

Arctic sense of artificial snow: From a traditional Lappish ski resort to an international crossover Alp resort

Introduction

In Europe's Nordic areas winter is expected every year with impatience. Snow and cold weather change job descriptions or bring extra work for many: snow workers, snowplow drivers, electricians, and physical education instructors and teachers, just to mention a few. Some sport-related markets and professions indeed depend on snow. Ski resorts provide an example of both. Ski resorts hire workers of many kinds, from slope and lift workers to ski instructors and waiters. Every season the same speculations and calculations arise: When will the first snow fall, and when will the winter period start? What type of workers, and how many of them should be contracted? At what time of the year do customers require services? Snow plays a major part in all these concerns, and increasingly a successful winter season is guaranteed with artificial snow. Furthermore, all these speculations and calculations are related to the economic circumstances under which snow – both natural and artificial – is turned into a profitable product for different customer groups to develop jobs, which might otherwise be scarce, in the peripheries of Europe.

In the present study, I examine what is the role and the value of artificial snow in today's Arctic ski resorts. As we talk about snow in a ski resort, the connection between snow and sports is obvious. However, to market the ski resort's facilities to sports enthusiasts and casual tourists snow has to become something else than just the white cold material in a fractal form. Snow ought to be associated, for example, with desired performances or pleasurable amusements in order to be attractive for consumers. In this context, language is a social practice and process which is under a constant negotiation as well as taken for granted¹. Thus, the concept *discourse* is used in this study. Language is similarly a resource² which is utilized in the discursive work to describe snow as an opportunity for sports related action instead of treating it as a plain element of nature. Consequently, I approach artificial snow from a discursive point of view by asking: What are the main sports-related discourses framing the artificial snow production and grooming? What kind of an impact do these discourses have to the ski resort area? Methodologically and theoretically, the present study is

¹ Fairclough, Norman, *Language and power*, 2nd ed. Pearson education, London 2001, 18–19.

² e.g. Pietikäinen, Sari and Anne Mäntynen, *Kurssi kohti diskurssia*, Vastapaino, Tampere 2009, 16.

built upon discourse studies and critical ethnography³⁴. I will argue in the paper that the artificial snow production and the discourses framing it in an Arctic ski resort have facilitated the change from a traditional Lappish winter ski resort to an international crossover Alp resort with a long season. During this change, the original meanings of Alp and alpine are replaced with local meanings to serve the distinct development of the Lappish ski resort area. Similarly, this development, in which artificial snow has turned into a profitable product for customers, has influenced the structures of the ski resort municipality.

In this article, I focus on a big, booming ski resort, namely Levi in Kittilä, Lapland. Levi offers an interesting example of an Arctic ski resort, which has capitalized its snow well. This area is also one of the hotspots in The Finnish Academy funded research project called *Cold Rush*⁵, which examines the dynamics of identity and language under changing economic conditions and cultural transformations in the Arctic North. The Finnish periphery with its challenges and possibilities in tourism, industry and winter elite sports are intertwined in Levi, which provides an interesting space for studying creative strategizing also related to snow and its production. During its 53-year-old history, Levi has developed from a ski resort of one lift to a ski resort of 28 lifts and 43 slopes, which serves almost 400 000 customers per season⁶.

The rationale for studying discourses framing artificial snow production and grooming in Lapland builds upon the ideas of location and investments: Despite of its location above the Arctic Circle and the so called *real winter*, the ski resort of Levi has nonetheless made enormous investments to their capacity to produce and groom artificial snow. The economic investments to snow at the area are significant⁷, which increases the need for speculation and calculation as well as the size of the risks. And yet, every year and every event cannot be a remarkable success, and some actors have better changes in utilizing the Arctic and local resources than others. The increases in tourism⁸ allow us to assume that Lapland is living its economic boom, which is why the dialogue between the periphery areas and economy, and

³ Pietikäinen, Sari, "Critical debates: Discourse, boundaries and social change". *Sociolinguistics. Theoretical Debates*. Edited by Nikolas Coupland. Cambridge University Press, Cambridge 2016.

⁴ Heller, Monica, Pietikäinen Sari and Pujolar, Joan, *Critical sociolinguistic research methods: Studying language issues that matter*. Routledge, forthcoming.

⁵ Cf. <https://www.jyu.fi/hytk/fi/laitokset/kivi/tutkimus/hankkeet/cold-rush>.

⁶ Kauppalehti, 25.2.2016, *Levistä kasvoi laskettelutehdas*. Retrieved 5.6.2017 from <https://www.kauppalehti.fi/uutiset/levista-kasvoi-laskettelutehdas/TTAvG5yt>.

⁷ Kauppalehti, 25.2.2016.

⁸ Yle.fi, 19.5.2016, Hurja kasvuluku Lapin matkailusta: lähes 15 prosentin nousu. Retrieved 5.6.2017 from <http://yle.fi/uutiset/3-8892309>.

also the question in how to make profit out of nature, such as snow, is interesting. There is a lack of studies examining the discourses framing manufacture and composition of artificial snow, although the economies of current era increasingly depend on the commodification of words and images⁹.

I will first introduce the context of the study and continue to the theoretical and methodological frameworks. Then I will proceed to the sport-related discourses in regard to artificial snow as well as to the consequences of these discourses, before considering the contribution of the study in a wider context.

Context of the study

Preliminary experiments in producing artificial snow were examined already by scholars before the 1940's¹⁰ in studies examining the impact of climate change, artificial snow is considered a human adaption strategy¹¹. Indeed, studies showcase that artificial snow is considered to guarantee proper skiing conditions despite the variability and changes of climate on snow conditions¹². Moreover, from previous studies we know that poor or proper snow conditions may effect on the choices made by leisure tourists¹³. However, artificial snowing and grooming have also ecological consequences¹⁴, which may cause environmental concerns on ski resort areas. The present study examines artificial snow production from the discursive point of view, and especially, how sport-related artificial snow production is rationalized.

⁹ Kelly-Holmes, Helen, "Theorising the market in sociolinguistics". *Sociolinguistics, Theoretical debates*. Edited by Nick Coupland. Cambridge University Press, Cambridge, 2016, 152–172.

¹⁰ Nakaya, Satô and Sekido Nakaya, "Preliminary Experiments on the artificial Production of Snow Crystals.". *Journal of the Faculty of Science, Hokkaido Imperial University*, 2:1, 1938, 1–11.

¹¹ Koenig, Urs and Bruno Abegg, "Impacts of Climate Change on Winter Tourism in the Swiss Alps.". *Journal of Sustainable Tourism*, Volume 5:1, 1997, 46–58. Elsasser, Hans and Paul Messerli, "The Vulnerability of the Snow Industry in the Swiss Alps.". *Mountain Research and Development*, 21:4, 2001, 335–339. Eriksen, Siri, Paulina Aldunce, Chandhar Sekhar Bahinipati, Rafael D'Almeida Martins, John Isaac Molefe, Charles Nhemachena, Karen O'Brien, Felix Olorunfemi, Jacob Park, Linda Sygna and Kirsten Ulsrud. "When not every response to climate change is a good one: Identifying principles for sustainable adaptation.". *Climate and Development*, 3:1, 2011, 7–20.

¹² Hopkins, Debbie, "The sustainability of climate change adaptation strategies in New Zealand's ski industry: a range of stakeholder perceptions.". *Journal of Sustainable Tourism*, 22:1, 2014, 107–126. Spandre, François, Morin Thibert and George-Marcelpoil. "Seasonal evolution of a ski slope under natural and artificial snow: detailed observations and modelling.". *The Cryosphere*, 2016.

¹³ Koenig and Abegg 1997. Unbehaun, Pröbstl and Haider Unbehaun, "Trends in winter sport tourism: challenges for the future.". *Tourism Review*, 63:1, 2008, 36–47.

¹⁴ Rixen, Christian, Stoeckli, Veronica and Ammann, Walter. "Does artificial snow production affect soil and vegetation of ski pistes.". *Perspectives in Plant Ecology, Evolution and Systematics*. 5:4, 2003, 219–230. Rixen, Christian, Stoeckli, Veronica and Walter Ammann, "Ground Temperatures under Ski Pistes with Artificial and Natural Snow Arctic.". *Arctic, Antarctic, and Alpine Research*, 36:4, 2004, 419–427.

The sports-related discourses concerning artificial snow are examined in the present study in an arctic ski resort namely Levi, in Kittilä municipality in the Finnish Lapland. The area of Levi ski resort consists of the fjelds of Levi, Kätkä and Pyhä, village of Sirkka, and lake Immeljärvi between the fjelds. This area has significance also in indigenous Sami culture¹⁵. In 2016, there were about 6350 inhabitants living in altogether 30 village areas of Kittilä municipality¹⁶. About 900 of these inhabitants lived in the village Sirkka¹⁷. During the past 35 years, the population has remained rather steady¹⁸. Current research on the number of seasonal workers in Lapland does not exist, but according to media, the number has increased at least in recent years¹⁹. Despite of Levi's location as one of the extremely peripheral areas of Europe, it attracts more and more tourists each year, for whom it offers an interesting mixture of untamed nature and tourist services, such as visits to reindeer herding farms, possibilities to view northern lights, as well as ski resort services, spas and bowling. Within 40 years, the capacity of beds in Levi area has increased from less than thousand to almost 30 000²⁰. Hautajärvi²¹ describes Levi's current center as a place in which one can see and be seen; as a village which is sanctified for winter sports and leisure.

The first fjeld skiers arrived in the 1930's and the inhabitants of Sirkka village offered accommodation for the tourists. Even at that time tourism brought relatively good income for the inhabitants of the area. According to Harri Hautajärvi's²² doctoral dissertation, the services were created rather fast out of nowhere and even some courses were arranged in order to learn how tourists should be treated.

The municipality of Kittilä built the first ski lift in 1964²³, 30 years after the first established ski slope in Finland²⁴. The facilities and activities were rather small until *Hotelli Levitunturi* (hotel) was built in 1981 by *Levin Matkailukeskus Oy*. Log cabins built of pine became

¹⁵ Paulaharju, Samuli, "Seitoja ja seidan palvontaa". *Suomi: Kirjoituksia isänmaallisista aiheista*, 5:15, 1–54.

¹⁶ Tilastokeskus, *Ennakkoväkiluku sukupuolen mukaan alueittain 2016*. Retrieved 30.5.2017 from: http://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/StatFin__vrm__vamu/005_vamu_tau_101.px/table/tableViewLayout1/?rxid=82ce39f0-3202-4b33-bfed-3ece4.

¹⁷ Kittilä, *Sirkka*. Retrieved 5.6.2017 from: <http://www.kittila.fi/sirkka>.

¹⁸ Kittilä, *Väestö*. Retrieved 5.6.2017 from: <http://www.kittila.fi/vaesto>.

¹⁹ Helsingin Sanomat, 19.4.2015. Retrieved 4.6.2017 from: <http://www.hs.fi/ura/art-2000002817231.html>; 14.12.2015, <http://yle.fi/uutiset/3-8522677>.

²⁰ Hautajärvi, Harri, *Autiotuvista lomakaupunkeihin. Lapin matkailun arkkitehtuurihistoria*. Aaltoyliopiston julkaisusarja Doctoral Dissertations 31, 2014, 280 and 298.

²¹ Hautajärvi 2014, 298–299.

²² Hautajärvi 2014.

²³ Levi, *Historiikki*. Retrieved 4.6.2017 from: <http://www.levi.fi/fi/levi/levi-ski-resort/historiikki.html>.

²⁴ Kanerva, Jari, *Alppihiihdon alkutaival: Pujottelu- ja tunturihiihto Suomessa 1920-luvulta 1960-luvulle*. University of Helsinki, Faculty of Arts, Department of Philosophy, History, Culture and Art Studies, Doctoral dissertation, 2010.

fashionable among builders of Lappish vacation homes from 1970's onwards, although this construction style is originally neither luxurious nor Lappish²⁵. In 1983, Finnair started their flights to Kittilä once a week during the high seasons. This development served especially the new middle class which is a concept used by sociologists²⁶ to describe people who distinguished themselves from the working class with cultural choices due to the urbanization of Finland in 1960's and 1970's. For this new social class, downhill skiing was part of the lifestyle which unified educated people and dissociated them from the working class²⁷.

Artificial snow, also called machine-made snow, is produced with a device especially designed for snow production. At that time when Levi was established, only Kalpalinna ski resort in Finnish South had a capacity to produce artificial snow²⁸. Today Levi holds more than 30 kilometers of pipelines inside the Levi fjeld and over 260 snow cannons at the slopes just to guarantee the snow for skiing seasons²⁹. Moreover, the grooming capacity includes 7 groomers for slopes, of which two are for snowboarding and freestyle skiing terrain parks. Furthermore, specialized staff and knowledge of the local surroundings are needed for these capacities to be utilized. With this capacity, they are able to maintain 43 slopes and 28 ski lifts each year although they estimate its natural snow sheet to be less than 1 meters during the winter season³⁰.

The first alpine skiing competition in Finland took place in 1934 in Kuopio, and it was already an international event³¹. The first international alpine skiing competition in Levi was held in 2001, which started the tradition of international events in Kittilä. According to Levi ski resort's webpage³², due to the internationalization of the resort, the name of the company was also changed from a Finnish name to an English one. Later in this paper I will argue that the event and discourses related to artificial snow, which have allowed the event to take place, have changed the image of the ski resort village towards more international one as well as the structure of the municipality.

I will use concepts elite and recreational sports later on in this paper. By elite sports and its athletes I mean in the present context the world's top athletes as well as the up and coming

²⁵ Hautajärvi 2014, 281–282.

²⁶ Jokinen, Kimmo and Kimmo Saaristo, *Suomalainen yhteiskunta*. Sanoma Pro Oy, Helsinki, 2010, 170–171.

²⁷ Jokinen and Saaristo 2010.

²⁸ Kanerva 2010, 162.

²⁹ Kauppalehti, 25.2.2016.

³⁰ Levi, *Reitit ja rinteet*. Retrieved 5.6.2017 from: <http://www.levi.fi/fi/viihdy-levilla/laskettelu-lautailu/rinteet-reitit.html>.

³¹ Kanerva 2010, 176–177.

³² Levi, *Historiikki*.

junior athletes who aim at the top level and, thus, invest great amount of resources into sports. The annual Alpine World Cup event (from year 2004) and the Finnish Snowboarding championships in 2017 stand as witnesses to the motivation of the Levi resort to serve elite sports related customers. For example, elite snowboarding requires half pipes and big jumps which are all produced with artificial snow due to the amount of snow needed. By recreational sports I refer to sports training and practitioners for whom winter sports are leisure activities for which the ski resort offers facilities. Yet, presumably among other tourists also the number of recreational sports practitioners has increased during last years in Levi³³, which again motivates the ski resort also to invest into these customer groups. Because of these interdependencies and due to the importance of snow, Levi also needs to know how to manage the meanings and meaning making processes related to both artificial and natural forms of snow.

Theoretical framework and methods

Critical discourse studies in the present study refers to the Foucauldian point of view, as a way to examine the logic behind particular world order³⁴: How do people make sense of the production of snow in Levi ski resort area, and, how does this sense of snow have an effect on what's happening at the ski resort area. Discourses contribute to the ways in which social reality is maintained, challenged and changed, and social reality impacts on what kind of discourses are available, preferred or marginalized in a given situation³⁵. Discourses construct and reconstruct social practices, which become materialized in our everyday communication and routines as well as in what Norman Fairclough³⁶ calls “non-discoursal” elements, that is, for example buildings and other material spaces.

It is acknowledged in critical discourse studies that all participants do not have similar opportunities to do discursive work or utilize resources, which is why discourses are embedded in a complex network of power relations and negotiations³⁷. Thus, critical ethnography, which in the present study means explorations of social, linguistic and

³³ Kauppalehti, 25.2.2016.

³⁴ Foucault, Michel, *Sanat ja asiat: Eräs ihmistieteiden arkeologia*. Helsinki: Gaudeamus, 2010, 315–327.

³⁵ Pietikäinen, Sari, ”Kriittinen diskurssintutkimus.”. *Kieli, diskurssi ja yhteisö*. Edited by Kari Sajavaara and Arja Piirainen-Marsh. Soveltavan kielentutkimuksen keskus, Jyväskylä, 2000, 192–193.

³⁶ Fairclough, Norman, “Critical discourse analysis in researching language in the new capitalism: Overdetermination, transdisciplinarity and textual analysis.”. *Systemic functional linguistics and critical discourse analysis*. Edited by Lynge Jung and Claire Harrison. Studies in social change. London: Continuum, 103–122.

³⁷ Pietikäinen 2016, 264.

economic processes and their meanings to people³⁸, was also needed to examine the discourses framing the artificial snow production and their impacts to an Arctic ski resort area. In practice, this meant the observation of and conversations with people about their experiences in snow production and grooming. I focused especially on people's accounts on how resources have been and should be used and what are the consequences of the production and grooming for the informants and the area.

Building the present study upon critical discourse studies and ethnography is justified because the research questions are related to the process in which artificial snow is turned into a profitable product through discourses. Snow becomes a cultural commodity which is also produced and consumed with discourses, words and images³⁹. Due to discourses and the so called *discursive work* in which value is added to this raw material, snow attains a value as a sport-related opportunity. It becomes something which enables practices and allows for images to be constructed. Thus, the present study also contributes to the field of marketing by examining the processes behind verbal aspects of branding⁴⁰.

The ethnographical data was gathered during a two-week intensive fieldwork period in January 2017 in Levi Ski resort area. I organized interviews (of which one was together with Professor Alexandre Duchêne), conducted informal interviews, arranged opportunities to observe artificial-snow-related work, and observed the ways in which artificial snow appears in the area. The interview data includes four from 30 minutes to an hour interviews with key actors or stakeholders related to artificial snow at the area. This means that all the informants had a central role in either the artificial snow production or usage, or, they had a good opinion (for example, due to their work) about artificial snow's impact for the area. During or after each observation event I wrote fieldnotes leading to altogether 34 transcribed fieldnote pages, of which every transcription was written within 24 hours of the observation taking place. This is how the freshness of the insights was ensured. I considered these interviews and observations as nexuses in which the discursive choices meet the social and historic contexts⁴¹.

Deriving from the collaborative ethnography design of our Cold Rush –project, the transcribed fieldnotes were also read and commented within our research group (Professors

³⁸ see also Heller, Monica, Pietikäinen, Sari and Pujolar Joan (forthcoming).

³⁹ Kelly-Holmes 2016, 165.

⁴⁰ Simmons, John, "The power of words and stories." *The definitive book of branding*, edited by Kartik Kompella, Sage, Los Angeles, 45–60.

⁴¹ Pietikäinen and Mäntynen 2009, 38–39.

Sari Pietikäinen and Alexandre Duchêne, and Postdoctoral scholar Leonardo Valenzuela Perez), including experts in Finnish Arctic economies, multi-sited ethnography and critical discourse studies. During the fieldwork period, we also held several group meetings in which we considered the findings so far, and in light of that, the next steps of fieldwork. Moreover, taking pictures and video clips as well as interpreting them together was an important part of the project's ethnographic work. In other words, the ethnographical multi-bodied fieldwork experiences and daily conversations and data sessions guided our decisions and interpretations on the field.

At first, my pictures were loosely related to artificial snow production and grooming, which means that I took dozens of pictures of snow groomers and cannons, buildings used for storing and maintaining them, and slopes and terrain parks. However, as the fieldwork proceeded and the first findings became clearer, I started capturing moments, places and occurrences in which artificial snow acquired some added value or had affected the structures of the area or caused investments. This turn was after noticing the connections with artificial snow and the alpine brand of the ski resort village. In the end, I had taken 181 pictures or clips related to artificial snow, for example on the gear and facilities for the snow production and grooming, on groomers' work as well as on the village around the ski resort. The interviews, fieldnote transcriptions, and visual material form the corpus of the data, which was analyzed with thematic analysis after the fieldwork period. Although the analysis process followed a hermeneutic process, as is natural for discourse studies⁴², I guided the process from the analysis of discursive choices towards the social contexts of these discourses.

Findings: artificial snow for elite and recreational sports

I found two sport-related main discourses framing artificial snow in the Levi ski resort area: *artificial snow for elite sports* and *artificial snow for recreational sports*, both of which circulate especially around people's accounts on how artificial snow facilitates and is consequential for elite and recreational sports in Levi area. Although these discourses are separate, as they may challenge each other, they are also intertwined, and by doing so together create the rationale for sport-related artificial snow production. That is, although the overall logic behind sport-related artificial snow production circulates around the creation and maintenance of a surface for skiing and snowboarding, different consumer groups prefer distinct facilities, which again may need investments and cause clashes on the discursive

⁴² Pietikäinen and Mäntynen 2009, 168.

level. I will first present briefly the sport-related discourses with respect to artificial snow and then introduce the findings related to the consequences of these discourses.

Artificial snow for elite sports: the brand of the ski resort

The discourse framing the production of artificial snow for elite sports constructs a social world in which artificial snow needs to be produced, so that elite athletes and junior athletes can train and compete at the Levi ski resort. Moreover, the snow is needed so that Levi may be regarded as a World Cup skiing resort or a good snowboarding resort, and for lengthening the season. Due to the artificial snow production, the skiing resort may be called an elite sports center or a paradise of a snowboarder.

The alpine skiing slopes as well as the terrain park for snowboarders and freestyle skiers (who perform similar maneuvers and prefer similar facilities as snowboarders) require artificial snow. However, the discourse of artificial snow for elite sports was mostly related to alpine skiing and especially the annual World Cup event, as occurred in next excerpt from an interviewee representing the ski resort (16.1.2017): “Due to alpine skiing, snow production is started right away when the cold weather arrives.” Adjusting the facilities for elite sports is the given reason for the snow production. Although the snow manufacturing requires money, equipment, and labor force, the same representative does not pay much attention to my inquiry on the utility and cost of the snow production and preservation:

“Researcher: I heard a rumor that you are starting to preserve snow?”

Informant: Yes, we should start at the turn of the month producing snow for the [world cup] competition slope something like, to preserve something like 40 000 cubic meters of snow, and that of which there would be next fall left about, between 20 000 and 30 000 cubic meters.

Researcher: And, apparently, there is an evaluation that it’s a big advantage, because producing snow is expensive, or is it?

Informant: Well, it is expensive, but we ensure that if there was a hard fall so we at least would get the base layer.”

(Personal interview, 16.1.2017.)

Securing the competition appears to be a good argument for the usage of the resources. Also the next example verifies this interpretation. The snow production – which may start even one year before the actual need – is rationalized by an idea of ensuring the alpine World Cup,

which brings customers and income to the area almost three months earlier than the opening of the slopes with natural snow:

“Informant: Then the competition begins, and here it starts with the World Cup, and then if there is snow, they’ll be held, and every fourth year they’ve been cancelled. But now they’ve started producing snow, I think they’ll start this week [. . .] So that they can preserve it.

Researcher: And with that they can ensure the competition?

Informant: Yeah, yeah! And it’s very important, as when they have the FIS contest they want to utilize the slope as it is in good shape, so the alpine schools can train [. . .] Now that there is not enough snow in Middle Europe, they come here to train, and we had, for example we had the US team here for one month, so it has such a huge impact so that there are several teams spending a month here [. . .] The slopes with natural snow are opening on week 7 [February].

Researcher: So, it’s not such a big deal, the first cross country track with snow?

Informant: No. But it does bring people here as well.

Researcher: So, tell me about those years when [The World Cup] it doesn’t happen.

Informant: Then it’s dark here. It’s very dark here!”

(Personal interview, 16.1.2017.)

If the World Cup is cancelled, it appears as a loss compared to darkness. The event and opening of the ski resort makes the village alive at the darkest time of the year, that is, in November. In this discourse, artificial snow is turned into something which is not consuming resources but instead produces them for the area. Artificial snow becomes an opportunity and whereas lack of it is a risk or an expense.

Despite the significance given to the alpine World Cup event, elite snowboarding also appeared as a reason to produce and groom artificial snow. This same willingness to invest in elite snowboarders by producing and grooming snow was written by me also into the fieldnotes when I observed a groomer’s nightshift:

“Heikki [not a real name] said there was supposed to be a park session with professional snowboarders Eero Ettala and Toni Kerkelä before the new terrain park was opened for public. He said it would have been so cool to get some media material on social media and people would find out that way that there is a new park in Levi. Eventually, the weather had been bad and they couldn’t organize the private session. He said it would have been nice to see Eero updating something on social media and there is right away several thousand

followers.[. . .] I asked how things have changed during these years that he has been working here. He said that around 2006 when he started driving the park they had only one groomer for that purpose and only one shaper tool. Once he had dropped the shaper somewhere while driving and he went to ask a new one, but the attitude was that maybe they can survive without one as well. Now they had two groomers, three drivers and several tools for just this purpose. [. . .] He said that bit by bit the ski resort has understood how important part of this concept a good park is. And now there is going to be also the Finnish Championships at Levi.”

(Fieldnotes, 17.1.2017.)

As for alpine skiing, snow production and grooming for terrain park is experienced as an opportunity rather than an expense or a risk, as the previous data extract showcases. This discourse enables Levi to be a paradise of a snowboarder, as it ensures facilities for elite snowboarders’ competitions and their media material production. Instead of being a raw material which requires resources and mundane work, snow becomes a cultural commodity which has value as an enabler. This value, which may be called brand in other academic fields⁴³, may be distributed via the media material produced by the elite snowboarders, as the previous data extract showcased. This is how the produced and groomed snow gets its added value⁴⁴ and it becomes experienced as a profitable product which attracts elite athletes, their teams and tourism related to elite sports into the area.

Artificial snow for recreational sports: a snow for the masses

The artificial snow production and the increase in tourism have evolved hand in hand. Hence, it is sensible that in the recreational sports discourse the production of artificial snow is rationalized in a way which emphasizes the needed ski resort facilities for tourists, longer season, and durability of the artificial snow for the masses. An informant who has worked for the ski resort for over 30 years recalls the development:

“Well, it was in early 80’s very seasonal one didn’t know anything about these seasonal peaks at that time, and we didn’t necessarily even have these possibilities, in year -84 we did the first artificial snowing for this front slope and this was some kind of a start for the growth and rise of the early season utilization. [. . .] In -84 the first underground line was built for this slope and 3 snow cannons arrived there, as far as I can remember, and the sizing, I

⁴³ Cf. e.g. Simmons, 2014.

⁴⁴ Kelly-Holmes 2016, 165.

remember how people talked about it, the [water] pumping capacity and the amount of cannons of the time, people talked that it was then already the biggest snowmaking system in Finland [. . .] In mid 90's it was already so, it was already low-performance and small and the increase has developed that way. “

(Personal interview, 16.1.2017.)

As the previous extract showcases, the development of Levi from a fjelt with one ski lift and slope to a resort with dozens of lifts and slopes with several seasonal peaks was possible only with a discourse which rationalized artificial snow producing as a worthwhile investment also in Arctic surroundings. When I asked the same ski resort representative if there also should be natural snow mixed with the artificial snow, he replied: “Well I don't know, this natural snow in these days doesn't, if we depend on that, we cannot rely on that and it doesn't last this amount of people on its own.” Thus, although the ski resorts above the Arctic Circle surely get natural snow at some point of the season, this snow does not guarantee the skiing and snowboarding facilities for the masses. The same person also confirms that big ski resorts ought to serve different customer segments, and thus, produce and groom snow also for several types of facilities. I asked him if they hope to also attract snowboarders and new school skiers to the slopes. He replied: “It's a growing segment and I would say that today it would be hard to not have special performance facilities in a resort as big as ours.” Also, the representative of the ski school (12.1.2017) confirmed this view in a personal interview by explaining that they use almost all facilities available with the pupils although they offer lessons only for beginners and intermediate practitioners.

Not every tourist in Levi uses the ski resort facilities, but often it's one important part of the package during the winter time, as I wrote down to my fieldnotes after a conversation with a hotel receptionist:

“I asked if there are athletes staying there often. She said every hotel is fully booked by the athletes and teams during the Alpine Skiing World Cup in November, but besides that there are only some random groups sometimes. I asked if the international tourists go to the slopes while they are here. She said they do go there as well, but it's not necessarily their main event of this trip. The Finnish tourist do come for the skiing and snowboarding especially, but the other tourists also want the experience of the wild nature . . . I wondered why would people from the alp areas come here. She answered that this was something she had wondered for years as well when she started her job, but after hearing the explanation that climate is

different and Lapland has the wild nature with northern lights so many times, she quit wondering. “

(Fieldnotes, 10.1.2017.)

This example shows well how Levi is a mixture of real winter and artificial winter as a product. The artificial snow is perhaps not valued by the customers by itself, but produces a valued performance together with real snow and wild nature.

Despite the fact that the artificial snow for recreational sports serves recreational customers and elite athletes, there is also a clash between the needs of these customer segments, as the next example showcases:

“Informant: I’ve heard several complains among the customers on how Levi ski resort is not opening the normal slopes early enough but instead are concentrating first on the alpine slopes and then the terrain parks.

Researcher: You mean, so that in principle the needs of the tourist and the elite athlete don’t meet?

Informant: Yes! So which one is suffering? Now it’s the normal tourist!”

(Personal interview, 17.1.2017.)

In other words, although elite sports and recreational sports utilize the same artificial snow, they don’t often use the same facilities with equal intensiveness, which is why the needs clash. This, again, creates distinctive discourses related to artificial snow. The artificial snow for recreational sports does not depend on any single moment of a season nor require approval from any sports organization unlike the artificial snow for elite sports. Thus, the snow can be produced later or there can be ideas of exclusivity with respect to the artificial snow for elite sports, and yet, all the tourist facilities are equally accessed by the elite athletes. Despite of the clash, both discourses are needed to guarantee a successful and long season for the ski resort area.

Discourses of artificial snow have changed the municipality

The discourses of elite and recreational artificial snow allow the ski resort to acquire a brand as a place which has apt facilities for elite athletes and a long season and a diverse variety of slopes for the masses. During the years of artificial snow in Levi, the ski resort village of Sirkka has had its image changed from a traditional Lappish ski resort village with pine log cabins and dispersed settlement towards a populous center with Alp village style houses and

plazas. Similarly, the traditional village center of Kittilä is losing its attractiveness to the Sirkka village, in which new services are established. Furthermore, the customers are more international than twenty years ago. This development may be understood only in the light of the development of the ski resort and the discourses related to its capacity to produce and groom artificial snow.

The artificial snow allows for international ski races to take place, which gives coverage, attracts customers, and brings services especially to the ski resort area, as one informant experienced when asked about the impact of the FIS race for the ski school:

“I don’t know for the school but it’s for the area, for Levi, for Finland; the world cup, ’cause people are watching in [on] the television and they see, it’s good advertising and of course it’s a, we are then world cup resort, and it’s a good status [. . .] The area is getting larger. It means also for us, if I, ’cause I live 4 kilometres from here to the resort, I have all the things in Levi, so I don’t have to travel so many times to Kittilä, for example, to get something.”

(Personal interview, 12.1.2017)

The informant’s experience is that she does not depend on the Kittilä village center because of the good variety of services at the Levi area. Kittilä village center still holds the main public services such as a library, schools from preschool to (senior) high or vocational school, and a public health care center. However, the intersection of tourism and ski resort facilities has generated several services especially in the ski resort area, such as local transportation system of ski busses, cafeterias, amusements for children, sports doctor services, and drug stores, which are also consumed by locals. Given that the ski resort was run only with natural snow, these services would not exist or they would be more seasonal than now. Also, the private sector, such as tourism and amusement enterprises, relishes the ski resort village, which changes the structure of the municipality. This structural change becomes materialized for example in the public sector, which has to increasingly offer services in the village of Sirkka. According to the head teacher Hannu Hettula⁴⁵, of Sirkka primary school, the number of students has increased from 34 to 152 between years 1997 and 2017 because of the increases in tourism, and within the past 5 years also due to the gold mine in Kittilä. He also estimated that the ongoing boom of tourism in Lapland will continue the expansion of the school, although some of the students are children of seasonal workers and thus, present in the area mostly during the winter season.

⁴⁵ Personal briefing via phone, 31.5.2017.

Same kinds of experiences were also expressed by other informants, who found it easy nowadays to live in Levi area because of the long season which guarantees the skiing and snowboarding facilities and a variety of services around the ski resort environment. Some of these informants had moved from other parts of Finland to Levi because of skiing and snowboarding facilities and now raise their families in Levi area. Some were locals, some stayed only for the long winter season in Lapland and moved back to Southern Finland for the summer. “If I can spend two and half months [the Summer] in Southern Finland, I’m satisfied”, one informant expressed his experiences in a personal interview (17.1.2017) about living in Levi.

Another remarkable change related to the discourses of artificial snow is the image of the Sirkka village where the ski resort is located in. When I asked from one informant about the change of the area during his years of living in Levi, he experienced the biggest change to be the development of the ski resort village and its center:

Informant: It is amazing! I was, as a matter of fact, away from here during the biggest development. I went in -03 back to Southern Finland and returned then, what was it, 2008 when I came back. During that time, this whole center was built here. This was all forest before, and I was shocked when I arrived here again... And there are funny stories anyways about, when this forest part, where the whole center now has taken the place, was in sale and all the locals had just laughed that this shit piece of land will be bought by nobody, and it’s a weird thing now how these lots are worth of half million at the moment.

Researcher: Who deserves the credit for that?

Informant: Well I claim that it’s purely the demand! That right now, the hotel capacity is not enough, it’s the demand by tourists. I claim that it’s the tourists’ who deserve credit.

(Personal interview, 17.1.2017.)

This change the informant talked about was also apparent in the pictures I took during the fieldwork period. The old vacation houses in the middle of woods, seen on the left side of the following picture, are now surrounded by Alp-style houses with Alp-related names such as *Sirkanalppi* (Sirkka’s Alp) or *Alppitähti* (Alp Star/Edelweiss).



These Alp-style houses cover mostly the center of the ski resort village, and this part is called the Alp village also by locals. Also Harri Hautajärvi⁴⁶ describes this area as being alp-style in his doctoral dissertation of architecture.

However, as we walked around the center with our research group, our Swiss member did not recognize the Alp images without an explanation of the style differences from the traditional Finnish log houses and without showing him the alpine names written in Finnish. The houses were accompanied by alpine plazas and by the ski resort's main building, which had a café named after the most successful Finnish Alpine skier, Tanja Poutiainen. The building had also an office lobby which reminiscent of an alpine skiing museum with its glass vitrines full of World Cup bibs, trophies, and stories related to Levi's World Cup history. Apparently, Levi is constantly developing its brand around elite winter sports, and the artificial snow for elite sports is a necessity in this process. Yet, as in MacAloon's⁴⁷ views on sports which are emptied from their original meanings and refilled with local meanings, the empty forms of alpine images represent now something distinct to traditional Finnish ski resorts and experiences in Lapland but in a way which is unrecognizable to a person who is from alpine areas. Alpine images become a clear way in the mechanisms of the markets to fulfill

⁴⁶ Hautajärvi 2014, 297.

⁴⁷ MacAloon, John J. "The theory of spectacle: Reviewing Olympic ethnography.?" *National identity and global sports events*. Edited by Tomlinson, 2006, 20.

consumers' expectations on a ski resort which combines traditional Lapland with international elite level sports.

Discussion: Does artificial snow assist urbanized tourists to find fulfillment experiences in their longing for nature?

Winter tourism in the booming Kittilä area in Lapland is strongly related to the ski resort and its capacity to produce and groom snow. As previous studies have indicated, snow conditions to be important for leisure tourists⁴⁸, With a successful discursive work, the artificial snow production can be considered to be a resource enabler instead of a resource consumer. Levi can be a village described by Hautajärvi⁴⁹ as a sanctuary for winter sports and leisure only with its artificial snow production and grooming as well as the discursive work related to it.

The value of artificial snow as a raw material is minor compared to its value after discursive work. The raw material is commodified in the discursive process⁵⁰, which turns artificial snow into an important part of Levi as a profitable product and enables a long season for two different customer groups: elite sports and recreational sports consumers. As I pointed out during this study, the discursive work allows Levi to become a mixture of an international elite level alpine resort and snowboarding paradise which also offers durable and versatile facilities for recreational masses for whom skiing or snowboarding is a hobby or a new experience – with a flavor of northern wild life. These discourses justify the resources used for artificial snow production and grooming in the area, where also natural snow exists as well. Yet, this discursive work would not be sufficient on its own, but it needs a great amount of mundane work behind the scenes every year with the artificial snow production and grooming. Together the discursive work and mundane work create the product which is consumed on skis and snowboards, and distributed as images and experiences on Levi via social media.

During the process of turning artificial snow into a cultural commodity, the original meanings of Alp or alpine are replaced with local versions, which are only sources of profit for the markets. However, it needs to be addressed that also the pine log houses have represented the Lappish scenery for tourists only for the past 40 years⁵¹, and hence, distributed alpine images merely continue the same commodification process of the area. Yet again, through this more

⁴⁸ Koenig and Abegg 1997. Unbehaun, Pröblst and Haider 2008.

⁴⁹ Hautajärvi 2014, 299

⁵⁰ e.g. Kelly-Holmes 2016.

⁵¹ Hautajärvi 2014, 280.

current process Levi is positioned distinctively to the nearest competitors in Lapland, which according to the marketing scholar Al Ries⁵², is a necessity in today's markets.

The discursive work has similarly supported the change of the structures of Kittilä municipality. The village center has lost its attractiveness to the ski resort village, which again is like a gold mine of work during the winter seasons. It may be asked if the artificial snow also turns the resort more accessible to the masses by offering a precise idea of using the facilities: Plain fjelds with natural snow may be attractive to some customer groups, but for many, the artificial snow brings the smooth slopes, alpine ski tracks, jumps and halfpipes, which guide the consumers to use their bodies in particular ways. The artificial snow and an Arctic ski resort together offer a nature experience, which is produced with the assistance of unnatural facilities. Maybe these unnaturally produced facilities assist urbanized tourists to find fulfillment experiences in their longing for nature, which might be unreachable with facilities relying solely on natural snow?

⁵² Ries, Al, "The essence of positioning." *The definitive book of branding*. Edited by Karthik Kompella. Sage, Los Angeles, 4.