

To Ski or Not to Ski?

An ethnographic exploration of the experiences of climate change and imaginations of the future in Briançon through the lens of snow



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Abstract

In Briançon, people experience a decline in snow due to climate change. Hence, snow is a lens through which experiences of climate change appear on different scales. Whereas the amounts of snow are still large on the mountain, down in the valley snow is disappearing. For the inhabitants this has much implications, since their lives are meshed up with snow. Especially skiing is present in their working and personal lives. The changes in snow are partly lived seasonal as snow comes back every year. Additionally, the inhabitants of Briançon experience *snowstalgia*, which entails feelings of longing to a past of snow. Since their experiences are formed by the context of the mountains, they could best be understood by what Ingold (2011) calls *dwelling perspective*.

Experiences of changing snow patterns also raise imaginations of the future among the population of Briançon. Bryant and Knight's (2019) methodology helps to grasp the future of snow in present experiences. The inhabitants' expectations differ from a complete disappearance of snow, to still having snow on high altitudes. Similarly, various actors in Briançon anticipate differently a possible future without snow, all dealing with change in their working lives. A focus on snow thus captures both experiences of climate change and imaginations of the future in Briançon.

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Introduction

I got off the train and glanced at the silhouettes of the mountains. The stars were shining and the air was cold. I walked through the streets of Briançon to the apartment where I would be living for the next three months. Everything about the town seemed normal to me, but I felt a bit disappointed in some way. This was the moment I realized there was no snow in the streets. The next day I was wearing ski clothes and shoes, while carrying my skies, helmet and sticks. I passed by ski rentals before arriving at the ski pass locket. It felt strange to wear such heavy winter clothes in warm weather and streets without snow. The gondola brought me slowly upwards until I arrived in a completely white landscape. The contrast of snow up the mountain was striking, compared to snowless Briançon. Many people were skiing or snowboarding down the mountain. The ongoing ski business thus still made its way on the top of the mountain, while the lower part was without snow. But as I soon learned, snow mattered, in all its forms, for the experience of climate change among inhabitants. People in Briançon were meshed up with snow and skiing, which made them experience this change. Not only did snow influence present lives and livelihoods in Briançon, but it played into their futures as well. By taking Briançon as my ethnographic point of departure, this thesis will give insight into how inhabitants experience the effects of climate change and how they orient towards the future. Thus, I will be answering the following question:

How do local inhabitants of Briançon experience climate change and how do they imagine their future?

For my research, several debates and concepts were important to integrate. As such, I will introduce snow as a tool to explore climate change, the dwelling perspective by Ingold (2011), snowstalgia, debates of the future, temporalization and double bind.

Snow as a proxy

During my fieldwork in 2024, I got to know how the local people of Briançon experienced climate change through snow. Snow appeared in various forms: fresh, just fallen from the sky; laying for thousands of years in a glacier up the mountain; liquid after it had been melted; or slushy at the end of the season. The quality and quantity of snow embodied the effects of climate change in Briançon. Therefore, I ethnographically approach snow as a *proxy* for the local effects

of climate change. This ethnographic tool is built onto Hecht's (2018,115) notion of *interscalar vehicle*. This vehicle is not an actual engine, but rather, it implies an inter-scalar device. Similarly, I will use snow to cut across different scales. In fact, snow connects different scales and helps to understand the complexity in-between them (ibid., 114). Hence, localized experiences are being related with scales such as the social, political or temporal one. In this thesis, I mainly used snow as a proxy to connect localized experiences with the broader process of climate change on different scales (Crate 2011).

Dwelling perspective

To localize these experiences, I will make use of Ingold's (2011) dwelling perspective. This concept helps me to encompass the environmental context and therefore perception of the local inhabitants. According to Ingold, people and other organisms form their perception by moving through the environment (Ingold 2011, 11). Instead of imagining transportation of completed beings, movement entails the production of these beings as well (ibid.). Hence, they form their perception by moving, or dwelling, through the environment. People (and other beings) thus acquire a "dwelling perspective". Inhabitants of Briançon dwell through their environment as well, forming their perception. Throughout this thesis, I will use the word *perception* interchangeably with *experience*. Furthermore, I will particularly focus on inhabitants' perception of snow and winter activities. Especially skiing is present in their lives and work-related practices. These practices are significantly vulnerable to climate change, since Briançon is a mountain town. Therefore, this city at high altitude may be called a frontier of climate change (Eriksen and Stensrud 2019, 13-14). Consequently, the effects of climate change influence the perception of these life worlds (Irvine et al. 2019). Hence, inhabitants of Briançon perceive differences in amounts and quality of snow.

Snowstalgia

Experiences of snow also bring feelings of the past. That day I arrived in Briançon, memories of winter sport holidays in Austria came to my mind. The streets there were filled with snow, which enabled us to sleigh down hills and make snowmen. I experienced feelings of longing to my own past experiences of snow. These feelings were similar to experiences of snow among my interlocutors, which brought old memories and stories of snow. Here, snow will let us experience a different past, by exploring feelings in the present. Therefore, I will introduce the concept *snowstalgia* to understand nostalgic feelings related to the past environment of snow

(Angé and Berliner 2020). The white landscapes of the past thus influence how inhabitants experience the present, but also the *future*.

The future

To understand how inhabitants think about their future, I will use two different orientations as analytical tools. Orientations give me ethnographic hold on the future by examining people's imaginations, actions and thoughts in the present time (Bryant and Knight 2019, 16). This allows me to examine, how the future influences people's experiences in the present. Since these orientations can be applied to various contexts, different cultures can be studied. Additionally, Bryant and Knight expand on six orientations, of which I particularly focus on people's expectation and anticipation of the future (2019; Hastrup 2023). These orientations help me to understand how present experiences of snow relate to the future. First, the decline in snow made people *expect* to have even less snow in the future. Simultaneously, the expectations of inhabitants were rather positive about the developments of snow on the higher altitudes. Second, people acted on the future and pulled the future closer to the present. These actions consisted of adaptations by different actors of my population. They thus *anticipated* the future by acting upon it. My interlocutors had different styles of anticipating the future. The most important actor of the valley, the ski station Serre Chevalier, was anticipating a future without snow by taking control of nature (Van Dooren 2019). Using technologies enabled them to make artificial snow and go higher up the mountain in the search for snow. Other actors, such as mountain guides and activists, were thinking and acting beyond humans. They incorporated all living beings of the planet (Chakrabarty 2021).

Temporalization

Experiences of snow are felt through a change in *temporalization* as well, which is the way inhabitants construct their daily lives (Munn 1992). In the winter, they construct their time around snow, but in the summer they do not. As such, snow is both temporal and permanent, since it is disappearing over time but at the same time comes back every year. The construction of time around snow is thus seasonal. Therefore, I will examine three different types of seasonality, which entail intertwining social and ecological processes (Harris 1998; Krause 2013). Because of climate change, the period of snow is becoming shorter and is shifting to earlier times in the year (Poudel 2020). The temporalization of the inhabitants is therefore changing as well.

Double bind

Apart from changes in snow, inhabitants also perceived a different kind of change. That is, infrastructures are being built for tourists and they are taking over the mountains. However, climate change and this change of landscape are also related to each other: the ski station attracts many tourists to conduct snow activities in Briançon, and with all its technologies and possible mobility, this ski industry is an incentive for climate change (Blühdorn 2009). Paradoxically, tourists thus come for the mountains and skiing, but at the same time skiing makes the continued existence of snow uncertain. This friction between the desire for snowy landscapes and its destruction by the industry itself could be called a *double bind*. The construction of infrastructures in Briançon is an embodiment of such a double bind.

I have shown how this thesis will discuss different angles and aspects of climate change in Briançon. As such, this thesis aims to contribute to anthropological debates about climate change and future imaginations by using snow as an embodiment of local experiences.

The field and population

As I have outlined above, I conducted research in Briançon, a French city situated in les Hautes Alpes. The city lies at 1326 meters above the sea level and is the second highest city in Europe (Le Dauphiné Libéré 2012). Briançon is best known for the ski station Serre Chevalier. The station is relatively large with 82 ski slopes in total extended over 410 hectares (Serre Chevalier 2024). When the ski industry came up around the 1960/70s, inhabitants abandoned their agricultural lives and replaced them with jobs in the ski industry. For centuries, Briançon has been an agricultural place, which was its main source of work and income. The soil was not beneficial for cultivating and people had a difficult existence. Tourism represented an escape from a hard-working and poor existence (Chambru and De Oliveira 2021). Although there are still some farmers in Briançon, the ski industry has taken over lives in the area. Therefore, skiing determines lives in the valley.

The changing weather conditions due to climate change, have made the existence of the ski station difficult. Around the globe, more and more ski resorts have to close or shorten the season due to a lack of snow (Gerretsen 2023). Therefore, I chose to examine the local population of a ski resort that still operates today. Briançon is one of the four places that is linked with the ski resort Serre Chevalier (figure 1). The other places are situated in the valley “de la Guisane”, following the river with the same name. Throughout my thesis, I include those other villages of the valley as well when I talk of Briançon. Some people, for example, live in

Briançon but work somewhere else, or vice versa. I therefore use interchangeably “the valley” and “Briançon” as the same area. Additionally, the inhabitants of this area are sometimes called “Briançonnais”, and so will I.



Figure 1: ski slopes of Serre Chevalier connecting with Briançon, Saint-Chaffrey, La Salle-les-Alpes and Le Monétier-les-Bains

My main research population are the employees of the ski station. I conducted research only on the part of the station belonging to Briançon, which is the far-left side of the station. My first contact there was with Catherine, who worked at the bottom of the gondola. She accepted my presence in her working space that day. Through her, I experienced a snowball effect: I started to know the whole Briançon part of the station (O’Reilly 2012, 44). I researched lift workers, mechanics, electricians, *pisteurs* (on which I will elaborate in chapter 3) and *col porteurs* (*idem*). They gave me insights about their work, but also about their personal thoughts about snow. Owners/employees of restaurants, bars, shops and ski rentals added up to these insights by having another perspective from outside the station.

I found that the population of Briançon was not solely bound to the ski station. In my research I bounced upon other work sectors as well. I included one of these in my research, which were the mountain guides. Including them was not a coincidence, since people expected

me to be eager to learn more about glaciers (which was not necessarily the case) and mountain guides were experts in that area. However, they became an important part of my research. Different from the ski station, their work is bound to weather conditions and they have to be more flexible in their habits. Hence, the change in snow had a direct impact on their work. Together with the pisteurs and a guard of the national parc, they also provided me with scientific knowledge about animals, vegetation and weather conditions. Lastly, I included an activist group “Les Escartons” in my research as well. They actively opposed mass tourism policies, which they considered destructive. I came to understand that Les Escartons were not the only ones with this mindset. In every domain I found interlocutors who opposed the ski industry. Apart from my main interlocutors, I also had events and meetings with other inhabitants of the valley. Together they were important in providing me with their perception about climate change and their future.

Methodology and operationalization

Throughout my fieldwork period I collected data by using a variety of methods (Hamersly and Atkinson 2019, 3). I mainly conducted participant observation and ethnographic interviews. Additionally, I conducted a field-walk, two field-skies and a photo-elicitation.

The most important method I used was participant observation. Therefore, I participated in daily activities, events and interactions to understand the aspects of everyday lives and cultures (DeWalt and DeWalt 2011, 1). On average, I went to the ski station three times a week to hang out with the employees. Sometimes I could help them with their daily tasks, but most of the time I just spent time with them in their working space. This opened up possibilities which enabled gathering of all sorts of data (Bernard 2011, 265). Consequently, I got to know their (work) habits, political views and character but also information about their personal life. Additionally, I attended meetings of Les Escartons and on several occasions went to bars, ski rentals and shops. Participant observation gave me an emic perspective which enabled me “to grasp the native’s point of view” (Bronislaw Malinowski 1922, 25). It also helped in building rapport with my interlocutors. They got used to me and, for example, started to give me “la bise” (two kisses on each cheek) when we greeted each other. Furthermore, due to participant observation, I obtained dozens of conversations with my interlocutors about their experience of snow.

To acquire more in-depth information about the emic perspective on feelings, I conducted 16 ethnographic interviews. I learned details about inhabitants’ experience of snow, which I could not have obtained otherwise (Hamersly and Atkinson 2007, 107). The reason is

that my interlocutors spoke more extensively during a private conversation. Throughout the research I chose who would be suitable to interview, which depended on their willingness to participate (Hamersly and Atkinson 2007, 112). Hence, I conducted interviews with employees of the station, owners of shops, ski rentals and bars, kayak and mountain guides, a guard of the national parc and members of Les Escartons. These interviews contributed to my knowledge of their perception of climate change. The other interview methods I used, gave me extended information about my interlocutors. The field-skiing and -walking added insights about my interlocutors' experience in the ski area and landscapes (Irving 2017). Additionally, one photo elicitation with pictures of glaciers contributed to understand snowstalgic feelings about the past, on which I will elaborate in the first chapter.

Ethics and positionality

During my fieldwork period, I followed the ethical principles from the AAA (DeWalt and DeWalt 2011, 211). The most important principles include the following: I will not do harm; respect the lives, attitudes, rights and opinions of my interlocutors in the field and also ensure safety of the population I am studying. I had these principles in mind while doing research and adhered to it.

Over time, I built up rapport with my interlocutors. With some of them I became friends and saw them outside my research. I also got friendly with others and had good conversations with them about topics not related to my research. Although I did not befriend every person, I was comfortable with all my interlocutors and the relations became better over time.

One ethical obstacle I had to face, was the anonymity of the employees of the ski station. They did not always talk positively about managers or other colleagues and some explicitly told me I should not tell their boss what was just being discussed. Although I use pseudonyms for all the names of my interlocutors in this thesis, their identities could still be revealed by the description of them. Therefore, I left out certain data that could harm my interlocutors. Another difficult part of my research entailed racist jokes. My interlocutors rarely made racist jokes, but when they did, I felt uncomfortable. Since it only occurred in group situations, I did not say anything about it and let the situation happen. However, it bothered me and I talked about it in private with my friend Artiom and my sister.

Gender came to be a particularly important matter for my positionality (DeWalt and Dewalt 2011, 99). The workers at the ski station were mainly men. I was often the only woman present, or we were a minority part of the group. I was also one of the youngest persons hanging around at the station. These two aspects made me interesting for the employees at the station,

who were mainly older men, and it facilitated the first contact with my interlocutors. However, I sometimes also felt embarrassed to be a woman. I got some uncomfortable situations with men who said I was cute, or made jokes I was in love with some of the employees. Besides gender, my foreign position in the field came to the fore as well. Especially my accent was striking for inhabitants of Briançon. New interlocutors always said my French was really good, but they could hear “a little accent”. Although I think this foreign accent also made first contact easier, I was always a bit hurt to hear my foreign status was so obvious. I have been speaking French since I was born, and these remarks felt like an attack on my ability to speak French. Later during my research, I started to partly appreciate the accent as something unique and good.

The structure

As stated before, this thesis seeks to understand local experience of climate change and imaginations of the future. It is structured into four chapters.

In chapter one, I will elaborate on the nostalgic experiences concerning snow, which I call snowstalgia. By dwelling on narrated memories, I will explore feelings of longing to snowy landscapes of the past. Additionally, I will discuss the perception of retreating glaciers in the area of Briançon, which also raises nostalgic feelings concerning the future of glaciers. Unraveling nostalgic feelings to the past and also the future is the first step in understanding experiences of snow in the present.

Day-to-day experiences of snow and expectations of the future will be discussed in chapter two. I will elaborate on how the inhabitants of Briançon perceive changes and differences in quantity of snow on different altitudes, and how these are lived differently by a variety of actors. Furthermore, I will show how inhabitants raise expectations toward their uncertain future.

Chapter three will discuss the touristic reliance of Briançon on snow. That is, economic lives are enmeshed with snow related tourist activities. I will show how a decrease in snow is influencing tourist activity in Briançon. In different ways, inhabitants anticipate the future by making changes in their work domain. Sometimes different actors in Briançon have contrasting ideas about the future.

In chapter four, I will discuss how people perceive climate change seasonally. Snow is lived seasonally and seasonality in turn plays an important role in how the inhabitants of Briançon experience time. Therefore, I will focus on three types of seasonality, which all

undergo a shift due to climate change. This chapter thus seeks to understand how climate change is also changing people's temporalization.

Lastly, I will conclude this thesis by summarizing the arguments built up in this thesis, answering my research question and discussing the relevance and implications of my research.

Chapter 1

Snowstalgia

I walked with Sarah and Joseph to a massive chalet in the small hamlet. This group of houses lies just a bit outside of Briançon, slightly higher on the mountain. We had to walk in the dark on a path that was slippery with ice. The door of the chalet was open and we entered the house. We went up a lot of stairs and through different rooms. Although it was my second time here, I still felt lost in this enormous house. When we arrived in the highest room, a warm light came to meet us and five persons were chattering around a square wooden table. They sat on wooden benches while flames crackled in the fireplace in front of the table. We greeted everyone and I introduced Sarah, my sister, to the group of people. I had just met them the week before. Laura, the hostess, was smiling all the time and greeted us enthusiastically. Her partner Maurice was sitting at the table and remained rather quiet. The other two persons, Johan and Bernadette, were both neighbours of the couple.

We sat down and played *regenwormen*, which was a Dutch game Sarah introduced to the rest of the company. While we played the game, we were eating snacks and drinking juice or wine. Everyone had cooked food which they brought to the game night. We talked a lot and laughed about the game. Laura and Maurice's son, Brian, later came in to join us.

At the end of the game night, Laura asked me how my research was going. This question stimulated conversations about snow and weather patterns. Especially Johan had some stories to tell. He was in his sixties and had lived around Briançon since he was four. From all the people in the room, he had been living in Briançon the longest. He started to talk about his past experience with snow. "We bobsled from up to mountain, down to Briançon. In those days, there was not much transport in the city. It was not that dangerous to sleigh in the city". Everyone around the table had gotten quiet and listened thoughtfully. "The snow came until the first level and people left their houses from the balcony. To use the door, one needed to make tunnels through the snow". Johan took a sip of his wine. Maurice replied, "now there is snow *que dalle* (nothing at all)!". Others nodded in agreement. "I even remember it was minus seventeen degrees outside when we went skiing with school" Brian added. He was in his mid-twenties. "Now, it is sometimes minus three, but never that low anymore". The discussion went on about old memories of Briançon. When it was over, we started to tidy up the games and clear the table. We said goodbye to each other and everyone slowly left the house to go home.

This vignette shows how snow and other aspects of the weather lead to stories of the past in the valley of Briançon. In this intimate setting of a typical chalet in the valley, old stories come up about the natural environment. These stories show certain feelings of longing for the past, which we call nostalgia. Nostalgia is the term used for longings of what is lacking in a changed present, because time has passed (Angé and Berliner 2015, 2). However, not only did the inhabitants of the little hamlet feel longings for the past time, but equally longed for a changed landscape of Briançon that no longer exists. More precisely, they longed for a past with more *snow*. Additionally, the vignette shows that these feelings are trans-generational. Both Johan as Brian come up with stories of different past experiences. Inhabitants of the valley thus experience nostalgic feelings of snow, both in the near and the far past.

Johan and Brian are not unique in these experiences in Briançon. Indeed, one of the experiences inhabitants have with snow, are the memories and longings for the past snowy winters. Using Albrecht et al. (2007) and Angé and Berliner (2020), I will introduce the concept *snowstalgia* to explore these feelings of longing for snow in Briançon. This will help me to understand the perception of changing snow patterns as well as of disappearing glaciers.

Longing for past experiences of snow

In general, inhabitants of Briançon are happy to live there. During my ethnographic fieldwork in the valley, I commonly heard the sentence “we live very well here” from my interlocutors. Some originated from Briançon but many inhabitants came from other parts of France. Most of them loved the mountains and outdoor activities linked to the natural environment. As did for example Pierre. I met him by spending much time at the gondola, where he was working at the bottom of the lift. Pierre grew up in Lyon and had moved to Briançon when he was twenty years old. I spent some time talking with him about the weather, work and skiing, even if he did not seem to care much for chatting. Most of our brief conversations were about his passion for kiting. This is a watersport performed at wide open water spaces. When it was raining one day and we were all a bit moody, he would say “this is good for the lakes, they will fill up with water again!”. In the periods in between his working seasons, he would go to the lake all the time. “I do not need to go on holiday or take the plane. I have the mountains all around me”. Pierre was an example of many of my interlocutors who praised the outdoors and its activities. Most of them felt affection for their natural environment.

Changing patterns in the landscapes of Briançon, and particularly the conditions of snow, have created nostalgic feelings towards my interlocutor’s environment. To understand these feelings, it is necessary to elaborate briefly on the study of nostalgia. Nostalgia has long

been studied as a longing for lost homes, resulting from people moving to new living places (Albrecht et al. 2007, 96). In this older study, nostalgia is used to describe people who feel homesick because they have had to change their home. In the 19th century, a temporal dimension was added to the study, which conceptualised nostalgia as the feeling of vanished time (Angé and Berliner 2020, 4). Nostalgia then entailed people who longed for the past. Now, longings to a specific place bring the aspect of space back in the study about nostalgic feelings. When Johan talks about his past experience with snow, he is also specifically referring to Briançon. He elaborates on both temporal and spatial aspects of snow in his narratives. My interlocutors thus experience similar feelings of nostalgia because they encounter profound change in their own living environment (Albrecht et al. 2007, 96). Albrecht coined the term *solastalgia* to refer to those feelings, which means “the lived experience of the physical desolation of home” (ibid.). Similarly, Angé and Berliner argue people can long for environmental places that are undergoing change, which they call *ecological nostalgias* (2020, 3). Both *solastalgia* and *ecological-nostalgia* are concepts that express feelings about the loss of environments. Hence, climate change could be the driver of such feelings (ibid., 98), as is the case in Briançon. Since my research focus is snow, I introduce *snowstalgia* as a derivation of these concepts, to define these feelings of longings specifically for snow. As I explained in the introduction, I use snow as a proxy to connect multiple dimensions. In this case, it helps to connect past experiences of snow to present nostalgic feelings towards this past. The neighbors in the vignette are expressing those feelings by telling stories of a different past. We saw that not only elderly were narrating their past experiences of snow, but also younger persons had nostalgic stories, like Brian about the low temperatures. Additionally, two of my younger interlocutors in their twenties, Artiom and Renée, told me in separate conversations how they used to jump of their balconies in the snow. The layer of snow was thick enough to not get hurt. This reference goes some twenty years back in time. Experiences of snowstalgic feelings can thus emerge in two decades as well as in six, which makes it an intergenerational experience.

Some inhabitants of Briançon did not only retell beautiful stories of the past, but also pointed to the difficulties of snow. Ida told me, for example, that people find snow annoying in essence, which is particularly true when snow has to be cleared. I experienced this inconvenience when I was living at Ida’s and Joseph’s house for a few days. I could stay there in turn for helping them with tasks in the house. One day it had snowed all night, and in the morning the house was surrounded by snow. Some twenty to thirty centimeters had fallen. The first thing we had to do was clearing the snow from the path and around the car. Together with Joseph and another volunteer we took one hour to clear most of the places that had to be used.

Although for me this experience was joyful, I was starting to be annoyed at the end of the job. I thus experienced difficulties, with which inhabitants of Briançon have to deal in the winter period. Hence, they do not always perceive snow as beautiful, but also as difficult. This is similar to how the people in Iceland perceive glaciers as menacing and threatening lives (Howe 2020, 172).

Serre Chevalier also holds on to snowstalgic feelings. Since clients have passion for snow and skiing, the ski station uses this to make a business out of snow. They remain open from December until April, even if there is no snow laying on the ski slopes. They can, because snow canons are used to make up the lower valley slopes. Serre Chevalier thus uses snowstalgic feelings of people, to go on with business as usual (Angé and Berliner 2020, 10). Although the ski station is not actively promoting the nostalgia of skiing (yet), they do everything to prolong skiing as much as possible. This is not for the benefits of the natural environment, because the ski domain is cutting trees for new slopes and gondolas. As such, Serre Chevalier mourns the passing of snow while they are responsible for it themselves (ibid., 9).

Glacier's future

It was a beautiful day in the beginning of March and I was sitting in a bakery with Patrick. This bakery was situated in the industrial district of Briançon. It was only my second official interview, but I felt remarkably confident. When I asked Patrick about his experience of a decrease in snow, he told me, “as mountain guides we are a direct testimony of this. I saw several glaciers disappear. This year I went up there and I only saw rocks”. Indeed, the importance given to receding glaciers was particular striking in my interviews with mountain guides. Patrick experienced disappearing glaciers as a very vivid materialization of climate change (Howe 2020, 166), since they are visibly receding over time. The attainability of this change, creates nostalgic feelings of loss. This makes glaciers popular in people’s imaginations of climate change (ibid., 168). Additionally, ice has material history, which enhances the feeling of loss as well (ibid., 166). That is, layers of ice are formed over the years forming the glacier. This means that the lower snow layers are some thousand years old. As Patrick said, “glaciers will never come back because it is impossible to remake the layers of snow, which were created over thousands of years”. The idea that a glacier will never return evokes strong feelings of loss. “The layers beneath are darker and therefore absorb the sun more easily,” Patrick continued. Therefore, the albedo effect is smaller after layers of ice already have melt (ibid., 170). Hence, glaciers presently melt faster than they did before, which makes people’s attention for glaciers especially strong now. Later in this interview, Patrick explained he had an old photo

of him and his family standing before a glacier. Since the moment the picture had been taken, the glacier had removed one kilometer. “Then you realize...”. In Patrick’s experience of the glacier, his personal feelings interfere with tales of devastation (Angé and Berliner 2020, 7). The interference with annihilation of nature makes his feeling different than simply nostalgic. Rather, it would be linked to snowstalgic feelings.

Close to Briançon, lies the national park “Les Ecrins”. This park is represented in a museum in Briançon and in a “house” in Le Casset, which is a village laying the valley. In these public spaces, facts and photos of the park are exposed. When I went to the house of the national park, I saw photos of receding glaciers myself. The day I was visiting the place, the house organized a meet and greet with a guard of the parc, named Maxime. He could explain different facts about the parc, ranging from animals to vegetation. After the meet and greet, he showed me pictures of the melting glaciers. They had been put up everywhere in the house, proving the melt of the Casset and White glacier. Over a range of 20 to 30 years one could see the significant decrease in ice of both glaciers (figure 2). These photos made climate change visible and raised people’s awareness because they had been put up in this public space. As Howe puts it, ice can be used as an environmental and social vessel (Howe 2020, 166), just as I use snow (or in this case ice) to relate to explore snowstalgic feelings. Even if I had never seen those glaciers in real life, I did see photos of the national park and I experienced some feeling of loss. Similarly, visitors come by and sense a feeling of losing their past environment.

Victor, a mountain guide close to retirement, also told me how he experienced disappearance of glaciers. “Before, I saw the sector of the White Glacier advance, but now it just recedes”. And is still receding. Apart from feelings towards the past, receding glaciers thus also play a role in how people orient themselves toward the future (Howe 2020, 170). For example, some glaciers around Briançon have not yet disappeared but caused serious worries among people. They could both turn in liquid or remain solid (ibid.). Patrick, for example, expressed negative feelings about the future. “I read from a scientific international group of climate change, that even if we would stop now with all emissions, it would take 50 years before the earth starts to cool down,” he explained. Hence, Patrick was expecting a future without glaciers. “In 2050, there will only be two glaciers left: the White Glacier and the White Valley. Every glacier below 3500 meters will have disappeared”. He did not know this for sure, but could only *expect* a certain future without glaciers. In actual fact, the future is not controllable and nobody ever knows what is going to happen (Bryant and Knight 2019, 59). Sometimes it is difficult to even try to predict a future. As Victor explained to me: “In every glacier, there is a certain point of fracture, which is a crack in the ice. Now, we are not certain of the place of this

fracture anymore”. Victor thus feels uncertain about the future and “uncanny”. Uncanny is the feeling one gets when something feels familiar, but at the same time it feels strange because it has changed. For mountain guides, mountains are a familiar place, but the receding glaciers make it feel strange at the same time. In this liminal space of familiarity and unfamiliarity, they cannot longer expect the same future for the layers of ice as it was before (Bryant and Knight 2019, 58). It becomes difficult to expect something at all. This uncanny feeling can be something that may pass, but when it is an extended liminality, it may cause a “new normal” (ibid., 76). As is the case for receding glaciers because it has been accepted among the population. Patrick also acknowledged the end of certain glaciers, but he felt bad about it. He experienced a loss of nature, which Hastrup calls “the end of nature”. Hastrup argues the end is not absolute, but rather, it is always made and remade, shaping people and shaped by people (2023, 17). In this sense, the end of glaciers could mean the beginning of something new (ibid., 26). The negative attitude of Patrick, however, does not show hope of a new beginning. Instead, snowstalgic feelings for glaciers around Briançon are growing, as they relate to the past as well as the future (Howe 2020, 176).



Figure 2: Casset Glacier over 25 years

Concluding remarks

In this chapter snow and glaciers made us travel to the past while we explored the emergence of snowstalgic feelings among the people in Briançon. Additionally, these feelings also exist in the future subjunctive, which makes the Briançonnais expecting a change in the future as well. For this, snowstalgia turned out to be a practical tool for analyzation. In the next chapter I will add on those snowstalgic feelings, by focusing on daily life concerns of snow and future expectations.

Chapter 2

Living with and without snow

“You have to put the closing sign higher as well, not just down”. Antoine said to Manny, “so the clients can see from there that the path is closed”. The two pisteurs were having a conversation about one of the snowshoe paths. I was in the employees’ refectory all the way up the mountain, at 2300 meter. Together with pisteurs I sat at the long table drinking some tea. Some of them had wine with peanuts as a small *apero* (aperitif), before lunch. The sound of a walkie-talkie reverberated around the room. Manny agreed with Antoine, and he would change the sign. Later I found out that the snowshoe path had been closed because it had snowed too much during the night. Opening and closing ski slopes was one of the responsibilities pisteurs had. Most of the time, however, they were waiting for an injury among the many skiers on the slopes. Handle first aid of the station was their main task. Jean, one of the chairlift workers, walked in and greeted everyone. He began to unpack his lunchbox. Jean, Christian, Malo, Sophie and I were sitting at one part of the table. We talked about the valley ski slope at the other side of the mountain. “If there is 20cm of snow, we can open the path”, Sophie said. “This year it has not been open yet,” she looked at me, “since there is a lack of snow”. “Below, there is nothing” Malo confirmed.

More people came in and around 13:00 it was getting full in the refectory. Benoit, Willy, Antoine, Manny and Ann were sitting together while they talked about their experiences in the morning. “It’s rubbish,” Antoine said, “I don’t like it at all. With the wind in my face, I could not throw it properly.” He was talking about the PIDA (Plan d’Intervention de Déclenchement d’Avalanches) of that morning. As pisteurs, they had to release avalanches to make the slopes safe for skiing. By releasing artificial avalanches, they prevent real ones to occur. They do this early in the morning before the ski station opens, only when it has snowed the day or night before. From time to time, one can hear the explosions down in Briançon. Since it had snowed heavily in the night, they had to exert PIDA this morning. Ann, the chef of the Briançon department, said “it was practical to have an extra pisteur present, who was not there for the avalanches”. Some weeks ago, a pisteur who worked in another part of the station, had had an accident while detonating explosive charges to release avalanches. His hand was injured for life. The station was trying to find a solution for the pisteurs by trying out a new and safer method. The pisteurs were currently getting acquainted with it. “It is way less effective than our previous method, because it enters in the snow. So, it blows up less snow than before,” Willy explained after the conversation. The pisteurs and Ann were still talking about the avalanches

and the accident, when a man walked in with two children. Everybody greeted them, and said “Hi Guillaume, it has been a long time!”. Willy talked to Guillaume about the ski slopes. “They can skip school when the snow is good,” he smiled and looked at the children. When Willy briefly explained who I was and what I did, Guillaume looked at me and said “It rains down and snows up, that’s it”.

The vignette describes in several ways the daily experiences of snow in Briançon. Every day, pisteurs have to work with snow. That is, their tasks are all related to the ski domain, and therefore to snow. Apart from the pisteur’s experiences, I also describe the difference in snow between high altitude and low altitude. On the one hand, there was barely any snow in the lower parts of Briançon. On the other hand, at higher altitudes, the mountain boasted an abundance of snow. The differences in amounts of snow between low and high altitudes was a finding that came back regularly throughout my research. Consequently, interlocutors called it “an exceptional year”. They perceived this in their daily lives which were intertwined with snow activities, and especially with skiing.

Earlier in my thesis, I showed how changing patterns of snow evoke snowstalgic feelings. This chapter will rather elaborate on the social dimension of snow. That is, snow is inevitably linked with the lives of the people in Briançon. By using Ingold’s (2022) notion of perception, I will explore how daily life experiences of snow are changing due to climate change. Additionally, I will elaborate on the future dimension of snow as well. Hence, I will use Bryant and Knight’s (2019) notion of expectation to understand how Briançonnais think about their future.

“Exceptional year”

As I showed in the vignette, pisteurs perceived an abundance of snow in higher places, which is why they had to release avalanches to clear the ski slopes. At the end of March, they had already performed 22 PIDA’s. To decide if there was any risk for natural avalanches, pisteurs had to take out weekly snow surveys. Willy and Benoit voluntarily accepted the task of taking out these surveys. Their task was to ski to the standard survey place, which lies at some 2,100 meter. There, they measured the thickness of the layer of snow as well as its quality and temperature. I once went down with Willy myself and helped him with the survey. We had to dig a hole and study each layer of snow. From these surveys Willy and Benoit created graphs and tables, which demonstrated the amounts of snow per week, month and year. From these findings, they could decide if it was necessary to conduct a PIDA or not. It is important to

mention that the quantity of snow at this level (2,100m), was not lower than ten years ago. At 3,000 meters we could even speak of records of snowfall, Willy and Benoit told me. In the valley, however, at 1,200 to 1,500 meter, the contrast could not be more pronounced. So up until a certain height, there was no snow, while above this point there would be an enormous amount of snow. This height is called the snow line, or isotherm, which is a symbolic line (although very visible) below which snow ceases to exist. Throughout my fieldwork, the isotherm changed over time, ranging from 1,600 meters to 1,800 or 2,000. The height of the snow level influences activities in Briançon. For example, Vauban, the main valley ski slope, had been open until mid-March but appeared as a sad stroke of snow in a green environment (figure 3). The other ski slope described in the vignette, had only been open for two days during the whole season. Climate change in Briançon is thus felt through the difference of snow between heights. My interlocutors experienced this through their perception (Ingold 2022). Their perception does not appear in the mind or body, but is an achievement of the whole body in its environment. Hence, perception is both ‘inside the head’ as ‘out there’ (ibid, 3). The inhabitants of Briançon perceived the difference of snow since they lived and “moved” through the mountains. These local experiences can be linked to the global aspects of climate change (Crate 2011, 166). Sometimes it would snow on lower altitudes, but the snow never stayed there for a long period of time. In an interview, Jean told me he had measured one meter of accumulated snow in the city of Briançon. We were standing outside, next to the place where skiers sat down in the chairlift to get up the mountain. He had worked for Serre Chevalier at the chairlift Croix de la Nore since 1989. “It’s not bad,” he said, “but everything has melted again”.

At the end of February, Manny showed me a video of sirocco. It was filmed somewhere up the mountain and everything in the video was yellow. “This is sand, coming from the Sahara”. The snow was yellow, and so was the sky. “It was filmed on the 6th of February, but normally this phenomenon only appears in the summer. Today the sky is a bit yellow, that is also sirocco”. I indeed noticed the sky was a bit yellow that day. One month later, however, I witnessed a real sirocco. I went up the mountain and everything was yellow, just as in the video Manny had showed to me (figure 4). Amazed I stopped by Artiom, who was working at the chairlift that day, and he taught me sirocco also has consequences. That is, sand is bad for the snow, and thus for skiing, as Artiom perceived it. This shows the materiality of nature is intrinsically intertwined with social lives (Hastrup 2023, 14-15). Additionally, work in different domains is also dependent on snow, on which I will elaborate in the next section.



Figure 3: ski slope Vauban, February 23

Not only humans, but also vegetation and animals react to the changing patterns of snow. Maxime, guard of the national park, told me about a variety of animals living with changes in snow. For example, the mountain hare changes color in the winter to hide in the white landscape. Now it is getting warmer and snow disappears. So the hare climbs in altitude. Guards like Maxime are afraid this species will mix up with other species who live higher up the mountain. If this happens, it can mean the end of the mountain hare. The way Maxime and the national park Les Écrins are concerned about living creatures, is compatible with Chakrabarty's (2021) concept of *habitability*. This means that all living things on the planet matter and should be taken into account when thinking of a sustainable future (Chakrabarty 2021, 83). This is also true of vegetation. Yann, worker at a chairlift and mountain guide, explained the disappearance of larches (*mélèzes*). This is the famous tree from the region, being promoted everywhere in shops and restaurants. Because of periods of warmth, the tree does not get enough water anymore and therefore tends to disappear. Yann and Maxime thus include all organisms in their thinking about the environment. Similarly, Ingold argues we need to step back from the dichotomy between society and nature, when making a link between the social and the ecological world. For Ingold, the person *is* the organism itself (Ingold 2022, 4). He argues that if people are organisms, we must apply relational thinking to the entire world of organic life (ibid.). Although the national park and mountain guides do include nature in their relational

thinking, many decisions by other actors do not live up to this ideal. Below, I elaborate on Serre Chevalier's control over nature, clashing with this idea of a habitable planet.

The features explained above made my interlocutors say over and over again “this year is exceptional”. However, Jean thought slightly differently about the weather conditions: “Now every year is an exceptional one”.



Figure 4: sirocco March 30

Professional life around snow

In Briançon, many professions are influenced by snow. In her piece about the Inughuits, Hastrup argues it is impossible to omit ice when thinking of their social life (2023, 15). Ice is used as a means of transportation in the high arctic. Because of climate change, hunters are not able to sledge over ice to preys as they did before (ibid., 16). The Briançonnais are dependent on snow in a slightly different way, since snow is intrinsically linked with skiing. They do not depend directly on snow for food, but rather for work and tourism. Since work is important for their life with snow, the inhabitants' perception is partly created by the work they do. Below, I will discuss several professions that do have to deal with snow.

The most dominant actor in Briançon during the winter period, is the ski station Serre Chevalier. It has a monopoly over the ski area on the mountain. Lack of snow on ski slopes is partly resolved by making artificial snow. Therefore, making snow is one of the jobs the station has to offer. Pierre was one of those people who had worked with artificial snow. When I met him, he worked at the gondola as a lift worker, but originally, he had been hired as a snowmaker.

Hence, others would refer to him as the one who “makes snow”. He explained to me how he ended up at the gondola. “They had to stop my contract, because it is not cold enough in the night”. Significantly, to produce snow it has to be maximum two degrees outside. Therefore, snow is normally being made in the night when temperatures are lower. Snowmakers pump water from lakes, rivers and canalization to the snow canons along the ski slopes (figure 5). There, the canons produce snow by using water and air. Without cold air, this process cannot be executed. Thus, not only did the weather disappoint in terms of quantity of real snow, but it was also often too hot to make artificial snow. At the end of the season, however, Serre Chevalier had been able to produce quite some cubic meters of snow with their snow canons. Their perception of the environment entails snow canons to deal with the declination of snow. The ski station, as an actor, thus dwells through the environment by performing human control over weather patterns. Van Dooren argues humans should take less appropriative forms of decision-making and leave nature to its own ends (Van Dooren 2019, 116). To step back from this management and human-centered approach is to include all living beings into consideration when making decisions (Chakrabarty 2021, 83). The ski station, on the contrary, is focused on economic incentives and not on including those more-than-humans. However, the employees of the station are not necessarily in agreement with this way of thinking. Pierre himself told me that working as a snowmaker was against his personal values, even if “we don’t use chemical products, only air, water and electricity”. The spirit of the whole snowmaking team was similar to his, advocating the preservation of the mountain.

Other employees of the station experience the snow in different ways. As described in the vignette, pisteurs, for example, cannot open certain slopes because of a decrease in snow. Furthermore, lift workers told me that they had to store cabins of the gondola more often because of the weather. That is, the combination of humidity and cold would make the cables more prone to freezing. The cables would freeze and then become hot again. Therefore, the cables had to run all night to prevent them from freezing. This means all the cabins had to be stored in the garage. Phillipe explained that climate change makes this happen more often. These are examples of employees being in dialogue with nature by constantly adapting to the weather. Therefore, they are making the nature (Hastrup 2023, 17).

For mountain guides, changes were needed regarding their courses. Courses are the paths they take with visitors in the mountains. During the summer, they travel these courses by foot. Melting permafrost is now terrorizing these summer courses. Permafrost is water which has always been frozen in a rock. It keeps the rock together. Since the temperatures are rising, permafrost is melting and becoming water again which makes the rock crumble down.

Therefore, courses become dangerous and guides cannot use those courses anymore. Victor, one of my interlocutors, also pointed to the imbalanced access of shelter because of the melting permafrost. Some shelters crumble down or paths to the shelters are becoming dangerous. Mountain guides thus have to proactively think about new ways of dwelling through the mountains. As such, they are actively taking part in the *production* of the environment, by thinking of alternatives (Ingold 2011, 12). Similarly, kayak guides are also influenced by snow. This became clear in a Whatsapp interview with a kayak guide. The interview consisted of me sending questions to Vincent, who answered with voice messages. It was our solution for his lack of time to conduct a face-to-face interview. In one voice message, Vincent told me: “Yes, snow influences kayaking. We are completely dependent on snow, glaciers and especially on snow in high altitudes. The more it snows, the more water there is in the rivers.” Climate change has been limiting snowfall, and thus also water in the rivers for kayaking. Consequently, guides have to produce alternatives in this changing climate (Ingold 2011; Hastrup 2023).

All these examples of living with snow are particular to Briançon. The inhabitants acknowledge climate change in the form of snow differently than other populations in the world (Irvine et al.’s, 2019; Eriksen and Stensrud 2019, 2). That is, snow is part of Briançonnais’ working and social lives, but of the local economy, as I will show in the next chapter. This makes them particularly aware of the weather and climate (Irvine et al.’s, 2019, 730).



Figure 5: snow canon on ski slope Vauban

Expectations of snow

I have already shown how inhabitants felt about the future of glaciers in the previous chapter: they expect glaciers to retreat or completely disappear. Similarly, many interlocutors expect snow to disappear as well. Some thought that in five years, all snow would be gone. Others perhaps in 10, 20, 25 or 30 years. Eloise, for example, who worked at a ski lift, thought there would be no snow anymore in ten years. She was relatively young compared to other employees of the station, being in her mid-twenties. Her job was to oversee the beginners ski lift. Eloise *expected* that snow would disappear due to climate change. This made her sad, for she enjoyed skiing very much. Many of my interlocutors actually expected such a future without snow. Again, my interlocutors experienced the “end of nature”, since they perceived a radical shift in their vision of the future (Hastrup 2023, 14). Additionally, inhabitants of Briançon expected the snow level to move further up as well. This would also have consequences for skiing. Sandra, the manager who was responsible for the environmental issues of the station, explained that the ski slopes down the mountain would not be usable anymore. Similarly, this spells a drastic change of the future, with snow coming to its end (ibid).

Nobody really knew how the future was going to unfold. Sophie, a pisteur, told me she was not sure about what to expect in the future. It is difficult to have expectations when times feel uncanny. The reason is that expectations are changing so drastically, which makes them unexpected (Bryant and Knight 2019, 74-75). When I asked Sophie about her personal future, she answered “if I would just have begun as a pisteur, I would have been worried about my job. But I have almost finished, so I am not”. I heard many opinions like this, not being worried about their own personal future. Moreover, younger people would suggest “I will change jobs,” or “I will move to another place if necessary”. Some of my interlocutors were slightly worried about their children, like Manny, for example. Two of his children were ski instructors and one was training to become a mountain guide. “For them it is going to be difficult”. Since snow was disappearing, Manny’s children’s lives were not just *shaped* by the future anymore, but rather became *determinative* of ends: their present lives were doomed into a snowless future wherein their work became difficult to perform (Bryant and Knight 2019, 46). This formed an uncanny feeling, which resulted in anxieties. Manny feared the future of his children because of the uncertain future of snow in Briançon.

However, not a few inhabitants of Briançon were convinced that snow would stay on higher altitudes for some time. This means skiing would be possible when done high enough on the mountain. Jean, the chairlift worker, was rather critical about the future: he did not know how to adapt to this problem. Nevertheless, he said “things will stay open here on altitude, for

several years”. Similarly, Sandra confessed that Serre Chevalier is expecting ski activities on higher altitudes. Both Jean and Sandra had faith in the near future of skiing. In line with this, Hastrup explains how the hunters in Greenland have not lost faith yet in living in the new nature (2023, 19). Two of these predictions contained numbers telling the future. First, the decline of snow was expressed in the number of years left. Second, snow surviving on higher altitudes was explained in the same way. These two examples could be called “numerical stories” and contain descriptions of how an environmental object works in a particular place and time (Brooks 2017, 34). Brooks calls these number narratives. In Briançon these narratives were not commonly referred to, but my interlocutors used them in interviews. Numbers were a way for inhabitants of Briançon to grips with something that is difficult to grasp.

Additionally, some of my interlocutors were not worried about the future in the first place. They thought nature would resolve global warming by itself. Daniel, for example, owned a little bistro in the city of Briançon. He explained that the earth has always been warming up, as it also does today. “In the past 100-200 years there have always been fluctuations in the climate. For sure there is a heating process, but the earth is like that”. Therefore, Daniel expected everything would turn out well in the long run. Climate change would, as he claimed, also be an excuse for the government to implement certain policies. In the following quote he criticizes a (potential) national policy.

“They want to reduce the meat consumption to 450 grams a week per person. It is ridiculous, I am not going to be told what to do. Soya is not gonna make any difference to climate change. The government is using climate change to direct us, but I do what I want”.

Daniel blames the government for using scientific knowledge for the wrong purposes (Bakalaki 2016, 18). That does, however, not mean he did not believe in scientific knowledge. It rather explains how he, and other interlocutors, perceived the state as a powerful minority (ibid. 13). Hence, they did not agree with government policies and would prefer another explanation to the heating of the planet. His expectation of the future was influenced by this perception of climate change: Daniel did not worry too much about the planet, since “it will restore itself”.

Concluding remarks

Inhabitants of Briançon experienced climate change in their day-to-day lives. Following snow as a proxy, we saw that the population perceived differences of snow on a variety of altitudes,

while their work was influenced by snow as well. Furthermore, we saw that expectations varied among the population. Consequently, the inhabitants were both worried as well as confident about the future. In the next chapter I will elaborate on the linkages of snow with tourism and how inhabitants anticipated their future through changes in work.

Chapter 3

Or Blanc

I was nipping from my tea in the small wooden apartment, while I listened to the two other women in the room. They explained that Les Escartons Autrement is against the concretization of the valley, since there is not much space in the Alps. “Personally, I want people to be able to live and build a home here,” Mireille said. I sat on the coach next to Angèle facing Mireille. They were members of Les Escartons Autrement, an association active in the valley of Briançon. We were sitting in Mireille’s house for an interview, which was about their project of water management in the valley. Mireille explained the project to me: “near Mont Genève, they are building eighteen hundred apartments, a project called Clos Enjaime,” I could hear some emotion in her voice. “It’s all for tourists. They do the same here in Monêtier and the rest of the valley”. Angèle nodded. Together, Angèle and Mireille explained to me that more places experienced such major construction projects. They mentioned Monêtier, the valley of Briançon and Cervière, which were all planning building projects for tourists. “Municipalities get money for it because of taxes. We want to prove that there will be a water shortage if they continue with those projects”.

When the interview was over, I drove back to Briançon with Angèle. Coming from Monêtier, we had to pass through the valley. When we were driving out of Monêtier, Angèle said: “Here on the right, is laying the construction of the two thousand five hundred apartments were talking about”. I looked to the right and saw an enormous construction site. It was situated on a plain with mountains behind it. The chalets were far from finished and the view made me feel sad. I knew the chalets would be empty for half of the year. Since people from the valley could not afford such apartments, the buildings remained empty when tourists were gone. The view was of short duration because the car went on, back to Briançon.

This vignette shows how much impact tourism has on Briançon. Apartments are taking over the valley, gravely changing the landscapes of Briançon. The municipality builds these expensive apartments because many tourists come for skiing. As I mentioned in the introduction, this change of landscape is related to the decline of snow. That is, tourists come for the snow, but cause it to decline at the same time, which is a double bind. Inhabitants of Briançon are economically dependent on these tourists and build their lives around them. Indirectly, snow is thus the main economic source. Therefore, several of my interlocutors called it *l’Or Blanc* (white gold). Furthermore, I particularly focused on the perspective of Les Escartons Autrement

(or Les Escartons). Les Escartons were taking an important part in discussions around newly-made infrastructures, by opposing mass tourism and its effects on the valley.

In this chapter I will show the importance of snow tourism in Briançon. Economic incentives make inhabitants embrace tourism to make a living. Consequently, different professions and activities are developed for tourists. At the same time, many interlocutors find the hoopla around tourism repulsive, like Les Escartons. They would prefer a different approach. The effects of climate change put the focus on snow tourism even more into question. Hence, the ski industry is an example of a double bind. This self-destructive snow-tourism has implications for the future of Briançon. How do inhabitants anticipate (Bryant and Knight 2019) their futures without snow and tourism? I will discuss three different ways of anticipating the tourist futures below.

Serre Chevalier: controlling tourism

As we saw in the previous chapter, snow is linked to social lives. Skiing, particularly, is the main social activity in Briançon. Not only do the inhabitants enjoy this sport themselves, but it also attracts a lot of tourists. The ski industry is really substantial and has caused mass-tourism. Most of the tourists in Briançon come for the ski station Serre Chevalier. It has 80 ski slopes and is one of the largest ski domains in Europe (Serre Chevalier 2024). Serre Chevalier is owned by la Compagnie Des Alpes (CDA), a major company in France. The ski station attracts many clients a year, tourists coming from all over Europe. To give an impression, in February the number of passages was an average of 21,000 per day¹. Passages are the number of clients using the ski station. Tourists come from different parts of Europe. They mainly live in Great-Britain, France, Holland, Sweden, Belgium, Italy, Denmark and Finland (Serre Chevalier 2024). As I showed in the vignette, the municipality builds apartments for these tourists and therefore encourages them to come. Together with the municipality, Serre Chevalier is sustaining this life style of ski-tourists, although it is unsustainable for the planet (Blühndorn 2009). Evidently, economic reasons are behind this choice: that same year the ski station, or actually CDA, made 47 million euros profit, though it was not even the end of the season². Although inhabitants of Briançon do not always support this way of living, they need tourists to live.

One day, when I was standing with Jean near his chairlift up the mountain, we encountered Peter, a ski instructor. We talked about my research in Briançon. “It’s a paradise here,” Peter said. “It is a paradise,” Jean agreed, “although sometimes with a lot of tourists”.

¹ Meeting with pisteurs March 12

² Meeting with pisteurs March 12

“But that makes us live as well,” Peter smiled, and he went on with his skiing class. My interlocutors thus experienced some contradictory emotions about tourists. On the one hand, they needed tourists for economic reasons. On the other hand, they preferred their living-space without tourists. This is again an example of a double bind, for tourism is indispensable but destructive at the same time. The engagement of local Briançonnais in tourism made up their experience and perspective of their environment. Perception is built in the current flows of human’s surroundings and their practical engagement with it (Ingold 2011, 10). Actors built their perception about tourism differently in Briançon. This was especially the case between the ski station, as decision-makers from above, who focus on economic incentives, and a vast number of habitants, who are longing for a good life (Sokolíčková 2022, 118). Different kinds of people opposed the ideas of the station, but Les Escartons were the ones who actively tried to make the good life happen in Briançon. They spoke up from below about decisions.

Climate change is bringing a new dimension to the reliance on l’or blanc. Without snow, the ski industry cannot go on as it always did. One day at the top of the mountain, I had a conversation with Veronique, a peddler of the station. A peddler has to open picknick areas, check ski passes, and has other specific tasks. Peddlers never stay in one place for a long time, but change scenery after some days. That day, Veronique told me “Without the ski station, there would be no life in Briançon”. This argumentation was shared by Ida, the woman with whom I had lived for some days. She worked for EKO, a low-tech association working with refugees. Ida explained that not only the tourist sector is depended on skiing, but other economic sectors in Briançon as well. So, if the tourist sector fell apart, the health care and social work would break as well. Inhabitants’ economic lives are thus bound to the snow (Hastrup 2023) and with decreasing amounts of snow, (tourist) life will be prone to change.

Serre Chevalier anticipated this uncertain future of snow by investing in nature. In the telephonic interview I conducted with Sandra, who I mentioned before, she explained the station’s environmental concerns. They focused on three different environmental axes: energy transitions, strategic carbon reduction and preservation of ecosystems (Serre Chevalier 2024). The first axe was covered by green energy. Thirty percent of the energy Serre Chevalier used was green, consisting of solar panels, windmills and hydropower. In the long run, this would reduce the effects of climate change, and therefore the declination of snow. The ski station thus did not simply expect something to happen, but instead they were pulled to the future and rushed toward it (Bryant and Knight 2019, 28-29). In other words, by investing in green energy, they anticipated their future. However, 70% of electric use was not powered by green technologies. For the carbon reduction, they replaced fuel of snow groomers by vegetable oil, which reduced

80% of carbon emissions. As for the preservations of ecosystems, they have several goals. One of those goals is to lose zero biodiversity by 2030 (Serre Chevalier 2024). At first site, these numbers seem a well thought out way to reduce energy consumption. However, relying on technological fixes is a market-oriented way of dealing with environmental problems (Blühdorn 2009). Instead of thinking of long-term solutions, technological fixes are solving short-term problems. Where Les Escartons want to think of the distant future, Serre Chevalier is trying solely to project the immediate future (Hastrup 2012, 21).

In contrast to the investment in green energy, the station is also sustaining current lifestyles (Blühdorn 2009). I have already mentioned snow canons that cover up the lack of snow on the ski slopes. Additionally, Serre Chevalier constructs gondolas to be able to ski higher up the mountain, where there still will be snow. This is not a long-term solution, since snow tends to disappear everywhere. Rather, the station anticipates on the rising isotherm of the near future of skiing. Last year, they built a new gondola going up the mountain in la Salle des Alpes, one of the villages at the feet of the ski domain. John, who worked at the gondola, told me the station did take a part of the bonus to finance the new gondola. Normally, seasonal workers receive a bonus at the end of the working season if everything went well. But at the beginning of the season, all 450 employees were informed that 500 euros of their bonus had been used for the gondola of 26 million euros. The station is thus solely focusing on profit, and does not care about their employees, who are the Briançonnais. One of the employees, Bernard, told me he thinks the new gondola is beautiful and works well. In a certain way this gondola blinded him, in the hope for a better future (Harvey 2012, 534), even when 500 euros had been taken from him. In addition, this luxurious gondola contrasts with the ideas of green energy because more energy is needed to keep it running. Again, the station is not anticipating for a distant future and instead creates a double bind.

Many interlocutors suggested Serre Chevalier has to focus on summer activities as a solution for the economic future. Ernest, an employee at the intermediate station of the gondola, had heard about the making of a toboggan run in Briançon. It would go down the mountain into the city, which would attract more tourists in summer. However, the plan was launched two years ago already, and he had not heard of it again. This was the case because economically, too much relied on the winter tourists. One time I asked Catherine about the differences between the winter and summer season. Catherine worked at the lower part of the gondola and I spent much time with her, chatting about anything and everything. She answered there were not many differences between the two tourist seasons, only in *frequency*. My interview with Sandra confirmed this: 90 % of the station's economy is earned in winter. Also, the ski rentals,

restaurants and stores depended on this ski-economy. Ironically, Sandra called the assemblage of these businesses an *ecosystem*, because the businesses all rely on each other. Additionally, she explained that “the station tries to invest in summer tourism, but it will never catch up with the winter activities. You can’t avoid skiing when it snows”. Economic growth is the main motivation for Serre Chevalier in anticipating the future. As such, climate change will not be able to reduce (Eriksen 2022, 5).

For the shops in the old part of the city, the summer is more profitable than the winter. Nathalie, owner of a little soap shop, explained to me that it had to do with the heritage status of the old city. Most of her clients came to admire the fortress, and not necessarily the snow. “Skiing keeps the tourists near the station, because it is really expensive. They do not want to miss a day of their pass”. The old city is removed from the ski station and therefore not as accessible as the city center. For Nathalie, the decline in snow is thus not influencing touristic activities. However, she also opened her shop during the winter season. Thus, although owners of shops decide themselves when they open or close, there is much overlap with the ski station and other businesses.

Flowing with snow

Tourists do not only come for the ski station, but also for other snow-related activities. Cross-country skiing and ski mountaineering, for example, are variations of skiing. You do not need a ski pass to do this. Cross-country skiing has loose skis, so people can walk and cross plains without using ski lifts. Ski mountaineering is similar, since the goal is to climb a mountain on skis or by foot, while carrying the skis. When you are on the top, you ski down just as in the ski domain. For these sports, tourists only need (their own) material to do these activities on the mountain. Lack of snow means the courses for skiing are less good, since there is no artificial snow to make up the snow. Therefore, people have to go higher up the mountain. These activities are not imposing controlling manners with regard to snow. Instead, people flow with the possibilities by adapting to snow patterns (O’Reilly 2020, 19). Active decisions are made on the basis of the future of snow. The future thus awakes the present in the form of activities or consciousness, which makes temporality temporalizing (Bryant and Knight 2019, 32). Several professions in Briançon have to anticipate their work in this way, aligning to this new flow of snow.

Previously, I mentioned how Victor, a mountain guide, experienced melting permafrost. He had to anticipate on this by taking different and safe itineraries in summer. In the winter, Victor had to follow the snow trail, which is getting higher and higher. Additionally, climate

change also impacted the number of clients that he could take on a course. “When snow becomes ice and we’ll have to take a steep course, I can only take one person with me instead of three.” In this way, he could give enough attention to his clients, while doing a difficult course. Victor thus thinks about the courses he can take with his clients. Dwelling through the environment then means to adapt as well. Mountain guides’ perspective thus play into on their way of adapting to the natural environment. With previous experiences and education, they anticipate on climate change. Additionally, Victor argued that the training of young mountain guides should be adapted to climate change as well. According to him, they should learn new strategies: “Change the codes, change the dates of exercise, change terrain, leave the rock courses for later and watch out for landslides”. Hence, the changing daily weather forecast and extreme weather events complicate anticipation because new knowledge is always needed to anticipate (Hastrup 2012, 22). Nevertheless, mountain guides try to keep running in these circumstances. Victor and some other mountain guides were also part of Les Escartons, having similar ways of thinking.

We have already seen how kayak guides had experiences with climate change as well. That is, the decline in snow reduces the water level in summer. Consequently, Vincent thought guides should reform professionally. “Living with water and skiing should remain optional and occasional, but not the main activity”. Vincent foresees a future wherein the existence of guides will be uncertain and unknown (Bryant and Knight 2019, 43). They are dwelling in an environment which is changing so fast, that it becomes uncanny (ibid., 44). Therefore, Vincent is going to change his profession into health and dietetics. As he said to me, “Because it is in agreement with the crises. And as I said before about consumption, I want to help people to consume differently to take care of the environment and the earth”. He adapts to the uncertainty by changing his profession. Vincent thus dwells through the environment by finding new ways of living with the river (Ingold 2011). But how can the other (kayak or mountain) guides continue without changing jobs? Unfortunately, there is no answer to this question, since the future is uncertain in times of climate change.

Activating against tourism

As I said before, Les Escartons actively stood up against mass tourism in the valley. They think that only large companies make profit from new infrastructures, and therefore, they are against these constructions. Les Escartons block certain government and municipality plans and policies that are being developed in Briançon. They thus fight the double bind of tourists wanting to experience *snow*, while destroying it at the same time. By undertaking action against

the government, they actively anticipate the future (Bryant and Knight 2019, 32). During meetings, Les Escartons discussed alternative ways of living in a changing climate. Luc told me in an interview about his ideas of the future. He was a member of Les Escartons and a semi-retired mountain guide. He thought society needed a collective change to deal with climate change. This summarizes how Les Escartons anticipated the future. In the meantime, they had smaller objectives.

Water is, obviously, the liquid form of snow and therefore important for the experiences of climate change. One committee of Les Escartons was occupied with water management in Montgenèvre, as I elaborated on in the vignette. Montgenèvre features a ski station and has developed plans for new apartments. Rumors were going around about the way water was managed there. One rumor was that drinkable water was being used for the making of artificial snow. Another rumor was about the amount of water that was left in the water sources. Together they raised questions about the amount of water used and left. Therefore, these rumors suggest a number narrative, like the expectation of years of snow left (Brooks 2017, 34). Additionally, the municipality was being vague about the exact numbers and water sources. Therefore, the members of Les Escartons discussed these topics in a meeting. The conclusion was “we just want to know what happens, maybe the rumors are not true, but we want to know”. It felt as their right as a citizen to know what was going on with the water sources (Muehlebach 2018, 345).

Simultaneously, one committee wanted to obstruct the winter Olympics of 2030. There was a fifty percent chance it would be held in The French Alps. The other option was Salt Lake City in the United States. If the French Alps are to be chosen, Briançon will be the location for an Olympic village. Furthermore, plans will be made to enlarge the ski station and infrastructure around it. One member of Les Escartons, Alain, was particularly focused on this topic together with his working partner Alice. Their first goal was to cancel the Olympics in the whole French Alps. He deemed his chances of success small, since they had to convince the Olympic committee. Therefore, their second goal was to prevent the Olympics particularly in Briançon. “Why now? Because during the opening of the Paris ceremony this summer, they will announce the 2030 Olympics,” Alain told me. “We have to combat this now, before it is all signed. After the agreement, it will be way more difficult to change course”. The reason for the battle was tourism, infrastructure and overconsumption. Compared to Paris, there will be a lot more changes in the valley, as Alain said. One requirement that interested me, was the guarantee of snow. If the Olympics is held in Briançon there has to be enough snow. The C.I.O. wants to guarantee this by making more snow canons. The already consumption-driven lifestyles will be

amplified to a maximum (Blühdorn 2009). Hence, Les Escartons are worried for the future of Briançon, if this will actually happen.

Next to the meetings and events of Les Escartons, I also went to see a documentary and attended a debate about le Queyras. This is a region near Briançon, situated in the Alps as well. The documentary was about the future of tourism in this region. One of the producers was Mikaël Chambru, a researcher, who also wrote an article about this topic (Chambru and De Oliveira 2021). After the documentary, there was a debate with Mikaël Chambru, a farmer, a policy maker and the audience. In this cinema, I saw a lot of members of Les Escartons. There were many questions and suggestions. Interestingly, the producers did not suggest to cut off snow tourism at once. Ski areas are dependent on tourism and it would not work to stop it instantly. There should be small reductions and in the meanwhile find something that could replace tourism. A balance is to be found between tourism and the reduction of snow.

Concluding remarks

As we have seen, snow has economical but also political implications in Briançon. The inhabitants are dependent on tourism for work and economics. But the more snow is declining, the less work is possible on the mountains. The population tries to anticipate their work in different ways, adapting to the snow. Additionally, Les Escartons are standing up against mass-tourism activities. In the next chapter, I will show how seasonality plays a role in the declination of snow as well.

Chapter 4

Shifting Seasonality

I was walking, on my way to the gondola. It was a sunny afternoon in the beginning of April. I went down the stairs and looked up to the mountain. The valley ski slope had already been closed for some weeks. Only some patches of snow were left of it. I first walked in the ski rental to say hi to Paul, who was sanding a pair of skis. When I asked him what he was doing he said, “it’s because it’s the end of season, I am doing maintenance”. We talked a bit about skiing and he told me snow is not pleasant anymore in this time of year. Later on, at the station, I first encountered John. I noticed it was completely empty except for him. This was different from some weeks ago, when the rows had been longer than the waiting place could bear. He started to talk enthusiastically about big amounts of snow that had fallen in the last couple of days. “But now it’s not good anymore, it got hot and refroze again. You must go skiing first thing in the morning, when it’s still fresh”. After this brief conversation, I entered the gondola and went to the intermediate cabin. There, I spent some time with electricians, mechanics and lift workers. They were joking around with each other and talked about electricity maintenance. Outside the work cabin it was extremely quiet: we saw some five clients in total getting up or down the mountain. After some time, most of the people left the cabin, and I stayed alone with Bernard, Tristan and Richard. Tristan told me that these hours, when there were no clients at all, were long and boring. Work was more exciting when it was busy.

Later that day I sat with an acquaintance on a terrace in the sun. Next to us, some friends of his were drinking a beer. They talked about skiing, and we could partly hear their conversation. I was sitting with my face in the sun, and I saw it slowly set behind the mountains. At one point we got engaged in the conversation about skiing. We were discussing the good days and slopes for skiing that week. After some talking, one friend said “maybe we have to accept it is becoming spring. We must turn the page,” and while he was saying it, he laughed. We laughed too.

This vignette shows in different ways how seasons are experienced in Briançon. That day in April, there were all the signs that winter was over, and spring was beginning. Not only was the weather experienced as changing but also work and activities change inherently according to the season. Consequently, three different kinds of seasonality come to the fore in the vignette. Firstly, I did describe the ending of a “snow season”, and secondly, I also described the shift in

the “touristic winter season”. The former entails the period of the year with snow and the correspondent activities. The latter consists of the period tourists are coming and inhabitants work in the tourist sector. The third type of seasonality described consists of the four nominal seasons, which we normally use.

In the vignette becomes clear that the Briançonnais live according to three different types of seasonality. They experience snow in a seasonal way as well, since it comes back every year. However, climate change ensures snow is disappearing earlier in the winter season, which changes inhabitants’ perception of snow. As such, I will examine how climate change is perceived seasonally. To examine this perception, I will use Nancy Munn’s (1992) concept of *temporalization*.

Four nominal seasons

When I talked with my interlocutors about the upcoming year, I was sometimes confused by the way they spoke about seasons. They had different ways of describing them. Most often, I heard them talk about the “winter season” and the “summer season”, which refer to the touristic activities as well as the snow, or snow free, practices. Sometimes, however, my interlocutors talked about four different seasons, which are the seasons I know: spring, summer, autumn and winter. As I showed in the vignette, the man on the terrace refers to the beginning of spring. He thus constructs time according to these four seasons.

This man was not the only Briançonnais who experienced four nominal seasons. Stéphane, one of my interlocutors, distinguished the four seasons as well. One day in February, I was standing with him close to the gondola. That day, he had to work at the bottom part of the lift. We were talking about my stay in Briançon and he was talking enthusiastically about the environment. When I said to him that I liked Briançon very much, he told me about the beauty of autumn. “All trees will be colored in red and orange”. Some weeks before, another lift worker had already showed me a photo of the mélèzes in autumn, which I found beautiful. I reflected on this moment and affirmed Stéphane’s statement. “The summers are sometimes a bit dry, but actually all seasons are good,” he continued. Stéphane thus categorized the four seasons as we know them. These are mainly defined by atmospheric circumstances, which influence, among other things, plants and trees (Orlove 2003, 127). When Stéphane described the autumn by pointing to orange trees, this shows the influence of the climate on his perception of seasons. Similarly, Evan-Pritchard argues that nature influences the way people construct time (Munn 1992, 96). Moreover, he argues that *both* natural cycles as well as social activities influence basic life cycles. His notion of *oecological* time captures this two-fold perception. The nominal

seasons, however, are not so much bound to activities in Briançon. Rather, they are mostly defined by the weather conditions and the way Briançonnais talk about them (Krause 2013, 25)

This seasonal way of temporalizing is being disturbed by climate change. The seasons are not as predictable anymore as they were (Poudel 2020). This year, for example, was exceptionally hot and my interlocutors talked about this very much. Since atmospheric conditions are lived by animals and vegetation, changes in these conditions also appear in the behavior of flora and fauna. This becomes apparent in the following example. On a sunny afternoon in February, I was drinking tea with Manny and some other pisteurs in their little hut on the pass of Prorel. We were talking about climate change and politics. Manny was asking me if I knew the western capercaillie and I answered I did not. He told me it was a bird that lives in this region. For two weeks, Manny had already caught sight of the western capercaillies doing love parades. “Normally they only do this in March. It is not normal,” he told me. The love parade Manny was talking about, normally starts in spring. However, these western capercaillies reacted to the hot weather conditions and therefore performed their parades already in February. The atmospheric conditions of the spring season thus shifted to earlier times of the year because of climate change. Therefore, the names and labels associated with the four seasons did not coincide with the atmospheric circumstances anymore. For the inhabitants, the temporalization of the four seasons is shifted to a seasonality with a smaller winter season. Global warming is thus displacing ideal weather patterns in Briançon, as in the Nhason valley of the Himalaya (Poudel 2020, 15). In the sections below I will elaborate on two different types of seasonality, which entail more social activities than this one.

Rhythmic tourist season

Most of the inhabitants of Briançon do not live according to the four nominal seasons described above. Rather, they live according to the winter/summer season and the snowy/nonsnowy season. The former type of seasonality, which I will describe in this subsection, refers to the touristic or working seasons, which divide the year into two different parts. It is another form of inhabitants' temporalization.

In the vignette, I described how Paul prepares the sport materials of a ski rental for a new season. He changes his work practices because the winter season is coming to an end. When the ski rental will close, Paul does not work there anymore until November. Then he will start the preparations for the next winter season. That is, the touristic winter season generally starts in December and ends in April. The summer season starts in June and lasts until the end

of August. These are the periods of the year tourists come to Briançon and most of the inhabitants have to work. Tourists come for snow related activities in the winter and for other outdoor activities in the summer. Paul temporalized in alignment with this touristic flow. To understand this kind of temporalization, I will briefly elaborate on the literature about rhythms and seasonality. Evan- Pritchard argues that time consists a of “rhythm” that links basic activities with natural cycles (Munn 1992, 96). Similarly, Krause discusses rhythms emerge from an interplay between various phenomena such as weather and human activity (Krause 2013, 25). According to him, rhythms allow dynamics of ecological and social processes not as opposed, but implicated in each other (ibid., 24). Moreover, Harris states that a particular community is engaging in *activity* within the *context* of their particular natural surroundings. Driven by Ingold’s dwelling perspective, he calls it the “dwelling perspective of seasonality” (Harris 1998, 66). Both social aspects as well as natural aspects thus construct time and therefore seasonality. For Briançon, this means the inhabitants temporalize by living within their natural surroundings and creating seasonal activities. These activities are bound to work and attract tourists.

The disruption of weather patterns due to climate change, does not have much impact on the tourist seasons in Briançon, at least not yet. This is due to the control Serre Chevalier exerts over people’s temporalization. That is, all 450 employees working for Serre Chevalier, live according to the opening times of the station. By using snow canons and controlling nature (Van Dooren 2019), the station does not have to adjust to climate change (Krause 2013, 40). It even stayed open one week longer compared to last year, although snow had left the lower ski slopes some time before. In this way, Serre Chevalies decides the rhythm of the season. Stores, restaurants and rentals depend heavily on this rhythm made by the ski station. One day before the station closed, I walked in my shorts to a ski rental next to Paul’s, and greeted the owner and his employee. I asked them if they were still open and the owner answered “Yes, tomorrow is the last day the station is open, so it’s almost over!”. They thus remained open until the last day of the ski station. The snow, however, was not that good anymore, as I described in the vignette. So even with declining snow, Serre Chevalier has certain control over temporalization of ski rentals and other businesses. Serre Chevalier thus has authority over the Briançonnais calendar and therefore influences everyday lives. They control time (Munn 1992, 109-110). Although the station does not fully control time construction of the valley, it does exert some power in the embodying process of the inhabitants (ibid., 112). This greatly influences the rhythmic character of Briançon, which is simultaneously torn by the effects of climate change.

In this way, Serre Chevalier does not interplay with ecological processes (Krause 2013, 24), but rather enforces their own will on nature.

Apart from the ski station and businesses, there are other work sectors that live the rhythm of the winter/summer season. In the beginning of my stay, shops were open every day of the week. Later in April, notes appeared on display cases with specific opening hours or even with weeks of absence because of holidays. There were fewer tourists, and the ski season was coming to an end. However, this seasonal calendar does not apply to all of the inhabitants of Briançon. Some have longer or shorter seasons and others do not work with the flow of seasons at all, like social workers, employees of the supermarket and healthcare workers. However, a great part of Briançon is bound to this tourist seasonal life.

Snowy season

The inhabitants of Briançon also categorize seasons in terms of the period with snow, and the period without snow, which I call the snowy and the non-snowy season. In the vignette, both Paul and John were talking about the quality of snow, which was strongly deteriorating at that time of the year. Due to changes in the quality of snow, skiing and snowboarding was not as good anymore. Similarly, the guys on the terrace were discussing the quality of snow as well, for skiing, and for the end of the (snow) season. In the winter season, inhabitants of Briançon thus create activities like skiing and snowboarding in the context of snowy landscapes. These activities are attempts to co-ordinate own movements of activities with monitoring of seasonal weather variations (Harris 1998, 74). The Briançonnais thus undergo mutual adjustment to their environment, which Krause names *resonance* (2013, 40). That is, snow and activities play into each other, which makes up experiences of the snowy season. Hence, the rhythm of the snowy season is not metronomic but integral to people's activity instead (Ibid., 28). Additionally, activities like skiing make the inhabitants appreciate the winter as much as other seasons, as is for example the case in Lapland (ibid., 37). They see the winter as a season full of activities and white landscapes, instead of a period that is cold and dark.

Summer activities without snow differ from winter activities. Skiing and snowboarding are dominant in the winter, while kayaking, climbing and hiking prevail in the summer. Harris notes similar differences on the banks of the river Amazone (1998, 78). There, the wet season is marked by people's isolation, while the dry season opens up social life. In Briançon, this difference in social life is less prominent but still existing. For example, Willy, a pisteur who skied five days a week in the winter season for work, once said to me "I could stop skiing in my life if I had to. But not climbing". Like most of the inhabitants, he preferred a summer

activity over the winter ones. The activities are thus significantly different in between seasons, which is compatible with Poudel's explanation of Himalayan women weaving clothes in the winter period (Poudel 2020, 10). Both are cultural activities bound to a season.

Climate change is influencing the experience of this type of seasonality as well. When I was talking with some chairlift workers up the mountain, they mentioned the quality of snow. The so-called "spring snow", was already present by then, in February. The lift workers explained that this type of snow had already melted, refrozen, remelted, refrozen and so on. It is particular to warmer weather conditions and normally only occurs later in spring, around March and April. Spring snow being now arriving earlier in the year, changes the experience of skiing and other snow-related practices. The rhythm of the season changes, and the inhabitants cannot rely on the previous weather conditions anymore. The seasons as they know it, the summer and winter season, are slowly transforming into one big summer season without snow. The actual weather patterns are thus no longer matching the social activities (Poudel 2020, 14).

Snow is undergoing change on other levels as well. We already saw how differences in snow were perceived on higher altitudes. In addition, the shift in seasons makes the snow level also rise on the mountains in certain periods of the year. In the conversation I had with Stéphane, he advised me about certain beautiful hikes I could make in the area. He pointed to one of the mountains on the other side of the valley, where the snow line came up to more or less 1,800 meters. "There is a fortress," he said, "and when there is no snow anymore you can access it by hiking". There was visibly still snow at the altitude of the fortress, so it was not accessible yet. I had learned during my stay in the mountains, that if I wanted to know whether there was snow or not on a particular path, I just had to look around to see at what height the snow level was. It would go up the more we approached spring. Now, certain snow levels were already attained earlier in the year. This became clear in my interview with Patrick. He showed me the snow level on the mountains around us. "It is now at, let's say, 1,600 meters, in the beginning of March". Normally in March the level should have been lower. This was a sign of the impact climate change had on the level. Similarly, in the Nhāson Valley the crop line is moving up as well, which makes agriculture on higher altitudes possible (Poudel 2020, 7). Whereas the higher crop line has positive economic outcomes in the Himalaya, the snow limit makes it harder for mountain guides to find suitable courses. It becomes difficult to expect the way courses will turn out to be (Bryant and Knight 2019, 51). The guides had to adjust their courses according to the snow level. Victor explained to me that June is a period of transition and adaptation for mountain guides. "Nothing goes well. Skiing is difficult, because there is not enough snow. The same goes for hiking, because at some points of the hike, there actually is snow. Spring to

summer is a difficult period”. The snow line is thus going up earlier throughout the years, making both hiking and skiing difficult to do. Mountain guides are therefore in constant negotiation with social activities and environmental snowy realities (Krause 2013, 40). They are able to function within the snow season as active participators by adjusting to these new snowy realities (Harris 1998, 74). However, this becomes more difficult to do over the years.

The “non-snowy” or summer season also depends on the shift of the snowy season. That is, in the non-snowy season, kayak guides experience differences in the melting of snow, which makes the kayak season begin and end earlier. In a Whatsapp interview with Vincent, he explained how not only the quantity of snow influenced the water level, but also the speed of melting.

“If there is a lot of ice on glaciers that warms fast, there will be a lot of water in April, May and June. In June and July there would be nothing anymore, everything would already have melted. It is good if the spring is not too hot, because it assures snow on higher altitudes. This means we can practice the activity in July and August”.

Since the warmer periods of the year begin earlier, the seasons do not adhere to the calendar of the kayak guides anymore. Glaciers melt earlier and faster, which shifts the kayak season to June and July. Kayak guides have to adapt to this new rhythm and therefore are part of the creation of the environment. Humans are an essential feature of this work in motion, of which seasonality is the periodicity (Harris 1998, 79). Hence, climate change makes it difficult to keep up with this work in motion. One day in April I was walking with Artiom, another kayak guide who also works at the chairlift, near the river. He had been kayaking again after a stop during the winter season and he pointed out the low water level. He told me it would ensure a wet summer, because there was still a lot of snow on the mountain to melt. In contrast with the overall predictions of water levels due to climate change, this year would be “a normal” summer in July and August. There is thus not one clear consequence of climate change and every year is different. This makes it even harder to predict.

Concluding remarks

In this chapter I showed how inhabitants of Briançon construct their time into three different types of seasonality, which are all undergoing a shift due to climate change. First, I demonstrated how the four nominal seasons are shifting to warmer periods, earlier in the year. Additionally, the inhabitants also have to adjust their ways of working. Lastly, all snow related

activities have to be adapted to the shrinking period of possible snow. Temporalizations of the Briançonnais are thus in dialogue with the changing weather patterns forming new habits.

Conclusion

In this thesis, I explored how inhabitants of Briançon experience changing patterns of snow as an embodiment of climate change and how they form imaginations of the future in relation to these experiences. This thesis aimed to answer the following question:

How do local inhabitants of Briançon experience climate change and how do they imagine their future?

To understand the multilayered experiences of my interlocutors concerning climate change, I used snow as a proxy and Ingold's notion of dwelling perspective throughout my thesis. Hence, I first showed the feelings of longing towards a past environment of snow. The inhabitants of Briançon experienced snowstalgic feelings to a time when snow was in abundance. Stories were told about their own memories, which brought them back to such white landscapes. Retreating glaciers and declining snow in the present day enhanced such feelings of loss. Climate change thus made the inhabitants of Briançon long for a different time and scenery. Memories of the past, additionally, created subjunctive feelings of loss because of the feeling glaciers would retreat in the future as well.

Upon this layer of snowstalgic feelings, I demonstrated how inhabitants of Briançon experience climate change in their day-to-day lives. Significant differences of snow on various altitudes raised concerns among the population. On the upper part of the mountain, thousands of skiers a year still made their way on the ski slopes, while the lower part of the mountain ran out of snow. Not only humans, but also animals and vegetation felt these differences and they reacted to it. However, experiences of snow differed among various actors present in Briançon. Whereas the ski station appropriated the mountain as a tourist place, mountain guides were directly impacted by the changes of snow in their working habits. Similarly, expectations of the future of snow varied considerably among the Briançonnais. These consisted of stories of remaining abundance up the mountain, the idea of natural climate cycles and expectations of expanding scarcity in the valley prevailed.

My argumentation continued by showing the tourist dimension of snow. Or blanc, which literally means "white gold", says enough about the economic dependence on snow. Briançon needs tourism in order to exist, while not all the inhabitants appreciate this mass consumption life-style. The declination of snow raised even more questions about this economic reliance on

tourism. Hence, I showed how this friction is a double bind. Actors also anticipated their future in different ways. Serre Chevalier relied on technological fixes to anticipate the future, while guides were flowing with the changing weather patterns. Furthermore, the activist group Les Escartons actively spoke out against mass tourism. They foresaw a different future in which Briançon would not be dependent on tourism any longer. These different ways of anticipating the future shows the complexity of all different interests in Briançon. There is not one uniform population, but rather a mixed group of people living in the same realities.

Lastly, changing patterns of snow also influenced temporalization of the Briançonnais. This is the case because the inhabitants construct time in a seasonal way and they experience snow seasonally. Three types of seasonality prevailed among my interlocutors: the four nominal seasons, the twofold tourist/work seasons and the snowy/non-snowy seasons. Climate change shifts the rhythm of the seasons, which ensures the winter and snowy season ends earlier in the year. Therefore, the Briançonnais have to construct their time differently by adapting their seasonal work and activities on these shifts. Above, I discussed four layers of argumentation which I divided into four chapters. These showed different dimensions of experiences of snow and imaginations of the future. Hence, the answer to my research question is not straightforward, but rather complex with multiple layers.

This thesis contributes to knowledge about local experiences of the effects of climate change in a mountain area and about the preoccupation with the future. Academically speaking, my research is relevant for debates about climate change because it specifically highlights local experiences in a frontier place. These places are most sensitive to climate change effects and therefore need attention. By zooming in on the future imaginations of the population, this thesis also contributes to debates about the future. The combination of these two debates makes my research relevant for the anthropological discipline by focusing on a mountain place.

Since climate change is an urgent matter in this current time, my research has societal relevance as well. Not only Briançon, but many mountain towns and villages have to deal with the effects of climate change. They are dependent on tourism like Briançon, or on agriculture (Poudel 2020). As these places are more prone to the effects of climate change, the future is uncertain. Hence, my research is about the perception of local population to understand their desires and needs. By taking their perception into account, further steps can be taken.

To conclude, I would like to say that research in frontier places is necessary to understand local effects of climate change. My findings are place-specific to Briançon, situated on a particular height and with particular people. As a future recommendation I thus suggest to conduct research in different frontier places, which will broaden the understanding of local

experiences. Additionally, I think it would be interesting to apply a multi-species approach in such places. My research covered only little of the natural, even though I think it would be relevant to research all sort of lives in and around snow. With such an approach we could develop a better understanding of the more-than-human needs in climate sensitive areas.

Bibliography

- Albrecht, Glenn, Gina-Maree Sartore, Linda Connor, Nick Higginbotham, Sonia Freeman, Brian Kelly, Helen Stain, Anne Tonna and Georgia Pollard. 2007. "Solastalgia: The Distresses Caused By Climate Change." *Sage Journals* 15(1): 95-98.
- Angé, Olivia and David Berliner. 2015. "Introduction" In *Anthropology and Nostalgia*, edited by Olivia Angé and David Berliner, 1-17. New York; Oxford: Berghahn Books.
- Angé, Olivia and David Berliner. 2021. "Introduction" In *Ecological Nostalgias: Memory, Affect and Creativity in Times of Ecological Upheavals*, edited by Olivia Angé and David Berliner, 1-16. New York: Berghahn Books.
- Bakalaki, Alexandra. 2016. "Chemtrails, Crisis, and Loss in an Interconnected World." *Visual Anthropology Review* 32(1): 12-23.
- Bernard, H. Russell. 2011. "Participant Observation". In *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, 256-290. Walnut Creek: Altamira Press.
- Blühdorn, Ingolfur. 2009. Locked Into the Politics of Unsustainability. *Eurozine*, October 30.
- Brooks, Emily. 2017. "Number Narratives: Abundance, Scarcity, and Sustainability in a California Water World." *Science as Culture* 26(1): 32-55.
- Bryant, Rebecca, and Daniel M. Knight. 2019. *The Anthropology of the Future. New Departures in Anthropology*. Cambridge: Cambridge University Press.
- Chakrabarty, Dipesh. 2021. "Sustainability and Habitability: Distinguishing the Global from the Planetary." In: *The Climate of History in a Planetary Age*, 81-85. Chicago: The University of Chicago Press
- Chambru, Mikaël and Jean-Philippe de Oliveira. 2021. "Action-research in the Context of Climate Risk in the Mountains: Investigations and Commitments Around a Public Domain." *Questions de Communication* 40(2): 283-302.
- Crate, Susan A. 2011. "Climate and Culture: Anthropology in the Era of Contemporary Climate Change." *Annual Review of Anthropology* 40: 175-194.
- DeWalt, Kathleen M. & Billie R. DeWalt. 2011. *Participant observation: a guide for fieldworkers*. Walnut Creek: Atlantic.
- Eriksen, Thomas Hylland. 2022. 'The Sustainability of an Anthropology of the Anthropocene.' *Sustainability* 14(6): 1-11.
- Gerretsen 2023. "From the Swiss Alpes to the Rocky Mountains, Ski Resorts Are Grappling With the Impacts of Climate Change. How Are They Adapting in A Warming World?"

- BBC, January 25, 2023. <https://www.bbc.com/future/article/20230124-how-climate-change-threatens-to-close-ski-resorts>
- Harris, Mark. 1998. "The Rhythm of Life on the Amazone Floodplain: Seasonality and Sociality in a Riverine Village." *The Journal of the Royal Anthropological Insitute* 4(1): 65-82.
- Hastrup, Kirsten. 2012. "Anticipating Nature: The Productive Uncertainty of Climate Models" In *The Social Life of Climate Models: Anticipating Nature*, edited by Kirsten Hastrup and Martin Skrydstrup, 1-29. Hoboken: Taylor and Francis Group.
- Hastrup, Kirsten. 2023. "The End of Nature? Inughuit Life on the Edge of Time." *Ethnos* 88 (1): 13–29.
- Hammersley, Martyn and Paul Atkinson. 2007. "Oral accounts and the role of interviewing", In *Ethnography: Principles in Practice*, 102-125. London & New York: Routledge (Fourth Edition).
- Hammersley, Martyn and Paul Atkinson. 2019. 'What is Ethnography?' and 'Oral accounts and the role of interviewing.' In *Ethnography: Principles in Practice*, 1-21 and 102-125. London & New York: Routledge (Fourth Edition).
- Harvey, Penny and Hannah Knox. 2012. "The Enchantments of Infrastructure." *Mobilities* 7(4): 521-536
- Hecht, Gabrielle. 2018. "Interscalar Vehicles for an African Anthropocene: On Waste, Temporality, and Violence." *Cultural Anthropology* 33(1): 109–41
- Howe, Cymene. 2021. "Chapter 8: Melt in the Future Subjective" In *Ecological Nostalgias: Memory, Affect and Creativity in Times of Ecological Upheavals*, edited by Olivia Angé and David Berliner, 1-16. New York: Berghahn Books.
- Ingold, Tim. 2011. *Being Alive: Essays on Movement, Knowledge and Discription*. London and New York: Routledge.
- Ingold, Tim. 2022. "General Introduction" from *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*, 1-9. London and New York: Routledge.
- Irvine, Richard D. G., Barbara Bodenhorn, Elsa Lee and D. Amarbayasgalan. 2019. "Learning to See Climate Change: Children's Perceptions of Environmental Transformation in Mongolia, Mexico, Arctic Alaska, and the United Kingdom." *Current Anthroponlogy* 60(6): 723-740.
- Irving, Andrew. 2017. "New York Stories." *Ethnos* 82 (3): 437-457.
- Krause, Franz. 2013. "Seasons as Rhythms on the Kemi River in Finnish Lapland." *Journal of Anthropology* 78(1): 23-46.

- Le Dauphiné: Libéré. 2012. “Briançon, La Plus Haute Ville d’Europe?”. Ledaupine.com, June 09, 2012. <https://www.ledauphine.com/hautes-alpes/2012/06/08/briancon-la-plus-haute-ville-d-europe>
- Malinowski, Bronislaw. 1922. *Argonauts of the Western Pacific: an account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. London: G. Routledge & Sons; New York: E.P. Dutton & Co.
- Muehlebach, Andrea. 2018. “Commonwealth: On democracy and dispossession in Italy.” *History and Anthropology* 29(3):342-358.
- Munn, Nancy D. 1992. “The Cultural Anthropology of Time: A Critical Essay.” *Annual Review Anthropology* 21: 93-123.
- O’Reilly, Jessica, Cindy Isenhour, Pamela McElwee and Ben Orlove. 2020. “Climate Change: Expanding Anthropological Possibilities.” *Annual Review of Anthropology* 49: 13-29.
- O’Reilly, Karen. 2012. *Ethnographic Methods*. New York: Routledge (Second Edition).
- Orlove, Benjamin. 2003. “How People Name Seasons.” In *Weather, Climate, Culture*, edited by Sarah Strauss and Benjamin S. Orlove, 121-140. London: Routledge.
- Poudel, Jiban Mani. 2020. “The Rhythms of Life in the Himalaya: Seasonality and Sociality Among the Gurung People of the Nhāson Valley.” *International Journal of Anthropology and Ethnology* 4(10): 1-18.
- Serre Chevalier. “The Ski Area”. Accessed June 25, 2024. <https://www.serre-chevalier.com/en/ski-area/ski-area>
- Serre Chevalier. “Transition Énergétique et Écologique.” Accessed June 25, 2024. <https://www.serre-chevalier.com/fr/domaine-skiable/transition-energetique-ecologique>
- Serre Chevalier. “Site Statistics.” Accessed June 25, 2024. <https://www.serrechevalier.com/statistics.aspx>
- Sokolíčková, Zdenka. 2022. “Introduction” and “Chapter 7: The Trouble with the Local Community,” from *The paradox of Svalbard : climate change and globalisation in the Arctic*, 22-37 and 116-136. London ; Las Vegas: Pluto Press.
- Stensrud, Astrid B. and Thomas H. Eriksen. 2019. “Introduction: Anthropological Perspectives on Global Economic and Environmental Crises in an Overheated World.” In *Climate, Capitalism and Communities: An Anthropology of Environmental Overheating*, edited by Astrid B. Stensrud & Thomas H. Erikson, 1–21. London: Pluto Press.
- Van Dooren, Thom. 2019. “Unwelcome Crows: Hospitality in the Anthropocene. Rotterdam, *The Netherlands*.” In *The Wake of Crows: Living and Dying in Shared Worlds*, 103–29.

Critical Perspectives on Animals: Theory, Culture, Science, and Law. New York:
Columbia University Press