

DE LISBOA

"Dizemos nosso rio, mas não é nosso": Dispossession and resistance against a lithium mining project in Covas do Barroso, Northern Portugal

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Master in Anthropology

Supervisor:

Dr. Antonio Maria Pusceddu, integrated researcher at Centro em Rede de Investigação em Antropologia (CRIA), ISCTE – Instituto Universitário de Lisboa

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Acknowledgments

This thesis, although a personal process, has been the result of the work and contribution of many people who I would like to thank for their help and support.

First of all I want to thank the people from Covas do Barroso for their warm reception, our long conversations, their teachings and for sharing their home, table and love of the mountainous lands with me. I want to especially thank those in Covas who, through our time together, offered me their friendship.

To all the teachers I had during the last two years, who helped me develop critical thinking and provided me with the instruments and theories to analyze the situation in Covas.

To Antonio Maria Pusceddu, my thesis supervisor, for his dedication and continuous guidance, not only through the development of the thesis but also on my participation in the anthropological community. Thank you for the confidence you gave me, which helped me face my doubts and the difficulties I found in the field and in my proposals.

My participation in this master's study and this thesis has been possible through the immense support of my family. My sister, who has been there every time I have felt insecure, boosted my confidence and gave me strength. My mum, who has believed and backed up any of the decisions I felt were right for me and my future, and shows her gratitude to all the beautiful people I found on the way. I know that both are my number one fans. My grandfather, who has motivated me to follow my instincts and supported my studies. And to Julien, my partner. I cannot begin to describe what his daily support has meant for me and the accomplishment of this thesis. For his interest in my thoughts, for watching and listening to classic and modern anthropology videos at night and on the weekends... Thanks for distracting me when I was stuck in a loop or feeling insecure. Also, to the rest of my family and friends, for understanding my crazy times during the last year.

Thank you to the rest of the class for our enriching debates.

Lastly, I want to reiterate my gratitude to all the people who generously shared their stories with me.

Resumo

A empresa Savannah Resources e o seu projecto de extracção de lítio em Covas do Barroso (concelho

de Boticas), é sentida como uma ameaça pela maioria da população da freguesia e por actores externos

que defendem os direitos sociais e ambientais. A ameaça do projecto aumenta quando situado numa

atmosfera política que insiste numa "transição energética sustentável" que dá prioridade ao

crescimento do nosso sistema económico através da utilização de "energias renováveis".

O meu foco será a forma como a população de Covas lida com os acontecimentos presentes e

futuros resultantes do projecto Mina da Savannah, como a população local se refere a ela.

A fim de articular as relações entre a economia local e a economia global, concentro-me nas

realidades materiais de Barbara e David (residentes de Covas do Barroso) e da Mina da Savannah,

respectivamente. Em Covas do Barroso, como em qualquer outro lugar, existem contradições e

interesses contraditórios entre os suos habitantes. Embora as experiências de Bárbara e David não

abranjam a vida em Covas, farei uso delas para articular as relações económicas e sociais da região. Da

mesma forma, descreverei o impacto material e ideológico da Mina da Savannah como uma

representação da dinâmica capitalista global. Através da materialização destas experiências, tentarei

dissipar as relações aparentemente incontornáveis mas profundamente dependentes entre os interesses

económicos, políticos e sociais locais e globais.

Palavras-chave: Terra - Reprodução social - Extrativismo - Lithium - Covas do Barroso -

Transição energética

ii

Abstract

The company, Savannah Resources, and its project to mine lithium in Covas do Barroso (municipality

of Boticas), is felt as a threat by most of the people in the freguesia and by external actors defending

social and environmental rights. The threat of the project increases when situated within a political

atmosphere that insists on a "sustainable energy transition" that prioritizes the growth of our economic

system through the use of "renewable energy".

My focus will be on the way the population of Covas deals with the resulting present and future

events caused by the 'Mina da Savannah' project, as the local population refers to it.

In order to articulate relations between local and global economy, I focus on the material realities

of Barbara and David (residents of Covas do Barroso) and of the Mina da Savannah, respectively. In

Covas do Barroso, as in other places, there are contradictions and conflicting interests between the

inhabitants. Although the experiences of Barbara and David don't encompass life in Covas, I will make

use of them to articulate the economic and social relations of the region. In the same way, I will describe

the material and ideological impact of the Mina da Savannah as a representation of global capitalist

dynamics. Through the materialization of these experiences, I try to disentangle the apparently

inconmensurable but deeply dependent relations between the local and global economic, political and

social interests.

Key words: Land - Social Reproduction - Extractivism - Lithium - Covas do Barroso - Energy

Transition

iii

INDEX

1. Methodology: Fieldwork and involvement	4
2. Theoretical framework	11
3. Ave, Lithium!	16
3.1. Green transition	16
3.2. Mina da Savannah	19
4. The making of Covas	27
4.1. Reproduction and contestation of statistics	31
5. Who takes care of this land?	39
5.1. Choosing to be a farmer	39
5.2. Subsidiary Economy	40
5.3. "Casi feito em Covas"	43
5.4. The land, the marsh and the <i>baldio</i>	46
5.4.1. The organization of the baldio	53
5.4.2. The energy market in the baldio	57
5.5. Natural and cultural resources	59
5.5.1. Trading natural and cultural resources	65
6. Conclusions	68
6.1. Reaction to the mine	68
6.2. Times of uncertainty	71
Reference	76

IMAGES INDEX

Acronyms

ADRAT: Development Association of the Alto Tâmega Region

APA: Agência Portuguesa do Ambiente

EU: European Union

EC: European Commission

CPRs: Common-Pool Resources

CD: Consejo directivo

CRMs: Critical Raw Materials

FAO: Food and Agriculture Organisation

GIAHS: Globally Important Agricultural Heritage System

GHG: Greenhouse Gas

INE: Instituto Nacional de Estatística

EV: Electric vehicles

EBA: European Battery Alliance

PRR: Plano de Recuperação e Resiliência

DGEG: Direção General de Energia e Geologia

DIA: Environmental Impact Declaration, (Estudo de Impacto Ambiental (EIA))

UP: Universidade do Porto

LNEG: Laboratório Nacional de Energia e Geologia

UDCB: Unidos Em Defesa de Covas do Barroso IGM: Geological and mining Institute of Portugal

People whose stories are part of the thesis:

Name	Age	Occupation
Barbara	43	Farmer and housewife
David	44	Farmer
Mafalda	44	Teacher
Nora	27	Housewife, farmer and cook
Eneko	26	Town Maintenance worker and farmer
Blossom	16	Student
Bubbles	7	Student
Lenin	87	Retired farmer
Antonio	68	Retired farmer, construction worker and business owner
Naya	66	Housewife
Manuel	born in the 1950s	Retired farmer
Minie	73	Housewife
Olivia	53	Worker at Centro de Saúde

This table facilitates a general view of the people in their local context, and includes names, ages and occupations. Although the table offers a big picture of the people present in my research, I find the category of "occupation" limiting and its content incomplete. Thus, although not included, motherhood or fatherhood should also be considered as an occupation, a job; as well as a retired farmer continues to work as a farmer. A question I will develop under the topic of social reproduction throughout the thesis.

INTRODUCTION

This thesis is based on ethnographic fieldwork carried out in Covas do Barroso (Boticas), Lisbon, and through online connections between the summer of 2021 and June 2022 for a total of two-three months. My longest period in Covas has been one month, first between August-September 2021 and then in January 2022 for the second time. But my visits have been recurrent along the whole year, June 2022 being the time of my last visit.

The thesis presents the ethnographic and qualitative data gathered during these months. These data are supported by anthropological theories that inform some of my research questions. Questions that have arisen in Covas do Barroso. Thus, the argument built throughout the document is divided into six chapters that will help answer some of these questions.

The first chapter is a short introduction of how I got introduced to and interacted with the people and the setting of my fieldwork. This chapter also includes the methodological issues that I found throughout the thesis, the reflections corresponding to my reactions to these issues and the use of ethnographic terminology and practices that I have applied. In the second chapter, I detail all the theoretical perspectives that have framed the analysis of the case in Covas do Barroso. The third chapter illustrates what is being contested in Covas do Barroso. I illustrate the discourses created around lithium in public policies and by private actors, such as companies in the automobile industry, commodity companies in the resource sector and mining companies. This chapter explains how these discourses and the resultant events have been lived and experienced in Covas do Barroso. Chapter four, "The making of Covas", talks about the population in Covas do Barroso. It investigates the social, as well as economic, values brought by the connections (this is relationships) of resistance built beyond Covas do Barroso's geographical borders; with the depopulation character often found in rural areas. Following on from the analysis of the value created through these connections, the fifth chapter examines the rural economy and the dependency relations created around it. I refer to the dependency on European subsidies, to a "deeper" dependency on the quality of the land, the water, the climate, and the animals, but also about the people's dependency who are connected to each other. People with whom knowledge is created, and without whom they could not carry out their farming and household activities. The final and concluding chapter summarizes the feelings of uncertainty and dispossession brought about by the lithium mining project in Covas do Barroso, highlighting the reactions that the project has triggered.

My way to Covas

When starting this master's thesis in anthropology, I didn't have a strong idea about what I wanted to do with it. Prior to the master's, I had been working as an 'experience designer', mostly for tech startups. Having worked in these environments triggered the question of who I was designing for and what lay behind the digitalization. These questions were somewhat influenced by the current changes in the

market toward a circular economy, policies against climate change, and the rise in movements defending social and human rights. These factors drove me to engage with a mobile phone company in the Netherlands; Fairphone¹. The founder, curious about how to build commonplace objects, decided one day to deconstruct a mobile phone. He decided to follow each component of the mobile phone to its origin. As one of the phone's earthy components, cobalt brought him to the Democratic Republic of Congo. He mapped the relations behind the cobalt; land impact, miners' working conditions, gender politics, global market influence, social impact in the region, political involvement, etc.

Thus, during my first year in the master's program, I started to draft a proposal for my thesis: "How will a circular economy impact societies which extract natural resources and manufacture goods for the linear economy?"². In this proposal, *societies* referred to Cuba; to the people impacted by the mines in Moa. And *natural resources* referred to cobalt. Due to the obvious time and financial restraints, Cuba or cobalt mines were not a realistic option to write a master thesis about. Some teachers had mentioned the projects to mine lithium in Boticas, Portugal. Although it is a bit of a challenge in terms of language; my mother tongues are Spanish and German, and my portuguese level is mostly conversational, it did fit with my current life in Portugal. In the region of Barroso, several mining projects were started and the one in Covas do Barroso (Covas, henceforth) was being highly contested.

How to read the thesis

As I will expand on later, the thesis has three levels/types of information – theoretical information (including questions and reflections), ethnographic information (supplied by the contribution of the people's experiences) and graphics (made by me to support my analysis). The combination of the three provides diverse narratives about the same event. Thus, although the three discourses are intermixed throughout the thesis, through the format of the document I will try to help the reader distinguish between the three discourses. The fieldnotes and stories that were shared with me during the fieldwork appear indented in the document, the life stories shared by some of the people are dented, highlighted, and framed in purple boxes. The color purple was by no means a random choice. The color purple has been used to identify subordinate groups, based on its symbolism related to power, imagination and transformation, but also frustration.³ In the ways I am using it in the thesis, the symbolism of color is also evocative of the symbolic meaning conveyed by the green, and blue⁴, in economic policies and for future projections by public and private entities. Although I won't be conducting an analysis on the communication language behind the green economy, the symbolism behind these colors has been widely exploited to convey images of nature and its preservation in sustainable services and products. Thus, I

¹ see "fair talk #2" https://soundcloud.com/jan-blaffert-820633736

² This exercise was part of the dissertation for the class "Questões do Conhecimento Antropológico", taught by Pedro Prista during 2020-2021.

³ One of its most famous uses has been on the Pulitzer Prize-winning 1982 novel from Alice Walker, The color Purple. But the symbolism of color is also used in marketing and communication campaigns.

⁴ Other policies on the ocean economy use the color blue for its symbolism.

found it important to use a color for the graphic elements of the thesis in which symbolism would also support the character of the people I am trying to give a voice to.

1. Methodology: Fieldwork and involvement

Communication is the process of making unique experiences into common experience, and it is, above all, the claim to live. (William 1984:55, Cit. in Narotzky, 1997:174)

This thesis tries, through ethnographic methods, to give a voice to the people in Covas and analyze the problem that they have to live with. Throughout the essay I will be referring to the mining project taking place in Covas as Mina da Savannah, as the local population refers to it. Instead of *mina do* Barroso, as the Savannah Resources Plc. – i.e. the company developing the mining operations and ensuring its profitability - and the Portuguese government and its agencies, refer to it. This will reinforce my argument of looking from the standpoint of the population, versus the governmental and market actors' standpoint. My focus will be on the way the population of Covas deals with the resulting present and future events.

During the summer of 2021, the association, Unidos Em Defesa de Covas do Barroso (UDCB, n.d.)⁵, created by a group of people in Covas to fight against the Mina da Savannah project, organized a camping to share the lived experience of their situation, make themselves heard by the media and their public, and find support amongst old and new friends (UDCB)⁶. After some readings on the situation and the extractive history in Portugal, I found the camp to be a great opportunity to familiarize myself with the local situation, their networks and, of course, the people. Between the 14th and 18th of August, me and several others (150 people, more or less) were at the camp and had discussions about energy transition, environmental justice, sustainable mobility, workshops on resistance strategies, imagining the future without mines, etc. The five days of the camp took place in Covas. It included interaction with the local and emigrant population (who came back to Covas) and the exchange of life stories. The interaction was mostly with people who were against the mining project, but also with some of the residents that were in favor or had a different (or no) opinion.

The first days of the camp, I was situating myself and listening to the discourses that the different groups had brought with them. Besides the people from Covas, there were some activist groups and journalists, like Greve Climática Estudiantil, Extinction Rebellion, Caravana Zapatista por La Vida, the Journal Mapa, and many others. There were also people from all over the world who were there to support and share in the fight against extractivist activities in other regions – i.e. many from different parts of Spain (Basque Country, Valencia, Caceres, Badajoz and of course the bordering territory of

⁵ see https://www.facebook.com/UnidosemdefesadeCovasdoBarroso/

⁶ https://barrososemminas.org/en/manifesto-english/

Galicia), from Mexico, France and other regions in Portugal. By the end of the five-day camp, me and some representatives of the Caravana Zapatista (referred to as 'La Caravana' in everyday conversation) stayed a couple more days. I was helping them out with some interviews they were conducting with the people of Covas, including the migrant population that was back in town for the summer. The interviews we did during those days were structured and video recorded. The questions were prepared by La Caravana, but I could add some of my own questions. These first interviews triggered more questions and conversations I had the opportunity to continue later. During my following periods in Covas, the interviews were either semi-structured or open-ended conversations. I tried to audio record them most of the time, but the moments very often called for taking quick field notes, which I would expand on at night.

The first week in the camp of Covas awakened my curiosity and desire to better understand how "a mobile phone" or an electric car, and mostly how the political and economic strategies behind those products, were impacting the life of the people living there. During those extra days in Covas I got to know Barbara (43), her life partner David (44) and her cousin Mafalda (44) better. I had interacted with them before during the camp discussions, but they didn't remember me amongst the many people they had met. I told Barbara about my interest in understanding how the project of the Mina da Savannah was impacting them, about my thesis and my wishful interest in helping out through, perhaps, communicating more widely about the situation there. She offered me a bed in her house for the next month.

Barbara and David had become the face of the fight against the mining project. I had already noticed their central presence during the camp. I first realized this when I noticed the number of journalists (from Germany, Denmark, Finland, France, Spain, UK, Portugal, and more) coming to interview them, but not the other Covas residents. Both Barbara and David have been at the center of many publications. One of the reasons for this is that Barbara speaks good English, which helps her interact with foreign journalists. Both of them have very good relationships with most of the people in Covas, which opened many opportunities for me to converse with the rest of the population. But as with anyone, especially in a situation like this where people are forced to choose a side, there are some people that do not agree with the anti-mining project position, ideologies, etc. Thus, when trying to talk to some residents I felt a distance; probably mistrust as a result of my perceived "chosen side" due to my connection to Barbara and David. The thesis is the analysis and account of my experience in the field. After more than two months in Covas, I became part of the social relations, and the thesis is greatly informed by this position.

In order to understand the connections in Covas, I started by inquiring about family relations. This focus on family was mostly triggered by the continued reference to family members – for example: "this woman with the hat is my aunt;" "I will visit his uncle;" "we are cousins;" "they are cousins;" "aunty Naya will bring it later;" etc.— in Barbara's and David's house, but also in general in the *aldeia*.

Barbara helped me to draw the kinship diagram (see image 1) of her and David's family. She helped me make the connections and she also explained some of the individual and collective stories of the

family to me. Family connections in Covas are a very important part of the relations in town; thus, the diagram helped me identify the stories I was hearing on the streets everyday. However, as I learned during my time there, family or blood relations are not the only ones that make up Covas society. I found it limiting to not have diagrams which map the relationships with other people in the *aldeia*, outside the *aldeia* or with animals and other natural resources; a limitation I try to amend through the use of graphic tools. Kinship diagrams⁷ do not map property relationships (this is why there are no kinship diagrams with cows and other livestock). It became important for me, in order to understand what is being left out and where possivel subordinate groups were created, to represent relations that do not fit into a traditional kinship diagram.

The next diagram (see image 1) shows the family and their kinship. In order to represent the diverse scales of relationships, I started by adding a geographical location layer to the kinship diagram. The "cloud colors" I use identify the connections of Covas with other geographical locations through the diaspora communities.

⁷ I thank Francisco Oneto for his comment on this point.

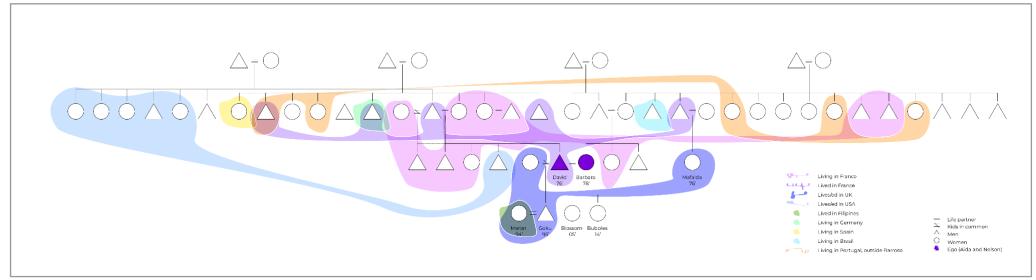


Image 1: Kinship diagram of Barbara's and David's family and the connections across places.

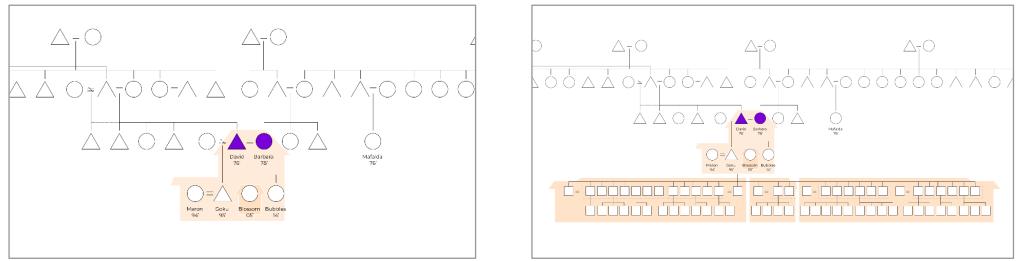


Image 2 (left): Kinship diagram highlighting the co-residence level; Image 3 (right): Kinship diagram including animals.

These three versions of the same kinship diagram try to represent how different levels of connections and dependencies are created. The first one shows the relationships that have been maintained with the diaspora. The second one represents co-residence level; a dimension that becomes very important to my analysis of the family economy. The third representation, for similarly important reasons concerning the local economy and property relations, includes the household's relation with the animals (cows, chickens, pigs, etc.).

I have tried to cover several sites in Covas by interacting with what could be called representatives of different spaces and time. I am not referring to staying in Covas for long periods of time, nor to moving in different physical spaces. The conversations I had with the different generations helped me navigate the way in which they value Covas through time. Through their life stories, which include migration movements, they also helped me understand how they value the diverse places in which they live(d). The dynamics of Covas have been very favorable in this sense because of how the people have integrated new relationships that I could easily follow (through social media, messages and encounters) after meeting them in person in Covas. Thus, through their connections with European and other worldwide social movements, I was able to include in my analysis the impact of global movements in relation to Covas. Thus, the multiplicity of actors has been instrumental in the definition of this place.

Regarding the time I spent in Covas, the schedule the university gave marked its limits. I was, however, very lucky with the timing. In August 2021, a few weeks before the details of my fieldwork had been decided, the camp was about to start. As often happens with anthropologists, I went to Covas rather unprepared (Sarró & Lima, 2006). Besides the anxiety this might have evoked in me, I was able to meet and become a part of many Covas relations. I was able to "follow people, connections, associations, and relationships across space" (Falzon, 2009:1-2). In November 2021, for example, a group of Zapatistas and of the CNI (Congreso Nacional Indígena) went to Covas. I joined them and offered to translate the conversations and help Barbara out a bit with the organization of beds and food. Although I didn't go to Mexico, I could learn about their fight in Mexico against extractivism and understand how and why these connections with Covas were being created.

The timing continued to be advantageous after my first month in Covas. The online course on 'Rethinking Extractivist Capitalism' of YISARES (Young International Scholars Autumn Research School)⁸, organized by the university of Bremen, started in October and gave me the opportunity to compare ethnographies of other fellows in similar "fields" all around the world and get introduced to some theoretical work.

As with most ethnographic works, or as with most of its definitions, I tried to learn and understand through daily activities and conversations during my time in Covas. During the first weeks of research I grappled with the feeling that I was developing my own "extractivist project"; one in which I look to

8

⁸ The archive of the course can be seen here: https://yisares.uni-bremen.de/archive/

extract information from the persons I interact with. In becoming aware of the influence that my presence and my perception has on the exchange of information, this feeling redirected my research into an "exchanging" mode. In Covas, I exchanged opinions and experiences. I noticed I was/am an external subject, a new connection. In order to be there, the people needed to know as much about me as I needed to know about them. Only in this way would we be able to have a sincere conversation, develop trust and share significant moments. Thus, although my first visit to Covas wasn't structured or prepared, I had brought with me my "fósforos e tabaco para partilhar" (Sarró & Lima, 2006:22).

Around mid september, I went back to Lisbon for the start of university and to digest all I had learned (or just experienced) during this month in Covas. Because I didn't go to Covas with a detailed research plan, I felt I needed to understand everything: from daily activities, economic activities, social relations, relations with the environment, the meaning of a *baldio*... and even what might seem like more basic things, such as national and local politics, history of the region and a bit of Portuguese too. My research hasn't been solely in the field through participant observation, notes, picture-taking and recording conversations. Because of its global implications, a big part of my research consisted of analyzing documents about the mine, and Portuguese and European policies and regulations. Much of my data, in order to analyze the impact of one policy over the other or over the resulting events, has been gathered by analyzing newspapers, contracts, propaganda and other types of relevant documents referred to in the bibliography.

Once in Lisbon, I stayed in touch with Barbara's family through calls and WhatsApp messages. For as long as I have known them, people have continued to come and go from Covas, and everyone in the town makes sure they are always welcome. My relationship with the family, with the population and many of the people connected has continued to grow, as has my implication in the fight. I have come back to Covas several times. In January, I came to do the second part of my fieldwork. This time, I better planned my "questions". Most of them were still non-specific, and the conversations continued to be unstructured, but I knew which topics I wanted to touch on and learn more about. By then, many of the conversations were an exchange of experiences, intermixed with opinions and plans. Additionally, the understanding I had developed during the last months (also of the Portuguese language) helped me participate in a more constructive and active way. I stayed again for a month in January, and although I didn't come back until June, we were continuously in contact.

Because of the use of ethnographic research in my thesis, I had to pay special attention to questions on ethics and privacy. My latest visit to Covas in June was the perfect time to enlarge the disciplinary discourse about privacy and anonymization by including the "researched community" in the conversation. I visited the people whose contributions are mentioned in my thesis and explained to them the public access that the thesis will have. We talked about their preference for anonymity and sometimes chose names they liked to represent them. As I suggested, some of these names might be linked to characters they admire, like or that can represent some of their characteristics e.g. political ideologies, age, etc. Throughout the thesis I use these pseudonyms as well as the people's positions (e.g. president).

Although these names will not be easily traceable, their identity could be traceable by the community and family.

Since the beginning of the thesis, and actually of the master, I decided to write the thesis in English. This is due to my limited knowledge of the Portuguese language and the use of English in most of the theories I used. Nevertheless, in order to keep a higher level of fidelity in the ethnographic work, the transcriptions from recorded interviews in Portuguese, and the Portuguese references, are kept in their original language throughout the thesis. Besides the level of fidelity I find important to incorporate portuguese in my thesis because: I can understand it and have social conversations, thus the transcriptions of recorded interviews are not at risk of misinterpretations; The thesis is going to be presented, defended and its printed version will be saved in Portugal; And last but not least, the portuguese extracts will allow the people that helped me develop the thesis, by sharing their stories, to find and identify themselves when reading them.

My background in design has also been part of how I developed and understood my ethnographic experiences and theories. In order to "translate" some of these events and theories I have used conceptual graphics. Through the use of design techniques, such as the creation of graphics, I believe I am closer to a "methodological pluralism with the notion that different approaches to research can complete each other" (Wall, 2014:34). The mix between conceptual knowledge, ethnographic research and illustration has helped me analyze the impacts in Covas from different perspectives that complement and feed back to each other. Thus, in order to convey some of the referred theories, I use graphics. This helps me express what otherwise would need many words, while also creating a parallel discourse; a graphic one, that I hope will be more understandable and thus reach a wider audience.

"[W]e can know more than we can tell" (Polanyi 2009:4, in Wall, 2014:34)

2. Theoretical framework

The aim of this section is to present the different authors and theories that helped me construct the argument of my thesis. Thus, I have let the theories of great economic anthropologists, anthropologists in other areas and some geographers, economists and sociologists guide my thesis.

The theories and topics that helped me draw the path I followed throughout the thesis started to appear during the second semester of my master's. During Nelia S. Dias' class on anthropological theory, Ian Hacking's theory on the creation of categories made me question the concept of sustainable development and the impact categorization has on nature. Additionally, it made me question the categorization surrounding human rights, including environmental rights and the role and recognition of native and traditional knowledge when relating to the environment.

The theoretical framework builds upon anthropological and sociological critical theories of capitalism. During my studies on "Sociology of Modernity" with Jose Luis Casanova and Richard Lachmann, I wrote my essay on how modernity periods have defined (and been defined by) our relationship with the natural world. For example, the recent period of market digitalization linked to environmental policies and to sustainable development. In his writings, professor of economics, Paul Burkett expands on "capitalism's tendency to despoil its natural environment" (Burkett, 1996:332) through its appropriation and exploitation. Theories on capitalism are also present in my thesis due to its implication in class struggles, which materialize in rural areas and the farmers' lives in Portugal. The analysis of basic capitalist concepts such as use value, exchange value and commodities have supported many of the arguments I made in my thesis, both on the human relation to the natural world and the practices of appropriation. Although Marx's critique of political economy centers its discourse on the abstraction of labor time in commodities, both labor and nature are necessary to produce 'use value'. Burkett emphasizes how, besides the focus of Marx's critiques on wage-labor exploitation, "nature's contribution is not reducible to this labor of appropriation" (Burkett, 1996:333).

My investigation into theories of commodities brought me to research the various meanings of value. The evaluation of the land, of social and economic modes of life is at the center of the lithium mine contestation in Covas. In my research on these theories, I have found, philosopher of economic anthropology, Polanyi's and, professor of community and environmental sociology, Collin's analysis on the costs (e.g. of production, environmental, of care, etc.) that are not measured, interesting. The tensions between self-regulating markets and the movements for protection, highlighted in Polanyi's concept of "double movement" (Polanyi, 2001), are part of the theories of value I analyze from a perspective of the depopulation movement of rural and peripheral areas in Europe. In Portugal, as well as in other European countries and the USA, the "state and local governments have been the most important providers of services" (Collins, 2016:11) that are now considered basic human rights; such as education and health services, among other vital forms of support. However, these services have decreased to the point of

almost disappearing in Covas do Barrroso. Thus, theories of value will help me question how "sacrificed areas" are created through the devaluation of activities by public policies in these areas.

In his collection of essays on *The Social Life of Things*, anthropologist Arjun Appadurai explains "the way in which desire and demand, reciprocal sacrifice and power interact to create economic value in specific social situations" (Appadurai, 1986:4). In his analysis on commodities and cultural perspectives, he also adds how, "value [...] is never an inherent property of objects, but it is a judgment made about them by subjects" (Appadurai, 1986:3). These theories and the implications of having different "regimes of value" (Appadurai, 1986:4) play an important role in my thesis, through the analysis of the social and environmental impact of energy transition policies in rural areas. Policies that are being valued by their ability to predict, and for their potential to prevent disasters.

American institutional economist, John R. Commons makes reference to the importance of predictions; in this case about the possible catastrophes that can bring climate change. "Looking at it from the individual standpoint, value is the principle of anticipation and cost is the principle of caution. Each arises from the principle of relative scarcity of resources [...], yet from the proprietary, or volitional, standpoint value and cost are the reciprocal principles of inducement or anticipation, and resistance to inducement or caution, that is, the principle of offering and withholding supply" (Commons, 1924:379-380). The "scarcity of resources" is a critical concept in climate change and preservation policies. It also becomes important in contexts where extractivist projects are being developed and depopulation, as well as dispossession of land, become the main concerns.

The social nature of the common lands in the northern region of Portugal, the *baldios*, have guided my research on the forms of common property. I found in Narotzky's definition on communal property a complete description of the communal system in Covas: "Communal property refers to the regulation of the access to and use of a resource by a community, and should be clearly distinguished from free access. Rights over a resource are collectively assigned and the main restrictive factor is definition of the rules of inclusion in the community. 'Belonging' to the community is generally based on criteria such as effective or putative kinship ties to long-standing members, residence and other ideological references to space such as filiation with sacred lineages and shrines, etc." (Narotzky, 1997:26-27). Her definition gives a good understanding of the political relations created between a community and the natural resources. Although the relation of the state to these resources is not mentioned in Narotzky's definition, this omission says plenty about the rights of the state to use them. Relations that are also being renegotiated in Covas.

Elionor Ostrom and her theory on how to govern common-pool resources (CPRs) became relevant when theorizing in my research the relation between nature and local population and between political power and economy. The governance of CPRs does not fit "in a dichotomous world of 'the market' and 'the state'" (Ostrom, 2010:641). In order to provide an alternative to a world governed by the market and the state, Ostrom and others emphasize the concept of 'polycentrism', which "connotes many centers of decision-making that are formally independent of each other" (Ostrom, 2010:643). As

Ostrom, I found in the irrigation system of Covas a challenge to "the presumption that governments always do a better job than users in organizing and protecting important resources" (Ostrom, 2010:641). Challenges that Ostrom's and others' theories helped me develop throughout the thesis. The concept of property is directly linked to the right to use, or the power to withhold, the land. These questions are essential in the fight against the imposition of mining projects in Covas and other rural areas of Portugal, questions on who has the power to decide. Marx and Brooks Adams concluded "that the propertied classes always control the government since it is they who own the tools, cattle and machinery, and their ownership is safeguarded only by control of government" (Commons, 1924:383).

The concept of private companies influencing governments has also been part of the previous theories that paved my way into the research of Savannah's involvement and impact in Covas. In my essay for the class on Human Rights and Culture, taught by Miguel Vale de Almeida during the second semester of 2021, I expanded on the idea of environmental rights to own property. I analyzed the concept of property from the Human Rights Convention perspective, and the influence the capitalist ideology of the time had on some articles⁹ of the convention. I also expanded on the power private companies can exercise over governments and on the very concept of property. The influence exercised by private companies on governmental policies, has triggered the expansion of social and environmental responsibilities, taken until now only by the state, to also include private companies. In 2011 the 'Guiding Principles on Business and Human Rights' were endorsed by the Human Rights Council. Until then, states didn't have the requirement to regulate international activities of businesses-i.e. activities carried out in, e.g. Portugal, by companies that are domicile in, e.g. Australia. The Human Rights Council also expands on how the negative impact of climate change directly affects all human rights – including the rights to life, housing, water and sanitation, food, health, development, gender rights and an adequate standard of living (OHCHR, 2019) - and especially those of minority and peasant communities. The power companies can wield over states is reflected in the corporations' capacity to establish and move their headquarters, domicile and offices from country to country. In a capitalist society, states need to attract these corporations in order to profit from the investments, technology, jobs and legitimacy they bring to the country. Although states were the most important and powerful actor in 1948¹⁰, "many things have changed and we have processes of globalization, liberalization, privatization and companies are bigger than ever" (Felice, 2013). The role of private companies, like Savannah, and states, as agents who dominate the reproduction of society are questioned in my thesis.

Narotzky, following Maurice Godelier, also expands on how relations of production, because of their function, dominate the reproduction of society. "The problem is that [...] the separation of an economic area of 'production' [appears] as a separate universal 'function' of social relations" (Narotzky, 1997:176) which has preference over "the production of people". In the example of Covas, as well as

⁹ Concretely article 17: 1. Everyone has the right to own property alone as well as in association with others. 2. No one shall be arbitrarily deprived of his property (United Nations, n.d.).

¹⁰ When the Universal Declaration of Human Rights (UDHR) was proclaimed.

in, the Wesh Marxist theorist, R. Williams contribution to Narotzky's work, we can see how the "the production of a social, political and cultural order [...] keep breaking the 'economic' order from within, [...] forcing in new questions such as housework and the sexual division of labour, migration, [...], work vs. employment, etc." (Narotzky, 1997:176-177). Throughout my thesis, I use Narotzky's work on social reproduction, to explain the involvement of the relations in Covas in the economic order of a capitalist society. Thus, the people of Covas, with their work on the land and at home, the allocation of resources (through their relations between kin, neighbors and migrant populations), and transfer of knowledge are part of the economic production. Narotzky also helps reveal how the production of use values for their own – the family and community – final consumption is (part of) the work in Covas, that should not be distinguished from a job in the capitalist society, except for the way in which connections between the material and the spiritual practices in the production process are being kept. The role of power and dominant hegemonies as an obstacle to construct alternative ways of life are also present in capitalist theories, in the work of Narotzky and in my immersion in the concept of extractivism during the Yisares' course on 'Rethinking Extractivist Capitalism'.

Extractivism in a literal sense is generally defined as the "extraction of huge volumes of natural resources, which are not at all or only very partially processed and are mainly for export according to the demand of central countries" (Acosta 2015 in Gago & Mezzadra, 2017:576). Although most of the theories developed on extractivism are situated in Latin America and African countries, and interlinked with western relations to these places, I found that some of the social implications, such as the dispossession of populations, can easily be applied to the projects of lithium extraction in Covas, and Europe. In their publication, Gago and Mezzadra try to expand on the concept of extractivism to help "define the fundamental features of the logic of contemporary capitalism's functioning" (Gago & Mezzadra, 2017:577). The most widespread term today at the "continental-scale is expressed in the idea of neo-extractivism" (Gago & Mezzadra, 2017:576). The authors recognize how this term, "is very effective at highlighting continuities in the development model, and therefore at compelling us to open up a space for searching for alternatives" (Gago & Mezzadra, 2017:577), but also highlight some of its limitations. I try to compensate for these limitations throughout the thesis by expanding on some of the previously mentioned theories and authors. In my thesis, the production of value by the rural and peripheral populations, which is ignored in the critique of neo-extractivism (Gago & Mezzadra, 2017), is central. Gago and Mezzadra, in their critique of neo-extractivism in Latin America, also reference how it "contributes to assigning a merely passive position to the poor urban populations, and this functions in parallel with a tendency to victimize the affected rural populations" (Gago & Mezzadra, 2017:577). Although Covas is by no means an urban population, I found it very important to highlight throughout the thesis the powerful role the population is playing in contesting the mining project. Thus, the analysis of the census pointing to the depopulation of rural areas and the statistics showing the low involvement in the national economy, is critically discussed in my thesis. I share experiences of the field that talk about the economic value of the household activities, the region and at the national level. But I also talk about the active role of the people in growing global connections as a response to the social impact of the mining project.

3. Ave, Lithium!

The mines have been present in the region of Covas do Barroso since before WWII, when Volframio was extracted to build weapons. Today, the contested mineral to extract in the area is lithium. In this section I explain the imaginaries of lithium, why it has been classified as a critical raw material by the EU, and what its extraction and manufacture mean for Covas, Portugal, Europe and the global economies.

I use the term 'imaginaries of lithium', because lithium's value is based on climate change predictions – e.g the Paris agreement signed during the COP21, 2015, to keep global warming under 1.5°C – but also on how political relations might develop, and how the market could grow. In order to make predictions, we look at "the science" (Ingold, 2022). Whose predictions "can propose mitigations to avoid complete catastrophe" (Ingold, 2022). Thus, the EU and most of the representatives of other world nations – e.g the 197 nations that were involved in the COP26, November 2021– have come together occasionally to design mitigation strategies and create a plan for the future.

For many private and public actors, lithium has become especially "valuable" (Appadurai, 1986) because of its critical classification, which makes it an essential raw material, without which "society can not move forward, nor be independent". These predictions about lithium's implications for our future pose the question of how anybody would oppose its acquisition, even if it involves land extraction and its associated practices of enforcement. Thus, in this chapter, land makes its appearance in terms of its value through (the extraction of) lithium, for the Portuguese and European economy, and for climate change politics (Eiss, 2008:191-213).

3.1. Green transition

As part of the strategy "to meet the goals of the Paris Agreement and for avoiding dangerous climate change and limiting global warming to 1.5 degrees Celsius" (COP26 Energy Transition Council – Summary Statement, 2020), the European Commission (EC) fosters the transition to a green economy. This economy includes the digitalization of several industries and end user products, as well as the transition to "green energy" based on "renewable sources" such as solar and wind energy, and nonrenewable mineral sources, such as lithium for the automobile and utilities industry.

In order to ensure the green transition, "Raw Materials [and their extraction] are crucial to Europe's economy", predicts the EC. The urgency to reduce CO2 emissions has exacerbated this concern and,

¹¹ "An institutional apparatus [...] concess authority and legitimacy on governments, which even with the best of intentions, though often with the worse, claim to follow it" (Ingold, 2022).

¹² Efforts by energy companies to gain a competitive edge in a developing market can lead to greenwashing, which is the process of conveying false or misleading information about the sustainability of a product or service (ecowatch.com).

¹³ Renewable energy relies on an energy-intensive mining production process to mine lithium and other minerals, for its storage.

thus, the market interest to access some of the "more valuable"¹⁴ raw materials, leading to the creation of the category of Critical Raw Materials (CRMs). "CRMs combine raw materials of high importance to the EU economy and of high risk associated with their supply" (EC.c)¹⁵. In 2011, an initial list of 14 CRMs was published. In 2020, the latest list was published¹⁶ with 30 CRMs, in which lithium appears for the first time. The market estimates show (and contributed to) an increase in CRM need by 2030¹⁷. In the strategic plan for CRMs published in 2020, the EC estimated that the "demand for lithium in the EU would increase 18 times by 2030 and almost 60 times by 2050" (see EC, 2020:6). The market plays a primary role in the categorization of CRMs. Helium, for example, was removed from the CRMs list because of the "decline in its economic importance" (EC, 2020, 4).

As mentioned, lithium is critical for its use in the growing market of electric vehicle batteries and energy storage. It is also a main component in digital products such as smartphones, laptops, etc. The electrification of the transport system is one of the main solutions to lower carbon emissions and reach 'net zero' 18 by 2050. Until 2014, mobility "represented almost a quarter of Europe's GHG emissions and the main cause of air pollution in European cities" from which 72.8% are caused by "road transport" (EC.b). Thus, transportation companies (publicly-traded) founded in the USA, Germany, and Japan (among others) such as Tesla, Toyota Motor, Volkswagen, Daimler AG, BMW AG are shifting to and prioritizing the manufacture of electric vehicles (EV) that will substitute gas cars, in order to reach "carbon neutrality" by 2050. To reach this goal, one of the possibilities is to use external offset credits 19, a carbon market the engineer of the *baldio* of Covas suggested the commoners of the *baldio* to join. Some of the countries of origin in the mineral supply chain, for companies such as Volkswagen and Tesla, are Australia, China, DR Congo, Russia, Turkey, Japan and Finland²⁰.

As mentioned, the dependency on other countries outside the EU for raw materials is one of the two factors making their access critical²¹. The resulting list of CRMs is then used to support EU development policies.

¹⁴ The value given to the lithium has influenced its cost and attracted multiple strategies and tools to finance its extraction - from European subsidies, to foreign capital through companies and investors.

¹⁵ Economic importance looks in detail at the allocation of raw materials to end-uses based on industrial applications. Supply risk looks at the country-level concentration of global production of primary raw materials and sourcing to the EU, the governance of supplier countries, including environmental aspects, the contribution of recycling (i.e. secondary raw materials), substitution, EU import reliance and trade restrictions in third countries (EC, 2020).

¹⁶ The Commission reviews the list of critical raw materials for the EU every three years (EC, 2020).

¹⁷ In the Sustainable Development Scenario (SDS), the global EV stock reaches almost 70 million vehicles in 2025 and 230 million vehicles in 2030 (iea.com).

¹⁸ Meaning balancing the greenhouse gasses we emit into the atmosphere with what we extract, to not add any more.

¹⁹ Offsetting claims to compensate an entity's own GHG emissions by accounting for GHG emission reductions (including through avoiding emissions) or GHG removals achieved external to the actor. Offsetting is typically arranged through a marketplace for carbon credits or other exchange mechanisms (zerotracker.net).

²⁰ see tesla.com and volkswagen.com

²¹ see EC report on the 2020 criticality assessment.

The list helps to identify investment needs, and to guide research and innovation under the EU's Horizon 2020, Horizon Europe and national programmes, especially on new mining technologies, substitution and recycling (EC, 2020, 2-3).

Thus, projects to mine CRMs, such as lithium, in Europe are being promoted by the public sector and are attracting foreign capital, mainly from big mining corporations and companies investing in the sector, such as Slipstream Resources²², an Australian investment company, Rio Tinto, etc. Besides the known lithium deposits in Portugal, other exploration projects are being developed in Spain, France, Serbia, Austria, Ukraine, Finland, Czechia, Ireland and the UK (WWF & ANP, 2022)²³.

Europe has been actively enabling and creating working groups around the industry of CRMs, the automotive sector and batteries. Some examples of these are the European Battery Alliance (EBA) – "launched in 2017 by the European Commission, EU countries, industry, and the scientific community. The Commission aims to make Europe a global leader in sustainable battery production and use" (EC.a). The EC had also launched the Raw Materials Initiative in 2008, in order to "create and agree on an integrated raw material strategy between EU countries [...] and meeting our critical needs for growth and jobs in Europe" (EC, 2008). The EC's initiative aims at securing access to raw materials which are "essential to the development of technologically sophisticated products in view of the growing number of their functionalities" (EC, 2008:3), as it is the need of lithium for Electric vehicles. The strategy is based on three pillars looking for: Improving political relations to "access raw materials on world markets" (EC, 2008:6); The improvement of the recycling legislation of raw materials; And foster the european sustainable supply of raw materials "through giving access to land [...] for the extractive industry; [...] Speed up the permit process for exploration and extraction activities; [...] [and increase] the knowledge base of mineral deposits within the EU" (EC, 2008:9)

The EU also finances the 'Plano de Recuperação e Resiliência' (PRR) in Portugal, which will focus on the energy transition and the digital transition between 2020-2030. Portuguese ministers, such as the new economy and sea minister, Antonio Costa Silva (with a Degree in Mining Engineering from IST, and a Master in Petroleum Engineering at Imperial College of London), also plan to support and develop the use of the Portuguese mineral resources²⁴. As part of the European policy framework, the Portuguese government also created, in 2016, a Lithium Working Group (*Grupo de Trabalho "Lítio"*) whose task was to "identificar e caraterizar os depósitos minerais de lítio em Portugal, bem como as atividades económicas associadas à prospeção e aproveitamento" (Governo do Portugal, 2016). In the group's report, the explanation is expanded by saying that the group's creation answers "the dynamism that has been observed in our country in requests for the attribution of prospection and exploration rights and the

²² Commodity focus is on the strategic "battery minerals", such as lithium, cobalt, copper and zinc. Slipstream currently has investments in Australia, Portugal, Spain and Brazil (slipstreamresources.com).

²³ see also "Global lithium (Li) mines, deposits and occurrences map" (BGS, 2021).

²⁴ see entrevista Antonio Costa (link).

exploitation of lithium mineral deposits, leveraged by the global demand for this metal with a view to its use in batteries for the automobile industry."²⁵ (Secretário de Estado da Energia et al., 2016:1). The Lithium Working Group's report concluded in the launch of a National Lithium Strategy by the Portuguese government, approved on the 1st of February 2018. Based on the approval of the group's strategy and evaluation on the potentialities of lithium for the market – i.e. for the "economic development, particularly in the most disadvantaged regions"²⁶ (DRE, 2018) – as well as for the lithium's macroeconomic benefits.

3.2. Mina da Savannah

In Covas, since 2019, Savannah Resources Plc is the sole owner of the Barroso Lithium Project, but the mining project started long before. The Mina do Barroso (the offical name of the project) has moved from hand to hand and the land projected to be mined has been extended, renamed and re-evaluated. This instability has complicated the relations in the region and increased a feeling of distrust. In order to better understand how these changes were perceived by "both" sides (assuming or reducing it to only two sides, although there are always shades of gray), I will first draw on the "officially recorded" events. I will try to communicate these changes through a timeline:

- In September 2004, the company Saibrais, sent an environmental impact study to the Direçao General de Energia e Geologia (DGEG), to get the concession to extract feldspar from the Mina do Barroso. The area of concession for the project was 70ha (VISA Consultores & SAIBRAIS, 2004)
- In May 2006, the 'Ministério da economia e da inovação' granted Saibrais S.A the exploration of feldspar and quartz in the Mina do Barroso (Ministério da Economia e da Inovação, 2006), after having approved the Environmental Impact Declaration (DIA) (Ministério do Ambiente, do ordenamento do território e do Desenvolvimento Regional, 2005). The concession was granted for 30 years, which could be extended twice; first by 20 years and then by a further 15 years. The expansion of the exploration area was then 120ha.
- The company Saibrais asked to change the company name in 2008, but this didn't get approved until 2016.
- By June 2016, Saibrais S.A became Imerys Ceramic Portugal, S.A, and modified its contract with the DGEG to add lithium to the explored minerals and to increase the exploration area to 542ha (DGEG, 2016). At this point, the area includes land situated in the freguesias de Covas do Barroso and Couto de Dornelas.

²⁵ Original portuguese version: "ao dinamismo que se tem verificado no nosso país de pedidos de atribuição de direitos de prospeção e pesquisa e de exploração de depósitos minerais de lítio, alavancados pela procura global deste metal com vista à respetiva utilização nas baterias para a indústria automóvel".

²⁶ Original portuguese version: "desenvolvimento económico, em particular nas regiões mais desfavorecidas".

- In March 2017, "Imerys Ceramics Portugal, S. A., titular do contrato de concessão de exploração de depósitos minerais de quartzo, feldspato e lítio a que corresponde a denominação de Mina do Barroso, transmitiu a sua posição contratual para a Slipstream Resources Portugal Unipessoal" (Diário da República, 2017).
- In that same year, 2017, Savannah Resources Plc. (based in the UK) "acquired the Portuguese assets through the purchase of an effective 75% shareholding in Slipstream Resources Unipersoal Lda" (savannahresources, 2017). And created Savannah Lithium Lda. Slipstream Resources brought the needed private equity to build Savannah's business.
- In 2019, Savannah Lithium Lda. became sole owner of Mina do Barroso, acquiring the remaining 25% from Slipstream Resources Investments Pty Ltd. (Australian-based company) and its existing shares in Savannah. (Savannahresources, 2019)

Many relations were developed across countries, with businesses and with state offices in order for Savannah to come to own the project to mine lithium in the Mina do Barroso in the present day. The succession of these events, agreements and contracts were not communicated (nor consulted) with the local population. During the summer of 2021, Mafalda, one of the faces of UDCB, explained to me and others who were interested, how she (and the people in Covas) learnt about the existence of lithium, the so-called, white gold, in Covas:

In my view [the story of the mine] started with finding the name of my 'little village' on the internet in English, in the 2000s, in a minute at an international conference. I was surprised that it mentioned Covas do Barroso as one of the places with the biggest lithium reserves in Europe and fifth biggest in the world. Here [in Covas] nobody talked about it. A short time later, in 2004 or so, my father received a request to do prospecting on land that belongs to us. I was curious to know what was going on here. In the village there was no talk of anything. Soon afterwards, maybe 1-2 years, I found the technical summary of the environmental impact. It talked about feldspar and quartz, there was no mention of lithium. I was very surprised, because what was mentioned in the minutes in those international conference documents talked about the economic potential of lithium mining here. So, I was surprised that the license was not for lithium exploration. That was the first time I realised that there really was interest. In fact, the first time was when I was a university student, in the mid-1990s. A geologist came knocking on our door because he wanted access to a land that was ours. He was interested in the stones that were there, a white rock, which was of interest for ceramics. And then there was the reference to Covas do Barroso, in these conference proceedings, which then appeared in

conferences all over the world. From Rotterdam, I think Canada and several other places.²⁷

She then continued explaining how the people in Covas reacted to what was happening in their private and common lands:

These references [about lithium in Covas, made at the international conferences] are connected with the Savannah Mine. Because the mine that Savannah has today comes from that license that was granted in 2006, to explore for feldspar and quartz. That license was for a much smaller area, which had an environmental impact study [EIA], and at the time there wasn't much opposition. With that license in 2006 nothing happened for many years. [...] Then we realised that what really happened with that quarry. One of the cores was exploited, soil was exploited about 1 truck/year and there were 2 years where there was no exploitation at all. We know this from the payments that were made to the Baldios. So the license was active but practically no exploitation took place. Then the first we heard of the Savannah Mine, or Savannah, was when Savannah bought the licence. Savannah Resources was talking about exploring for lithium and the investors [said] that it had already done an environmental impact study and therefore was already able to do exploration.

We were surprised. The study was for a much smaller area, and lithium was not mentioned in the original license. We tried to understand what had happened. People didn't have a good idea of the area of the license. There was an area that was 120ha that later became 540ha, and at the time we didn't really understand what was going on. The company asked for prospecting, and people allowed it without really knowing what the area was. I was curious, I went to see the investors' reports, and I saw the extension of the area they were talking about. It had nothing to do with the area that was in the 2006 environmental impact study, it was a much larger area [and close] to the village. While

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²⁷ This translation, from portugues to english, and all the following are made by me. "No meu ponto de vista [a história da mina] começou com encontrar o nome da minha 'aldeiazinha' na internet em inglês, nos anos 2000, numa acta numa conferência internacional. Eu fiquei surpreendida com o facto de mencionar Covas do Barroso como um dos lugares com as maiores reservas do lítio da Europa e quinta maior do mundo. Aqui [em Covas] ninguém falava disso. Passado pouco tempo, em 2004, talvez, meu pai recebeu um pedido para fazer prospecções numa terra que nos pertence. Eu tive curiosidade por saber o que se estava a passar aqui. Na aldeia não se falava de nada. Encontrei pouco tempo depois, talvez 1-2 anos, o resumo técnico do impacto ambiental. Falava de feldspato e quartzo, não havia menção ao lítio. Eu fiquei muito surpreendida, porque aquilo que estava referido nas actas em esses documentos das conferências internacionais falava das potencialidades económicas da exploração do lítio aqui. Portanto, surpreendeu-me que a licença não fosse para exploração do lítio. Essa foi a primeira vez que eu percebi que realmente havia interesse. Aliás, a primeira vez, realmente, até foi quando eu era estudante universitária, meados dos anos 90. Um geólogo foi bater à nossa porta porque queria acesso a um terreno que era nosso. Ele tinha interesse nas pedras que lá estavam, uma rocha branca, que tinha interesse para a cerâmica. E depois fui a referência a Covas do Barroso, em essas actas de conferências, que depois apareciam em conferências em várias partes do mundo. Desde Rotterdam, creio que o Canadá e vários outros lugares.

so much here in the village, people also started asking questions. Because seeing the damage that was being done by prospecting that was not "there on that land" but it was a huge area, and it's not what they had understood. So they started asking questions, and along with what I was saying that was in the investor reports we started to realise the scale of what they wanted to do. One of the things that impacted me the most, was the fact that, I think in June 2019, they had done the "spoken study", a preliminary fissibility report and they were talking about the need for the environmental impact study unless the project was considered Proyecto de Interés Nacional (PIN). Savannah actually tried to have it be PIN, that's written there, in the report, in black on white. (Mafalda, 2021)²⁸

The maps situating the mines - i.e. shared by the different environmental impact studies - show how the project has been growing up until today.

²⁸ Original Portuguese version: "Estas referências [sobre o lítio em Covas, feitas nas conferências internacionais] estão conectadas com a Mina da Savannah. Porque a mina que hoje tem a Savannah, vem de essa licença que foi concedida em 2006, para fazer a exploração de feldspato e quartzo. Essa licença, era para um área muito mais reduzida, que teve estudo de impacto ambiental [EIA], e na altura não houve tanta oposição. Com essa licença de 2006 nada aconteceu durante muitos anos. [...] Depois é que nós percebemos que o que realmente aconteceu com essa pedreira. Um dos núcleos foi explorado, solo foram explorados cerca de 1 caminhão/ano e houve 2 anos nos que não houve nenhuma exploração. Nós sabemos isso através dos pagamentos que se fizeram aos Baldios. Portanto a licença estava ativa mas praticamente não houve exploração. Depois, a primeira vez que ouvimos da Mina da Savannah, ou da Savannah, foi quando a Savannah comprou a licença. Savannah Resources falava de explorar lítio e aos investidores [dizia] que já tinha feito um estudo de impacto ambiental e portanto já estava apto para fazer exploração.

Nós surpreendeu. O estudo era para um área muito menor, e o lítio não era mencionado na licença original. Intentamos perceber o que tinha passado. As pessoas não tinham bem noção da área da licença. Havia uma área que era de 120ha que depois passou a ser 540ha, e na altura nós não percebemos bem que estava a passar. A companhia pediu para fazer prospecções, e as pessoas permitiram sem saber bem que área era. Eu tive curiosidade, foi ver os relatórios dos investidores, e vi a extensão do área do que estavam falando. Não tinha nada que ver com a área que estava no estudo de impacto ambiental de 2006, era uma área muito maior [e próximo] a aldeia. Enquanto tanto aqui na aldeia, as pessoas também começaram a fazer perguntas. Porque verem os estragos que estavam a ser feitos por prospecção que não era "lá em aquele terreno" mas era uma área enorme, e não é o que eles tinham entendido. Então começaram a fazer perguntas, e junto com o que eu estava dizendo que estava nos relatórios dos investidores começamos a perceber a dimensão do que queriam fazer. Uma das coisas que mais me impactou, foi o facto de, acho em Junho 2019, eles haviam feito o "spoken study", um relatório preliminar de fissibilidade e falavam da necessidade do estudo de impacto ambiental excepto se o projeto fosse considerado Proyecto de Interés Nacional (PIN). A Savannah realmente tentou que fosse PIN, isso está escrito lá, no relatório, em preto sobre branco." (Mafalda, 2021)

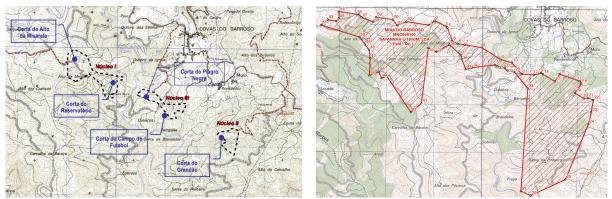


Image 4 (left): 2004, 70ha requested for feldspar exploration by Saibrais (APA, 2004); Image 5 (right): 2021, 542ha requested by Savannah Lithium SA, 2021 (DGEG, 2021).



Image 6: Request for the extension of 51ha of the exploration area (a total of 593ha). Waiting for approval since 2019 (DGEG, 2019).

The company Savannah only talks directly to the *baldios*, where most of the commoners (*compartes*) are against the mine. The mine wants to occupy 350ha, which is 17.5%, of the common lands. A 350ha area means 59.02% of the projected exploration area, out of a 593ha total planned. The rest of the land required for the mine, which is not part of the *baldio*, is being dealt with by the private owners of these lands. To perceive how these areas interact with each other I have put together the map of the baldio, the map of the requested concession area and the distance to the closest residential area (200 meters).

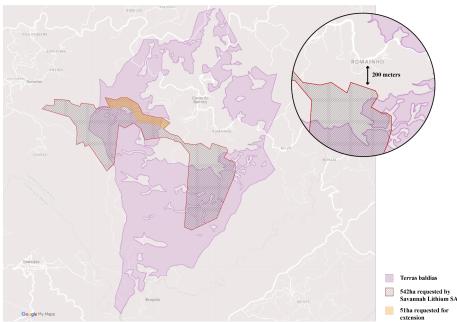


Image 7: Shows the areas requested for the mine overlapped with the map of the baldio, with detail on the distance to residential areas, made by me.

In order to rent out the common land, the majority of the *compartes* need to agree. At the beginning, when they found out about the mining project, few *compartes* said anything in the assembly. The participation of the *compartes* has been low since the dictatorship, under the assumption that it is the person in charge, the representative, who will make the decisions anyway. But once a few started to voice their opinion, others followed.

Savannah Resources is not working alone on the extraction of lithium. European policies on energy transition, including the move towards electric cars, and incentives to mine CRMs in Europe also play their part. Portuguese public entities, such as universities, are also contributing to projects to extract lithium. During 2018, Savannah signed an agreement with the Universidade do Porto (UP) and the Laboratório Nacional de Energia e Geologia (LNEG):

We are delighted to enter into this agreement with these two prestigious Portuguese organisations. Both have a good track record, and it was even Professor Noronha from the University of Porto who discovered the presence of lithium in Portugal in Grandão some 30 years ago," commented the Savannah technical director. (see Batalha Oliveira, 2018)²⁹

The UP is a member of the Cluster Portugal Mineral Resources Association, together with mining companies actively looking for the lithium extraction opportunities in the region. As Dale Ferguson mentioned, Noronha, Lima and other representatives and departments of the UP have been key players

²⁹ Original Portuguese version: "Estamos encantados por entrar neste acordo com estas duas prestigiadas organizações portuguesas. Ambas têm bom historial, inclusivamente, foi o professor Noronha da Universidade do Porto que descobriu a presença de lítio em Portugal em Grandão há cerca de 30 anos", comentou o diretor técnico da Savannah." (see Batalha Oliveira, 2018)²⁹

in informing and developing geologic studies about the accessibility of lithium in the region. The university's science faculty also technically advised the DIA on one of the lithium mines in the region. In his publication on the Journal Mapa, Vitor Afonso³⁰ mentions the economic implications of the municipality of Montalegre in the evaluations made by the university of Porto:

It was precisely to this Faculty of Sciences from the University of Porto (FCUP), that the Municipality of Montalegre, has awarded, three days ago, through a direct award in the amount of EUR 19,864.48, the "purchase of services to perform technical advice to the environmental impact study - Romano Mine" (Afonso & Movimento Não às Minas - Montalegre, 2022)³¹

More public universities are taking part in the research and evaluation of lithium extraction projects in Portugal. The Universidad do Minho also made a report for Savannah on the 'Economic Impacts and Development' of the Mina do Barroso project in 2020. The report highlights the relevance of the project for the Portuguese economy:

Savannah Lithium, Lda. hired the University of Minho to carry out an independent study on the economic impacts of the project. [...] Lithium ion batteries occupy a central position in the new energy paradigm, based on renewable energies. [...] Projects for the exploration of litiniferous pegmatites in Europe are of a strategic nature. [...] The Mina do Barroso project is the largest conventional lithium (spodumene) exploration project in Western Europe. [...] The strategic relevance of the project for Portugal is indisputable. (Universidad do Minho et al., 2020)

I would like to clarify the importance of this "documented data" about the past events for my thesis. Paraphrasing Tsing, "I am not a journalist" (Tsing, 2004:7) and my concern does not only involve which lithium miners and Portuguese government officials knew about or participated in various conjuring acts. I am more interested in the art of conjuring itself, as practiced not only by Savannah officers and employees, but also by the analysts, reporters, investors, and regulators who formed their retinue. The story of how mining lithium started in Covas, as told by Mafalda, describes the lack of transparency from the beginning and the consequent generation of rumors and distrust. These characteristics have been growing with the project in the region.

³⁰ Vitor Afonso is one of the representatives of the movement "Não às Minas - Montalegre" (link).

³¹ Original Portuguese version: "Foi precisamente a essa Faculdade de Ciências da Universidade do Porto (FCUP), que o Município de Montalegre, adjudicou, há 3 dias, através de um ajuste directo no valor de 19,864,48€, a "aquisição de serviços para realizar parecer técnico ao estudo de impacte ambiental − Mina do Romano" (Afonso & Movimento Não às Minas − Montalegre, 2022)

For the life in Covas, the critical character given to lithium in order to build "our common future"³² (Boccardi, 2012), can be translated into, at least, an uncertain future. The predictions made by the people in Covas are built on the distrust generated by the dynamics and capitalistic discourses behind the project to mine lithium. The mine project, in the way it is being developed, competes with the livelihood sustaining practices in Covas. Thus, in the next chapters land and the dynamics behind it will make its appearance in terms of its value for the inhabitants of Covas, and not solely on the value given through (the extraction of) lithium (Eiss, 2008:191-213).

³² The classic definition of 'Sustainable development', provided in the Brundtland Report of 1987 (Boccardi, 2012:2).

4. The making of Covas

It is possible to envisage an alternative interpretation of place. In this interpretation, what gives a place its specificity is not some long internalized history but the fact that it is constructed out of a particular constellation of social relations, meeting and weaving together at a particular locus. (Doreen Massey, 1991:28)

Throughout this chapter, I explore how Covas would be understood if looked at from another standpoint than the one based on statistics which draw on the depopulation and the need to create jobs in rural areas. This standpoint legitimizes policies that bring open pit mines to the freguesia of Covas. Throughout my thesis, I continue analyzing how Covas could be understood if looked at through its connections and relations.

Covas, as any other place, could be defined through many of its identities. The "complex mix of all these" (Massey, 1991:28) identities are a result of the relationships that cross and link the households, at the local and international scale, and vice versa. In the following paragraphs I will show how these spatial scales interact and shape the relations of Covas today. These three scales (and others in between) can not be disaggregated. Thus, it is impossible to talk about, for example, the local scale without observing the impact international entities have on the household and the household on local identities.

In order to better understand the three scales, I should explain what I mean by local. I refer to the space in which community/ies (structurally nested and overlapping) deal with common questions and relations within the everyday. Connections that I try to map in the following graph:

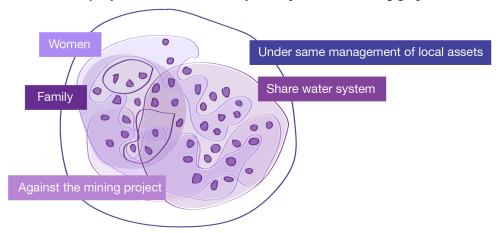


Image 8: Representation of nested and overlapping communities, made by me. In which a person is part of many communities.

Although not as homogeneous a group of people as it might sometimes be idealised³³, the people of Covas are considered a community. The same goes for the migrant population, people affiliated to a political party – i.e. in the case of Covas, probably to the PSD (Partido Social Democrata) or to the CDU (Coligação Democrática Unitária) – the young population, the farmers, and so on. Under this "multiplication of communities", new communities can be created as a result of new political, economic and social relationships. Thus, the people impacted by the mining project can also form a community, or rather, several communities connected by how they experience the mine – the community of the people who profit, of the people who does not have a choice, etc. "Human experience", as Susana Narotzky explains, "is a process of forming and transforming social relations […]. Experience is at once an individual process and a social process" (Narotzky, 1997:174).

The communities that have grown around the subject of the mine have surpassed, by far, the Covas territory. The recent uplifted communities, against the mining project, are a good example of how new territories can be drawn depending on what we use to create borders, or even to define power. These and other communities have connected the people of Covas with people in other parts of Portugal, Europe and worldwide.

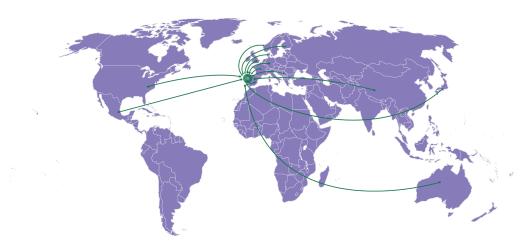


Image 9: Global map with connections of social organizations, journalists, companies and individual actors to Covas, made by me.

Only during the last year (2021-2022): Dr. Steven H. Emerman, a recognized Professor of Geology based in the USA, has presented his petition to the EU Parliament³⁴ to denounce the conditions of the mining project in Covas; Dr. A. Dunlap a social anthropologist teaching at the University of Oslo has, besides participating in the same petition, visited Covas and evaluated the political and social situation; a representative from a Japanese newspaper, as well as many others from countries in

³³ Massey talks about how the sense of place and its particularities, in a time of movement and intermixing, are "An (idealised) notion of an era when places were (supposedly) inhabited by coherent and homogeneous communities is set against the current fragmentation and disruption." (Massey, 1991:24).

³⁴ He also previously evaluated the 'Instalação de Armazenamento de Rejeitados da Proposta de Mina de Lítio do Barroso da Savannah Lithium' and presented the evaluation to the UNECE (link).

Europe, has researched the Mina da Savannah; the Zapatistas have come to Covas from Mexico to support the protest against the mining project (as well as several others happening in Europe); protesters of the months-long protest in Serbia against "Rio Tinto lithium mine" also sent a message of solidarity to the mining projects in Portugal; until 2019, the Australian-based company Resources Investments Pty Ltd, invested in the project for the Mina da Savannah; Elon Musk continues to look for ways to compensate for lithium's demand and shortage; and the EU seeks to reduce Europe's lithium dependency on third party countries.

Covas is one such "meeting place" (D. Massey, 1991:28) of relations, growing by the proliferation of interests in the region, where the multiplicity of value perceptions—i.e. towards the physical space, the relations to the place, the life there, etc.—are especially apparent today. Through the observation of different scales of actors (through space and temporality), I analize how they value, revalue and devalue resources in Covas. These valorizations and the resource and necessity policies created in relation to them shape social relations connected to Covas and tell different stories of Covas identity.

Some of these relations are more powerful than others; as in the case of the governments that have been present in Covas over the centuries and into the present day. Government perception about what and how Covas should be has shaped Covas' relation with the 'outside' as well as the relations 'inside'.

Several Portuguese "civic grassroots initiatives" came together and signed 'The National Manifest, Against Plans for Mineral Extraction in Portugal', published in 2020. Their demands, for the government to relate in a different way to them, included, among other important claims, having access to "precise, transparent, and comprehensive information at local, regional, national and European levels. This includes the disclosure of any agreements between public bodies (e.g. universities) and private entities of the extractive sector, as well as the disclosure of any data gathered about the Movements in the scope of projects (co-)financed through public funds (e.g. H2020)" (Movimentos Sociais, 2020)



Image 10: Conceptual image of the creation of communities around the conflict areas, made by me.

The elements (represented by dots) in the above graph, are based on the communities that signed the "National Manifest - Against Plans for Mineral Extraction in Portugal" and the relationships that were created as a result.³⁵

As expressed in the manifesto, many external actors have contributed to the "public identity" of Covas: universities, international companies and institutions, etc. Actors who have the power and authority to become part of the "public architects" who define the value of Covas. Their perception is communicated to and often assimilated into the "public" perception and also into the perception of some of the inhabitants of Covas itself. But the questions raised by the lithium-mining project have created many new relations and communities that traverse spaces and different social and political contexts. As Antonio Pusceddu, my thesis supervisor, mentioned during my class presentation in May 2022, it is interesting to see how new alliances between anti-capitalist networks in urban contexts and PSD (Partido Social Demócrata) followers are created. I would like to show some of the global perceptions of Covas and how these impact 'local times' and give rise to political struggles.

³⁵ The data is based on empirical experience, on the notes taken in the field and some of the documents gathered after, about the connections. No quantitative data has been gathered on it for the moment.

³⁶ Massey talks about the "need to think through what might be an adequately progressive sense of place, one which would fit in with the current global-local times and the feelings and relations they give rise to, *and* which would be useful in what are, after all, political struggles often inevitably based on place" (Massey, 1991:26).

4.1. Reproduction and contestation of statistics

Declared as a parish, outlined in maps and signposted on roads distinguishing the territory from its neighboring parishes, Covas do Barroso (2967 ha) includes the villages of Covas, Romainho and Muro. In administrative terms, the parish of Covas do Barroso lies in the municipality of Boticas, in the district of Vila Real, in the province of Alto Tamega³⁷. Geopolitically, Covas lies in the north of Portugal, 40km away from the Portuguese-Spanish border; 140km away from Porto, one of the metropolitan areas, and 450km away from the administrative capital of Lisbon. In terms of Portugal's size and communication infrastructure, these distances equate to a big disconnection from the urban centers, including the services and visibility they provide to the population. Thus, Covas is classified as a peripheral region that is geographically as well as socially distanced.

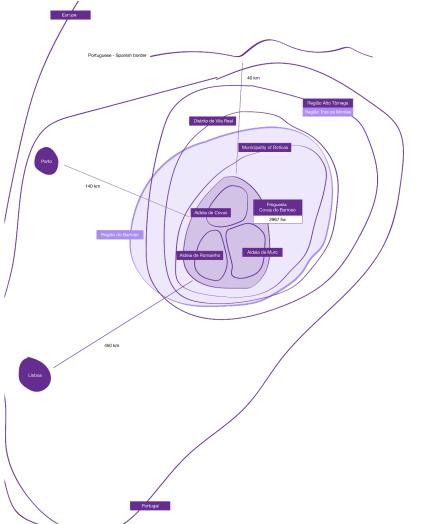


Image 11: Representation of common classifications given to the territory of Covas in relation to others, made by me.

³⁷ Some decades ago Covas do Barroso was still considered to be situated, under the medieval division of provinces, in 'Trás os Montes'.

It is possible to say that Boticas lies in the region of Barroso, the traditional name used in the administrative and judicial structures. Today, *Barroso* is also used to designate the region recognised by the United Nations Food and Agriculture Organisation (FAO) as a Globally Important Agricultural Heritage System (GIAHS)³⁸. It is also used to denote the mining project (waiting for approval), Mina do Barroso Lithium Project³⁹, by the Portuguese government and the mining company (two actors I will discuss later). But perhaps even more relevant is the use of *Barroso* as the population's place of origin descriptor of their identity: "Eu sou barrosã / barrosão" (Population of Barroso, 2021), a notion I will also come to later.

Situating Covas is an exercise of analyzing the actors that try to define it. As mentioned, one of the identities given to the place and community of Covas do Barroso, has emerged from its relation with the government of Portugal. Thus, what the Portuguese government measures and asks about Covas, becomes part of the place's and its inhabitants' identity. What questions is the Portuguese government concerned with?

The municipal chamber values Covas by: its population, economy, mobility and accessibility, housing, equipment and basic services (health, social, school, administrative and security), and environment and planning (Câmara Municipal de Boticas (CMB), 2020). In order to evaluate and intervene, the state uses demographic studies and statistics as a main indicator to govern:

Through Census data it is possible to obtain, for each geographic level, a "photograph" of people and their living conditions. In this way, we get to know: how many we are, how we are, where we live, how we live. Census data on population and housing are therefore essential to identify, for example: The number of schools, day care centers, nursing homes that are needed; Where to build roads, hospitals, etc.; How to distribute the funds among the Municipal Councils. (INE, n.d.)

The implementation of the census has a big impact on the way a community and a place are valued by the state and also by those who receive that (e)valuation. It also highly influences future decisions taken by state actors, who will try to predict the best possible use of the regional and national resources. When asking, what is the resident population in Covas today? and how has the resident population changed over the decades? The Instituto Nacional Estatistica (INE) of Portugal provides us with the data collected during the census, which, through the following graph shows:

³⁸ Food and Agriculture Organization of the United Nations.

³⁹ Savannah, 2021.

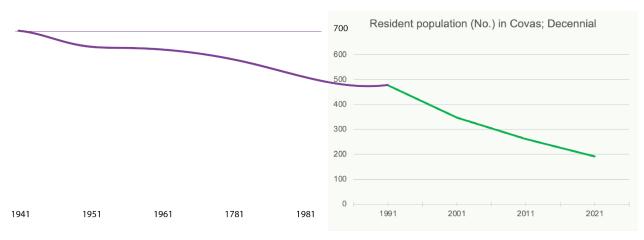


Image 12: Data on population accessible through INE, complemented by data on population provided by the population of Covas, in order to show life in the previous decades to the dictator. The years between 1940 and 1990, are an assumption of the progression path.

The resident population counted 192 people in 2021, and of 477 residents in 1991 (INE)⁴⁰. As the government's objective is to ensure the welfare of the population through the improvement of their condition: increasing wealth, longevity, health, etc., I think that looking at this graph (Image 12), which highlights the depopulation of the region, it is safe to say that something has not gone as planned.

In Covas, the older population remember the life events lying behind this line, and the previous decades. Which, if it were available at the INE, would have shown a similar tendency: "During the 40's the population in Covas was approximately 700 people," explain two Covas residents, one born in that decade, the other a bit younger. A third resident, also from the 40's, tells me how "before the revolution of the 25th of April 1974, Covas had two shops and a healthcenter, even before Boticas did. There was also a library and roads." He continues by telling me that "what needs to be done is to put pressure on the government and bring to Covas the minister of agriculture, of finance and put pressure on them". ⁴¹ Three days earlier, I was having a similar conversation with another resident. This time a younger one:

We already had two schools, we already had a medical station... and now we have nothing. [...] It's the fault of the government that all the policies it has done have never been to try to make the interior more dynamic and value it (Woman, 43)⁴² 43 44

The life events behind the depopulation are mostly a result of rural migration flows. Emigration from rural to urban areas has been, and still is today, a movement impacting Covas, Portugal, Europe and the

⁴⁰ The census is run every 10 years.

⁴¹ Fieldnotes with old men, 08/08/2021.

⁴² Recorded interview with a woman, 03/08/2021.

⁴³ The district of Vila Real, to which Covas is one of the 197 parishes, can elect 5 deputies (out of 278). This percentage of representation in the parliament is repeated in most of the peripheral regions of the country and often perceived as no representation of the regions.

⁴⁴ Original portuguese version: "Nós já tivemos duas escolas, já tivemos um posto médico... e agora não temos nada. [...] A culpa é do governo que todas as políticas que fez nunca foram para intentar dinamizar e valorizar o interior" (Woman, 43)

rest of the world. During 1960, 65% of the Portuguese population was living in rural areas, whereas during 2020 only 33% remained⁴⁵. As it is mostly the people of working and fertile age who emigrate – i.e. the highest number of permanent emigrants by age in Portugal were 15-50 years old between 2011-2020, while between 2008-2011 the highest number of immigrants were 0-34 years old (INE) – the statistics show the advanced age of the people staying in rural areas and the resulting low natality rate.

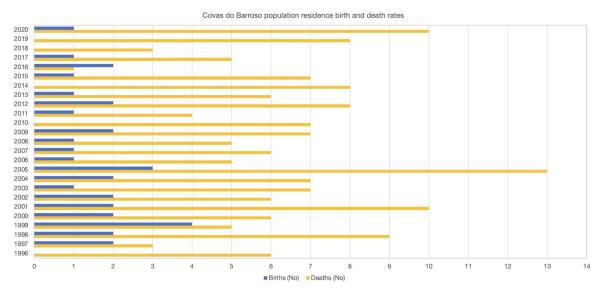


Image 13: Births and death rates of the resident population in Covas since 1996.

If we look at the number of births (blue lines) and deaths (yellow lines) in Covas, and compare it with the data on the resident population (table 1), we could conclude that in the 20 years between 2001 and 2021, the population decreased 38% as a result of deaths and a further 13.5% due to emigration (besides an almost 7% rate of births) (INE).

Migration movements in Covas are perceived as something natural. The children that grow up in Covas are expected to go to school and leave for places: where some existing family members live, where there is a job waiting, where they can potentially expand their horizons, where they can become independent,

According to one of the farmers, "in the time after the Second World War and the dictatorship years, there were some very poor people in Covas. Imagine 700 people working all the bits of land," she exclaims. "There was not much money, the *caseiros* (merchants) used to bring rice, coffee and pasta to their shop in town and exchange it for eggs," a man (68) tells me.

During the 60s, children in Covas didn't start school before they were seven years old. Until then, they would help collect the grapes, potatoes, look after the sheep or help the grandparents. During that time school only went up to 4th grade, when children were more or less 12 years old. By the time they were out of school and had become teenagers, it was during the European recovery from WWII, and

⁴⁵ World Bank staff estimates based on the United Nations Population Division's World Urbanization Prospects: 2018 Revision (The World Bank, 2018).

⁴⁶ All these motivations where shared with me by members of the population during my stay in Covas.

many looked for ways to emigrate, often to France. The experiences and life stories from every person and family in Covas are different, but most of them include at least a period of emigration.

Antonio (68) and Naya (66) live in France for most of the year. They come and stay in Covas at Antonio's house two to three times per year for at least for a month each time. When they do so, they visit their family, take care of the house and the plot, collect some fruits, etc. Antonio harvests his olives in December and presses them to make olive oil in January. This year (2022) he extracted 108 liters of olive oil, which they later brought back to France to distribute amongst their family there. When they migrated to France between the late 60s and early 70s, there were already some relatives who had emigrated there. Naya was 17 years old when she left Covas, but came back three years later while Antonio was in the colonial war in Angola (for 25 months). They went back to France in 1975. Once there, Antonio became employed in construction for 10 years and later became an independent worker. Antonio and Naya bought some land in the south of France and built their house. "We feel at home there," he says, "where we live, there are more Portuguese people around". Their family in France now has 11 members consisting of both children and grandchildren⁴⁷.

"For decades, the emigrants were seen as impeccable people, that were not working and were going to the coffee and had money to spend freely. They didn't dress the same way and talked about the jobs they had in France. Today you see the children growing up in Covas, and you don't see that difference", says Barbara, one of the young mums living in Covas⁴⁸. And she continues by adding, "some people coming for the first time to Covas are even surprised to see that. They ask me, "how is it possible that I built a house here and live better than them there?" "she tells me while watching the cows.

I will discuss the household economy in Covas in detail at a later stage, however, it is relevant at this point to mention the deep connection between the family's governance and its economy when talking about "emigrant-local" and inheritance relations, including its remittances. That is why the story told by this mother is relevant. Despite the high rate of emigration over the years, the majority of these families and family members are still connected to Covas. They maintain houses, land and family there, and most of them continue to come every year. Thus, they invest time, money and effort into their homes and relations to the place. The "migrated population" also continues investing in the acquisition of land, paying for energy costs, doing house renovations, and even helping out with other family costs. The relationship of the diasporas with Covas, even the material connections are not written anywhere, and the knowledge of who lives where and who participates in the economy is transmitted orally. Thus,

⁴⁷ Fieldnotes taken 08/2021.

⁴⁸ Fieldnotes taken 08/2021.

when the energy company wants to install new transmission towers, they need the local population to facilitate them with information about landowners and how to contact them.

In order to install new electricity lines, Energias de Portugal (EDP) checks different routes that go through public, communal and private land, in order to decide where to build transmission towers. For this task, they have to talk to the president of the *baldio*, the president of the parish and each of the land owners where they want to install a transmission tower. The EDP workers came up with the "best" route, which goes through the land of some owners who migrated to France or the USA. "Do you think we can contact them? Do they reply or have access to the email?" asks the EDP worker to the president of the *baldio* and the vice-president of the parish, while presenting them the different routes. "Maybe we can deal with the bureaucracy when they come in the summer," answers the other EDP worker. The owners (at least the one based in the USA) still has a monthly contract with EDP and pays €30 euros per month. ⁴⁹

The social relationships and experiences mentioned in the ethnographic vignette above, impact the economy, jobs, politics and social life in Covas. This way of socially reproducing is "invisible to the statistical world", as my supervisor, Antonio Pusceddu, mentioned in one of our sessions, and exposes a dimension of the economy that is not conventionally understood or recognised. The family's land will be worked and used by the family members that stayed, or it will be lent or rented to other farmers of the town. The "all year long residents" will not only take care of it, but have more land to farm and breed livestock. In Covas, the family economy continues to be very present in economics. It is common that a large percentage of the farmed land is inherited from parents, aunts/uncles and grandparents.

This is the case of Manuel, born in Covas during Salazar's regime. He was away from Covas from 1967 until 1976 – during the first of two of these years he was sent to the colonial war in Mozambique and when the mandatory time was over, he decided to go to France until the war was over. He came back to Covas in 1974 with the desire to be a farmer and the hope of living in a social democracy after the dictatorship ended. He started a dairy farm and grew potatoes on his wife's family's land. By this time, the house and the land they farmed were their own property, and the surplus they produced was sold to cooperatives. Other families went through similar situations. A lot of the men and women of Manuel's generation migrated to France to find a better life; some came back and others stayed and grew a family there, but the land of the great-grandparents is still

⁴⁹ Fieldnotes taken in 08/2021.

being used to farm and breed livestock by the family members that stayed in Covas, or by others that rent the grazing lands.⁵⁰

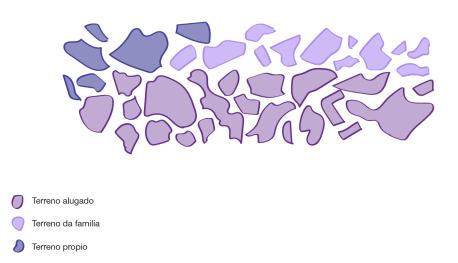


Image 14: Example of lands used by a family in Covas and its "property" relation to it.

As we will see in the next chapter, the agricultural work and harvesting of the land is a big part of the household economy and the families' and town's nourishment. Sometimes these lands, houses, and even animals, are either inherited or belong(ed) to family members that migrated. Either way, emigration or inheritance, their properties are often usufructuary by the people that stayed in Covas.

How to define who is a resident versus who is an emigrant is complex, since some live half of the year in Covas, others may be there less, but keep their belongings there and most of them are highly invested in what happens in the town⁵¹. Naya and Antonio, for example, go to demonstrations and meetings against the Mina da Savannah project every time they are in Covas. Some of the "mobile residents" return every three months for a couple of months, others once a year for six months, or every two months for a week, and so on.

Minie (73) defines herself as *barrosã* and has her family house in Covas. When her daughter migrated to France, Minie, who had previously lived in France from 1970 till 1982, moved with her. In France, as in Covas, Minie has children, grandchildren, and closets full of personal possessions, and her dog always travels with her. Late last

⁵⁰ Fieldnotes taken 08/2021.

⁵¹ In Portugal, the definition of "resident population" has changed over the years. By 2007 it was defined as: " The persons who [...] are present or absent in a given housing unit, this unit being where they live during most of the year with their family, or where they have all or most of their belongings" (Ine.pt). By 2011, "resident" had changed to: "Set of persons who, regardless of being present or absent in a given housing unit at the moment of observation, have lived in the place of their usual residence for a continuous period of 12 months prior to the moment of observation, or have arrived to the place of their usual residence during the period of 12 months prior to the moment of observation, with the purpose of living there for a year, at least."(Ine.pt).

summer, I met Minie in Covas. She had to stay a bit longer than planned in order to go to the dentist. She used this time to host some friends that came to give more visibility to the vindication against the Mina da Savannah. She then went back to France but we saw each other again for Christmas in Covas.⁵²

Minie could be considered as a resident of both places, France and Covas, which she probably does. Despite the fact that Minie and other "mobile residents" are (not) counted statistically, the population triples during the summer months alone. Summer is a time when many of the community members that emigrated come back, sometimes to help with the harvest, often to look after their houses, to connect with the family, and often to enjoy the holidays. As suggested by Patricia Alves de Matos in response to one of my presentations, "identity politics has put aside the importance of materiality in the life of people, to live to meet your needs. People don't just need recognition, but they are also involved in dynamics connected to where they live, to their migration trajectories, belonging to a community and valorization, etc. These dynamics have to do with something else, it has to do with their needs and the resources they think should be valued in order to satisfy their needs".

The above comment helps make clearer what is contested in Covas and who is involved. Since the speculations of the mine project started, the community(ies) of Covas has grown, although it has always been bigger than it seemed (based on statistics), through migration dynamics and its participation on the global market, a connection I will talk about in the next chapter. The entrance of the mining project, and the organizations behind its development, is questioning the dynamics that sustain livelihood in Covas. The project also calls into question the dynamics behind Covas' participation and belonging to the local, the national and the global community. It simultaneously questions how the people in Covas manage the household and are part of the world (economically, socially and politically). Thus, in the next chapter I will go through the dynamics and valorizations driving the economy in Covas.

⁵² Fieldnotes taken between 2021-2022.

5. Who takes care of this land?

"Socialization can be seen as part of the process of resource allocation, one which, at least in part, takes place in a realm of relationships often conceived as non-economic: those between kin, neighbors, friends and peers." (Narotzky, 1997:161).

The functionality of the local economy is a fundamental part of the construction of Covas. I analyze the economic relationships on three different scales: household economy, local economy and land economy. In the context of Covas, the existence of Common lands in the region is a significant aspect of the local economy.

5.1. Choosing to be a farmer

"I like this [life as a farmer in Covas], because it is what you showed me," said Barbara to her father when she was 18 years old.

As well as life in cities is reproduced, rural life in Covas is also reproduced over generations. In Covas, "local knowledge" of the relationship with the land, the animals and other local activities are passed on to children during their "growing age". "O rego toda a gente conhece" Barbara tells me when I ask her about a map of the irrigation system, a map that hasn't been drawn and which information has been orally transmitted. I will return to the "use cases" of local knowledge as a cultural resource, however, what is relevant to highlight for now are the agricultural and animal breeding activities as part of this local knowledge. Knowledge on when to access water and how much; where to find bush and wood; where to bring the cattle; how to take care of the forest and prevent fires, or how to react when there are fires; when it is time to plant tomatoes, kale (*couves*), or other crops, all this and more characterize the Covas way of living.

Social relations with the emigrant population, and other global social networks, have become more and more important due to the possibilities they create for another form of livelihood. These relationships can offer a future outside of Covas for children, but also for adults. As previously mentioned, children are encouraged to leave for places with "more opportunities", or to a place with a better position in reference to the means of production and means of livelihood (Narotzky, 1997).

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⁵³ Fieldnotes 04/2022.

Despite this, some children still decide to stay in Covas. This is the case for Barbara, who chose to be a farmer:

When people ask why she decided to be a farmer, Barbara often mentions how at the end of her school years, when all her friends were dreaming of possible jobs (the majority in cities) she didn't feel any "passion" for these possible futures. She describes how her future appeared "un-visible" to her. Before starting the last year of school, she decided she wanted to continue farming. Barbara explains how her father was saddened by this, he wished for Barbara to have a different job, a less hard one. In the eyes of her family and friends, who over the years had either migrated away or stayed and farmed the land in Covas, farming didn't provide a good future. ⁵⁴

As mentioned in the previous chapter, there were different reasons why farming was not considered a "good lifestyle", or one that could provide a good future, and triggered migration movements to the cities. Today, many of the reasons can be considered historical. Policies supporting the centralization of services and other "development" policies which changed the "expectations" of the population, made farming look harder and less desirable over the decades. The subsequent depopulation movements brought a lot of work for the people who stayed, who had to work the land to keep it fertile, take care of the forest, animals and infrastructure of the town. The dependency on the weather conditions for agricultural activities and the later dependency on state subventions, also contribute to the complications involved in having a "good lifestyle".

The economy in Portuguese rural areas today is supported by subsidy policies through the direct intervention of the state, and the EU. Farmers in Covas don't have a fixed income and depend, to a large degree, on European subsidies to "indirectly acquire use values" and commodities. Most of these European subsidies depend on the health and fertility of the farmers' animals, which depend on the farmers' access to the land and on its fertility, which depends on the weather, the farmers' work, and their relationship to these lands. Farmers are responsible for the interconnection between land-food-animal-finance.

5.2. Subsidiary Economy

While watching the cows in the lameiro, Barbara explained why they get subsidies:

⁵⁴ Fieldnotes throughout the visits.

⁵⁵ In her analysis of Marxist approaches to economic 'logics', Narotzky explains how "one stresses the production of use values to be obtained directly - as when a peasant works a subsistence plot - or indirectly as in simple commodity production where exchange is limited, in theory, to the indirect acquisition of needed use values." (Narotzky, 1997:162).

With the entry into the EU, the opening of borders and the possibility of products coming from other places, which can put meat at lower prices, we here can't compete with those companies. [...] We don't get paid for production. That's why now there are all these donkeys that don't produce anything. The subsidies are not paid to production, they are paid... I don't know, to say that you continue to live from agriculture. (Barbara)^{56 57}

"Any day, the subsidies' conditions will change, it always happens that way", Barbara tells me. The subsidies, i.e. the financial amount farmers receive, decreasing during the last years, means less people are choosing to farm. "Only those who really like it, or who already have a structure that comes from their parents, give continuity, otherwise they leave. Which is what has happened" ⁵⁸ ⁵⁹ (Barbara). Thus, the social and political circumstances that make farmers dependent on European subsidies makes me question "the degree to which the maintenance of life is controlled by oneself" (Narotzky, 1997:167) in Covas.

This economic dependency has also created an opportunity "of control", or at least of very high influence, for Savannah; Savannah Resources has become one of the actors who exercise pressure to control life in Covas. Its capital's ownership gives the company the power to control resources⁶⁰ and social relations of production. In this case, one way this behavior materializes is through the speculation of land value in Covas. In order to fulfill its intention to acquire land in Covas, Savannah has hired local residents, i.e. people with pre-existing social relations in the community, visit houses and make offers to local landowners⁶¹. The national politics and the inhabitants' reaction o to the speculation created around the Mina da Savannah also expose how "some people [including governmental institutions and companies] have more control over their own and others' livelihood, further driving people into different positions in their attempt to reproduce life" (Narotzky, 1997:167).

The offers made by the company to the land owners have been changing during the last years, generating speculations about the future of life in Covas; about land prices, who is ready to sell, and who is in favor of or against the mine. "They offered my parents, for their land, a price equivalent to its value 25 years ago" says one of the migrant residents to me during summer, when we were sitting in

⁵⁶ Recorded interview 08/2021.

⁵⁷ Original Portuguese version: "Com a entrada na UE, a abertura de fronteiras e a possibilidade de virem produtos de outros lugares, que conseguem colocar a carne a preços mais baixos, nós aqui não conseguimos competir com essas empresas. [...] Não somos pagos à produção. Por isso é que agora há esses burros todos que não produzem nada. Os subsídios não são pagos á produção, são pagos... sei lá, para dizer que continuas a viver da agricultura." (Barbara)

⁵⁸ Recorded interview 08/2021.

⁵⁹ Original Portuguese version: "Só quem tem mesmo gosto, ou já tem uma estrutura que vem dos pais, dão continuidade, senão vão-se embora. Que é o que tem acontecido" (Barbara)

⁶⁰ "The capitalist is moved by his drive to accumulate, because ownership of capital is what makes him a capitalist, what gives him the power to control resources and results in his commanding position in the social relations of production." (Narotzky, 1997:163).

⁶¹ Savannah's "land acquisition program" appears in their magazine "Barroso lithium Magazine", the first publication of which came out on 05/04/2022 and can be seen here.

Nosso Cafe, one of the two coffee shops in town. While others tell me how land prices in the desired concession area and surroundings have increased four times; up to 2 €/m2 from the previous 0,5€. During my time in Covas, I heard different opinions. Some people think that "if I don't sell now, I will be expropriated later"; "this is the best offer I will get"; "the mine is not going to be so bad". Others made a distinction between the property and the "property rights"⁶²: "Even if I sell they need a permit to continue with the mine project"; "since we live outside of Covas or have more land to farm we could sell all or part of it and make some money"; "the price is ridiculously low". Still others think they don't have the option to choose. However, to this day, most people don't want to sell and are scared; "what will I do without land to farm and breed animals"⁶³.

Barbara and David apply to different types of subsidies. One of them is *prêmios animais*, ⁶⁴ which they apply for with the cows' *aleitantes* ⁶⁵. In order to get this subsidy, estimations about the future fertility of the cows are made every year and penalties are applied in case the estimation is wrong. Although bulls are part of the families' cattle, and need to be taken care of and nourished, as the subsidy is granted for giving birth, the bulls don't receive it. In the cattle, there are only two bulls, which they change every other generation when they buy another one. This "circulation" of bulls is needed to avoid the same consanguinity between the female calves and to keep "good calves" (*com boa pinta*). Barbara explains the process to me as well as what the conversations in the nomination office for subventions are like sometimes:

In the case of lactating women, the cow receives because it is already producing offspring, it has already given birth. So when I go to apply, for a grant (they have access to the SNIRB, which is the database of animals. Whenever a calf is born we have to register it and do it all) for example, I say: This year I have 20 cows. 20 cows are 20 quotas. One quota is, for example, for each cow gives me 130 euros. So when I get there to apply for the employee goes to the SNIRB database and tells me: this year you only have 18 cows, so you will have a penalty because you committed [but after all] you do not have 20 cows, we always committed at the beginning of the year. And then she tells me look, you have a cow here that had to have given birth and not

⁶² Schlager and E. Ostrom (1992) drew on the earlier work of Commons ([1924] 1968) to conceptualize property rights systems as containing bundles of rights rather than a single right. The meta-analysis of existing. field cases helped to identify five property rights that individuals using a common-pool resource might cumulatively have: (i) access: the right to enter a specified property, (ii) withdrawal: the right to harvest specific products from a resource, (iii) management: the right to transform the resource and regulate internal use patterns, (iv) exclusion: the right to decide who will have access, withdrawal, or management rights, and (v) alienation: the right to lease or sell any of the other four rights (Ostrom, 2010:643).

⁶³ Fieldnotes during my visits.

⁶⁴ see https://www.ifap.pt/val-regras

⁶⁵ 'Aleitantes' refers to a female that has given birth at least once in the last 18 months. By definition, a 'vaca aleitante' will be a cow belonging to a breed intended for "meat" (or resulting from a cross with one of these breeds) and which is part of a herd intended for raising calves for meat production, which presupposes the feeding of the calves based on breast milk (ifap.pt).

give birth. I said "but look she will give birth in one of these days" ok, if it is within this time..."⁶⁶

The second type of subsidy they can access is based on "zona desfavorecida"⁶⁸, within which Covas is included for being a mountainous region. The subsidy aims to maintain the agricultural and livestock activities in these regions. Here, the cows are equal to the use of the land. If a farmer has 10 cows, i.e. counted as "cabeças normais"⁶⁹, and each *cabeça* needs to have access to at least 1ha of land, they will need 10ha of land to pasture. The subsidy decreases with the increase of owned cows/hectares per farmer, i.e. the first 3ha (or three cows) will receive 260€/ha, 3 to 10ha will be valued at 190€/ha, and so on, until a limit of 150ha per farmer (IFAP).

The subsidies help produce meat. The profits from selling the calves only cover the "production" costs and are not enough for the families to be economically independent. This is based on what Barbara was explaining before about the market competition; the prices of the meat produced in Covas cannot compete and they stay dependent on subsidies. Thus, for many farming families in Covas, subsidies (which are divided in two payments per year) are the main income. This dependency reproduces the same activities and life in Covas: either stay, farm and depend on the subsidies or migrate.

5.3. "Casi feito em Covas"

The subsidies are reinvested into the nourishment and care of the animals, the land and the family. Some common expenses are the purchase of seeds to plant corn. The seeds are bought every year from the company "Pioneer". These seeds are bought because they reduce the natural 30% loss of crops per year. The corn is used to produce silage (*silagem*⁷⁰) for the cows. Other expenses include the seeds to plant grass, the petrol (which is also sustained by state subventions) to cut wood and carry the harvest, move the soil to collect potatoes, etc. As Barbara puts it, "We earn money on what we save" For example, if they were to buy the silage needed to feed the cows, they would pay 5000 euros per 1000 tonnes, which they would use in, more or less, 3ha. And if they bought the wood they use to heat their house and the water, they would pay around 800 euros/year. If they were to buy the hay (*feno*), instead of

⁶⁶ Recorded conversation, 08/2021.

⁶⁷ "No caso das aleitantes, a vaca recebe porque já está a produzir crias, já pariu. Por isso, quando eu vou fazer a candidatura, para um subsídio (eles têm acesso ao SNIRB, que é a base de dados dos animais. Sempre que nasce um vitelo nós temos que registá-lo e fazer isso tudo.) por exemplo, eu digo assim: Este ano tenho 20 vacas. 20 vacas são 20 cotas. Uma cota é, por exemplo, por cada vaca dá-me 130 euros. Então quando eu chego lá para fazer a candidatura a funcionária vai à base de dados do SNIRB e diz-me assim: este ano só tens 18 vacas, por isso vais ter uma penalização porque te comprometeste [mas afinal] não tens as 20 vacas, comprometemo-nos sempre no inicio do ano. E depois ela diz-me olha, tens aqui uma vaca que já tinha que ter parido e não pario. Eu disse "mas olha ela vai a parir num destes dias" ok, se for dentro deste prazo…"

⁶⁸ https://www.ifap.pt/mzd-pdr2020-regras

⁶⁹ 24 month-old cows are considered as a whole, a *cabeça normal*, here bulls also count as "cabeça normal". Less than 6 month-old calves count as a 0.4 head; and between 6-24 month-old calves count as a 0.6 head.

 $^{^{70}}$ Silagem, cortar milho para as vacas, é uma interajuda tu vens a ajudar-me a mim, eu vou te ajudar a ti... (Barbara, recorded fieldnotes on 01/2022).

⁷¹ Original Portuguese version: "Nos ganamos dinero no que ahorramos"

growing it, they would pay 20 euros/roll, etc. This form of "earning money" by saving is only possible through the "free labor" of the household members and the community. Since the pandemic started, Eneko (26), David's son, and his girlfriend Nora (27), with whom he lived in London, UK, came "back" to Covas and are today working with the cows, the land and the town of Covas.



Images 15 (left): Collected firewood for winter 2021-2022; Image 16 (right): Collected and rolled hay.

At home, this behavior of saving by doing extra work oneself, can be seen in what David likes to call "food nearly made in Covas"⁷². The food can be baked chicken with potatoes, rice and *flan* as dessert. In this dinner, the chicken, the potatoes and the eggs for the flan will be "grown" in Covas. And the rice, milk and sugar to make the flan will be bought and has probably been produced "outside". One of the conditions to be able to eat *nearly made in Covas* is that they have to eat seasonal food: "During the tomato season, we only eat tomatoes, now it's time for *grelos*"⁷³ Barbara says while eating *grelos* in January.

Barbara is in charge of the household economy, which includes the management of present income and costs: "Me, the electricity, the water, the social security, the house expenses, I take care of everything" (Barbara)^{74 75}, as well as some future planning.

I asked Barbara how she plans for the future. At what age do you plan to stop working?

What questions do you ask me... what do you mean by working? You who have been here for a few days, do you think I work? And what job do you think I can stop doing? Maybe in a few years, in 20 years, I can let Eneko be here, he will then take care of the

⁷² Original Portuguese version: "Comida quase feita em Covas"

⁷³ Original Portuguese version: "Nós na época dos tomates só comemos tomates, agora é a época dos grelos"

⁷⁴ Recorded conversation 01/2022.

⁷⁵ Original Portuguese version: "Eu, a luz, a água, a segurança social, as despesas da casa, sou eu que me encarrego de tudo"

cows and we will just help. Which means, stop receiving and work the same. What we do is self-sufficiency, so I have to sow potatoes to eat, I have to take care of the firewood... because if you were to buy everything... It is these little things that make the difference, which is what makes us earn some money.^{76 77}

I was wondering how she and David would be able to take care of the firewood, seeds, and harvesting potatoes in 20-30 years. During the potato harvest in September, I witnessed how Barbara's father could not bend down for four hours to pick up potatoes. I saw how tired David got after cutting trees to prepare firewood for the winter. But what happens in Covas, is that people help each other. When harvesting Barbara's dad's potatoes, 10 people (from different generations) helped out. "Real life" (Narotzky, 1997) in Covas is clearly based on the production of relationships between people. Barbara continued telling me:

The people who come to help us are our friends. They help in whatever is necessary, in the silage, in the husking of the maize, and we go also to help... In the husking came Maria, Joana, Carlos (friend and neighbour of the land), João (that stays in the house)... and there are people that appear, others that call... there Pedro, and Manu (that also sow their potatoes in our land)... We also help, for example, when Francisco lacks hay, or doesn't get on with this or that, David goes to fix the machine, if he needs to roll the hay he helps... when he has a sick cow he goes there... It's always an exchange.⁷⁸

⁷⁶ Recorded conversation 01/2022.

⁷⁷ Original Portuguese version: "Que perguntas me fazes... ¿O que entendes por trabalhar? Tu que estás aqui há uns dias, achas que trabalho? E que trabalho achas que posso deixar de fazer? Se calhar, daqui a uns anos, daqui a 20 anos, posso deixar, se o Eneko aqui estiver, ele tomar conta das vacas e nós só ajudamos. Que é óssea, deixa de receber e passa a ter o mesmo trabalho. Isto que nós fazemos é auto-suficiência, então tenho que semear batatas para comer, tenho que tratar da lenha... porque se vas a comprar tudo o que... é em essas pequenas coisas que faz a diferença que é o que nos faz amanhar algum dinheiro."

⁷⁸ Recorded conversation 01/2022.

⁷⁹ Original Portuguese version: "As pessoas que nos vêm ajudar são os nossos amigos. Ajudam no que fora preciso, na silagem, na desfolhada do milho, e nós vamos também a ajudar... Na desfolhada veio a Maria, Joana, Carlos (amigo e vizinho do terreno), João (que fica lá na casa)... e há pessoas que vão aparecendo, outras que chamam... aí o Pedro, e o Manu (que também semeiam suas batatas no nosso terreno)... Nós também ajudamos, por exemplo, quando falta feno ao Francisco, ou não se entende com isto ou aquilo, David vai arranjar a máquina, se precisa de enrolar o feno ajuda... quando tem uma vaca doente vai lá... É sempre uma troca."



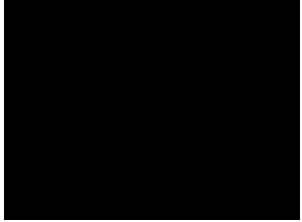


Image 17 (left): Everyone helps pickup potatoes (28/08/2021); Image 18 (right): Everyone helps pickup the corn (foto from UDCB).

Troca implies, among many things including *comunitarismo*, that most of the time this labor is an "external cost" (Collins, 2016) to capitalist forms of production. Thus, the Covas economy, based on social relations, compensates for the lack of income (besides subsidies) in rural areas. Subsidies are directed to the production of animals and land administration by the farmer, and are also used to pay for costs in the household, such as water, electricity, social security, children's education, and some commodities. In Covas, dependency is not only on the subsidies but also on the people that live with you.

Economic systems based on relationships are present in multiple spaces around the world, not only in Covas. The diversity of economic models and livelihoods adjust to the needs of every place. It is the devaluation of the existing sociocultural systems and political-economic structures differing from hegemonic models that trigger the creation of extractivist projects in rural areas.

5.4. The land, the marsh and the baldio

As mentioned in the previous chapter, it is common in Covas that the land farmed by the "all-year residents" is either inherited from family members or is still owned by "mobile residents" but farmed by their family members in Covas. The land is a big part of the household economy, the families' nourishment, and the general Covas economy. Besides this private relation to the land (which is either owned by individuals or by a collective, such as the family), public and common property landforms are also present in Covas. Private property is land owned and managed by individuals, families or companies. Public property is land the freguesia and central government manage, use and care. Common Lands, or *baldios*, are owned and managed by the local community of Covas; the *compartes*. The relation to the land becomes especially relevant when land-use is contested by the lithium extraction project.

I visited Olivia (53), one of Covas' all-year residents, on a sunday afternoon at her house. She explained to me how "property rights" as a way to relate the land to the family, have been orally shared between family members:

My land is not registered. Because it was a very expensive act. When my grandfather passed away, my mother and an aunt were the heirs. We have some plots of land, some are bigger and some are smaller... but there are a lot of them (maybe 30) - in Muro, Romainho and Covas. That was very expensive, and it stays like that... and the land ends up in the name of my grandfather, my grandfather's uncle, my grandfather's mother... They went on passing, passing, passing, but only through 'inheritance by word of mouth', there was never anything written down. What we did with the land that was inherited from my grandparents [...] was - this one belongs to the mother, this one belongs to the aunt, that half belongs to the mother, that half belongs to the aunt... - and that's it. But there is no document where it says and proves that this is so. Because in truth, everything we have is in the name of those who passed away many years ago. (Olivia)^{81 82}

Although "government action or indeed privatization, can lead to the loss of local knowledge and local systems of governance that have evolved over time" (Wall, 2014:32)⁸³, the migration movements, the aging population, and the tradition of transferring information orally, have urged the creation of a systematized written process to determine land ownership. To determine this, BUPi has been enforced and implemented by the Portuguese government:

The BUPi (Balcão Único do Prédio - Single Property Counter) is a platform aimed at owners of rural and mixed properties, which allows the Portuguese territory to be mapped, understood and valued (BUPi, n.d.). ⁸⁴

⁸⁰ R. Commons' argued that it is misleading to merge an object with its ownership and to assume that ownership means we can do whatever we like with it. In contrast he distinguished property from property rights and argued that property rights were often a bundle of rights. (Wall, 2014:29).

⁸¹ Recorded conversation in 08/2021.

⁸² Original portuguese version: "Os meus terrenos, não estão registados. Porque era um acto muito caro. Então o meu avô faleceu, e a minha mãe e uma tia eram as herdeiras. Temos alguns terrenos em que alguns são maiores e outros mais pequenos... mas são muitos (se calhar são 30) - em Muro, Romainho e Covas. Isso era muito dispendioso, e vai ficando... e acabam por andar os terrenos em nome de meu avô, de um tio de meu avô, da mãe de meu avô... Foram passando, passando, passando, mas só por 'herança de boca', nunca houve nada escrito. Os terrenos que foram herdados de meus avós [...] nós fizemos - este é da mãe, este é da tia, aquela metade é da mãe, aquele da tia... - e fico assim. Mas não há documento nenhum, onde diga e que prove que isso é assim. Porque na verdade, tudo o que temos está no nome de quem faleceu já há muitos anos."

⁸³ According to Ostrom.

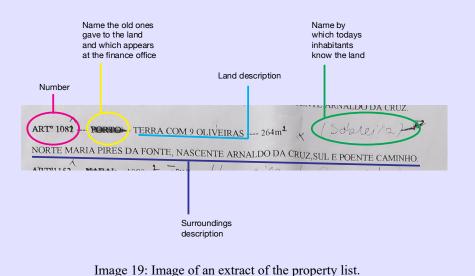
⁸⁴ Original portuguese version: "O BUPi (Balcão Único do Prédio) é uma plataforma dirigida aos proprietários de prédios rústicos e mistos, que permite mapear, entender e valorizar o território português".

Over the months, I continued asking people about the lands' systematization. It seemed at first that nobody saw a downside to it or had a strong idea of what it meant, but slowly more opinions arose. One of the forest engineers told me, "it was useless. Same as the previous land declarations (P1, P2...)". Around the year 1999, and probably in relation to the Fundo Europeo de Orientação e Garantia Agricola (FEOGA), land declarations were made in Covas in order to access subventions. But the land declarations made then, often did not correspond to the actual land size. According to one of the landowners, "the difficulties to mark the ground were related to the difficulties in reading and perceiving the maps of the land in 2D by the population. The land in the maps didn't seem to have the same size. As a result they marked sometimes more and sometimes less, than the actual land. The lands were marked by technicians of the Ministry of Agriculture and the baldios didn't need to be declared then". 85

Lands need to be re-identified for the declaration in BUPi. Thus, in order to implement policies effectively⁸⁶ collaboration between "better informed local people" and experts was needed. As well as local forms of knowledge that had to be "translated". Olivia continued by explaining to me how the lands are identified:

[To differentiate the land,] almost all of them have a mark, or a stone, or a tree - a tree that maybe has already been cut down but the root is still there... -. So, it's natural that between one owner and the other it's difficult to understand the area, but with a good understanding... If with the owner next to me, we both go and say "hey you know this is yours, over here it's mine, let's go over here and mark it". [...] It seems easy to solve those situations.

We have a list with all the land [at the tax office], with the articles:



⁸⁵ Fieldnotes 01/2022.

⁸⁶ D. Walter mentions the influence of F. Hayek on "Ostrom's sympathy for local solutions to resource management". Hayek defended the importance of "Local knowledge" as necessary to implement policies effectively. As local people are better informed in many circumstances than experts in the center are (Wall, 2014).

[For example], here we know the "Oliveiras de cima" and the "Oliveiras das sobreiras", because there were two cork oak trees. [In the list appears] the number and the name that the old people gave (the land was known by that). So the finances had one name and we know it by another. ⁸⁷

I talked to the president of the *Junta de Freguesia* in Covas, for whom informing and facilitating the implementation of the land declaration process is a responsibility. She expressed how she does not see any downsides to systematizing the lands. She explained to me how she is managing the process and what the goal of it is:

President: The procedure is for both the legal person and the private person. Both the wasteland and the Parish Council land [...] we have to do the same process. Although everything is registered, it has to be identified in the platform. Besides making a countywide register, it's also good because [...] I'm making a security for my property. (Where I have document to say it's mine).

Shandra: Why is it important today to define the owner?

President: The registration has always been important, it's just that it is in these four years when we can do this. If we don't do it, land that is not identified and registered will become ownerless. If they become ownerless, they revert to the State. I suppose they call it the 'grey zone'. We have until January 2025 to do it (it started this year, 2021).

This is important, so that in a few years, our children, our grandchildren, will have a card (like our ID card) identifying the land, the property.

que ate se cainar ja fui cortada mas ainda la esta a raiz... -. Pronto, e natural que entre um e outro naja dificuldade de perceber a área, mas com bom entendimento... Se o proprietário que está a meu lado, vamos os dois, e dizemos "oi sabes que aqui é o teu ali é meu, vamos aqui então marcar". [...] Parece-me fácil resolver essas situações. Nós temos uma lista com os terrenos todos [nas finanças], com os artigos. [Por exemplo], aqui nós conhecemos as "Oliveiras de cima" e as "Oliveiras das sobreiras", porque havia duas árvores de sobreiras. [Na lista aparece] o número e o nome que as pessoas antigas davam (os terrenos eram conhecidos por isso).

Então as finanças tinham um nome e nós conhecemos por outro.

⁸⁷ [Para diferenciar os terrenos,] em quase todos há uma marcação, ou uma pedra, ou uma árvore - uma árvore que até se calhar já fui cortada mas ainda lá está a raiz... -. Pronto, é natural que entre um e outro haja diferented de perceber a área, mas com hom entendimento. Se o proprietário que está a men lado, vomos os



Image 20: Map of private plot as obtained in the finance office.

Shandra: Are the families and migrants well informed?

President: [We, in addition to warning] walk through the villages, now, at the time when the migrants are... [summer 2021]. And those who are not, it's a matter of the word-passing - passing from one to the other, from the other to the next...- And it those who are here warn those who are outside.

Shandra: What is the impact of defining the land?

President: The need to define [the land] is not to be without land. I have my land, but I have nothing to say that it is mine. So far it doesn't [suppose any danger]. Until the moment they say, that someone says so:

- Whose land is this? Do you have a document of it?
- [and you have to answer] No, I don't
- Why don't you?

[And] they end up taking it away from me, and I have no way to complain, because I don't have anything written saying... For the land to look valid, from the owner, the land has to be registered, with the name of the person, with my nameShandra: As famílias e migrantes estão bem informadas? ⁸⁸

⁸⁸ Original portuguese version: "*Presidenta*: O procedimento é tanto para a pessoa colectiva como para a pessoa particular. Tanto o baldio, como os terrenos da Junta de Freguesia [...] temos que fazer o mesmo processo. Embora esteja tudo registado, tem que ser identificado na plataforma. Além de fazer um

As a "legal construct", the mapping and valorization of land needed by BUPi proves and declares officially—and digitally—land property. As expressed by Olivia, many of the private lands have been orally inherited. The family is normally aware of it and this does not present difficulties. The *baldio* was also declared in the finance office after the last law update in 2017⁹⁰, but still needs to be declared in the registration office, which was less easily accepted. 91

During the land declarations in 1999, the people were not that exact. But BUPi's declaration is to write down the property's delineations, which will be passed down through the generations, so everyone needs to be more thorough. The declaration of the lands is complete when someone signs as being responsible for them. But what happens if someone writes down a bigger area than they actually own? Until spring of 2022, the computer program introducing the maps didn't accept the baldio because of its irregular and discontinuous land space.

cadastro a nível do concelho, é bom porque [...] eu estou a fazer uma segurança para a minha propriedade. (Em que eu tenho documento para dizer que é meu).

Shandra: Por que é importante hoje definir o proprietário?

Presidenta: O registo sempre foi importante, só que nestes 4 anos é que nós podemos fazer isto. Se não fizermos, os terrenos que não forem identificados e registados, passam a não ter dono. Passando a não ter dono, reverte ao estado. Suponho que chamam, a 'zona cinzenta'. Temos até Janeiro de 2025 para fazer (começou neste ano de 2021). É fácil de fazer, temos todo tempo para reunir todos os documentos. Se não tivermos, temos de tentar arranjar a informação possível do que é nosso, através de papéis antigos que existam em casa... Se não, vamos às finanças, porque lá está tudo, não registrado mas identificado pelos números. [É] obrigatório identificá-los no mapa. Isto é importante, para que daqui a uns anos, nossos filhos, nossos netos, fiquem com cartão (tipo nosso cartão de identificação) de identificação dos terrenos, da propriedade.

Shandra: As famílias e migrantes estão bem informadas?

Presidenta: [Nós, além de avisar, andamos] pelas aldeias agora, no tempo em que os migrantes estão... [verão 2021]. E aqueles que não estiverem, é uma questão do passa-palavra - passar daquele para o outro, do outro para o outro...- E faz com que os que estão aqui avisem os que estiverem fora.

Shandra: Qual é o impacto de definir os terrenos?

Presidenta: A necessidade de definir [os terrenos] é não ficarem sem os terrenos. Eu tenho o meu terreno, mas não tenho nada a dizer que é meu. Até agora não [supõe nenhum perigo]. Até ao momento que eles disserem, que alguém diga assim:

- De quem é este terreno? Tens um documento dele?
- [e tenha de responder] Não, não tenho
- Porque não tens?

[E] acabam por me tirar, e eu não tenho como reclamar, porque não tenho nada escrito a dizer... Para que os terrenos pareçam válidos do proprietário, os terrenos têm que ter um registo, com o nome da pessoa, com o meu nome."

- ⁸⁹ "Both Commons and Ostrom noted the importance of negotiation and compromise to achieve political solutions. [...] He argued that legal frameworks helped shape market outcomes and that property was a legal construct." (Wall, 2014:29).
- ⁹⁰ When the Local Community (*Comunidad local*) passed to be called "Council of directors" (*Consejo directivo*).
- ⁹¹ The area of the *baldio* of Covas was declared and accepted in the *conservaduria* during spring 2022, after my main fieldwork.

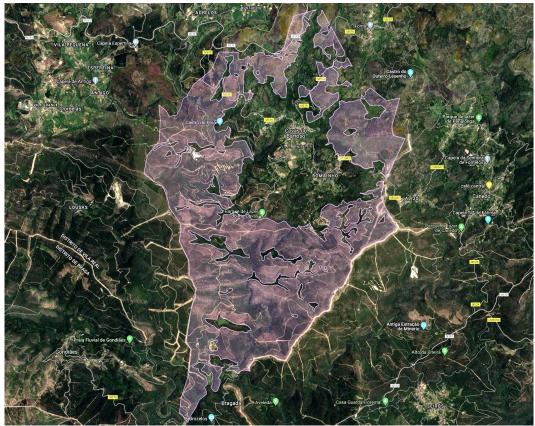


Image 21: Map of the baldio of Covas do Barroso.

Historical interpretations of the definition of *baldio* have also delayed its declaration in the *conservaduria*. In order to continue with the different interpretations of the *baldio* and their impact in the common lands today, I need to first explain the local and national history of the *baldio*.

As previously mentioned, the last change to the law of the *baldios* was made in 2017 and highlights how to carry out the registration of these common lands for the local community. But the definition and use of the *baldio* is also marked by the multiple changes it has gone through since the 17th century.

Over the centuries, wasteland has been coveted by the powerful and by the Estado Novo itself, and many episodes of appropriation, consummated or not, of the goods possessed by this form of community property are known.⁹² (Baladi, 2020)

In the history of the Portuguese *baldios*, the period under Salazar's dictatorship needs to be noted. During Salazar's regime, the *baldios* were taken by the state. The deprivation of the *baldios* from its communities resulted in the scarcity and near disappearance of *agro-silvo-pastoral* activities, which later

⁹² Original portuguese version: "Ao longo dos séculos, foram os baldios cobiçados por poderosos e pelo próprio Estado Novo, sendo conhecidos muitos episódios de apropriação, consumada ou não, dos bens possuídos por esta forma de propriedade comunitária."

resulted in the population's need to migrate to Europe and other countries. 93 As a result of the following revolution period, after April 25th of 1974, the baldios were given back to their communities.

Although the changes to the 1976 law of the baldios specify how the baldios have been returned to the local community, still today there are some older understandings about their status These understandings have delayed the declaration of the baldio today. The baldio is still understood by some as a property of the state which does not need to be registered. That is, there is no need for the president of the baldio, or any other representative of the common land who is not a government official, to come and declare them, and this declaration will not be accepted. Several conditions have given the opportunity to some landowners, whose lands are bordering with the baldio, to declare the baldio as its own. On one site, landowners have the permission to declare 10% extra land, when their land is not bordering with other previously registered properties or when their land has not already been delimited by a "fence". The previously mentioned lack of compatibility of the digital programs to register the "shape" of the *baldio*, has also affected the possibility to register the common lands. The lands bordering the baldio, and the owner of which was able to declare more of it, are often the lands being sold to Savannah. This is the case of a few, four or five, private landowners who want to sell their property to the mining company, and they decide to add, for example, 7500 m² to their private land. The land of the baldio cannot be sold, but if private lands are "drawn" on top of it, "de quem é este terreno?" as the president of the Junta de Freguesia says (when talking about the land registration for the BUPi). If managed, part of the common lands would have been seized by private owners and sold as private land. These events have increasingly divided and confronted the population. These are declarations which only a legal process can perhaps readjust.

5.4.1. The organization of the baldio

In the territory of Covas there are 2000ha⁹⁴ of common lands. The population linked to the baldio (common lands, in english) are the *compartes* (commoners, in english):

The commoners are defined as: "the residents who carry out their activity on the site and who, according to the uses and customs recognised by the community, have the right to its fruition".95 (Baladi, 2020).

The assembleia de compartes (commoners assembly in english) elects, by majority, a president that will serve a four-year term until re-election (when the same president can be re-elected), and also elects the

⁹³ see baladi.pt

⁹⁴ 2000ha is the dimension resulting from the analog measuring system. In 2017, with the changes on the law, the baldios had to be registered in the *finanças*. The land was then measured again using digital systems, and the result was of 1881,27 ha.

⁹⁵ Os compartes são definidos como: "os moradores que exercem a sua actividade no local e que, segundo os usos e costumbres reconhecidos por a comunidade, tenham direito à sua fruição"

Consejo directivo (CD) (board of directors, in english) of five people. These are the people that will make most of the daily decisions and present them to the rest of the *compartes* at the biannual ordinary meetings, or any extraordinary ones that might be called. Originally, the *baldios* were areas of agrosilvo-pastoral⁹⁶ activity, carried out to cover the needs of the local population:

The common lands are an indispensable component of the agricultural economy, especially for the poorest sections of the rural population, playing a recognised role for subsistence.⁹⁷ (Baladi, 2020).

The *compartes*, as a group, can decide between two types of administration for the *baldio*: either being under the management of the local community, the *compartes*; or under a shared management between the *compartes* and the state. The type of administration a *baldio* wants to follow, has normally been decided generations ago and maintained in the same way since. In addition to these two forms of administration, the *baldios* are also under a type of activity regime. Most of the *baldios* are under a 'forest regime' (*regime florestal*) since 1901. There are not many known cases of *baldios* that are not under a forest regime. Although today it should be easy to change the forest regime of the baldio. "There is one example of a baldio that changed regime in 1950", explains one of the ex-engineers of the *baldio* to me on a morning he went to see the president of the *baldio*. The 2000ha of Common lands under the territory of Covas do Barroso are co-managed by the community and the state, and are under a forest regime. I will shortly explain what both these statuses imply.

The co-management of the *baldio* gives the state – normally through the Instituto da Conservação da Natureza e das Florestas (ICNF) – a "sit" (an opinion) on the projects developed in the *baldio*. Acording to the president of the *baldio*, " when we want to do something, as we are in co-management, we have to ask for an opinion from the ICNF (Institute for Conservation and Forests), an institution that belongs to the state". Although the dependency on the approval and the subsequent control by the ICNF is a clear drawback, the *baldio* of Covas is still co-managed by the state. ""[Because] it partly makes sense. Imagine I did a project now where I would destroy half of the baldio. ICNF seeing the project would say, no, this is against the rules of good practice" the president of the *baldio*

⁹⁶ Agro-silvo-pastoralism is a production activity that combines pastoralism (extensive livestock husbandry on pastures) and agriculture in a partially wooded environment.(dicoagroecologie.fr).

⁹⁷ Original portugues version: Estas terras comunitárias são uma componente imprescindível à economia agrícola, especialmente das camadas mais pobres da população rural, desempenhando um papel de reconhecida importância no plano da subsistência

⁹⁸ Fieldnotes 01/2022.

⁹⁹ Fieldnotes 01/2022.

Original portuguese version: "quando nós queremos fazer alguma coisa, como estamos em co-gestão, temos que pedir opinião, pedir o parecer, ao ICNF (Instituto de Conservação e Floresta), instituição que pertence ao estado".

¹⁰¹ Fieldnotes 01/2022.

¹⁰² Original portuguese version: "[Por quê] em parte faz sentido. Imagina que eu fazia um projeto agora em que destruiria metade do baldio. O ICNF ao ver o projecto diria, não, isto é contra as regras de boas práticas".

continues telling me. The co-management also guarantees 40% of the profits made through the marketable products and services of the *baldio* to the state.¹⁰³

There are examples of *baldios* being managed by only the local community in Portugal. This is the case of the *baldio* of Vilarinho, also in the region of Barroso. The *compartes* of Vilarinho, explains Rita Serra¹⁰⁴, claimed the management of the land that the state has not been capable of managing. "As in many other places around the world, local people claim forest management for themselves when the state is unable to manage the resource in a way that brings benefits to local people" (Nunes, 2015).

To be under an auto- or co-management regime of the *baldio* has been a permanent question, although not one that has been often addressed. "The lack of self-management of the *baldios* are an inheritance of the time of Salazar" says the ex-engineer of the *baldio*. "During that time, the baldios were there without any activity, without making timber out of it. This lack of activity didn't trigger an active administration of the common lands (regiões baldias)" continues the ex-engineer. The engineer currently working for the *baldio* of Covas, suggested to "move to the auto-management regime and use that 40% that has been given to the state in another way: 20% to arrangements and other activities for the baldio; 15% to the financing of other jobs; and 5% to the "agrupamento" (grouping) of baldios to the forest authority)."

The other status about which the *compartes* can decide, in theory, is the forest regime. Besides the objective of the 1976 law to return the common lands to the *compartes* after the dictatorship, the forestation of the communal lands by the state had already taken a big part of its administration. The Forest Regime (present since 1901) means the area is reserved for tree production only, to timber and resin. The *baldio* of Covas is mostly forest, although it still has 550ha (a fourth of the common lands)

¹⁰³ In 2010 the *baldio* of Covas suffered a great fire and the forest was lost. The forest went through a natural regeneration process of the pine trees. The losts caused by the fire and the natural auto regeneration of its trees, allowed for the compartes to only give a 20% of the profits (generated through the timber) to the government, instead of an usual 40%.

¹⁰⁴ see jornalmapa.pt (2015).

¹⁰⁵ Original Portuguese version: Tal como em muitos outros lugares do mundo, as populações locais reclamam para si a gestão florestal quando o Estado é incapaz de gerir o recurso de forma a trazer benefícios às populações locais.

¹⁰⁶ Fieldnotes 01/2022.

¹⁰⁷ The forest organ manages the grouping of the Portuguese baldios. The 5% would be dedicated to support care activities of baldios that don't earn enough to pay for those arrangements themselves.

^{108 &}quot;[La producción de la] forestación de las tierras comunales fue confiada a la administración del Servicio Forestal del Estado. Como resultado, dos nuevos recursos - la madera y la resina - se habían añadido a los matorrales y la leña de las tierras de pasto tradicionales. Los legisladores plenamente conscientes, no se limitaron simplemente a restituir las tierras comunales a las aldeas. Esta nueva situación exigía, desde su punto de vista, la garantía de una gestión forestal orientada por profesionales y la creación de mecanismos que ayudaran a los comuneros a distribuir los ingresos que se preveían obtener de las ventas de madera y de las concesiones de resina. Cuando el Servicio Forestal comenzó las labores de forestación de las tierras comunales de las aldeas, impidió temporalmente el pastoreo y, en consecuencia, los pastores perdieron sus fuentes de ingreso y se vieron obligados a abandonar la actividad ganadera. Cuando, unos años más tarde, se permitió de nuevo el pastoreo en esas zonas, no quedaban ya ni personas ni animales. A partir de 1960, mucha gente emigró (temporal o permanentemente) al noroeste de Europa. Aquellas aldeas cuyo sustento se basaba en los rebaños de ovejas y cabras se vieron particularmente afectadas por esa sangría demográfica y corrieron el riesgo de convertirse en pueblos fantasma, totalmente vacíos." (Brouwer, 1995).

with the right conditions for pastoral activities. The president of the *baldio* referred to these areas as "the available area". This regime obliges the *compartes* to ask the government for authorization in case they want some area within the *baldio* to be used in another way, for example, to build a warehouse. "Maybe, the restriction to, almost, only grow pine trees within the common lands can help stop the Mina da Savannah". says the engineer during one of the meetings with the president of the *baldio*.

In January 2022, there were 191 *compartes* (which have to be recounted every year). New people can join and become a *comparte:* each individual will be accepted based on social relations and sometimes also on residency and for having property in the region. But the last word is always given by the *compartes*. As mentioned before, in Covas, although the representatives make most of the daily decisions, the *compartes* must be informed. Thus, when requested, there will be an assembly of *compartes* to make decisions that impact the common lands. The decision will be taken by a majority through a deliberation process. This "radical democracy" (*democraça extrema*¹⁰⁹) — as put it by the president of the baldio — frames such political and economic projects as who becomes a *comparte*, or allowing the Mina do Barroso in the common lands or not:

In the case of the mine, we happen to be against, most of us are against, because if we were in favour, we would hold a meeting of the commoners, people would vote, agree and there would be no problem. The only problem the company has is that the people in front of the commonlands are against it [...] The difference is that on council or private land, there is an entity that decides what to do.¹¹⁰ (President of the *baldio*, 2021)

This "radical democracy" also has its ups and downs. In terms of the *compartes*' participation, the decisions have not always been taken collectively and the confidence on the democratic system and participation has been, for a long time, decimated:

Today, more than 40 years after the return of democracy to Portugal, you are not used to participation and people making collective decisions. This is not only the case of the Covas' *baldio*, but of many of them. The level of participation of the commoner men and women is very low. There is a collective tendency, not imposed by whoever is in charge of managing the baldíos, of how the people understand that this should be managed. Because there are representatives, they are going to do what they want. So people don't participate in the assemblies. The participation [of the community members] has grown, tripled, sometimes almost quadrupled, because of the mine. You no longer have 15-20 people in the assembly, you

110 Original Portuguese version: "No caso da mina, nós por acaso somos contra, a maioria é contra, porque se nós fossemos a favor faríamos uma assembleia de compartes, as pessoas votavam, concordavam e não haveria problema nenhum. O único problema que tem a empresa é que a gente à frente do baldio está contra [...] A diferença é que nos terrenos da Junta ou dos particulares, há uma entidade que decide o que fazer."

¹⁰⁹ Fieldnote of conversation with the president of the baldio 01/2022.

have 80-90 people, which is half of the group of commoners. (Interview with Venes, 2021)¹¹¹

5.4.2. The energy market in the baldio

The *baldio* of Covas marks the economic activities of the region. Adding common lands to private lands, commoners can breed more animals, have access to more natural resources and also have access to European subsidies. The access to these subsidies grows with the access to more land. The *baldio* allows for other activities, mostly related to energy companies. Each *baldio* has its own characteristics to which the different activities have to accommodate:

Our *baldio* is mostly forest, very prone to trees but not to grass. Around us there are only trees, a lot of stones and the hill is very close to the village and it is difficult to graze as it is done in the 'come and go' areas.¹¹³ (President of the baldio, 2021)

In the case of Covas the herding activities are split between the common lands and the private lands:

Our village is small, so people have few animals, even goats and sheep there are few. [...] Here to be able to have more animals we produce more maize. [We choose to make silage because it is a good complement, and because ours is a very fertile valley, [...] Most [of the maize] is for feeding the animals, both cattle and chickens.¹¹⁴ (President of the baldio, 2021)

The extension and topography of the *baldio* allows for other activities that provide the *baldio* and the *compartes* with access to natural resources that the individuals can use, and with money to pay for maintenance work in the *baldio*.

¹¹¹ Recorded interview in spanish, 08/2021.

¹¹² Original spanish version: "Hoy, más de 40 años después de volver la democracia a Portugal, tienes poca costumbre de participación y de la gente tomar decisiones colectivas. Este no es el caso único del baldío de Covas, pero de muchos baldíos. El nivel de participación de los comuneros y las comuneras es muy bajo. Hay una tendencia colectiva, no es impuesta por quien está en el manejo de los baldíos, de cómo la gente entiende que debe manejarse esto. Y es que como hay representantes, ellos van a hacer lo que quieren. Entonces la gente no participa en las asambleas. Ha crecido la participación [de los comuneros], triplicado a veces casi cuadruplicado, por el tema de la mina. Ya no tienes 15-20 personas en la asamblea, tienes 80-90 personas que es la mitad del grupo de comuneros.

¹¹³ Original Portuguese version: O nosso baldio é maioritariamente de floresta, é muito propenso para árvores mas não para erva. Aqui ao nosso redor há só árvores, muitas pedras e o monte está muito próximo da aldeia e é difícil fazer o pastoreio como se faz nas zonas de 'chegar e largar'.

¹¹⁴ Nossa aldeia é pequena, então as pessoas têm pouca quantidade de animais, mesmo a nível das cabras e ovelhas há poucas. [...] Aqui para poder ter mais animais produzimos mais milho. [...] Optamos por fazer silagem porque é um bom complemento, e porque é um vale muito fértil o nosso, [...] A maioria [do milho] é para alimentação dos animais, tanto de bovino como das galinhas.

The common land provides energy in the village, as the homes use firewood from the pine trees to heat the water and the houses. But the wood the *compartes* take from the *baldio* are leftovers, bush, an uprooted pine tree or spoiled firewood. Actually, except for one or two *compartes* that do not have access to other "private" wood, trees are not cut down for wood in the *baldio* for private use. "Which is not the intention either, otherwise the baldio would be left with nothing. [...] You cut one but to have another one like it would take 50 years." (President of the *baldio*). The regeneration time needed by the trees to grow is also the reason why, since the big fire of 2010, the *baldio* of Covas has not sold much wood in the timber market. Previously, the production of timber served for commercial activities. After 10 years of growth, the lumber would have a size that allows for the construction of posts and fences. After 20 years it could be sold for telephone posts, and the resin could be sold for industrial glue production. Bush, on the other hand, is collected by the *compartes* in the *baldio* during the whole year and used by local farmers to prepare the beds for the cows, that will later become manure (estrume).





Image 22 (left): Bush between the pine trees; Image 23 (right): Recently born calf lying on a bed of bush.

The *baldio* is also used for other sources of energy that go directly to the market. The company, Hidroerge, installed hydroelectric infrastructure in 1996, including a dam, water channels, a hydroelectric plant, etc., in the *baldio* of Covas. The "annual production is equivalent to the average consumption of 14 500 inhabitants (250% of the population¹¹⁷)" (hidroerg.pt)¹¹⁸. The company pays 1500 euros/year to the *baldio* to rent the land. People say around town that "the hydroelectric company makes 5000 euros/day in winter". There is also a quartz mine in the area of the *baldio* that pays a 4500 euros/year rent for the land it uses. As mentioned in the previous chapter, EDP also has business in the *baldio*. In January 2022, they wanted to connect two of the electricity lines. In order to do that, they

¹¹⁵ Recorded conversation 01/2022.

¹¹⁶ Original portuguese version: "O que também não é a intenção, senão o baldio ficava sem nada. [...] Cortas um mas para ter outro igual só daria em 50 anos"

¹¹⁷ Referring to the population of Boticas.

This reference, as well as the following translated from Portuguese to english, has been translated by me.

need to pass through common, private and public lands. When possible, they prefer to deal with less actors, which translates into less private lands; since dealing with many private owners often complicates the approval of the lines and transmission tower installations. While talking with the president of the baldio, the EDP workers used a map of the baldio, and the surrounding areas, to show where they thought about building the transmission towers. The contract of the electric lines is for 15 years and it requires the pruning of the trees of seven to nine meters of land under the cables. The telephone company also needs to build cell towers and install the lines to connect them, in the baldio. But they do not pay for the space under the line. Each cell tower needs 50m² of land, for which they also pay 300 euros/month in rent. The payments received from these companies are reinvested in the common lands, in projects for the care and maintenance of the forest and of the 550ha of grazing lands forming the baldio. Projects that when developed by the local population, support the local economy. This is the case for a European project to stop a plague of the forest from harming the trees. After standing as a candidate for the project, the baldio offered the job to all the compartes. Four of whom offered to work on the project and went to a meeting in January with the engineer of the baldio to listen to the working conditions of the project. The project is mostly financed by the EU, through the "Programa de Desenvolvimento Rural" (PDR 2020), but the baldio still has to pay 10% (€50k) of the project. It is a three-year project that works for three months/year, and requires 50 pine trees/ha to be cleaned, which equates to more or less 100,000 trees. The engineer shared some of the conditions when cleaning the trees, to ensure their health: "If there are nests [of the insects causing the plague] in the top of the tree, you cannot cut it away, you have to manually take it off", otherwise, if you cut the top of the tree, the tree stops growing. It was also important to keep the administration informed about the progress of the project - what areas were already cleaned, and how many trees, etc..

There are more options for the *baldio* and the people of Covas to join the energy market. In one of the conversations between the president and the engineer of the *baldio*, he mentioned the option to join the "carbon market". After some estimations, the engineer came up with the result that the CO2 that could be compensated, through carbon sequestration, in the mining area alone (waiting for the mine concession approval), will be valued at \in 5,000,000. Right now the market price is \in 80.90/tonne of CO2 (Trading Economics, n.d.).

Although the *baldio* is co-managed by the state, meaning it has an opinion when approving new projects, it is the representatives of the *baldio* who self manage all the projects happening in the *baldio* everyday.

5.5. Natural and cultural resources

As previously mentioned, cultural resources in the form of local knowledge, practices, events, tools, and even social relationships are at the base of the reproduction of life in Covas. Local knowledge is also

¹¹⁹ Fieldnote 01/2022.

tied together to relations with the land, water, animals and weather. And this knowledge is orally passed down to new generations, rather than written "instructions" on how to develop these practices.

Migration movements, the fear of losing the memory and traditions of Covas, and people's affluence and new connections brought by the mining project, have triggered the documentation of some of these practices. Mafalda (44), who migrated to the UK after she finished school, but is still very present in Covas and is the head of the UDCB, started years ago to collect some of the traditions of Covas, which are now accessible online¹²⁰. Aurora (28), on the other hand, came to Covas in 2021 to act against the mining project. She is now living there and is writing a book also about the traditions in Covas.

Local knowledge on natural resources shapes the activities in Covas mostly by assuming nature's relation with time. This temporality has been created by the degrees of "renewability" (Nadasdy, 2008) that characterize natural resources. So, for example, most of the activities in Covas related to natural resources are cyclical¹²¹. This is the case for potatoes, which can be seeded in April, harvested in September and consumed until next May. Or the case of corn, for the *silagem*, which needs to be seeded in April and harvested in September-October; or garlic which is planted in December and harvested in June, etc. These times work as a guide, as plants are still dependent on the weather, the treatment provided by the people in Covas, and the quality of the soil. Thus, there is always a level of uncertainty on what the conditions will be to access natural resources in the next season (or cycle). An uncertainty that has been growing due to climate change and, in Covas, because of the lithium-mining project next to the town and in the *baldio*. This uncertainty is often understood as a vulnerability which triggers a subvention-based economy and migration movements from rural to urban areas.

During the month of January, we (David, Barbara and I) went to open waterways in one of the old marshes. Hay grows in old marshes, where the grass hasn't changed or the earth moved and the roots grow deeper and stronger. David explains to me how the seeding had covered the previous waterways and how to open them again to create networks of water for new grass to grow. "Aqui dizemos que a água é o sangue da terra" David tells me. While working at the marsh, I learned that the land is Barbara's mum's property, and the house next to it was her great-grandmother's.

Some days later, I saw Eneko working at the pines on another privately owned land. He was hired by a neighbor to mow the bush there:

This bush stays here, on the floor. Its functionality is to cover the ground from the sunlight, to prevent more from growing. And in two years it will become manure. Normally the bush wouldn't grow so much, because the needle leaves of the pine trees that fall would crush it and prevent it from growing. But in this case the bush has grown

¹²⁰ The link to the web site is: https://cbarroso.jfreguesia.com/tradicoes.php

¹²¹ Paul Nadasdy explains how "Wildlife biologists [in the Yukon] view animal population and human-animal relations as embedded in cyclical time, characterized by the periodic recurrence of similar events of the same type" (Nadasdy, 2008:75-106).

at the same time as the trees and is too strong. In the pine trees we cut the lower branches for the pine to grow more, otherwise the energy and the water would be distributed in the lower parts making it grow wide instead of tall. But you knew all this already, right? Eneko asked me.¹²²



Image 24 (left): Waterway opened; Image 25 (right): Eneko cutting bush.

Human labor, together with dependency on water, land, and forest, bring together natural and cultural resources. In order to access firewood, the wood needs to be cut at a time when the weather isn't too hot and dry during the summer. In order to water and grow the corn, water needs to be socially (and manually) distributed between the months of June 24th-October 29th. These months are the time of year when the river flow decreases. Since corn and other crops still need to be watered, the water needs to be directed and distributed to the fields. During my time in Covas, I could see the interconnection between natural resources and human labor and how the latter becomes part of this cyclical time. Thus, I created the next graph to represent these relations:

¹²² Fieldnotes 01/2022.



Image 26: The connections between natural resources and human labor, done by me.

In Covas "everyone knows the irrigation system" said Barbara. The irrigation system in Covas is based on a "traditional and adapted knowledge system" and it is a "gravity based irrigation system" (FAO.org/GIAHS). This is one of the reasons for the classification and award of Barroso's region as a GIAHS. Every year, between the 24th of June and October 29th, the water in Covas coming from the springs is distributed amongst the population. "It has been like this at least since 1730, but there is no memory before that" Lenin¹²⁴ (87), one of the oldest men living in Covas, tells me. He continued explaining how back then, most of the lands were *terra de soutos (terra com castanheiros)*; land with chestnut trees. Over the years, the population and families grew. Seven days of the week were not enough to water all the lands. That is why, around 1843, the people added two more days to the "water calendar". In order to decide how to distribute the water, they differentiated between even and uneven years. The even years, the water "comes from above" (*vem de cima*), which means that the distribution of water will start on the "Dia do Barreiro", and will follow in this order:

- 1 Dia do Barreiro
- 2 Dia do Paso
- 3 Dia da Joana Alfonso
- 4 Dia do Lavanco
- 5 Dia da Velha Cova
- 6 Dia da Travessa
- 7 Dia de Fon de Vila
- 8 Dia dos muitos
- 9 Dia dos acrescentados
- + Hora de Graça (9 herederos no mismo tempo)

¹²³ Original portuguese version: "O rego toda a gente conhece"

¹²⁴ Lenin is the pseudonym chosen by a Covas resident. The name makes reference to his affiliation to the PCP (Partido Comunista Português).

The names of the days help identify the areas that will use the *rego* that day. The people used information about who lived in particular areas in order to name the days, e.g. "day of Joana Alfonso". Or they used who was going to use the water that day; "day of many", or what the area was used for or characterized by; "the clay day", "the laundry day", or where the area was situated, e.g. " the back of the village day", and so on. The days are divided by the sunlight: "Medianoite to sol quente; sol quente to tarde; and tarde to medianoite." At each of the "changing times", the people with land in that area will meet. If there are two-three people, or there is not enough water, they will divide the time for each of them and close or open the water channels to redirect the water to their land (mostly *lameiros*).

Both of these elements, the water and the trees, or the rivers and the *baldio*, are common resources that are very important to the economy in Covas (and especially for the energy in Covas). As Mafalda explained to me through the popular saying: "He who does not save water and firewood does not save anything that has" they are also a symbol of a "good economy" Through this saying, Mafalda makes reference not only to the historical use of water and wood in the town, but also to how it is currently used. In Covas, water is used not only to produce hydroelectric energy, but also to be directly consumed by the people and animals, to give them energy Wood is used to heat the houses, the water, and is very often used to cook. The activities and life run in Covas, and at home, can only be sustained over time because of the activity' simultaneous economic and ecological character. The dependency of the household activities in natural resources renders them automatically economic. 129

The animal reproduction cycles also work as a time reference in Covas. Cows and bulls' mating cycle is every 20 days (until the cow is pregnant), and the pregnancy lasts around nine months. The cows have one-two calves every two years; hens lay eggs everyday, which can be collected and eaten or shared with other village residents; and the pigs are bought around April and fed until the time of the *fumeiro*¹³⁰ in December.

¹²⁵ Fieldnotes 01/2022.

¹²⁶ Original portuguese version: "quem não poupa água e lenha não poupa coisa que tenha"

¹²⁷ Recorded interview 08/2021.

¹²⁸ "Si no hubiese agua, no habría vida; Si no hubiese aire nos moriríamos en el momento ..." intervention of one of the zapatistas on November 2021.

¹²⁹ Jayanta Bandyopadhyay and Vandana Shiva wrote how "the words ecology and economy have emerged from the same Greek word 'oikos' or the household. Yet in the context of market-oriented development they have been rendered contradictory. "Ecological destruction is an obvious cost for economic development'—the ecology movements are told. Natural resources are produced and reproduced through a complex network of ecological processes (Shiva & Bandyopadhyay, 1988).

¹³⁰ The fumeiro is a gastronomic tradition in the north of Portugal, and a ritual present in Barroso. Every year "As tripas do porco são usadas pelas gentes transmontanas para fazer saborosos enchidos: salpicões, chouriças, alheiras, farinheiras" (Freguesia de Covas do Barroso, n.d.) and more.



Images 27 (left): Sausages (*enchidos*) made by Barbara, Nora and Minie for the family and other residents in Covas; Image 28 (right): Fireplace curing the enchidos with smoke and the heat of the firewood.

As seen through all the activities in Covas and their "calendar", natural resources are not only (partly) building cultural resources in Covas, but these cycles also mark: the access to food, the creation of the local economy, the access to the market and the possibility to access European subsidies. Besides the impact of natural timestamps there are also social and civil activities that mark the time and rhythm at home, for example, the schedules children must follow in going to school. Blossom¹³¹ (16), for example, always comes home from school on Fridays and has to go back to Chaves, the city where the school is, on Sunday's afternoon. Chaves is 40km away from Covas. In the region, schools are only in the big cities. Her small sister, Bubbles¹³² (7), has to take the bus every morning at 7.40am¹³³ to go to Boticas (20km away), where there is a school until 4th grade. However, there is no respite in agriculture; plants keep growing, and animals still need to eat on the weekend, making the seven-day week inconsequential for these activities (as well as for the water distribution mentioned before), so the timings set by the school and followed by the children are what mark the weekends.

Although local knowledge is often perceived as "highly informal" (Wall, 2014) and not always valued as a source of information, sometimes "scientific knowledge" and policies impacting Covas do rely on local knowledge to ensure they are effectively implemented. The mapping and definition of properties for BUPi is a good example of a time when policies required, and made use of, the

Blossom is one of the characters from The Powerpuff Girls TV series. The name was chosen for the age, the personality and the sister relationship of the animated character by one of the students in Covas.

Bubbles is another character from The Powerpuff Girls TV series. The name was also chosen for the age, the personality and for being the sister of Blossom, by one of the students in Covas.

¹³³ There has not been a school in Covas do Barroso since the 80s. This also happens in other villages of the region. The families in the municipality of Boticas, have to send their children to the city of Boticas (the same happens in the municipality of Montalegre), as schools in the villages have closed. The school in Boticas runs until 4th grade. After that, parents will have to choose another school, often in Chaves, the capital of the district. Children have to live in Chaves during the week until university to don't spend all their time after school in the bus instead of doing homeworks or other activities.

collaboration of local knowledge. The EDP workers also recognize the essentiality of local knowledge when they need to work around the activities and topography of the *baldio* and local-migrant relations to build their electricity lines.

The local activities I have presented have been the result of local knowledge influenced by the time marked by natural resources (the water flow in the different seasons, the growth of the plants, etc.). These activities are part of the economy and livelihood of Covas. But these times are not always taken into account in a capitalist economic system based on rapid growth. Thus, policies of public and private actors measure the cost and value of lithium extraction in a way that does not account for the cost and value of life in Covas.

5.5.1. Trading natural and cultural resources

Natural and cultural resources have also been used to boost other economies and open new markets in the region. These activities have been overseen and sometimes run by local actors (e.g. rural tourism projects) but also by external actors (e.g. heritage declaration), and always, although at different scales, as a response to global markets.

This is the case for the tourism economy. Both natural and cultural resources have been used to attract more tourism to the region. The gastronomy, the landscape, the natural reserves and the agricultural tradition of the region are used to promote tourism in the region of Barroso. For the tourism project, the name 'Barroso', has been used to create an identity that symbolizes all these natural elements and cultural practices in the region. But Barroso was previously an entity with which locals identified themselves, perhaps also one that included references to the mountainous landscapes, but also a class entity; "one that grouped its members in terms of relationship to land and labor, as well as place" (Eiss, 2008, 191-213).

In order to save the heritage and to develop the local economy in the region, as well as provide for the national economy, tourism is being constructed as an alternative to the development of the lithium mine project, and the money it can bring to the country. The hope of many local representatives, business owners and families is that by investing in the tourism market, the government will no longer prioritize the mine. Since agro-tourism would bring economic interest for the country as well as social and environmental advantages.

In 2018, the Development Association of the Alto Tâmega Region (ADRAT) – with the support of the municipalities of Boticas and Montalegre, the Portuguese Ministry of Agriculture, universities, and other agricultural local associations – presented a proposal and was awarded with the classification of 'Globally Important Agricultural Heritage System' (GIAHS) by the FAO. The classification is often perceived as a recognition of the identity of Barroso's region, their labor and lifestyle, although it is also perceived as just "a nice stamp to have". Others see it as being useful for attracting more tourism and developing economic activities related to it. During the opening table of the meeting *Patrimônio Agrícola Mundial, Conhecimento dos Agricultores e Práticas Agrícolas*

Atuais (2021), the vice president of the municipality of Montalegre, David Teixeira, mentioned that "We are a small but above all young project that wants to grow"¹³⁴. Barroso, as he proudly explains, is a region with several classifications:

This FAO classification is mainly for the preservation of memory, for the preservation of ancestral knowledge of this territory, which makes it different.¹³⁵ (Centro de Estudos Rurais & Teixeira, 2021)

Water systems, landscape, land use, local production and others (ADRAT, 2018), have been mapped and evaluated in order to grant this category to the region of Barroso. But, others have also looked at and evaluated the environmental and economic development of Barroso in general, and Covas in particular. Through the examination of its relief features, water ecosystems, etc., hydraulic companies, as well as other energy companies, have found how to economically profit from these natural resources.

Relief features, through topographic maps have also been observed as, for example, a fundamental input data for many geoscience studies. The analysis of the tectonic shifts has also been used to confirm the possibility of extracting minerals. The Geological and mining Institute of Portugal (IGM) presented an analysis of the land of Covas, namely about the lithium present in the area: "The Portuguese territory has many rich in Li-rich mineral occurrences [...] Some of those occurrences have a higher economic potential value, as is the case of the Guarda district and the Barroso-Alvão region" (Carvalho and Farinha, 2004). By using a quantitative and scientific approach to analyze the relief features and ecosystems, the company Savannah Resources, has also found, through the extraction of lithium, how to profit from the natural resources in Covas. As part of the "feasibility" analysis, the company has looked at the hydrographic region¹³⁶. Its analysis has been concerned with the quantitative use of water the mine will need. But the concerns for other actors, i.e. families, local business, environmental organizations and representatives, are the location and interconnections of the water systems, because the mine risks contaminating them.

The opening of some markets that depend on the natural and cultural resources of a region have become a problem when their approach to decision-making is based on only one type of knowledge; a "one size fits all" (Ostrom, 2010:642) approach, not combined with local knowledge and life. Thus, when confronting a project pushed by giants, the people of Covas answer by trying to offer something governments might be interested in instead. By using a marketable solution, with quantifiable economic benefits at its heart, such as the tourism industry or the carbon capture industry. This

¹³⁵ Origianl portuguese version: "Esta classificação das FAO é sobretudo para a preservação da memória, de preservação de saberes ancestrais deste território, que fazem dele um território diferente."

¹³⁴ Original portugues version: "Somos um projeto pequenino mas sobretudo jovem que quer crescer"

¹³⁶ The "area de concessão insere-se na região hidrográfica do Douro" (Savannah Resources group company & VISA consultores, 2018). See Estudo de Impacto Ambiental- da ampliação da mina do Barroso.

strategy of belonging, tries to look for a way to produce the economic benefits seeked by western strategies based on capital accumulation, while giving value to socio-cultural and political-economic dynamics of Covas. This "solution" will privilege the global market valuation of the activities in the area, before their valuation at a local scale.

6. Conclusions

6.1. Reaction to the mine

The relationship between Savannah, the government and the people from Covas, has turned public. Thus, almost everyday one can hear about new publications in newspapers supporting or opposing the mining project. On any given day one can find journalists coming to the town to interview people, as well as doctoral and master's students like me. In the cafe or the main square, people will talk about how their parents or their neighbors got an offer from Savannah to sell their land.

The shared feeling of injustice between the people in Covas and other regions impacted by the projection of lithium mines and other energy projects has "shuffled" the relations in Covas, as well as created new ones that disrupt the surrounding mountains of the region. The contestation surrounding "neo-extractivist" (Gago & Mezzadra, 2017) projects in general, and the one in Covas in particular, has brought a huge range of different actors together. Thus, the strong presence of political and economic interests raises questions between residents (and migrants) of Covas about their present lives and uncertain futures while they negotiate new borders with the mining company, the Portuguese government, activist groups, academics, the land, the water, and between the members of the local community. The impact affects old and new relations. Part of the "re-arrangements" is the loss of local relationships:

I talk to you like we've known each other for 10 years. What I don't like is that I don't talk to the people here anymore. It seems that the 'outsiders' are the good guys and the 'insiders' are the bad guys. (Barbara)¹³⁷¹³⁸

Although the mine is a very present subject in the *aldeia*, it has become difficult for some residents of Covas to exchange opinions about the mine. Some people manage to avoid the subject most of the time to avoid confrontation, and others have stopped talking to each other altogether. The mining project has brought division, sometimes perceived as two groups—in favor or against— old relations. But this division has more than two levels. It includes people that are not informed about the development of the mining project, those who do not think they can fight giants, people who are actively fighting the mine, people in favor, etc.

¹³⁷ Fieldnote 01/2022.

¹³⁸ Original portuguese version: "Falo contigo como se nos conhecêssemos há 10 anos. O que não gosto é que já não falo assim com a gente daqui. Parece que a gente de 'fora' são os bons e a gente de dentro 'os maus'."

J. Kotilainen mentioned at the EU parliament public hearing that "negative [social and environmental] impacts can transform into concerns and conflicts if they are not being addressed or mitigated. Environmental conflicts are fuelled by concrete changes in the environment but also by changes in societal value. Globally and at the European level, the number of cases has increased in the recent decades, this is because our mineral demand is growing." He continues by expressing how important it is to consider and include the fears of the population when planning mining projects "the stage of exploration in mining doesn't have big environmental or socio-economic impacts, but it can trigger long periods of uncertainty in people. Especially those worried about the possible impacts can be very anxious" (European Parliament, 2021).

Thus, to contravene the lack of transparency and consultation, the people in Covas have come together and created the association UDCB. Under the Association many acts have been carried out, such as the organization of the *Acampamento em Defesa do Barroso* in August 2021¹³⁹. They have spoken at different conferences across Europe, for example, the one organized by the European Environmental Bureau (EEB) and Friends of the Earth Europe (FoEE). Additionally, they have organised and participated in almost every protest. UDCB has connected and created support groups with other associations living through similar situations—Associação Montalegre com Vida, Movimento não às Minas, Povo e Natureza do Barroso (PNB), 'Minas não, sim à Vida', SOS Serra D'Arga, and many others — and with friends from other locations, such as the Caravana Zapatista.

The economic and political influence of private investors – i.e. the Lithium Working Group reported how its creation was triggered by the multiple requests for the attribution of prospecting and exploration rights of lithium – makes Savannah, and the private mining sector in general, responsible for the environmental and human impact caused by the mines (as established by the creation of the Guiding Principles on Business and Human Rights¹⁴⁰). But companies are not alone "in the conjuring business at this time. In order to attract companies, countries, regions, and towns must dramatize their potential as places for investment. Dramatic performance is the prerequisite of their economic performance" (Tsing, 2004:84). In Covas, geologists and other actors hired by public institutions have been searching for lithium since the mid 90s (As Mafalda recalls), in order to attract financial investment into the country. But the deposits of lithium available in the region are still based on an estimation¹⁴¹. European and state actors also need to ensure transparency not only with world markets, as mentioned in the Raw Materials Initiative (EC, 2008), but also with the local population. The lack of transparency with the Mina da Savannah project and the corresponding trust has been a major problem in Covas. Thus, their lack of transparency has been denounced by the Spanish organization Montescola¹⁴² to the European parliament. The Parish of Covas do Barroso also denounces the Portuguese government for letting the

¹³⁹ see https://barrososemminas.org/

¹⁴⁰ The guiding principles have been expanded in the theoretical framework chapter.

¹⁴¹ see "Estimativa de Recursos Minerais JORC para lítio" and Euronews publication (between others).

¹⁴² see Arhus Convention Compliance (link).

companies exchange contracts between them without informing the local population. As well as for the alterations made to the approved contracts between the government and the company without the corresponding update on the DIA or the consulting the population.¹⁴³

The mining project uses the image of rural areas' depopulation to support its construction. Thus, the extraction of lithium is being argued by some as the way to bring public wealth to the region. Public wealth, in the form of creating jobs and bringing public services such as schools and health centers to the region. The creation of the National Lithium Strategy has been supported for its potential to develop the economy in the most disadvantaged regions. Still, although argued as the positive outcomes of the mining industry by public and private actors, it is not perceived as such by local residents whose income depends on the land they work. Even those who had that hope experienced disillusion when they noted that the jobs were not going to be for the inhabitants and that no money was going to be invested in the region. When talking about how he feels about the mining project, one of the oldest residents in Covas, who some months ago still hoped for the possibility to negotiate "privileges" for Covas, said:

I also don't like the way they're doing things, they're not going to leave anything in the region. There was [decades ago] another mine that brought a health centre to another village, but this won't bring anything here. I am old, Covas is dead, their daughters [speaking of Barbara and David] will not be farmers and neither will my grandchildren. (Lenin)¹⁴⁴ 145

During my first week in Covas, I heard: "We are not so fundamentalist that we are against development, that's not it" as justification for not "collaborating" with the development of global projects to reduce CO2 emissions. The people in Covas and the surrounding regions also facing mining projects, try to explain how these projects have not been communicated and did not include the local population in the decisions. The lack of communication from the Savannah mining project has transmitted a feeling of irrelevance and unimportance to the people of Covas, which has grown during the last years. "It's very exhausting" I heard, in reference to what is now *uma luta* (a fight, in english). This is how most of the people in Covas are feeling, they have not been consulted, they do not have a say.

 $^{^{143}\} see\ https://www.jornaldenegocios.pt/empresas/energia/detalhe/litio-junta-de-covas-do-barroso-em-boticas-interpoe-acao-judicial-contra-o-estado$

¹⁴⁴ Fieldnote 01/22.

¹⁴⁵ Original portuguese version: "Também não gosto da maneira como fazem as coisas, não vão deixar nada na região. Havia [há décadas] outra mina que trouxe um centro de saúde para outra aldeia, mas para aqui não trará nada. Eu sou velho, o Covas está morto, as filhas deles [falando da Barbara e do David] não serão agricultores e os meus netos também não."

¹⁴⁶ Recorded presentation during the camping 08/2021.

¹⁴⁷ Original Portuguese version: "Não somos tão fundamentalistas que estamos contra o desenvolvimento, não é isso"

¹⁴⁸ Original Portuguese vesion: "É muito desgastante".

At the end it is the government who decides, we are too few for the "things" we want to matter. We are locked between mountains, so there are not many people arriving here, but we are directly affected by the mine. (Barbara)¹⁴⁹

The lack of consultation also raised concerns about the mine's environmental impact based on its proximity and use of the rivers, and about the security conditions for the population. During the public hearing at the EU parlament, Dr. Emmerman explained how the statement made by the European parliament resolution of 2004, claiming that "primary and secondary sourcing in the EU is subject to the highest environmental and social standards worldwide" is not true. He continued by giving examples of creations and expansions of mines in Spain and Portugal. These included the short conditions of the self rescue zone, the weakness of the flat design saving regulations, etc. (European Parliament, 2021).

Now everyone is waiting for the Agência Portuguesa do Ambiente (APA) to decide, based on the Estudo de Impacto Ambiental (EIA)¹⁵⁰, to give the license of exploration to Savannah or not. The decision has been delayed since December 2021, and has still not been made today, June 2022. The 'dependency' on the results, to "know where the future will lead" (Ingold, 2022), brings a feeling of uncertainty about the future for the people living in Covas. Depending on the day, people might prefer not to think about the future; or they imagine where they would migrate to, where their families live; or they imagine life without the mine again.

6.2. Times of uncertainty

"When Ι was little. Ι asked father. my Why don't you cut down trees? these – Because they were here when I bought this land and they should be here for the next person. Today everything has changed." (Barbara)¹⁵¹

Throughout the research, I aimed to get a picture of the material relations in Covas. I have analyzed different scales of time, through historical periods, space, and global connections. "If we wanted to understand the whole movement of social reproduction, however, we would necessarily have to take into account, for any historical period, a much wider set of related issues" (Narotzky, 1997:189).

We are living in a phase of economic modernization, with discourses of progress that support a development expected to bring political independence and a "green economy" that will stop climate change. The extraction of lithium, and of CRMs in general, is being pushed by governmental policies

¹⁴⁹ Fieldnotes 09/2021.

¹⁵⁰ Public consultation ended in July 2021.

¹⁵¹ Fieldnotes 11/2021.

as the solution for this economic, political and environmental crisis. As a response to its international (European) demand, the exploration projects to extract lithium are being designed and developed in rural and peripheral areas¹⁵² in Europe. In order to follow European climate measures, rural areas are being loaded with work to prevent further CO2 emissions. They have been given the responsibility of preserving a "green lifestyle" that takes care of the land, the rivers and the air. While also being loaded with other imaginaries for saving the climate crisis through opening lithium mines that will reduce CO2 emissions caused by urban transportation. Thus, rural areas and the land are experiencing the beginning of what could be termed 'climate austerity measures' and "people have to engage with the field of forces resulting from them" (Pusceddu et al., 2021:1).

In cities and in places "far" from the explored areas, present and future consumers of lithium are not likely to consider how the object is produced or how the materials are extracted. This alienation is more easily achieved by carrying out production and extraction activities in areas socially and geographically distanced from where consumers live. Such as natural or rural areas, or other countries, often situated in the global South. This "division of the world" that draws on the material flows is often referred to as 'centers of accumulation' and 'peripheries of extraction (Franquesa, 2019).

The problem is that cities [where most policies are voted on and decided] focus on reducing contamination there, without worrying about it increasing elsewhere. (Barbara)¹⁵³ ¹⁵⁴

So, what is being contested in Covas? Can new energy transition policies and the livelihood in Covas coexist? Is there not enough space for a mine and grazing lands? Or is there not enough water for both activities? These are indeed some of the fears. Fears that, as described by Emerman in 2021, are well founded. Mining is considered a high risk activity and "the consequences of being wrong are so great" (European Parliament, 2021). But, as many of the activities supporting energy production in the *baldio* show, there should be space for both worlds.

I believe that the two worlds can exist together and can learn from each other. Because two wills come together. The will of the people to look for other ways of life, and the will of the people to have more people come here to live. A very rich relationship can come out of this. (Interview Venes)¹⁵⁵ 156

¹⁵² Spain and Portugal are affected by its geographical division between agricultural peripheral areas and city centers.

¹⁵³ Fieldnotes 01/2022.

¹⁵⁴ Original portuguese version: O problema é que as cidades [onde a maioria das políticas são votadas e decididas] se focam em reduzir a contaminação lá, sem se preocuparem com o facto de aumentarem noutro sítio.

¹⁵⁵ Recorded interview 08/2021.

¹⁵⁶ Original Spanish version: "Yo creo que los dos mundos pueden existir juntos y pueden aprender mutuamente. Porque se juntan dos voluntades. La voluntad de la gente de buscar otras formas de vida, y la voluntad de la gente de que venga más gente aquí a vivir. Una relación muy rica puede salir de aquí."

Discovering a natural resource that can fuel the next period of economic modernization, such as lithium, can be understood by many as a guarantee of fortune. Instead, as in the case of Covas and many lithium (and other metals) exploitation areas, it often leads to conflicts. "History is full of examples of countries whose natural-resource wealth led to less economic success" (Mittelman, 2017). "The mine will bring new job opportunities" communicates the Savannah as well as some European brochures. "[Jobs] for workers in the mine, geologists and even biologists" says a Savannah representative at their office in Boticas, while presenting to the Universidade do Porto geology students. Political, economic and environmental policies do not take into account social impact, as the EIA (before it was open to public consultation) demonstrates. Problems arise when democratic processes, i.e. through consultation and agreement, are ignored and when one party's desires are not aligned with the others. One of the mining pits has been designed 200m away from Romainho residents, in Covas do Barroso; superimposing the importance of lithium in this concrete area onto the residency of the locals, who will have to sacrifice their livelihoods.

We are farmers. We have always been farmers. Our livelihood will be destroyed. There I can grow my own food. It will all disappear. [...] It will pollute the rivers, it will destroy the grazing land. We live off sheepherding. Our lifestyle is with animals. Natural and agricultural heritage are very important concerns, because we need water and air to live. [...] What will happen to us? [...] There is a house there, right by the perimeter [of the mine], 200m away. Who can live with that? It is unequal. They have the money. We are few but determined to win this battle. (UDCB, 2021)

Through the voices of some of the inhabitants in Covas, this video shares the concerns brought by the lithium exploration project to the area. People's discourses express the fears of what they would lose and the resistance they have to put to the actors promising progress for the region, and capital and a sustainable development to the country and Europe. As Lenin noted, little is going to be left in Covas. In the population versus resource debate, the concept of 'resource curse' has been used to indicate the situation in most of these extraction areas. (Franquesa, 2019).

Although the contested land for the mine is over private and common property, its value has become important not only for Covas residents, but also for its potential in the commodity market. The increased difficulty to acquire CRMs, by its dependency on third countries and the impact of environmental policies, have made lithium a valuable material. The value that distances the CRM from its acquisition is normally "overcome in and through economic exchange, in which the value of objects is determined

¹⁵⁷ Fieldnotes 06/2022.

reciprocally" (Appadurai, 1986:3). But in the case of Covas (and other lithium mining projects in the Iberic peninsula, and other countries) this exchange has not been agreed. Questions about the value given to the land, to the people or to the market of raw materials have been analyzed from different theories of value¹⁵⁸. In the case of Covas, the cost related to the lives of the people has been accepted as an externality—i.e. not included in the extraction market price. When governments and companies define the value of the transport and energy markets, other elements such as social migration movements, are obscured.

Questions on the significance and value of property have arisen throughout my thesis. From human relations with the environment, the significance of family inheritance and labor, different ways of relating to the land, to property rights. Through its capital ownership and the reproduction of capitalist forms of relation, Savannah tries to acquire land in Covas and control resources. For the moment, this capital ownership allows for the speculation of property rights of some of the private and common lands in Covas. Although the *compartes* are empowered to decide what is being done in the *baldio* of Covas, a lot is being said about the government's power to expropriate them in the case of a Project of National Interest (PNI). Imaginary and materialized events related to the mining project have triggered conversations around the definition of the relationship between the people of Covas and the land and the river.

We are selfish, I say it is 'my land', 'my river', but they are not mine. I was born here and have lived here all my life. (Barbara, 2022)¹⁵⁹ 160

As explained throughout the thesis, the conflicts created by the lithium mining project in Covas have brought many changes. Changes as reflections on how we relate to the land, and how we relate to others. Although these changes and reflections come from a conflict, they have triggered a broader societal debate. "Anthropologists have not participated enough in these debates in recent decades" (Franquesa, 2019:87) and I had not participated before either. But the contestation of the project has created new connections that were difficult to imagine before. As Mafalda mentioned during one of our conversations, "one of the reasons to leave Covas is the lack of opportunities for people other than farmers". The contestation to the Mina da Savannah has brought new connections, multiculturality and a mix of people from different backgrounds and generations, through activist groups, other rural regions, academics, artists, journalists, and so on. The connections materialized in Covas exemplify the possibility of society's "construction of alternative ways of life and of thinking within a dominant

¹⁵⁸ Expanded in the theoretical framework.

¹⁵⁹ Fieldnotes 01/2022.

¹⁶⁰ Original portuguese version: "Somos egoístas, eu digo que é 'a minha terra', 'o meu rio', mas não são meus. Eu nasci e vivi aqui toda a minha vida"

hegemony" (Narotzky, 1997:177). Today there are four new permanent residents in Covas that emerged from these new connections.

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