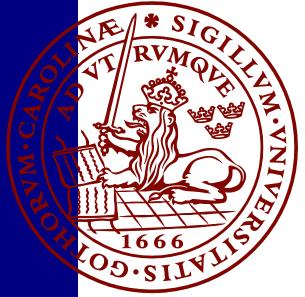
# Menorca's calm threatened by climate 'jaleo'

Place attachment, collective identity, and collective action towards climate change impacts in Menorca, Spain

Mar Triginer Mitjavila

Master Thesis Series in Environmental Studies and Sustainability Science, No 2022:044

A thesis submitted in partial fulfillment of the requirements of Lund University International Master's Programme in Environmental Studies and Sustainability Science (30hp/credits)







# Menorca's calm threatened by climate 'jaleo'

Place attachment, collective identity, and collective action towards climate change impacts in Menorca, Spain

Mar Triginer Mitjavila

A thesis submitted in partial fulfillment of the requirements of Lund University International Master's Programme in Environmental Studies and Sustainability Science Submitted on the 10th of May, 2022

Supervisor: Inge-Merete Hougaard, LUCSUS, Lund University

# **Abstract**

Local perceptions on global scale problems are often overlooked, focusing the attention instead on policy action or scientific reports. To challenge that, this thesis focuses on Menorca's population, specifically on whether place attachment is related to the perception of climate change impacts in the territory and if this can translate into concrete local action against its impacts. For that, I use an ethnographic approach. I discovered that most people's connection with the territory is deep and rooted, and that climate change impacts have already been perceived. However, there is a rather individualistic feeling that does not lead to a collective identity force. This suggests that collective identity has decreased, and another wave of protests is far from being a reality. However, the environmental values in the island leave the answer open and indicate that collective action could happen in the future.

Keywords: climate change, place attachment, collective identity, territory, perception.

Word count: 11,828

# Acknowledgements

This is the end of a crazy adventure, and there are some main characters I'd like to thank for it: First, I would like to thank the most important people in my life, my parents. Thank you for the constant support, for convincing me that I am capable and that I can do it. Without your love and trust I would not be here. I will always be grateful to you for being the best parents in the world.

My love for Menorca makes no sense without including my family. I want to express my eternal gratitude to my grandparents, who are already in heaven, for building a house there for the family to be together during summers. Indeed, they gave me the happiest childhood memories there. I hope this work makes you proud wherever you are, I love you.

Pol, thank you for coming to Sweden and sharing this adventure with me. Thank you for the patience, for the everyday support, and for the dedication you always put on this relationship. You make me happy.

My life in Sweden has been spectacular thanks to my closest friends, my family in Sweden. You know who you are. Thank you for accepting me as I am and for wanting to enjoy your adventure with me. Thank you for your time, your trust, your wisdom. I admire you and I have learned a lot from you. I hope to do so for a long time to come.

Uncle, thank you for the interest you have had in my project from the very first minute, for the trust you have placed in me, and for all the help I have received. Conversations with you have always made me reflect and look towards possible new horizons.

Inge and Elsa, thank you for your support and for guiding me through this process when times were uncertain.

Thanks to all the people who have participated in this project. Without you this would not have been possible. Thank you for your trust and for showing your most sentimental side towards the island. I know that these topics can be very intimate. I only hope that this project lives up to your expectations.

Finally, I would like to thank the people from Menorca who stood up for their island.

# **Table of Contents**

1	Introduction	1
	1.1 Topic and context	1
	1.2 Questions and objectives	2
	1.3 Contribution to sustainability science	3
2	Background	4
	2.1 Main characteristics of Menorca's territory	4
	2.1.1 Menorca's economic and energetic profile	5
	2.2 Menorca's battle against urbanization	5
	2.3 Climate change in the Mediterranean Basin and Menorca	7
3	Theory	7
	3.1 The importance of place and place attachment theory	7
	3.2 Analytical model	
	3.2.1 Relationship between person and place	10
	3.2.2 Sense of community and collective identity	
	3.3 Operationalization of theory	. 13
4	Methodology	.14
	4.1 Research design	. 14
	4.1.1 Ethnography	14
	4.2 Data collection	. 15
	4.2.1 Interviews	16
	4.2.2 The Walk & Talk method	16
	4.2.3 Participant observation	17
	4.3 Data analysis strategy	. 18
	4.4 Limitations, positionality, and reflexivity	. 18
5	Analysis	.19
	5.1 Perceptions of climate change	. 20
	5.1.1 Water	20
	5.1.2 Increase of temperature	21
	5.1.3 Diffuse spring and autumn	22
	5.2 Psychological processes of place attachment	. 22

5.2.1 Affect	22
5.2.2 Behavior	24
5.2.3 Cognition	24
5.3 Sense of community and collective identity	25
6 Discussion	26
6.1 Implications	28
7 Conclusion	29
8 References	30
9 Appendix	35
Appendix 1. Overview of the interviews and active participation	35
Appendix 2. Interview guide	36
Appendix 3. Map of Menorca with some of its most emblematic places	38
List of tables and figures	
Figure 1. Situating Menorca on a map	4
Figure 2. The tripartite model of place attachment	9
Figure 3. My model of place attachment	10
Table 1. Interview details	35
Table 2. Attendance to events	36
Figure 4. Some of the most emblematic places in Menorca	38

# 1 Introduction

# 1.1 Topic and context

The Mediterranean Basin is considered to be one of the most important climate change hotspots in the world due to its vulnerability because of its morphological and geographical characteristics (Enríquez & Bujosa Bestard, 2020), and because of the large number of impacts it is suffering compared to other regions in the world (Torres et al., 2021). According to the United Nations Environmental Program (UNEP), the Mediterranean Basin is warming up 20% faster than the global average, and if this continues and the 2°C degrees are reached, precipitation would be reduced up to 15% which is worrying considering that the resource demand is expected to increase notably during the next years. Moreover, the sea temperature would increase by 1.8°C and 3.5°C in 2100, reaching the highest temperatures in Spain and Eastern Mediterranean (*Climate change in the Mediterranean*, n.d).

Menorca, an island that is part of the Balearic Archipelago in Spain, is in the Mediterranean Sea and thus is also suffering the consequences of climate change. The impacts are highlighted there as it is an island and the vulnerability is higher. Moreover, most of the population lives up to 10m above mean sea level, which makes it potentially exposed to future disruptions (Luque et al., 2021). The future projections for the island are disheartening, as 15% of its beaches could lose half of their surface in 30 years, the temperature could rise exponentially, and there would be a regression of rainfall (Institut Menorquí de Estudis, 2018), affecting not only the life in the island, but also its biodiversity and agriculture. After seeing these projections, climate change presents itself as the biggest threat to life on earth as we know it, and this is reason enough to act against it.

In this sense, Menorca is an interesting case to investigate because of the attachment locals have to the territory and how they have continuously fought to maintain their environmental habitat intact. The mobilizations started during the 70s, when the territory was opened to tourism and urbanization projects were presented; thanks to many episodes of demonstrations, the citizens succeeded in maintaining the natural value of the territory, and in convincing the government to pass laws that would protect it (Serra Busquets & Mayol Arbona, 2014). The social cohesion and perseverance of Menorca's citizens combined with the new laws made Menorca an eligible candidate to obtain the title of Biosphere Reserve given out by UNESCO, which they achieved in 1993 (Atienza & Díaz-Acha, 2019).

Thanks to this, Menorca is considered to be the most conserved island of the whole Archipelago. Considering this attachment, and climate change impacts in Menorca, I ask myself whether people perceive these impacts explained above, and if they act on it.

# 1.2 Objective and questions

The overarching aim of this thesis is to understand the local perceptions of climate change and whether if collective identity and collective action exist so that the information can be used to build a sustainable future in Menorca where all stakeholders are integrated. To achieve this, this thesis intends to answer the following research questions and sub questions:

- 1. To what extent is place attachment related to a major perception of climate change impacts in the territory?
  - a. How do inhabitants define Menorca?
  - b. How is the sense of community portrayed in the island (if there is one)?
  - c. What is locals' perception of climate change?
- 2. Given place attachment and climate change perception does that translate into concrete local action against its impacts?

All these questions are answered through an ethnographic methodological approach, combining participant observation and semi-structured interviews, and through the lenses of place attachment combined with collective identity theory.

The thesis is structured as follows: after this introduction, some background information is provided about the main characteristics of Menorca's territory, its economy, the different mobilizations against urbanization, and climate change impacts in the island. The theory section presents an explanation of the concept of place and my theoretical model which includes place attachment and collective identity theory. Later, the methodology section is divided into the research design, where I talk about ethnography, the data collection, where the walk and talk method is introduced, and my research strategy. Later, my findings are presented as well as the discussion where the results are analyzed. The thesis finishes with some concluding remarks.

# 1.3 Contribution to sustainability science

There is loads of literature whose purpose is to portray local perceptions to contribute to effective adaptation planning and practice. This research also intends to contribute to this cause. Examples of it are articles such as the one written by Jurt et al., (2015) which also examines local perceptions on impacts of climate change. They also defend that the feeling of belonging is crucial to trigger motivation for future action. Jaśkiewicz & Besta (2018) combine place attachment and collective identity in their paper, finding that they are correlated; the more place attachment, the more collective identity people would show. Escalera-Reyes (2020) writes about place attachment and collective identity in a case study in Andalusia, Spain, and concludes that if it was not for place attachment, social mobilization would not have occurred. My research also connects place attachment and collective identity, in an aim to provide more evidence in this correlation with the reality of Menorca.

My thesis contributes to sustainability science by giving importance to the vision of local people in such global problem. There has been a recent and emerging agreement that sustainability requires new ways of decision-making and knowledge production (Lang et al., 2012), and that the integration of local perspective and scientific evidence is important for developing a comprehensive understanding of the complexities of climate change. People's perception of place is important; we cannot understand the whole world by following the global models. We need to understand what people in the ground feel, sense and know about. It is the only way to relate to our material environment, the everyday experience, and an everyday lived perception of environment. Moreover, local perceptions are important for researchers and practitioners for two main reasons: first, local perceptions can help create better public policies for specific local challenges. Secondly, local perceptions give another perspective to the always relied on environmental indicators, putting more importance to the social part of sustainability, including well-being and quality of life (Jones et al., 2019).

Aside from local perspectives, the title of Biosphere Reserve and the willingness of the population to live in harmony with what surrounds them resembles to one of the points sustainability science addresses, which is aiming for a relationship of symbiosis between the natural environment and human activity. Moreover, the title of Biosphere reserve also allows the island to be subject of projects towards a more sustainable life, which goes hand in hand with sustainability science and the provision of possible scenarios for global sustainability (Spangenberg, 2011).

# 2 Background

# 2.1 Main characteristics of Menorca's territory

Menorca is an island located in the northwestern part of the Mediterranean Sea, and is part of the archipelago of the Balearic Islands (Sierra et al., 2014) (See Figure 1). Menorca is the second largest of the group, Mallorca is the largest one and the following ones are Ibiza and Formentera. Its capital is Maó. It has a surface area of 701.8km2, broadly rectangular and flat, with around 80% of its surface being below 100m above sea level (Sierra et al., 2014). The highest point in the island is Monte Toro, with a height of 358m. The number of inhabitants in 2019 was 93.397 (OBSAM, 2019), although the number always doubles in summer, reaching around 110.000 inhabitants due to seasonal tourism and thus putting more human pressure on the island (Cardona Pons et al., 2018).

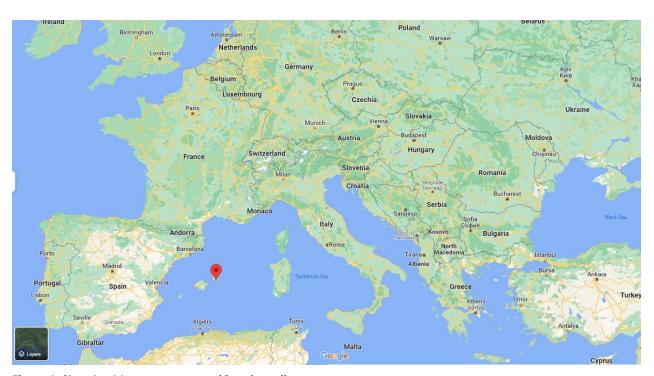


Figure 1. Situating Menorca on a map (Google, n.d).

Due to its location, the climate in Menorca is temperate, seasonal in terms of precipitation (concentrated in autumn), and moderate in terms of temperature. The humidity in the island is high most of the time, with an annual average of 70%. Winters are considered mild and humid, and summers are hot. The average temperature is 17°C, with the average highest being 21°C, and the lowest being 14°C (Marcos-Valls et al., 2020).

# 2.1.1 Menorca's economic and energetic profile

Currently, tourism accounts for 80% of Menorca's economy (Marcos-Valls et al., 2020). However, because Menorca was one of the latest spots to be open to tourism, this 'virtuous delay', as some call it, and the new laws and mobilizations, (have) helped the island maintain a fair balance between human activity and nature (Atienza & Díaz-Acha, 2019). It is important to note that even if tourism supposes such a huge revenue for the island, agriculture accounts for 40% of the island's territory, and helps maintaining the preservation and conservation of landscapes and biodiversity (Cardona Pons et al., 2018).

When it comes to energy, Menorca is very much dependent on energy imports coming from a submarine tube connecting both Mallorca and Menorca, and resources transported by boat. Having only 1% of renewable energy, the island still covers most of its demand with fossil fuels, with oil representing 87% of the total. 80% of the electricity consumed in the island comes from Maó's thermal power station, which works with fuel oil and emits half of the CO2 emissions of the island (Cardona Pons et al., 2018) This information is useful because it is related to the findings and what participants say about the future of the island.

# 2.2 Menorca's battle against urbanization

During Francisco Franco's dictatorship (1939-1975), Menorca was the Balearic Island that suffered the most aggressive economic and political isolation and as punishment for being the last one to surrender to the nationalists (Serra Busquets & Mayol Arbona, 2014). During Franco's dictatorship, the island was very much dependent on agriculture, production of cheese and milk, and manufacturing of footwear and jewelry for its prosperity. It was in the 1970s when Menorca opened to tourism and the industry started to play a major role. Looking to the future development of the island, the government issued the Pla Provincial (1975), a territorial projection for the island where a good proportion of the territory would be urbanized, and ring roads would be built to enhance and ease the change (GOB, 2017). According to this plan, all town halls could incorporate new urbanizations in their jurisdiction. These projections and plans were forcefully criticized by the island's population, which massively mobilized against them and for the defense and protection of their territory.

There was one non-governmental organization that led and organized the protests, Grup Balear d'Ornitologia i Defensa de la Naturalesa<sup>1</sup>, known as GOB founded in 1977 (Serra Busquets & Mayol Arbona, 2014). Under the mottos 'One who loves Menorca does not destroy it' or 'Save the island, it is not too late yet', the NGO mobilized thousands of people to prevent urbanizing places which are now emblematic, such as Cala Turqueta, Son Saura, Macarella, or Trebalúger (GOB, 2017) (See Appendix 3). One of the most important triumphs was the one in S'Albufera des Grau, an area that was supposed to be urbanized and turned into a water ski center. Thanks to the social cohesion and perseverance of society, the Balearic Islands Parliament approved a law that declared it a Natural Area of Special Interest in 1986. A decade later, the zone was declared to be a natural park, and other zones were included under the law's domain. Nowadays S'Albufera des Grau is the center of the Biosphere Reserve of Menorca, which was declared in 1993 by UNESCO (Serra Busquets & Mayol Arbona, 2014) and more areas in Menorca enjoy the protection of the government.

The concept 'Biosphere Reserve' (BR) started to be used in 1973 by UNESCO's Man and Biosphere Programme (MaB) to define and recognize those territories in which the activity carried out by humans was respectful and in harmony with the natural environment, conserving the natural resources and cultural heritage of the region. These places are 'learning places for sustainable development', providing local solutions to global challenges. The objective of this concept is to establish a scientific study on how to improve the relationship between humans and the conservation of the environment (UNESCO, n.d). Menorca was given the title of Biosphere Reserve in 1993, and the area covered 71.191ha. After a revision in 2019, the area was extended to 514.485ha, including maritime and terrestrial areas (Consell Insular de Menorca, n.d.).

This Biosphere Reserve declaration led to other laws in favor of the environmental protection of the territory. The biggest and most successful one is Pla Territorial Insular (PTI), approved in 2003, which deleted almost 50.000 touristic posts, illegalized constructions in rural soil (which makes 95% of the island), and focused the development of tourism in hotels and not in new urbanizations (GOB, 2017). This law has successfully turned Menorca in the most protected and conserved island in the Balearic Islands. The last massive demonstration happened in 2007 against a project that wanted to build a high road crossing the island. Finally, the project was stopped (GOB, 2017).

-

<sup>&</sup>lt;sup>1</sup> Balearic Group of Ornithology and Nature Defence

# 2.3 Climate change in Menorca

In Menorca, the most evident effect of climate change has been the temperature change; the annual average has increased more than one degree Celsius in the last 40 years, especially during spring and autumn. This represents more than the average global warming. This phenomenon has contributed to an enlargement of the summer season, leaving the feeling that the seasons between winter and summer are in danger of extinction. Moreover, this increase of temperatures promotes evapotranspiration, and water demand becomes more urgent for humans and the environment due to a hydric deficit and prolonged droughts (Institut Menorquí d'Estudis, 2018). Moreover, the island has also experienced the rise of the sea-level, around 8cm in the last four decades. This threatens not only the population, which lives less than 100m above sea level, but also the coastal ecosystems such as dune systems, beaches, and humid coastal zones such as Albufera des Grau (Institut Menorquí d'Estudis, 2018), the core zone of the Biosphere Reserve.

# 3 Theory

This section explains the framework that is used in this project. Place attachment theory is crucial to understand the sense of belonging people from Menorca have to the island. Collective identity is introduced inside the place attachment model to understand how social bonds are important to have collective action over something of extreme importance to the people within the group. The bond to the land, and the personal connection with a collective can help us understand the rootedness of people in Menorca, perceptions of climate change, and their willingness to fight the possible distortions.

# 3.1 The importance of place and place attachment theory

The concept of place has been a point of focus in recent psychological, geographical and sustainability research (Jones et al., 2019). Most of the authors agree that a place is a dynamic concept and more than a point in space; it is something we put important meaning to as the center of human experience, social relationships, emotions, and thoughts (Fresque-Baxter & Armitage, 2012; Knez, 2005; Stedman, 2002). Stedman (2002) defines three components of place: it is a *physical setting* where *human activities* happen and thus *social and psychological processes* are rooted. Building on this concept, environmental psychology experts have tried to explain our relationship with space with many different concepts and

theories. Place identity<sup>2</sup>, place attachment<sup>3</sup>, sense of place<sup>4</sup>, place dependence and place satisfaction<sup>5</sup>, and rootedness<sup>6</sup> are examples of these attempts (Fresque-Baxter & Armitage, 2012; Foote & Azaryahu, 2009; Harun et al., 2015; Knez, 2005; Peng et al., 2020; Scannell & Gifford, 2014). Although some of them have very similar definitions (e.g., place identity, place attachment and sense of place), they have important different details. This has created a situation of no universal consensus among the discipline regarding the relationship between these concepts and which of them should prevail among the others. For example, Stedman (2002) puts the concept of sense of place as the major theory from where the others develop, and he does not mention place-identity theory. Meanwhile, Fresque-Baxter & Armitage (2012) put place-identity theory in the core of environmental psychology and place.

In this thesis, I follow the place attachment theory and the model I propose is influenced by its three-dimensional structure proposed by Scannell & Gifford (2010). This is because the authors achieve to explain in a very clear-cut and coherent why place attachment should be the root and the other concepts (defined above) should follow. They define place attachment as "a cognitive emotional bond that individuals develop toward places" (Scannell & Gifford, 2014, p.1). The theory began to be well-known and massively studied in the 1980s and 1990s, when environmental psychologists felt the need to know more about the relationship between individuals and the space that surrounds them (Scannell & Gifford, 2014). In the last 20 years, the number of studies including the words 'place attachment' and 'sense of place' have quadrupled (Scannell & Gifford, 2014). This interest may be due to the fact that globalization, increased mobility and environmental degradation have threatened our sense of belonging to a place, and our emotional and cognitive connections to it (Relph, 1976; Sennet, 2000 in Scannell & Gifford, 2014).

\_

<sup>&</sup>lt;sup>2</sup> Place identity: Considered to be part of self-identity, place identity is a socially constructed phenomenon and a cognitive process tied to a sense of belonging with a specific place (Fresque-Baxter & Armitage, 2012).

<sup>&</sup>lt;sup>3</sup> The definition of place attachment is explained later in this section.

<sup>&</sup>lt;sup>4</sup> "Sense of place refers to the emotive bonds and attachments people develop or experience in particular environments" (Foote & Azaryahu, 2009 p. 96).

<sup>&</sup>lt;sup>5</sup> Place dependence and satisfaction reflect the functional part of a place in terms of providing amenities necessary for desired activities (Peng et al., 2020).

<sup>&</sup>lt;sup>6</sup> "Place rootedness refers to a very strong and focused bond that in its essence means being completely at homethat is unreflectively secure and comfortable in a particular location" (Harun et al., 2015).

Key features of place attachment are emotions, feelings, cognition, and behavior. These are included in the three-dimensional structure of place attachment that reveals the multidimensionality of the concept. As mentioned above, this structure is useful as it organizes the different place-related concepts existing in literature, creating a comprehensive understanding about all of them. The three dimensions of place attachment are (1) the person, (2) the psychological process and (3) the place dimension (Scannell & Gifford, 2010). Find below the figure of the tripartite model.

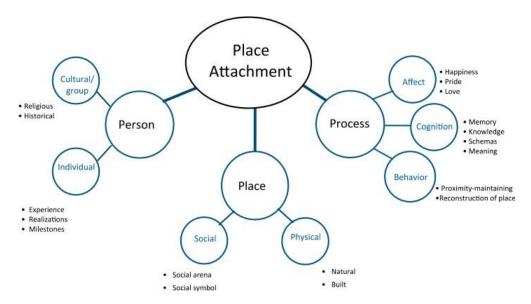


Figure 2. The tripartite model of place attachment (Scannell & Gifford, 2010).

However, I have adapted the tripartite model of place attachment for this project and have included other concepts and theories I use as well, such as the perception of territorial disruptions, grief, and most importantly, collective identity. Moreover, and without discrediting the work of Scannell & Gifford (2010), I consider there might be some categories that would be slightly overlapping each other in the model and thus could be confusing in my analysis, such as the characteristics of the individual category and the cognition process. Other categories are not used in this thesis and have been taken out to avoid a mislead. Following this explanation, figure 4 illustrates how the adapted model looks like.

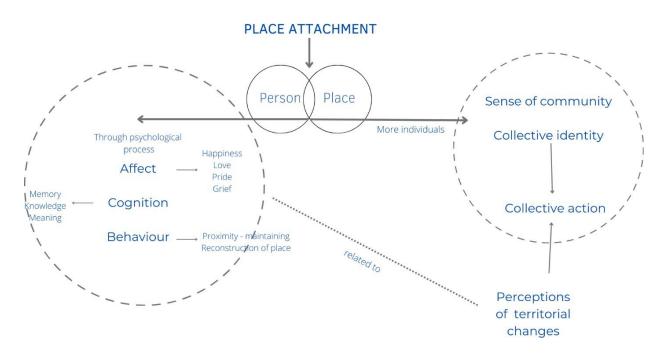


Figure 3. My model of place attachment. Made by the author.

# 3.2 Analytical model

# 3.2.1 Relationship between person and place

My model argues that in place attachment, the individual and the place are two intertwined concepts. This section focuses the psychological processes that an individual goes through when experimenting this connection to a territory. Although I acknowledge that the attachment can happen in a group level, this part of the model focuses on the individual as I give importance to the group level later. When a person experiences place attachment, three psychological processes occur: affect, cognition and behavior. As some authors like Stedman (2002) have pointed out, these also happen in sense of place (Scannell & Gifford, 2010).

The affect level focuses on the emotional level of the connection with a place, and how people's well-being and pride can be related to that bond. Displacement events caused by wars or environmental disasters are a clear example; the grief people suffer from when they have to abandon their homes shows the affection that can be created with a place (Scannell & Gifford, 2010). Emotions towards climate change, and the distress it causes when places change due to this uncertain threat are another example.

Solastalgia<sup>7</sup> or econostalgia<sup>8</sup> are often encountered when a place suffers negative impacts (Clayton, 2020), as well as ecological grief, pointed out in figure X and defined by Cunsolo & Ellis (2018) as "the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems, and meaningful landscapes due to acute or chronic environmental change" (p.275).

The cognitive level pays attention to the memories, beliefs, or knowledge that people connect with a place. "Place attachment as cognition involves the construction of, and bonding to, place meaning, as well as the cognitions that facilitate closeness to a place" (Scannell & Gifford, 2010, p. 3). In this level Scannell & Gifford (2010) situate Proshansky et al., (1983) theory of place identity. In their theory, they define place-identity as a phenomenon that occurs when a person incorporates a place to their self-identity due to cognitive procedures such as memories, thoughts, or values.

The behavioral level focuses on the individual's actions regarding their surroundings. As one can see in inter-personal attachments, one action that demonstrates a strong bond between two bodies is the proximity-maintaining behavior, that is, the efforts someone makes to stay close to another that does them good, or in this case, a place that makes them feel best (Scannell & Gifford, 2010). Some research like Hay's (1998) on rootedness and community interaction in Banks peninsula illustrate this phenomenon. However, one cannot only stick to this explanation to explain behavior since there might be situations where the person, even if the bond is strong, cannot be in that place that often. The behavioral level can also be explained by post-disaster settings. The actions people take in trying to restore and recreate a place also show a strong connection and a willingness to be able to enjoy the place as they were doing before (see Francaviglia, 1978).

These psychological processes can influence the perception we have on territorial changes. As Relph (1976) argues, attachment to a place involves concern and care for it, which means that if the place suffers from some negative changes, the individuals would oppose to them and defend the territory. Scannell & Gifford (2014) also defend this argument defining the behavior of individuals towards the place they love 'stewardship'; they want to protect it and preserve its meaning. As we live in society, place attachment is

<sup>7</sup> Solastalgia refers to "the chronic distress people experience in response to negative environmental change, particularly when it affects a home environment" (Clayton, 2020, p.2)

<sup>&</sup>lt;sup>8</sup> Econostalgia refers to a "perception that a geographic location was better in the past" (Clayton, 2020, p.2)

necessarily social (Scannell & Gifford, 2010). The next part of the model focuses on this social aspect, considering the sense of community but putting special focus on collective identity.

#### 3.2.2 Sense of community and collective identity

Much research has placed emphasis on the social part of place attachment, since group identity and social relationships are an important part of the human being's nature. Here, concepts like sense of community of place (social ties rooted in place) and collective identity appear (Melucci, 1995). As said before, place attachment is necessarily social and can be compared with a sense of community. According to Kasarda & Janowitz (1974), "community is a complex system of friendship and kinship networks and formal and informal associational ties rooted in family life and on-going socialization processes" (p.329). Although two types of community are defined, community of interest and community of place, this model focuses on the latter, where geographical location is the center of the human connection, thus social ties are rooted in place (Scannell & Gifford, 2010).

This thesis gives more attention to the collective identity theory than to the sense of community. The concept of collective identity was first portrayed by thinkers such as Marx, Weber, or Durkheim. They provided the basis for understanding the structural-cultural bases for identity formation (see Hunt & Benford, 2004). As with place, nowadays there is no consensual definition of collective identity either. However, by exploring the different proposed definitions, one can have a solid idea of what collective identity may be. Polletta & Jasper (2001) define collective identity as "an individual's cognitive, moral and emotional connection with a broader community, category, practice or institution" (p. 285). The collectives can be imagined as well as a reality, and it is distinct from a personal identity although it can be part of who a person is (Polletta & Jasper, 2001). This identity is fluid (it can change) and relational (it depends on a person's interactions with others), and it is different from ideology because one can identify with a movement because they share its goals without having to identify themselves with the fellow members. Snow (2001) proposed another definition, which focuses more on the oneness or we-ness feeling that people get from imagined perceptions or realities lived among the same collective, in contrast with reality or imagined sets of others (Flesher Fominaya, 2010). In this case, the researcher highlights the exclusiveness of a collective by stating that different collectives will have different realities or conceptions.

In this thesis I apply Melucci's (1995) definition of collective identity because in his literature he tries to relate individual and collective identity, which I consider appropriate taking into account the place attachment theory explained above. To him, collective identity is "an interactive and shared definition produced by several individuals (or groups at a more complex level) and concerned with the orientations of action and the field of opportunities in which the action takes place" (Melucci, 1995 p. 45). In the definition of collective identity, the individual goes through a process of defining both individual and collective identity, where the first one is fragile, and a non-permanent process that of course can change and reconstruct one's identity (Ainsworth, 1997). He points out that collective identity is a network of active relationships between actors, and that it is the actors themselves who produce and construct the collective identity by defining themselves as it. Thus, collective identity is a result of these social relationships. As well as Polletta & Jasper (2001), Melucci (1995) also argues that members of this collective identity do not need to be in complete agreement about beliefs, ideology or interests to come together and see themselves as part of the same identity and movement. Finally, he stresses the importance of emotions for members to be willing to get involved, participate and generate collective action (Melucci, 1995).

As briefly introduced in the paragraphs above, Melucci's theory puts special focus on collective action. To him, getting involved in collective action means going through a process of defining individual and collective identity. A collective identity is nothing else than a shared definition of the field of opportunities and constraints offered to collective action: "Shared" means constructed and negotiated through a repeated process of "activation" of social relationships connecting the actors" (Melluci, 1985 p.793). To him, both concepts are intertwined because unity comes from collective identity, but collective identity cannot be explained without considering resources, organizational structures, and leadership (Melucci, 1985).

# 3.3 Operationalization of theory

Based on the above, I hypothesize that if place attachment is a phenomenon experienced by a great number of people towards a specific territory, a collective care towards it and thus a collective identity in this sense can be built. These two theories together can help answer the research question posed. To do that, I first analyze the interviews with the place attachment theory to discover if there is indeed a place attachment feeling within the island. The social characteristic of 'place' in the model is important to see if there is a sense of community or shared values and goals among society. After that, the collective

identity theory is used to see if there is a possibility that locals mobilize against possible disruptions or in this case, climate change impacts in the territory.

# 4 Methodology

Like any other part of the world, Menorca is not exempted from climate change's impacts. As this will inevitably lead to disruptions in the territory, deep emotional connections with it can trigger a wide range of reactions, from frustration or rage to strength and willingness to fight. This puts the local people of Menorca, their experience, perception, and feelings at the core of the thesis, and therefore, an ethnographical approach can be of help to study them.

Before starting with the methodology, it is necessary to point out that this thesis adopts a critical realist ontological position, which asserts that there exists an objectively knowable reality (*Critical realism*, n.d), but we also should embrace a form of epistemic relativism as knowledge is always context, concept and activity-dependent (Archer et al., 2016). Hence, our perceptions of the world can be different and because of this, socially constructed. In this thesis, climate change is understood as a phenomenon that is scientifically proven to exist. However, the way participants in the thesis understand climate change, and how different their perceptions can be, proves that they are socially constructed.

# 4.1 Research design

# 4.1.1 Ethnography

Ethnography's roots come from anthropology and qualitative sociology (Harrison, 2018), and is concerned with "revealing the constructed nature of social life and how social and cultural forces shape people's perceived understandings of the world and the choices they make" (Harrison, 2018 p. 25). It is defined as one of the many methodological approaches in social research in which data collection involves the researcher to participate in the social sphere of a specific place for a period of time, covertly or overtly, watching, listening to the interactions that may occur and asking questions in form of formal or informal interviews. Even if the researcher draws on a range of sources of data, they normally rely on a very specific one: participant observation (Hammersley & Atkinson, 2019). Participant observation is also a methodological approach, and it is in fact very similar in definition to ethnography. However, ethnography is sometimes the preferred term to use as participant observation can indicate a quite narrow methodology, as it would only imply observation, though in practice the methodology goes far beyond

that (Bryman, 2019). Valuable concepts in ethnography research are adaptability and flexibility; one of the core characteristics of the research practice is how improvisational it is; the researcher has to deal with unpredictable decisions, setting up last-minute relationship priorities, and different methods to employ (Harrison 2018).

Despite ethnography's holistic aspirations, the researcher needs to go through a selection to choose their preferences and narrow down. This is of special importance in this case, where the time for thesis research was limited as well as the word count. This is why a selection strategy is important. Harrison (2018) then talks about selection strategy and sampling, which in this case refers to the ethnographic decision-making. He claims there are various ways of sampling: random (any individual in society can be selected), convenience/opportunistic ("they require minimal effort or arise serendipitously" (Harrison, 2018, p.23)), snowball (people referring the researcher to other people), typical/variation (cases are selected under the judgement that they are going to be representative of a broader community), and general judgement sampling (selection by maximization of efficiency) (Harrison, 2018). In this research, most of the interviews were sampled by the snowball strategy, although random sampling also happened on some occasions.

It is important to understand that there are several roles an ethnographer can adopt in their research. In this case, my role as a researcher could be defined as a 'partially participating observer'; the researcher participates in the group's activities but not as a core member, and observation is important but not necessarily the main data source. Documentation or interviews can play a bigger part in the research (Bryman, 2019). Additionally, gaining access to a public space may sometimes be difficult if communities are rather closed. This is why the researcher will sometimes need an individual who acts like both sponsor and gatekeeper (Bryman, 2019). In this case, Menorca is quite a small island with a rather small community, and they can be quite reluctant sometimes with what they call 'foreigners'. This is why I relied on the help of a family member who is very well integrated in the island, to break the barrier and be able to connect faster and easier with people living in Menorca.

#### 4.2 Data collection

To collect data, I used methods such as interviews applying the Walk and Talk method, informal conversations, and participant observation in the day-to-day life but also in some events like participating in a fieldtrip and a conference about energy transitions in Menorca.

Before going to Menorca in February for two weeks and a half, I sent emails to the contacts my family member facilitated so people could start being familiarized with my thesis and the topic. The exchange of emails went on for over a month: the project was introduced to them, as well as its objectives and goals. The initial information was followed by an email focusing on ethical research and consent. All the interviewees agreed on the conditions of the project. At the same time, other interviewees were recruited randomly in the street in Menorca, agreeing before starting the interview on the conditions as well.

#### 4.2.1 Interviews

The interview guideline consisted of 9 questions (see appendix 2). The interviews were conducted in Catalan or Spanish. They were semi-structured and the questions open-ended. In some cases, more questions were asked for clarification. Although the interviews were to last about 40 minutes, most interviewees took some more time to answer them, reaching the hour and a half. My initial thought was to have two interviews with each person, but because of the amount of information given in the first encounter and how open people were to tell me all about their feelings and experiences, I ended up having just one with each interviewee. In the end, for three weeks I interviewed 20 people, of which 44% were women and 56% men. Their ages ranged from 26 to 78 years old. The participants were chosen for having spent time in Menorca for a substantial period of time (around 10 years, but the timing did not have to be consecutive). As the project was gaining form, I realized some more questions could be asked to answer the research question, so I had three more interviews two months later via Zoom to ask some more questions that the reader can also find in the appendix.

# 4.2.2 The Walk & Talk method

As said in the above section, interviews played the main role in my research. To conduct them, I used the walk and talk method, a research approach considered very useful in social sciences and humanities, that focuses on the relationship between what people say and where they say it, as the content of the interaction will be influenced by the landscape and social environment (Pranka, 2020). This method fits very well with the place attachment theory and thus was very helpful to see the relationship participants had with their surroundings. It could be said it is a hybrid approach, between interviewing and participant observation (Pranka, 2020). This method was chosen for two reasons: the interaction created when two people walk together, and how walking can connect people with their surroundings.

Stepping into the first reason, when I offered the participants to walk while talking to each other, all of them agreed with a slight surprise; they were not used to having meetings while walking. However, at the end of the encounter, most of them told me how comfortable they felt, and how easy it was to talk and open, so much that they ended up talking as if they were doing so with a friend. This is something that supports the theory behind the methodology: walking is a sociable movement, where people can understand each other not only with words, but with corporal movement as well (Lee & Ingold, 2020). Avoiding direct eye contact can serve people to let go of their shyness, and choose the moment to do so instead of feeling obliged to: instead of looking at one another, the method allows us to look with one another (Lee & Ingold, 2020). Moreover, sitting one in front of the other creates a confrontational environment, whereas with walking, both walking partners share the same route, and their discussions or arguments go in only one direction. I decided to follow Richard Carpiano's way (Carpiano, 2009) of putting the method in practice: I let the participants choose when and where to meet, the route we should take, and how long the interview would last. They adopted the role of tour guide, of experts in the area (Pranka, 2020). In allowing them to do so, I was surprised to see how, unconsciously, all the participants ended up referring to something in the environment and establishing an emotional connection with it.

This brings us to the second reason, how people connect with the environment. Working with the sense of belonging and place attachment in the project, it was essential to see how participants felt. Thus, meeting indoors was not an option for this project. As John Gray pointed out, a connection is created between place-making and walking (Gray, 1999). Thus, when walking with another person, one can better understand what their relationship is and how they interact with their surroundings (Pranka, 2020).

#### 4.2.3 Participant observation

Apart from the interviews, observation was also conducted. According to Cristina Grasseni (2004) in Pink (2007), "participant observation means sharing a process of sensory apprenticeship in order to appreciate and, to some extent, even appropriate the 'way of seeing' of the object" (p.16). Fortunately, I had the opportunity to spend four days living with one of the participants of the thesis. In this period, we shared some walks, and talked frequently about the island. The person who I for confidentiality have given the pseudonym Pere in this thesis, also showed me two photography exhibitions of Menorca's nature: one focusing on the rural area, and the other one focusing on the sea. Moreover, I was invited to attend a

conference about energy transitions in the island organized by the Consell Insular de Menorca<sup>9</sup>, where, even if the topic is not what this project focuses on, I could observe different attitudes in relation to the upcoming challenges and changes in the island and have informal conversations about them. I also attended a four-hour field trip with approximately 100 people. These field trips happen regularly and are organized by GOB, the main and largest environmental NGO of the island. Most people who participated were living in Menorca. Because of how popular these field trips are, the places were fully book within half an hour after the release. Luckily, one of the interviewees could sneak me in. In this excursion I could feel how people relate to each other, and how they interact with the natural environment.

# 4.3 Data analysis strategy

The strategy of data analysis of this project intends to link the place attachment theory levels and collective identity theory with the data collected through interviews. To do that, I first transcribed the 20 semi-structured in-depth interviews and my reflections from the ethnographic research. The transcription process was done manually since the participants were speaking Menorquin, a Catalan dialect, and it is not a language listed in transcription apps. To organize the transcriptions, I used a table (See appendix 1) which ordered the interviews in date, pseudonym, and place order. Secondly, I used categories from my adapted theoretical framework to find patterns within the transcripts were looked for and organized into groupings, for example similar emotions towards the island, or similar perceptions of climate change impacts and possible disruptions. This was done to connect this part of the interviews with the place attachment theory and the different sections of the tripartite model. Moreover, a thorough analysis on how the interviewees feel community-wise and identify themselves within the social aspect of the island was crucial to grasp whether there is collective identity.

# 4.4 Limitations, positionality, and reflexivity

The limitations of my thesis start with the sampling strategy: due to time and strategic decisions, the sample of participants is small, which affects the generalizability of the results and conclusions. Moreover, the way I managed to contact those people was through the snowball effect, which could affect the results because if most of the participants know each other they could have the same ideologies or same beliefs related to climate change or the island (Harrison, 2018). Another limitation that involves participants is that it is impossible to know whether the answers they provided where completely honest or instead they

-

<sup>&</sup>lt;sup>9</sup> Consell Insular de Menorca is Menorca's government which has some self-government characteristics but depends on and responds to the Government of the Balearic Islands.

said what they considered created a good image of themselves for the thesis. Moving to the research design, it could maybe not be the best one to answer my research questions or could have probably included a survey to have more generalizability in the thesis. Moreover, the questions from the interview could have been different and this could have led to different answers. However, a survey and interviews would have provided too much data, and the time I had to develop the thesis was relatively short. Another possible limitation has to do with the exclusion of other islands, which could have been a good idea to compare place attachments, collective identity, and perception of climate change.

Another possible limitation has to do with theoretical bias. Looking at the results using only one theoretical lens overlooks other possible important information that is probably missing in my thesis. By the same token, using specific categories brings me to the same problematic. Lastly, my strong emotional connection to the island practically since I was born could have also affected how I have conducted my research, the questions asked, and how I interpret my findings. However, one can find some advantages to this, like that with my knowledge about the island the project has been more effective. Moreover, it was easy to create trust with the participants thanks to my knowledge about the island but also because we could speak the same language and I could relate to places they would mention or things they would talk about. Also, there is a possibility that I had a positive effect on them with my questions, leading them to a possible individual reflection or change in their attitude or habits.

# **5** Analysis

In this section I intend to relate my findings with the chosen theories. To make sense of all the information, I have organized it following my theoretical model. Following this model, the discussion is divided between three sections: in the first one I intend to present my results regarding perceptions of climate change which are divided into three major topics: water, temperature, and seasons. The second one focuses on the place attachment and goes into the connection between this attachment and the perception of climate change impacts. The third section will focus more on the social side, concretely on the perception of sense of community and collective identity in Menorca. In here, I answer whether mobilizations asking for more political action towards these climate change impacts could happen. In this section I use pseudonyms to keep the anonymity of the participants.

# 5.1 Perceptions of climate change

This section displays the findings obtained about the perception of climate change impacts. I have summarized them into three major topics, which are the ones participants gave more importance to: (lack of) water, increase of temperatures, and diffuse spring and autumn seasons.

# 5.1.1 (Lack of) water

As I mention in the introduction of this section, I was very much surprised by the awareness all participants had about climate change impacts in the territory, and by how all of them were pointing at the same threats. The biggest problem of the island according to the participants and what I could hear in some conversations during the field trip is (the lack of) water. Menorca does not have rivers, and the only water inhabitants gather naturally comes from the underground aquifers or the rain. The problem is that currently either way is feasible. Marcos tried to explain the underground side to me: "In Menorca we have calcareous soil that is very porous, very permeable and the remnants of agriculture penetrate the interior and pollute the water. It is already bad because it is loaded with lime, and it is of low quality. Now that it is raining less, there is a decrease in underground water, and this allows the seawater to enter and damage it even more". Because of this, almost every inhabitant in Menorca consumes bottled water. Instead of going to the roots of the problem and changing the agrarian system to be less pollutant, Guillem told me the government was installing water purification systems that were not efficient at all. Clara also told me that the sea level rise together with exploitation of water resources worsens the situation as more salted water can enter these wells.

All the participants were worried about the fact that every year it rains less in Menorca. In fact, during my time there it rained once, and that was the topic of conversation for the rest of the week. They had not seen a rainy day since November. During the field trip, water was the protagonist. All the interviewees were very worried about how unstable the rainfall regime had turned out to be, and the future consequences of this phenomenon. Every year the island becomes drier and drier. Pere told me that "the rainfall regime is suffering alterations. Normally, from August to October it would rain in Menorca, and it was essential to recharge the aquifers. This does not happen anymore". According to Guillem, it had not rained for months, and suddenly it rained 26 days in a row in November. The rain was so heavy, and the island was so little prepared that the torrents flooded, provoking disasters, and destroying crops: "A farmer asked us (GOB) for help, and many people answered. It was very beautiful to see so many people willing to aid her, but very sad to see that there was nothing left from what she had planted". These rains

are so heavy that water does not penetrate the underground, making it impossible for the island to gather all the water needed. Jordi, another participant, told me how much this affected him: "I have lived all my life here, I've been in contact with nature, and now I see everything is dry... It affects me a lot because I see the land is dying. If this continues, Menorca will be a desert in the future. I still have hope, but it is worrying".

# **5.1.2** *Increase of temperature*

Along with water, an increase of temperatures is also a big topic in Menorca. Summer season has changed, it suffers from more and more continuous heat waves to the point where locals need to put the air conditioning on every day when few decades ago hardly any house would have the system installed. When I talked to Anna, she argued that for Menorca's inhabitants "it is very much normalized having an AC, when some years ago it did not look necessary nor a basic need". There is one phenomenon that has triggered this increase in temperatures, and this is the loss of tramontana, a cold, strong wind coming from the north or northwest of the Mediterranean. Elena explained to me that "in Menorca, everything that blows carries water except for tramontana. Its speed is what makes it so impressive, and its continuity. During nights, one closes the windows, opens them again in the morning and the wind continues at the same speed. It could last for ten days!". And Xavier then pointed out that "for me, losing the tramontana is serious because it is what balances out the climate of the island. It outweighs the humidity of the island (...) all of this is a loss, and it is very painful, like death".

The atmosphere's temperature is not the only one increasing; Menorca's inhabitants are very much aware of the increase of the sea's temperature as well. Marcos mentioned how sea turtles are now coming to Menorca to lay their eggs instead of the North African coast, and jellyfish smacks are seen more frequently in Menorca's beaches every year (Interview Elena). When I asked about how this phenomenon makes them feel, the majority showed worry and fear, but Anna and Judith told me how happy they were that, thanks to the warmth of the sea, they could swim more often.

# 5.1.3 Diffuse spring and autumn

Related to temperatures, interviewees agree that spring and autumn are disappearing, making summer the longest season. This is perceived through clothing, as Marcos described, because the mid-term clothes are not used anymore. Inhabitants also perceive it in nature: Nini and Martí told me they can see trees and flowers blossoming before time: "Yesterday for example the gardener came to prune one tree, and they said they could not do it anymore because it was already blooming. I was shocked!". Pere was sad to see this happening; "I lack the season variety, because they show an evolutionary process. This richness conditions our decisions, our stances, our perceptions. Sometimes they change unconsciously. Without being conscious, deep down one feels that there is something missing. I miss the transitions, the colours of nature, the temperatures...". On the other hand, Maria confessed that although being selfish, she was happy that she could have an eternal summer.

This also affects insects; Sandra told me that every year there are less bees on the island, and because of this change of temperature tropical species like tiger mosquitoes have become common in the island.

# 5.2 Psychological processes of place attachment

Before talking about the relationship between people and place in Menorca, revising the concept of place in the island's case is crucial as it is the roots of place attachment theory. My findings suggest that in Menorca, the concept is fairly understood as Fresque-Baxter & Armitage (2012) or Stedman (2002) do. Like they argue, Menorca is more than simple land to its people; their life experiences, relationships, and thoughts are rooted there, which puts it at the center of their lives.

# 5.2.1 Affect

Following the explanation of sense of place in Menorca, the relationship between the territory and its people is strong and rooted. One way they show it is through affect; locals displayed all the characteristics in the place attachment model: happiness, pride, love, and grief (Scannell & Gifford, 2010). In this section, I intend to relate these four with the results from the ethnographic work.

When I asked the participants how they would define Menorca, most of them would smile or laugh, followed by a small sigh. No one answered with a negative definition, and on the contrary, all participants and even the people I could interact with in the fieldtrip showed joy, contentment of living in Menorca or being from there. Clara, for example, a woman who first went to Menorca when she was 23 and ended up staying, claimed that "Menorca is my home, this is the most important definition. This is where I

decided I was going to spend my life (...) This is the best place I could live in, where the life we live is a luxury, and we can leave aside the superfluous things". Pere, another participant who has lived between Barcelona and Menorca all his life, defined the island as a "reference point for delving into everything that involves life, coexistence, the impacts of society on the environment and how ecosystems work". One could grasp the well-being of these people in relation to their surroundings (Scannell & Gifford, 2010). One thing that contributed to this well-being was how nature felt so near, thus their connection with it was vast. Everyone expressed their happiness of being able to just step into the woods whenever they wanted or go for eternal walks near the coast.

Love and pride were inherently showed during all the interviews. In the fieldtrip that I went to, the majority of the conversations I could overhear praised the landscape. However, in the interviews there were differences between how people saw the island that are worth mentioning. While some participants like Maria or Judith mythicized the island by describing it as a "pearl", or a "holiday paradise", others like Marcos Jordi or Guillem, had a rather crude vision about the island, defining it as "fragile", with a "poor economy and territory". These participants were discontent with the way Menorca is always portrayed (as a paradise), and with the fact that it has been very easy to stick to that definition instead of solving the real problems. Guillem complained that: "Menorca has a dichotomy, a great contradiction; the outside shines as a Biosphere Reserve but what is behind of this has never been given enough attention; the water issue is not solved, neither are the waste and energy problems, and one asks oneself: what are you so proud of? You should all be ashamed!". Here I discovered an interesting pattern related to climate change impacts: the people who have lesser perception of climate change impacts in the island were the same ones that saw the island as a paradise. On the contrary, those who were more conscious tended to demystify it.

When entering the topic about climate change impacts, the majority of participants introduced the feeling of grief. Clayton, (2020) and Cunsolo & Ellis (2018)'s definitions of econostalgia, solastalgia and ecological grief were included as part of the place attachment model because aside from the example that Scannell & Gifford (2010) put about displacement events, grief can also be felt in emotions towards climate change and place attachment, which is one of the centers of this thesis. Related to this, it was a surprise to find how many people had perceived substantial impacts of climate change in the island. Most of them suffered grief for this, showing anger, desperation, crying or even stating that it was like seeing death. They worried for the future of the island, and about it being extremely complicated to reverse. This relates

perfectly with Cunsolo & Ellis' (2018) theory about ecological grief, or the definitions of solastalgia or econostalgia as this type of feeling is a natural response for those who retain close living to a natural environment and experience slow, gradual and ongoing natural changes such as the ones mentioned above (Cunsolo et al., 2020). It is also important to mention how some people were not affected at all about these changes, which were the same ones that were portraying Menorca as a paradise. It was also interesting to see how some of the participants would also confuse climate change with other phenomenon such as beach plastic pollution, which revealed how confusing climate change can be for people who are not in the academic field.

#### 5.2.2 Behavior

Moving on to the behavioral part, and like in inter-personal attachments, proximity-maintaining behavior was displayed with Menorca in people that were not born in the island and would not currently live in the island but would make efforts to go as soon as they could, like Pere, as the feeling that the place provides does them good and makes them feel safe (Scannell & Gifford, 2010). Other participants like Sergi told me how they had refused interesting job opportunities because they would not leave the island. Toni would also tell me how when they worked in cities like Barcelona, they would feel incomplete, like they could not give their 100% because they lacked something. Other behavioral actions could be found in the mobilizations for the defense of their territory. This is an act of love and protection, and willingness to prevent their territory from changing, which is similar to the example Scannell & Gifford (2014) pose about post-disaster situations and the willingness of the population to try to restore and recreate a place instead of building a new one.

# 5.2.3 Cognition

The fact that participants showed significant knowledge about their territory, the composition of it, and the climate change impacts and future possible disruptions in Menorca proves that place attachment happens also in a cognitive level, as it pays attention to knowledge or memories that make the bond with a place stronger. (Scannell & Gifford, 2010). Aside from the knowledge, participants talked vividly about memories that connected them directly to the territory, mostly excursions with friends and family which involved connection with nature to discover new places in the island. These memories also explain the grief feeling that locals felt, as they could see the negative changes in their territory compared to years before.

# 5.3 Sense of community and collective identity

The Walk and Talk method was very effective for me to grasp the sense of community in Menorca. Through the interviews and day-to-day observations, I discovered that people would stop once or twice to say hi or have a small conversation with people along their way. This phenomenon was exemplified in the interview with Xavier and Elena: "Look, what just happened is the 'a-b-c' in Menorca. You can be anywhere and suddenly you meet a person that you barely know their name, but you've been bumping into each other for so long that they become part of your daily life". Xavier and Elena, as well as other participants like Ferran, also highlighted how much they appreciated this phenomenon as it made them feel that they belonged somewhere instead of being a mere stranger in a big city.

When I asked further about this feeling, about stronger collective identity aside from saying hi to the neighbor, Pol and Eva were proud talking about how many cultural associations Menorca offered to society, although the majority of participants would go back to the mobilizations against urbanism. Pol, for example, stated that "in Menorca there have been urbanization agreements where all political parties were in unison, and this is unthinkable in Mallorca or Eivissa. For example, the agreement on respecting that rustic soil would only be used for agrarian activities; this is unthinkable in other islands where touristic promotion in rustic soil is still the daily bread". Despite these comments, there was a general agreement that the collective identity is not so powerful anymore. They argued that capitalism has won the battle in Menorca, and individuality reigns among society so people are not as motivated as they were to participate in social meetings or debates to confront and discuss different questions in Menorca. Jordi told me that "there is an island feel, and it exists as an identity but in some aspects it is not enough... We are more individualistic every day. The willingness to talk, to try and solve problems together is not there anymore. The feeling is too superficial, it does not go beyond that". Another participant who shared the same opinion was Sergi, who expressed anger when he told me that "all the good work that we did during the 80s in Menorca with the massive social and cultural mobilizations is diluted now. All that critical conscience does not exist anymore. It is very painful to see this. I am quite pessimistic about Menorca nowadays because of this".

Following Sergi's explanation, if we take a look back in time, and following the definition of collective identity proposed by Melucci (1995), my findings suggest that Menorca has, on many occasions, experienced it. The mobilizations that have happened throughout these years have demonstrated some traits: it was the population who constructed the collective identity and its definition, and one of the most

important characteristics was the fact that people within the group did not have to agree on the same beliefs, political ideology, or interests. This happened last in the mobilization against the highway in 2007; some of the participants were volunteering or working in GOB, and they told me how shocked they were when people of all-kinds of political beliefs would go to their offices and beg them to stop the project. There is a connection between place attachment and collective identity here because, as Melucci (1995) argues, emotions are important for members to get involved and participate in collective action. In Menorca, collective action happened for the protection of the territory. Thus, the place attachment portrayed above is and was an important reason for these mobilizations to happen. In the mobilizations towards the protection of the territory, aside from fighting against urbanization projects, one could say that the citizens also incorporated traits of protecting the island against environmental disruptions. One clear example was the strive to achieve the title of Biosphere Reserve which represents among other things the willingness of the citizens in Menorca to live in a sustainable way to promote the conservation of resources, natural heritage, and the island's biodiversity.

# **6 Discussion**

The first part of the analysis responds to the first research question on whether place attachment is related to a major perception of climate change impacts in the territory. As the reader can grasp, locals not only have a great connection with the island, but also very good knowledge about its characteristics. Hence, my results suggest that their attachment and connection to the island is in fact very much related to the perception of climate change impacts to the island. However, the second research question, which intends to answer if place attachment and climate change perception can that translate into concrete local action against its impacts leaves some interesting reflections and a rather open answer.

The arguments for one to think that climate change mobilizations could not happen in Menorca are ample. First, when comparing the mobilizations against urbanization projects and climate change, one must acknowledge that urbanization threats are not the same as climate change impacts; the urbanization projects are more tangible, in the sense that the consequences of the project are rapid and easy to picture. Moreover, in these projects there is always a group of people to blame. On the contrary, climate change is gradual, complex, abstract, unintentional, and difficult to blame just a single group for it (Jurt et al., 2015). In this case it is appropriate to refer to the tail of the boiling frog, an urban myth that explains that if a frog is put in boiling water, it will instantly leap out. However, if the pot is filled with tepid water and it heats up gradually, the frog will stay there until boiled to death. The inaction towards climate change is

very much related to the complexity of climate change, together with the fact that there is still a lot of skepticism towards it and even lack of consciousness, as some participants proved with their excitement about having higher temperatures. This would suggest a negative answer to whether to expect or not the same protests that happened against urbanization in the case of climate change, and implies that in this case, while there is substantial place attachment in Menorca, it may be not enough to trigger new mobilizations, and that stronger community ties would be needed for collective action to happen. This also raises the question on whether community is enough for collective action. Place attachment is relevant and has served for many purposes in the island, but when talking about climate change, more factors are needed.

However, there are other reasons to think that mobilizations for more political action against climate change could be possible. As mentioned before, the Biosphere Reserve title was achieved in 1993 thanks to the citizens' willingness to protect their territory, and if one looks at what this Biosphere Reserve denomination entitles, it means that citizens are disposed to live in harmony with the territory to protect its nature, and its biodiversity. This explanation would suggest that citizens want to practice a sustainable life and that, after all the mobilizations that started in the 70s, a major disruption in the territory could result in a collective reaction in Menorca. Aside from this, citizens of Menorca have demonstrated on many occasions how they can leave aside their personal beliefs or interests and focus on a common goal for the well-being of the island. This suggests that it could happen now as well, even if, as locals argue, capitalism has won the battle in Menorca.

Other steps towards sustainability in the island are being made which would suggest that aside from collective action, an enhancement of collective identity could help locals agree to new projects and move forward to a greener island. I could see this during the interviews where aside from the negative feelings climate change was triggering, some of the participants were also hopeful and stated that with the Biosphere Reserve title, green energy projects, and all the laws that protect the natural environment of the island, actions could still be taken to preserve the island and to make it an example of green alternatives and sustainable development. Jordi for example stated that "we have worked hard for the territory and have developed an important ethos towards it". It was interesting to see how, spontaneously, Guillem, Marcos, Jordi, Ferran, Eva and Pere mentioned the concept of laboratory of sustainability to describe a future scenario for Menorca, claiming that the island has the tools and the landscape to turn into that. Eva pointed out that "we have gone through a long way to find the equilibrium

between conservation and development, and this allows the island to be a pilot territory to try new models. This is an island, we know how limited our available resources are and the dependency we have on them, and this makes it a perfect place to study how the future should be".

Going back to the green energy projects, these include projects towards energy efficiency and independence, like the installation of solar panels or windmill parks. Given the tradition of protecting the territory from changing, this could also be seen as a disruption to the territory and create rejection among citizens. However, the conservation values the island built after being a Biosphere Reserve have resulted in a stricter procedure on approving these projects, allowing only the ones that would result in minor changes in the territory. Pol was hopeful that society was starting to understand that major changes must happen if there's willingness to conserve the island as it is nowadays. This suggests that there could be an incompatibility between the environmental values of the island and the installation of these projects, in the sense that they could be challenging a green transition. However, on the other hand, there is something that illustrates that the two factors combined could lead to a more responsible and sustainable transition.

# **6.1 Implications**

The overarching aim of this research was to understand the local perceptions of climate change and what triggers (or not) collective identity and subsequently collective action so that the information can be used to build a sustainable future in Menorca where all stakeholders are integrated. My findings have helped me reach my objective, and they can be used to come closer to local's understanding of the climate reality. However, while being in Menorca I realized how many interesting characteristics does the island have worth studying that I could not include here. I was left curious about the water problematic and the agricultural world: I would have liked to dive into the farmer's perspective and see if any measures can be implemented so that pollution can be reduced. Another very interesting topic to study is this tension between the willingness to protect and conserve the natural areas of the island and the green transition: how collective identity and place attachment could help create a new idea about how the island could look with turbines and solar panels instead of a thermoelectric plant? What are the pros and cons? What can be done to convince islanders that those territorial changes must happen for a better future?

Moreover, even if this information was not included in the thesis because it was not part of the research objective, tourism is something that really concerns and even bothers locals. It would be interesting to investigate how locals associate tourism with environmental degradation, and what solutions do they imagine considering that it is the industry that brings more money to the island.

My findings could have impact in the societal sphere by raising awareness of what the climate change situation looks like in the island and how it is perceived. Aside from this, in the academic field they fit into existing knowledge and case studies about collective identity and place attachment. Possible analysis and comparison between case studies could lead to a better and clearer understanding of these two-phenomenon combined, and how different the results can be depending on the geographical space the case focuses on.

# 7 Conclusion

This thesis concludes with a retrospect on my research. This thesis aimed at studying the relationship of place attachment and perceptions of climate change impacts in the island of Menorca, and if this translates int concrete local action. The theories of place attachment and collective action were the lenses through which I tried to answer these questions. For that, I used an ethnographic methodological approach, and I went to Menorca for 2 weeks and a half and gather some data through semi-structured interviews and participant observation. Regarding perception of climate change, locals highlighted three principal topics: (lack of) water and polluted water, an increase in temperatures, and shorter autumns and springs. It was surprising how all the participants pointed at the same problematics and all of them were very much aware of the negative implications of those. Regarding place attachment, all participants demonstrated a clear bond with the island and how their lives where deeply rooted to the territory. When talking about the impacts of climate change, most of them felt grief, sadness, or anger. Regarding collective identity, participants were constantly mentioning the mobilizations that started on the 70s, and how proud they were about them because they achieved to stop urbanization projects that would have significantly changed the island's ecosystem. Despite this pride, most of them complained about this feeling of collective identity not happening anymore, and people being very much individualistic nowadays. This suggests that collective action could not happen in the foreseeable future. However, the environmental values in the island and the previous history about mobilizations leaves the door open for the possibility.

# 8 References

- Ainsworth, S. (1997). Alberto Melucci: Challenging Codes. Collective action in the information age. *Fire Risk Management*, 40, 413–416. https://doi.org/10.4135/9781452218557.n286
- Archer, M., Decoteau, C., Gorski, P., Little, D., Porpora, D., Rutzou, T., Smith, C., Steinmetz, G., & Vandenberghe, F. (2016). *What is critical realism?* Moral Agency within Social Structures and Culture; Georgetown University Press. https://doi.org/10.2307/j.ctv10crch2.6
- Atienza, D., & Díaz-Acha, Y. (2019). *Mediterráneo : realidad y retos de nuestro entorno natural*.

  Universidad Complutense de Madrid.
- Bryman, A. (2019). Social Research Methods. Oxford University Press.
- Cardona Pons, J., Camps Orfila, X., & Pons Maria, M. (2018). Menorca's first energy transition.
- Carpiano, R. M. (2009). Come take a walk with me: The "Go-Along" interview as a novel method for studying the implications of place for health and well-being. *Health and Place*, *15*(1), 263–272. https://doi.org/10.1016/j.healthplace.2008.05.003
- Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*, 74(June), 102263. https://doi.org/10.1016/j.janxdis.2020.102263
- Climate change in the Mediterranean. (n.d.). Unep.Org. Retrieved April 29, 2022, from https://www.unep.org/unepmap/resources/factsheets/climate-change
- Cramer, W., Guiot, J., Fader, M., Garrabou, J., Gattuso, J. P., Iglesias, A., Lange, M. A., Lionello, P., Llasat, M. C., Paz, S., Peñuelas, J., Snoussi, M., Toreti, A., Tsimplis, M. N., & Xoplaki, E. (2018). Climate change and interconnected risks to sustainable development in the Mediterranean. *Nature Climate Change*, 8(11), 972–980. https://doi.org/10.1038/s41558-018-0299-2
- Cramer, W., Marini, K., & Guiot, J. (2020). *Current situation and risks for the future First Mediterranean*Assessment Report.
- Critical realism. (n.d.). Newworldencyclopedia.Org. Retrieved April 29, 2022, from https://www.newworldencyclopedia.org/entry/critical\_realism
- Cunsolo, A., & Ellis, N. R. (2018). Ecological grief as a mental health response to climate change-related loss. *Nature Climate Change*, 8(4), 275–281. https://doi.org/10.1038/s41558-018-0092-2
- Cunsolo, A., Harper, S. L., Minor, K., Hayes, K., Williams, K. G., & Howard, C. (2020). Ecological grief and anxiety: the start of a healthy response to climate change? *The Lancet Planetary Health*, *4*(7), e261–e263. https://doi.org/10.1016/S2542-5196(20)30144-3
- Enríquez, A. R., & Bujosa Bestard, A. (2020). Measuring the economic impact of climate-induced environmental changes on sun-and-beach tourism. *Climatic Change*, *160*(2), 203–217.

- https://doi.org/10.1007/s10584-020-02682-w
- Escalera-Reyes, J. (2020). Place attachment, feeling of belonging and collective identity in socio-ecological systems: Study case of pegalajar (Andalusia-Spain). *Sustainability (Switzerland)*, *12*(8), 1–22. https://doi.org/10.3390/SU12083388
- Hammersley, M., & Atkinson, P. (2019). Ethnography: Principles in practice (4th ed.). Routledge.
- Harrison, A. K. (2018). *Ethnography*. Oxford University Press. https://doi.org/10.1093/oso/9780199371785.001.0001
- First climate and environmental change report in the Mediterranean. (2020). Union for the Mediterranean UfM. https://ufmsecretariat.org/climate/
- Flesher Fominaya, C. (2010). Collective Identity in Social Movements: Central Concepts and Debates. Sociology Compass, 4(6), 393–404. https://doi.org/10.1111/j.1751-9020.2010.00287.x
- Foote, K. E., & Azaryahu, M. (2009). Sense of Place. *International Encyclopedia of Human Geography*, 96–100. https://doi.org/10.1016/B978-008044910-4.00998-6
- Francaviglia, R. V. (1978). Xenia rebuilds: Effects of predisaster conditioning on postdisaster redevelopment. *Journal of the American Planning Association*, *44*(1), 13–24. https://doi.org/10.1080/01944367808976873
- Fresque-Baxter, J. A., & Armitage, D. (2012). Place identity and climate change adaptation: A synthesis and framework for understanding. *Wiley Interdisciplinary Reviews: Climate Change*, *3*(3), 251–266. https://doi.org/10.1002/wcc.164
- GOB. (2017). Socarrell 40 anys del GOB Menorca. 97, 1–20.
- Google. (n.d.). [Google Maps location of Menorca within the Mediterranean Sea and Europe]. Retreived May 3, 2022, from https://www.google.com/maps/place/Minorca/@48.7897071,17.0997646,4.93z/data=!4m5!3m4! 1s0x12be1f9d2cb820e9:0x529ac484178e77c9!8m2!3d39.9496287!4d4.1104449
- Google. (n.d.). [Google Maps location of Menorca]. Retreived May 4, 2022, from https://www.google.com/maps/@39.9598381,4.0364007,11.5z
- Gray, J. (1999). Open spaces and dwelling places: being at home on hill farms in the Scottish borders.

  American Ethnologist, 26(2), 440–460. https://doi.org/10.1525/ae.1999.26.2.440
- Harun, N. Z., Mansor, M., & Said, I. (2015). Place Rootedness Suggesting the Loss and Survival of Historical Public Spaces. *Procedia Environmental Sciences*, 28(SustaiN 2014), 528–537. https://doi.org/10.1016/j.proenv.2015.07.063
- Hay, R. B. (1998). Sense of place in development context. Journal of Environmental Psychology,

- 18(October), 5-29.
- Hunt, S. A., & Benford, R. D. (2004). Collective Identity, Solidarity, and Commitment. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.), *The Blackwell Companion to Social Movements* (pp. 433–451). Blackwell Publishing Ltd. https://doi.org/10.1002/9780470999103
- Institut Menorquí de Estudis. (2018). Cambio climático en Menorca Presentación.
- Jaśkiewicz, M., & Besta, T. (2018). Place Attachment and Collective Action Tendency. *Social Psychological Bulletin*, *13*(4), 1–18. https://doi.org/10.32872/spb.v13i4.25612
- Jones, N., Malesios, C., Aloupi, M., Proikaki, M., Tsalis, T., Hatziantoniou, M., Dimitrakopoulos, P. G., Skouloudis, A., Holtvoeth, J., Nikolau, I., Stasinakis, A. S., Kalantzi, O. I., Gatidou, G., Zkeri, E., Koulousaris, M., & Evangelinos, K. I. (2019). Exploring the role of local community perceptions in sustainability measurements. *International Journal of Sustainability Development and World Ecology*, 26(6), 471-483. https://doi.org/10.1080/13504509.2019.16138330
- Jurt, C., Burga, M. D., Vicuña, L., Huggel, C., & Orlove, B. (2015). Local perceptions in climate change debates: insights from case studies in the Alps and the Andes. *Climatic Change*, *133*(3), 511–523. https://doi.org/10.1007/s10584-015-1529-5
- Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review*, *39*(3), 328. https://doi.org/10.2307/2094293
- Knez, I. (2005). Attachment and identity as related to a place and its perceived climate. *Journal of Environmental Psychology*, 25(2), 207–218. https://doi.org/10.1016/j.jenvp.2005.03.003
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges.

  Sustainability Science, 7(SUPPL. 1), 25–43. https://doi.org/10.1007/s11625-011-0149-x
- Lee, J., & Ingold, T. (2020). Fieldwork on foot: Perceiving, routing, socializing. *Locating the Field: Space, Place and Context in Anthropology, May,* 67–85. https://doi.org/10.4324/9781003085904-4
- Luque, P., Gómez-Pujol, L., Marcos, M., & Orfila, A. (2021). Coastal Flooding in the Balearic Islands

  During the Twenty-First Century Caused by Sea-Level Rise and Extreme Events. *Frontiers in Marine Science*, 8(August), 1–21. https://doi.org/10.3389/fmars.2021.676452
- Marcos-Valls, A., Kovacic, Z., Giampietro, M., Kallis, G., & Rieradevall, J. (2020). Isolated yet open: A metabolic analysis of Menorca. *Science of the Total Environment*, *738*, 139221. https://doi.org/10.1016/j.scitotenv.2020.139221
- Melluci, A. (1985). The Symbolic Challenge of contemporary movements. *Social Research*, *52*(4), 789–816.

- Melucci, A. (1995). The Process of Collective Identity. In H. Johnston & B. Klandermans (Eds.), *Social Movements and Culture* (pp. 41–63). University of Minnesota Press.

  http://ufl.summon.serialssolutions.com.lp.hscl.ufl.edu/document/show?id=FETCH-proquest\_abstracts\_600413661&q=the+process+of+collective+identity&s.q=the+process+of+collective+identity
- Peng, J., Strijker, D., & Wu, Q. (2020). Place Identity: How Far Have We Come in Exploring Its Meanings? Frontiers in Psychology, 11(March), 1–19. https://doi.org/10.3389/fpsyg.2020.00294
- Pink, S. (2007). Walking with video. *Visual Studies*, *22*(3), 240–252. https://doi.org/10.1080/14725860701657142
- *Població*. (n.d.). OBSAM. Retrieved March 20, 2022, from https://www.obsam.cat/documents/poblacio/ Polletta, F., & Jasper, J. M. (2001). *Collective Identity and Social Movements*. 283–305.
- Pranka, M. (2020). The walk-and-talk methodology researching place and people. *SHS Web of Conferences*, *85*, 03007. https://doi.org/10.1051/shsconf/20208503007
- Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, *3*, 57–83. https://doi.org/10.4324/9781315816852 Relph, E. (1976). *Place and Placelessness*. Pion.
- Scannell, L., & Gifford, R. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, *30*(1), 1–10. https://doi.org/10.1016/j.jenvp.2009.096
- Scannell, L., & Gifford, R. (2014). The Psychology of Place Attachment. In R. Gifford (Ed.), *Environmental Psychology: Principles and Practice* (5th ed., Issue November). Optimal Books.
- Serra Busquets, S., & Mayol Arbona, G. (2014). *Les mobilitzacions ciutadanes a les Illes Balears XX i XXI*(L. Gallinari (ed.)). Rivista dell'Istituto di Storia dell'Europa Mediterranea.

  https://doi.org/10.7410/1118
- Sierra, J. P., Mösso, C., & González-Marco, D. (2014). Wave energy resource assessment in Menorca (Spain). *Renewable Energy*, 71, 51–60. https://doi.org/10.1016/j.renene.2014.05.017
- Spangenberg, J. H. (2011). Sustainability science: a review, an analysis and some empirical lessons. *Environmental Conservation*, *38*(3), 275–287. https://doi.org/10.1017/s0376892911000270
- Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity. *Environment and Behavior*, *34*(5), 561–581. https://doi.org/10.1177/0013916502034005001

Torres, C., Jordà, G., de Vílchez, P., Vaquer-Sunyer, R., Rita, J., Canals, V., Cladera, A., Escalona, J. M., & Miranda, M. Á. (2021). Climate change and their impacts in the Balearic Islands: a guide for policy design in Mediterranean regions. *Regional Environmental Change*, *21*(4), 19. https://doi.org/10.1007/s10113-021-01810-1

UNESCO. (n.d.). *Biosphere Reserves*. UNESCO. Retrieved February 10, 2022, from https://en.unesco.org/biosphere/about

# 9 Appendix

# Appendix 1. Overview of the interviews and active participation

Table 1: Interview details

Number	Date	Pseudonym	Place	Duration
1	08/02/2022, 12:30	Clara	Surroundings of	00:55:18
			Biosphere Reserve	
			building	
2	08/02/2022, 15:00	Pere	Es Grau	01:34:01
3	08/02/2022, 17:30	Jordi	Maó's port	00:56:46
4	09/02/2022, 12:00	Guillem	Calesfonts	01:14:10
5	09/02/2022, 17:00	Eva	Camí Verd	00:59:49
6	10/02/2022, 10:00	Pol	Maó center	00:36:22
7	10/02/2022, 17:00	Sergi	Parc des Freginal	01:05:31
8	11/02/2022, 12:00	Xavier and Elena	Binisafuller	01:42:55
9	13/02/2022, 19:00	Martí and Nini	Maó center	01:09:51
10	14/02/2022, 11:00	Xavier and Elena	Binisafuller	00:47:53
11	14/02/2022, 17:00	Marcos	S'Arenal d'en Castell	01:02:11
12	14/02/2022, 19:00	Ferran	Sant Lluís	00:58:01
13	15/02/2022, 11:00	María	Maó center	01:13:08
14	15/02/2022, 19:00	Josep and Judith	Calesfonts	00:38:28
15	15/02/2022, 20:00	Sandra	Calesfonts	00:34:45
16	16/02/2022, 11:00	Martí and Amapola	Es Grau	01:10:28
17	17/02/2022, 19:00	Anna	S'Arenal d'en Castell	00:27:44
18	01/03/2022, 12:00	Pol	Zoom	00:26:39
19	05/03/2022, 10:00	Xavier and Elena	Zoom	00:46:34
20	05/03/2022, 12:00	Ferran	Zoom	00:11:36

Table 2: Attendance to events

Date	Place	Motive
10/02/2022; 20:00 – 21:00	Ateneu de Maó	Conference about
		Sustainable transitions in the
		island
13/02/2022; 08:00 – 15:00	Cala en Turqueta	Excursion

# Appendix 2. Interview guide

# First Interview

#### 1. Basics

 Tell me about yourself (how old are you, how long have you lived/been coming to Menorca, what do you do for living/in your spare time).

#### 2. Present

- How would you define Menorca?
- How would you describe the relationship you have with the island?
- Sense of belonging
  - Do you feel you have a special connection with the island? How does the island make you feel that is different from the rest of places?
  - O What makes you feel this way?
  - (If there is one) do you feel that your sense of belonging has evolved through time? In what way and why?
  - How would you describe the relations among the citizens? Would you say that there is a sense
     of community in the island? What characterizes it?

#### Climate change

- Have you perceived climate change impacts in the island? Which impacts have been more notorious and where?
- Are these changes affecting your lifestyle in any way?
- O How do these impacts make you feel?

#### 3. Past

• Could you tell me about your best memories in Menorca?

• Is there something that you miss from those times (the past, and your experience in the island?

# 4. Future

- How do you see Menorca in the next few decades?
- Which future challenges you think Menorca will be facing and which possible solutions could be posed?

# Second interview

- Where you in Menorca when the mobilizations happened? If yes, could you tell me what happened and how do you feel about it?
- Did you participate?
- Why do you think these mobilizations are not happening nowadays?
- Do you see them happening in the near future?

# Appendix 3. Map of Menorca with some of its most emblematic places



**Figure 2:** Some of the most emblematic places of Menorca (Google, n.d). Pictures are owns' author or free of copyright.