. Vuestras historias hacen hoy parte de mi.

A todos mis colegas de SUSPLACE, por haber hecho de un proyecto un viaje inolvidable, y especialmente a mi equipo de 'Once Upon the Future', Alessandro, Angela, Anastasia, Kelli, y Lorena. Estoy agradecida a todos aquellos que me han apoyaron en diferentes momentos para enfrentar este viaje de grandes aprendizajes. A mi compañera de oficina

en Aveiro, Catarina, mis compañeras de casa Cristianne y Joana, y a mi vecino en Lisboa Diogo. No puedo dejar de agradecer a *mi jefa*, Marta Varanda y a mi terapeuta Esther Velázquez quienes han significado mucho en mi crecimiento personal y profesional en estos dos últimos años en Lisboa.

Y a todas esas personas que contribuyen a ser quien soy, y sin las cuales habría abandonado el doctorado hace mucho tiempo. A mi madre Gloria, y mi padre Juancho por darme la seguridad que necesito al creer en mí, por vuestro incansable apoyo en viajes y mudanzas, pero sobretodo por el ejemplo que me dais al avanzar en la vida cada vez mas vulnerables, serenos y felices. A mi hermana Cecilia, por ser esa hada madrina que aparece siempre cuando la necesito, y mi espejo que me muestra quien soy. Y a mi hermano Alejo, por mostrar siempre tu amor de manera sutil cuando más lo he necesitado. Gracias a las hermanas que escogí, Olga y Leire y finalmente a Oscar, por ser mi mayor fan y sinónimo de hogar allá donde estás.

Por último, gracias a todos los que han querido acompañarme en mi defensa. A mis tías Berti y Camen; mis tíos, Pepe y Nacho; a mi prima Celia; a mis amigas de la universidad, Inés y Johanna, y demás colegas y amig@s. Me siento afortunada de teneros y poder compartir con vosotros este día tan especial.

## Publications

- Fazey, I., N. Schöpke, G. Caniglia, A. Hodgson, I. Kendrick, C. Lyon, G. Page, J. Patterson, C. Riedy, T. Strasser, S. Verveen, D. Adams, B. Goldstein, M. Klaes, G. Leicester, A. [...] M. Nieto-Romero, [...] and H. R. Young. 2020. Transforming knowledge systems for life on Earth: Visions of future systems and how to get there. *Energy Research and Social Science* 70(September): 101724.
- Horlings, L. G., M. Nieto-Romero, S. Pisters, and K. Soini. 2019. Operationalising transformative sustainability science through place-based research: The role of researchers. *Sustainability Science* 1–18.
- Vasta, A., E. Figueiredo, S. Valente, H. Vihinen, and M. Nieto-romero. 2019. Place-Based Policies for Sustainability and Rural Development : The Case of a Portuguese Village “ Spun ” in Traditional Linen. *Social Sciences* 8(289).

### Included in this thesis:

- Nieto-Romero, M., S. Valente, E. Figueiredo, and C. Parra. 2019. Historical commons as sites of transformation. A critical research agenda to study human and more-than-human communities. *Geoforum*.
- Nieto-Romero, M., C. Parra, and B. Bock. 2021. Re-building historical commons: How formal institutions affect participation in community forests in Galicia, Spain. *Ecological Economics* 188: 107112.
- Nieto-Romero, M., García-López, G., Swagemakers, P., Bock, B. (in review). Communal forest management and citizenship: political tensions and clashing citizenships in an urban municipality in Galicia (Spain). *International Journal of the Commons*.
- Nieto-Romero, M., Parra, C., Valente S., Bettina, B. (in review). Affective mapping to rebuild the commons? A Participatory Action Research in a historical community forest. *Conservation & Society*.

## Biography

**Marta Nieto Romero** is a researcher focused on the social dimensions of sustainability transformations. She is particularly interested in commons as an organizational system to manage and care for nature and people, and in transdisciplinary and action research for catalyzing changes on social-ecological systems. She is currently based at ISEG, University of Lisbon, where she works as a researcher within the project eGROUNDWATER.



Her research has always been at the interface of ecosystems and society, collaborating in international projects with ecologists, engineers, social scientists and civil society. Her journey into the social component of sustainability sciences started when, having graduated in Biology, she met Dr. Prof. Berta Martin-López from the Social-Ecological Laboratory at the Autonomous University of Madrid in the context of a Master in Ecology. After graduating, she decided to deepen her knowledge on the social dimension of sustainability with a transdisciplinary Master's degree in Rural Planning from the Mediterranean Agricultural Institute of Zaragoza-CIHEAM. She then went to Leuphana University and explored the potential of scenario planning methodology for enhancing a collective vision among key stakeholders involved in the management and conservation of a cultural landscape in Transylvania (Romania). This highly inspiring experience surrounded by centenary woodpastures made her decide to come back 'home' to contribute with research in her country. In 2016, she got a SUPPLACE Marie Curie ITN position in Aveiro (Portugal), a country familiar to her because of her Erasmus in Coimbra. She then moved to the University of Aveiro and became an external PhD candidate of Wageningen University. In 2019 she embarked in the project 'Once Upon The Future' with other SUSPLACE researchers which sought to turn their PhD research into children's stories. In 2021, a compilation of children's stories was published by Babidi-bú, an independent children's editorial based in Spain (<https://tinyurl.com/5b7cdp4f>).

When SUSPLACE ended, Marta moved to Lisbon and started working at a European H2020 project called eGROUNDWATER (<https://egroundwater.com>). Based at ISEG (University of Lisbon) she is now involved in a participatory action research process to catalyse more participatory and sustainable forms of managing aquifers in southern Portugal. In the future, she wishes to continue working on 'commoning' of both water and forests for supporting thriving social-ecological systems.



