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Democratisation of the outdoors: how equipment lending is emerging in Norway's sharing economy to provide sustainable consumption at the local scale

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ARSTRACT

Outdoor equipment lending is emerging as a collaborative consumption practice in Norway's sharing economy, potentially providing a solution to the adverse climate and environmental impacts connected with the country's outdoor culture. Little is known, however, of how to upscale such practices when owning equipment is culturally embedded. This article contributes to an emerging literature on how emotions, knowledge, and environmental values may contribute to participation in collaborative consumption and responds to calls for research on cultural and contextual elements of sharing practices. Through ethnographic fieldwork and interviews, we explore the outdoor equipment lending outlet TURBO in the city of Tromsø, Norway. We ask, how can collaborative consumption of equipment provide a sustainable solution to the societal goal of democratic participation in outdoor life. Building on practice theory, our analyses reveal a shift in focus from low-income and immigrant families to broader outreach and inclusion of many new user groups. In the encounters taking place at TURBO, emotions of trust and affinity, knowledge of how to access the outdoors, and environmental values are shared in dynamic interaction between lenders and borrowers. The direct effect on private consumption lies outside the scope of this research, but we argue that collaborative consumption of equipment provides potential climate and environmental benefits through the lending of donated equipment, by extending life cycles of equipment through reuse and repair, and when borrowing equipment supersedes traditional consumption. Moreover, the practices at TURBO destigmatise borrowing instead of buying and contribute to the democratisation of the outdoors.

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Outdoors; sharing economy; collaborative consumption: circular economy; democratisation

Introduction

Outdoor sports and recreational activities contribute to adverse climate and environmental impacts, as they are often associated with unsustainable consumption of material goods. Norwegian outdoor life has traditionally been connected to a simple lifestyle with low environmental impacts, but outdoor equipment and clothing have become specialised and diversified, applying problematic materials, apace with increasing consumption (Aall et al. 2011; Statistics Norway 2022). Still, the political aim in Norway is socially just and broad participation in the outdoors, as nature-based sports

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and leisure activities are considered to benefit public health, social inclusion, and environmental awareness (Gurholt and Broch 2019; Gurholt and Haukeland 2019). Presenting a possible sustainable solution, the emerging trend of outdoor equipment lending outlets provides access-based consumption free of charge. The sharing economy and such collaborative consumption practices challenge how we think about ownership and mitigate environmental damage when reducing consumption (Schor and Vallas 2021; Selloni 2017; Solum, Førde, and Guillen-Royo 2024). However, the capitalistic sharing economy receives critique for its social and environmental impacts, leading to calls for refocusing the attention on face-to-face community-sharing organisations, that envision "a form of consumption that transcends capitalism's long-standing emphasis on property ownership and individual ownership of goods" (Fraanje and Spaargaren 2019; Schor and Vallas 2021, 383). Through reuse, repair and maintenance, equipment lending initiatives also promise to incorporate circular economy principles (Acquier, Daudigeos, and Pinkse 2017; Bradley and Persson 2022; Kirchherr, Reike, and Hekkert 2017), and thereby contribute to Norway's climate action plan by "scaling up re-use and recovery and making resource use more effective" (Norwegian Ministry of Climate and Environment 2021, 209).

In this article, we explore the phenomenon of equipment lending as an emerging aspect of Norway's sharing economy, focusing on collaborative consumption practices (Fraanje and Spaargaren 2019; Frenken and Schor 2017). While much of the sharing economy literature focuses on new technologies, supply-demand, and the possible disruption of markets (Frenken and Schor 2017; Grabher and König 2020; Martin 2016; Zvolska, Palgan, and Mont 2019), our contribution builds on an emerging literature focusing on the role of emotions, knowledge, and environmental values in social practices and responds to calls for research investigating cultural and contextual elements of collaborative consumption practices (Katrini 2018; Reckwitz 2002; Sahakian and Wilhite 2014; Spaargaren 2011). Studies in Norway suggest that emotions and environmental values play a role in upscaling sharing practices and that sharing initiatives in local communities offer pathways toward sustainability. Research also indicates that cultural change is important in upscaling urban sharing innovations (Guillen-Royo 2023; Julsrud 2023; Westskog et al. 2020; Zimmermann and Palgan 2024). The meaning of second-hand shopping has long been connected with whether the practice is a result of choice or necessity (Gregson, Crewe, and Brooks 2002). Relatedly, recent studies connect negative emotions with borrowing instead of buying sports equipment and highlight how owning equipment and knowing of how to use it is culturally embedded and taken for granted in Norway, in ways that may conceal ethnic and class discrimination (Guillen-Royo 2023; Gurholt and Haukeland 2019). There is a lack of exploration of the emergence of non-capitalistic sharing cultures (Katrini 2018), and a need for studies on how collaborative consumption practices are performed and embedded to increase participation and relate such practices to sustainability transitions (Fraanje and Spaargaren 2019). Thus, how to upscale collaborative consumption of outdoor sports and leisure equipment remains understudied. We address this research gap with an explorative research question:

How can collaborative consumption of equipment provide a sustainable solution to the societal goal of broad participation in outdoor life?

Municipalities in Norway have provided equipment lending since the 1990s, but few knew about and used these services, as they were primarily measures to alleviate poverty (Erdvik et al. 2023). This changed during the 2010s, when the Norwegian Directorate of Health prioritised equipment lending, aiming for equal access to leisure and sports activities for all citizens (Norwegian Directorate of Health 2010). Funding was granted to municipalities through subsidy schemes to combat child poverty, leading to the establishment of a nationwide network of lending outlets, BUA, in 2014. Through a shared internet site, software for lending and inventory, and reputation building, BUA sought to upscale the number of loans and combat the stigma of equipment borrowing as a sign of poverty. Today, BUA organises around 200 lending outlets across the country (Erdvik and Bjørnarå 2022). Previous research has shown how BUA provides equipment lending across Norway through

various collaborations (Erdvik et al. 2023), and how lending outlets are co-created and co-produced in partnerships between public, private, and ideal actors (Solum, Førde, and Guillen-Royo 2024). Through ethnographic fieldwork and interviews with employees, volunteers, and users, we explore the lending outlet with the highest number of loans and users annually, named TURBO, located in Tromsø in Northern Norway. Building on practice theory (Reckwitz 2002; Shove, Pantzar, and Watson 2012; Spaargaren 2011), our analysis reveals how TURBO facilitates encounters between lenders and borrowers, where emotions of trust, affinity, knowledge of how to access the outdoors, and environmental values, are shared. Advancing the debate about the future of collaborative consumption (Fraanje and Spaargaren 2019; Schor and Vallas 2021), we argue that the collaborative consumption practices at TURBO provide potential climate and environmental benefits through the lending of donated equipment, by extending life cycles of equipment through reuse and repair, and when borrowing equipment supersedes traditional consumption. Moreover, the practices at TURBO destigmatise borrowing instead of buying and contribute to the democratisation of the outdoors.

TURBO – democratic participation and the commercialisation of outdoor life

Equipment lending is emerging in Norway's sharing economy due to the activities and culture surrounding outdoor life. In the Nordic countries, the outdoors represents a source of social cohesion and, traditionally, environmental awareness. During the 1800s, Romantic ideals of beautiful, rugged landscapes became important in constructing a national identity distinct from other Europeans. Henrik Ibsen (1871) coined the term "friluftsliv" (literally translated free-air-life) in a poetic description of the enjoyment of outdoor life, and the Polar explorer Fridtjof Nansen advocated skiing and outdoor survival skills as part of youth's physical education. In a young nation, formally separated from Sweden in 1905, nature evolved from a room for harvesting to an aesthetic and romantic space for activities, culturally significant in consolidating Norwegian society through symbols of unity and shared experiences (Augestad 2019; Flemsæter, Setten, and Brown 2015; Ibsen 1871).

Democratic participation in the outdoors is a political aim in Norway, as well as a social and cultural value rooted in the free access to uncultivated public and private land (Gurholt and Broch 2019). A physical infrastructure of cabins, marked trails, and shelters stimulates participation, but access to the outdoors is also a result of socialisation and having the necessary equipment. There is a high degree of participation among the Norwegian population, but low-income and immigrant families are less active than high-income and highly educated families. As access to nature cannot be regarded as the main obstacle, "cultural barriers seem decisive such as a lack of knowledge and trust in one's own abilities, or feelings of not fitting in, of not having the correct equipment or necessary skills" (Gurholt and Haukeland 2019, 171). Since the late 1990s, facilitating outdoor activities for minority groups has been a political target (Broch and Gurholt 2011). However, as Flemsæter, Setten, and Brown (2015) point out, the Norwegian concept of the outdoors is ideologically charged, with the risk of a one-way process of immigrants being expected to learn the Norwegian way of practising outdoor activities. Conceptualising the outdoors as an egalitarian social and cultural phenomenon may veil class, gender, and ethnic differences. Therefore, outdoor activities are understood as situated, variable and society-related experiences and practices (Flemsæter, Setten, and Brown 2015; Gurholt and Haukeland 2019).

A paradox of the political aim of securing participation in outdoor activities and building environmental awareness through nature experiences is the negative environmental impacts of increased equipment and clothing consumption. Outdoor sports and leisure activities have become commercialised, diversified, and specialised, with changing consumer preferences increasingly based on material consumption. Rapid technological development has led to extensive use of problematic materials and technologies, such as nanotechnology, dangerous chemicals, and heavy metals. Further, the product life cycles of sports equipment and clothing have shortened (Aall et al. 2011; Abu-Omar et al. 2022). Obstacles to making outdoor equipment sustainable are the high technical and functional requirements of products. Circular economy solutions, such as reusable materials and designing for durability and repairability, are proposed by parts of the gear and apparel industry (Fuchs and Hovemann 2022). However, the benefits of narrowing resource loops risk being offset by rising consumption, with few businesses discouraging consumption for the sake of the environment (Bocken, Niessen, and Short 2022). A potentially sustainable solution is circularity implemented through the reuse, repair, and sharing of materials in local communities (Bradley and Persson 2022).

Located in the northernmost region of Europe, TURBO lends outdoor equipment to residents of Tromsø. TURBO emerged as a partnership between Tromsø municipality and Red Cross Tromsø in 2016 and became part of the BUA network in 2019. Tromsø municipality supports the organisation through three part-time employees and a location in the Town Hall. Red Cross Tromsø integrates humanitarian values into the services through volunteers and two part-time employees, while BUA provides the digital lending system, competence, and marketing through the shared brand. TURBO has increased the number of loans to over 13,000 in 2021, making it the most successful lending outlet in Norway. Outreach is achieved by collaborating with local schools, kindergartens, youth clubs, child welfare offices, and the municipal refugee centre. Young adults aged 20–29 make up half of TURBO's around 2,000 users. The second and third largest age groups are aged 30-39 and 40-49, with 501 and 346 users, respectively. Long winter seasons contribute to the largest lending category, "skis and skates", amounting to 62 per cent of the loans. The normal loan period is one week, but terms and conditions are flexible, especially for children and adolescents who are permitted to borrow equipment for a season at a time. While around 60 per cent of the equipment is acquired through commercial actors in Tromsø, as much as 40 per cent is donated by users, incorporating reuse and repair as important aspects of the sharing practices (BUA statistics 2021; Solum, Førde, and Guillen-Royo 2024).

Theory – the sharing economy and practice of collaborative consumption

Sharing economy, circular economy, collaborative consumption, or library of things? TURBO encompasses elements of all these ambiguous concepts, while constituting something different, with its organisational partnerships and cultural embeddedness. Sharing is as old as humankind, while the concepts of collaborative consumption and sharing economy often indicate platform-based consumption (Frenken and Schor 2017; Minami, Ramos, and Bortoluzzo 2021). TURBO, however, is not conducive to the sharing economy, as in the popular description of a Web 2.0 triadic platform, service, and exchange system. Their digital infrastructure is on a par with public library systems, keeping track of inventory and loans, rather than facilitating platform-based peer-to-peer transactions. TURBO lends itself to comparisons with libraries of things that construct a dialogue of sharing whereby users gain access to both products and services (Ameli 2017; Söderholm 2016), e.g. equipment and knowledge of how to access the outdoors. As a contributing part of the circular economy, TURBO ensures that products are reused, shared, and repaired, to prolong life cycles, and to increase the environmental sustainability of equipment consumption. We define TURBO as an access-based and collaborative consumption practice; "an economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership" (Bardhi and Eckhardt 2012; Botsman and Rogers 2010, in Selloni 2017, 17).

Collaborative sharing practices have synergetic potential to create alternative structures for everyday needs that are affordable, engaging and environmentally resourceful (Katrini 2018). Yet there is a need for better, in-depth understanding of the cultural and contextual elements of sustainable consumption practices (Katrini 2018; Spaargaren 2011; Westskog et al. 2020). Building on practice theory entails a focus on the people and organisations involved in the performance of practices, including interactions, knowledge and meaning elements, norms, and values. Further, material objects are elements of social practices that are simultaneously contingent on physical space, infrastructures, and contexts (Reckwitz 2002; Sahakian and Wilhite 2014; Shove, Pantzar, and Watson 2012). Practice theory has roots in, amongst other areas, the sociology of class and culture, structuration theory, and Wittgenstein's philosophy (e.g. Bourdieu 1984; Giddens 1984; Schatzki 1996), while we draw inspiration primarily from the later developments that have placed social practices at the heart of studies of sustainability, emphasising patterns of consumption (Fraanje and Spaargaren 2019; Guillen-Royo 2023; Shove, Pantzar, and Watson 2012; Spaargaren 2011). We see practices as "a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood" (Reckwitz 2002, 250), and address calls for analyses that encompass emotions as central aspects of collaborative consumption practices (Fraanje and Spaargaren 2019; Spaargaren 2011).

Our inquiry is informed by the situated nature of practices in everyday life, and the way shared knowledge enables collective ways of ascribing meaning to the world, that is bound to agency and contexts (Sahakian and Wilhite 2014). Like second-hand shopping (Gregson, Crewe, and Brooks 2002), the meaning of equipment lending is produced in and through practice and cannot be reduced to the transaction, as it depends on social status and matters of choice or necessity. This entails a focus on the cultural and class-based barriers to participation that influence users. We investigate the possible poverty-related stigma involved and are sensitive to the body as a carrier of personal histories and abilities that are contingent on social relations (Nettleton and Green 2014; Reutter et al. 2009). As we explore these socioeconomic and cultural elements of access-based consumption, we also consider the feelings of added responsibility in using nonowned products and the consumption work involved in the practices, in extra logistics, and in scheduling and planning to access products (Cherry and Pidgeon 2018; Hobson et al. 2021).

At its best, the sharing economy accommodates the "triple bottom line" of people, planet, and profits: encouraging the use of underutilised goods, thereby reducing production, creating new economic opportunities, and stimulating social interactions (Botsman and Rogers 2010; Fraanje and Spaargaren 2019). The negative mirror image is collaborative consumption and a platformbased sharing economy that increases environmental impacts, reinforces existing inequalities, and undermines workers' rights and job security (Katrini 2018; Martin 2016; Martin, Lazarevic, and Gullström 2019). Fraanje and Spaargaren (2019, 499) see two diverging trajectories for the future of collaborative consumption: one that focuses on transactions instead of relations, and another that sticks to the social aspects of building community and connecting people through sharing.

Methods

Case study research methods are applied to study TURBO as an intrinsic case of the collaborative consumption practices in the BUA network. The analysis presented is based on fieldwork and an interview study conducted at TURBO in 2021-2022. We conducted 8 semi-structured interviews with staff and volunteers. They included the municipal manager, two employees from the municipality, two employees from Red Cross Tromsø, and three volunteers. They had different backgrounds, and while some of them had worked at the outlet since its beginning and knew the history of TURBO well, others had joined more recently as volunteers. We also interviewed 16 TURBO users who were recruited as they came to borrow equipment during our fieldwork. The selection represents different geographical backgrounds, genders, age groups, and educational and income levels, and users with varying outdoor experience, from the novice to the experienced outdoor-life enthusiast. All these interviews were conducted at TURBO, creating interview situations that activate the significance of place and enable practice-specific questions in situ (Sand 2019). To gain insight into an important institutional partnership, we interviewed the headmaster of a nearby primary school. Throughout the analysis, we provide relevant details about the interview participants, to describe their involvement in the collaborative consumption practices.

Interview material is combined with participant observation at TURBO, where one of the authors participated as a volunteer for three days during opening hours, allowing time to take part in encounters and social interactions. Qualitative data is further complemented by statistics from a BUA report on equipment lending and internal documents, something that allows for triangulation,



providing an in-depth perspective on our analysis and giving validity to our results (Kapiszewski, MacLean, and Read 2015). The analysis is inductive and inspired by reflexive thematic analysis, as we emphasise the "researcher's reflective and thoughtful engagement with their data and their reflexive and thoughtful engagement with the analytic process" while developing the three overarching themes presented below (Braun and Clarke 2019, 594). Our findings are applicable to "moderatum generalizations" (Gobo 2008) to similar collaborative consumption initiatives. The theoretical analysis conveys a broader analytical generalisability, substantiated by the discourse on the sharing economy and collaborative consumption practices.

Analysis – sharing more than equipment

In this chapter, we present the analysis of the collaborative consumption practices taking place at TURBO. We first present TURBO as an arena for encounters, focusing on the transfer of knowledge and feelings of trust and affinity in the interactions between lenders and borrowers. We then illustrate the negotiation of values in equipment sharing, and how various user groups experience access-based consumption. The third section of the analysis focuses on how collaborative consumption of equipment affords participation in outdoor activities.

Encounters in practices of collaborative consumption

TURBO is situated within Tromsø's Town Hall, a large glass building dominated by the local government offices, a public library, and a Movie Theatre. Inside this organisational hive, they stick out, with sledges, skis, and bicycles filling their designated premises, but also tucked underneath stairways and piled up in the shared space. Three afternoons a week, TURBO opens its doors to people who come to borrow, deliver, or donate equipment. A shifting crew of volunteers, the Red Cross coordinator, and the municipal staff and manager meet the users. They comprise a diverse group of young students and retirees, devoted outdoor enthusiasts, and traditional Red Cross workers. On busy days there are long queues, and they receive around 100 users, depending on the season and weather conditions. The users represent all ages, from "babies on a sledge to elders" as one of the volunteers puts it. The coordinator estimates that half of them are immigrants and that there are many exchange students. There are also primary, secondary, and high school students, who often come with their parents. The atmosphere is busy, but friendly, joyful, and characterised by a strong sense of community. Even though the roster changes, the crew know each other well and are familiar with the regular users: "Many come so often that we know their names, we can joke with them". The coordinator emphasises that TURBO is not a shop, and how this facilitates other kinds of relationships:

It creates a completely different atmosphere. We have about three thousand users, and I know almost all their names, how many children they have and how old they are. It's nice that you can have that sort of relationship with them

A high degree of trust is created at TURBO. Knowing the users and their practices is important, and the volunteers are concerned about what is suitable for each person and their specific outdoor activity: "We ask what kind of gear they want, where they are going, when ... We are considering if they are beginners or experienced, the weather ... " Time is spent talking to newcomers to outdoor activities and the Arctic landscape: "We tell them where it is nice to bike. Where it is best to go skiing. And then we adjust the equipment and their plans to their capacities and needs". A man, originally from Germany, describes the first time he borrowed skis: "When I came here, I thought I was going to the mountain Kjølen – it was the first time I went skiing. And he (the manager) said, 'don't do that'. He was right". Like many others, this user emphasises the importance of the transfer of knowledge and experience, of where to go and what equipment to use. A college student comes by with her father to borrow skis for a school trip, and leaves with a fully equipped backpack, and with a sleeping bag, sleeping mat, and a headlight. They thought she only needed skis and shoes, but as they were questioned, the volunteers realised she was not equipped for sleeping out on a winter night. Outdoor activities are not without risk, especially in the Arctic winter landscape.

For many, both users and the crew, TURBO is an important meeting place. Some of the regulars drop by just to chat while waiting for the bus, especially elderly people. "If they only want to talk, we will listen to them – if we have time", the coordinator says. One of the volunteers, a young woman from Estonia, joined TURBO to socialise: "I have almost become family with the others working here", she says and explains how TURBO is a great place to meet people, especially since it does not require fluent Norwegian. She describes the cosy atmosphere, mirroring the users, who often highlight the inclusivity at TURBO. As one of them explains: "As an immigrant, the long winter is hard – we all struggle. Meeting places are important". Another stresses the caring aspect of TURBO: "They (the crew) are really nice people. The older guy (the municipal manager), he cares about you. He really does". The coordinator explains that they are very concerned with making users, especially children and adolescents, feel welcome and at home. There is a dynamic interaction between lenders and borrowers, between young and old, experienced and newcomers to outdoor activities, and the equipment needed to participate. Many forms of excitement are generated in these encounters, demonstrating how "emotional energy" can drive participation in collaborative consumption practices (Fraanje and Spaargaren 2019).

When not busy with loans and returns, the crew maintains and repairs the equipment. They prepare skis with new glide wax, change broken ski bindings, and repair bicycles. Donated gear is not always suitable for lending, but might have some useful bits for the stockpile of spare parts. New volunteers are trained by experienced ones, in a transfer of knowledge important for TURBO's environmental profile. By taking care of equipment, they extend life cycles – which is the core circular economy principle in this collaborative consumption practice (Acquier, Daudigeos, and Pinkse 2017; Kirchherr, Reike, and Hekkert 2017).

Negotiating the values in equipment sharing

TURBO is experiencing a shift from borrowing as a sign of low income to something mainstream, popular, and cool. With the green shift on the political agenda and the environmental crisis on school curriculums for many years, the crew see themselves as contributing to popularising sustainable consumption. As the municipal manager explains: "I think we've seen that TURBO has made it popular to use old equipment, or rather equipment that other people also use. I think it has changed people's attitudes to uncritically buying new things instead of borrowing". These values are prevalent, especially among adolescents, students and expats who participate in Tromsø's vibrant outdoor scene, and it follows that repairing equipment is as much about making it look OK as keeping it safe and handy: "It's always supposed to be proper things", a staff member explains, "and the markings are discrete QR codes that do not flash 'TURBO'". The small and inconspicuous markings reveal BUA's efforts to destigmatise collaborative consumption of equipment. On the other hand, worn and torn gear can be a way to showcase your outdoor experience. As a Norwegian man in his 30s declares:

It is not a stigma to have borrowed skis, not in my age group. Not cool to buy new skis all the time, that I can tell you. You get more embarrassing questions then, than if you have borrowed at TURBO. To have well-used equipment gives street cred on the mountain!

Even as TURBO has become a trendy green alternative for some, the crew acknowledges that this varies among user groups. Borrowing out of necessity, rather than choice or values, may still imply a stigma, and as the coordinator tells us, reaching target groups is a constant struggle: "Those that don't want to be visible are the most difficult to reach". She is supported by an older volunteer: "I think that they are missing today because there's still a stigma attached, 'I can't go there, because then everybody sees that I have little money"". Turning to the issue of those not reached, a municipal staff member reflects on how social circumstances can result in having less



know-how or time to engage in the required consumption work: "When you live with lasting lowincome it affects some other things, for example, the ability to plan ahead". Increased demand among the general population, spurred on by environmental values, may conflict with the initial aim of securing participation in outdoor recreation for vulnerable groups. Before the high seasons, students are the first to arrive, a volunteer explains, sometimes leading to empty shelves:

Before Easter, when TURBO was completely empty, people arrived the last day before the holidays, sometimes with three kids, and we had nothing to offer them. It was like; 'Where have you been? Now it's the last day!' It's a sad feeling ...

Parents sometimes worry about how their children experience using non-owned equipment. Nevertheless, economic considerations lead to borrowing for many families, as a teenage Norwegian mother, borrowing skis for her child, explains: "I think it is a lot to pay for new equipment when she's so little. So, when I can get skis for the season here ... " Environmental values can reassure parents, and as a newly divorced Norwegian mother explains, borrowing equipment is a way to instil these values in children:

I believe the kids understand sustainability or appreciate thinking sustainably. They are used to things being new and fancy, but I hope I can give them other values. I considered on my way here, will my eldest find it OK with a complete equipment package from TURBO? But I think he will. I believe this might have changed.

The crew is aware of the language they use and avoid putting people in fixed categories when talking about whom TURBO is intended for. On the other hand, a growing group of users termed the "reuse enthusiasts" by a volunteer, illustrates a cultural shift toward environmental awareness: "We have understood that some want to be part of the reuse enthusiasts, and we have become very popular among them too. Then we got a new meaning, that we are a green alternative. This has happened gradually". When asked about the organisation's commitment to environmental sustainability, the crew expand upon how this is, and will be, secondary to ensuring equal participation in the outdoors.

Contributing to democratic participation

"TURBO makes me capable of doing things I otherwise wouldn't do. I borrow all kinds of things, backpack, skis, sleigh mattresses, bikes". Like many of those borrowing at TURBO, this Belgian woman emphasises how the organisation affords participation in outdoor activities. A diligent user, she comes to deliver a bike: "I wonder what I should borrow now?" she continues, "I like to see what's available". When asked, the manager explains that equality means giving people from all backgrounds the opportunity to participate, independent of their resources. Borrowing is free of charge, and lenient terms and sanctions for misuse of equipment are measures to alleviate feelings of anxiety about using non-owned equipment, especially for adolescents, students, and low-income and immigrant families.

TURBO's immigrant users often relate how borrowing equipment facilitates their involvement in outdoor activities. As exemplified by a woman from Eastern Europe: "My quality of life has increased remarkably after I started to borrow here. I get out into the mountains, and it's fantastic for my health to be able to bike around the city". "TURBO – it's fantastic!", a German man chimes in: "Especially for beginners. I think I never would've started skiing if I had to pay every time". But with the right equipment, guidance and instructions, the Arctic landscape becomes accessible. Emphasising the interactions at TURBO, a young Spanish man explains how borrowing affords participation:

The great thing about this is to try new stuff. It's important with guidance from people working here. When people like us (foreigners) come here, we don't know anything about this landscape. The first question they (the crew) ask is 'are you experienced or not?' No, we don't have a clue!

TURBO prioritises children and young people, and many of the users are families, school children and students from secondary school to university. The headmaster of a nearby primary school asserts that as much as one third of the equipment is borrowed from TURBO when they arrange outdoor activities. Under the Norwegian Education Act they are obliged to offer outdoor physical education, but as public schools in Norway are bound to a principle of free education this would not be possible without access-based consumption. Therefore, an indirect effect of TURBO is warranting outdoor school activities, also for children who have their own equipment. The headmaster weighs the importance of teaching everyone the joy of outdoor life: "When you've got the possibility to try it at school, there is a greater chance that you will practice it. The pupils learn to make use of their nearby areas". It is busy at TURBO when the schools organise outdoor excursions. A teenager comes by with his mum to borrow equipment for a skiing day and relates: "We don't ski and won't invest in things we don't normally use. If it weren't for TURBO, I wouldn't participate in skiing at all".

Giving priority to children means prioritising the parents, too: "The kids will not go skiing if the parents do not accompany them", one staff member explains, and continues: "If 5–8 year-olds are to experience the joy of skiing, they need to have skis throughout the season". Although they have rules and principles, "in the day-to-day, it's best to be flexible, to find and adapt to the various needs of our user groups". Lenient terms are crucial, not only for democratic participation in the outdoors, but for reduced consumption; by borrowing for a whole season, families need not invest in equipment that the children will shortly outgrow, reducing the economic burden of participation. This also reduces consumption work, and the frequency of returns, storing and registering, allowing for better services. By providing free and easy access to a variety of equipment, TURBO allows its users to explore ways of connecting to nature and being enthused by outdoor leisure activities. This encourages public health and well-being, and nature as an important, although contested arena for inclusion into Norwegian society (Flemsæter, Setten, and Brown 2015; Gurholt and Broch 2019).

Discussion - sustainable outdoor life

The over-arching themes in the analysis are TURBO as a place for encounters where people share equipment and transfer knowledge about the outdoors; the negotiation of values in the collaborative consumption practices; and how TURBO affords participation in outdoor activities. Now we turn to the research question: How can collaborative consumption of equipment provide a sustainable solution to the societal goal of broad participation in outdoor life? The discussion encompasses (1) how the practice of collaborative consumption at TURBO contributes to the democratisation of the outdoors; and (2) whether equipment lending represents a sustainable solution to the societal goal of broad participation in outdoor activities.

Democratisation of the outdoors

The Nordic countries have established an infrastructure of cabins, shelters, and marked trails, but there are still cultural and socioeconomic boundaries to democratic participation in the outdoors (Gurholt and Haukeland 2019). The analysis has revealed TURBO to be an arena for encounters where lenders and borrowers from all backgrounds, material objects, knowledge and meaning elements, norms, and values constitute the performance of practices that have the synergetic potential to bridge boundaries and encourage participation. At the core of the interactions are trust, affinity, and positive emotions that make it easy to ask, learn, and get access to the correct and necessary equipment. TURBO lends itself to comparison with public libraries and libraries of things, and can be termed a "third space" where sharing fosters sustainable community development (Jochumsen, Rasmussen, and Skot-Hansen 2012; Söderholm 2016). This is conducive to the trajectory of beneficial collaborative consumption; a trajectory that promises to reinforce, rather than undermine, the "civil society" aspects of sharing (Fraanje and Spaargaren 2019). We propose that the BUA network might be conceptualised as a social infrastructure, much in line with modern public

libraries (Klinenberg 2018), multifunctional in sharing equipment and transferring outdoor experience and knowledge, complementing the already established infrastructure of cabins, shelters, and marked trails in Norway. As such, BUA and TURBO support the democratic principle of equal access to uncultivated public and private land, through innovative sharing practices tied to cultural and contextual elements.

When owning equipment is culturally embedded, overcoming poverty-related stigma is crucial for upscaling access-based consumption. In Tromsø, the utilisation of non-owned equipment has evolved from a measure to alleviate poverty to a socially acceptable and embedded practice with broad outreach. Our focus on cultural and class-based barriers to participation has revealed varying perceptions of how borrowing influences social status. The meaning of equipment lending is produced in and through practice and our findings support the distinction between participating out of choice or necessity (Gregson, Crewe, and Brooks 2002). This varies among user groups, however, and while parents sometimes worry about how their children experience using non-owned equipment, many teenagers, young adults, and reuse enthusiasts are choosing borrowing as a lifestyle and value-based decision, destigmatising access-based consumption of outdoor equipment. We contend that encounters at TURBO can strengthen social acceptance of borrowing by facilitating the exchange of knowledge, values, and norms amongst individuals from diverse backgrounds. Further, these collaborative consumption practices can ameliorate gaps in understanding and feelings of not fitting into outdoor life or physical activities that are contingent on personal histories and social relations (Gurholt and Haukeland 2019; Nettleton and Green 2014). The lenient terms and sanctions are crucial for alleviating other socioeconomic and cultural boundaries, such as the required consumption work and anxiety when using non-owned equipment, especially for children, adolescents, and low-income and immigrant families. Through such means, TURBO and the BUA network represent opportunities for conveying Norwegian outdoor culture without the unhelpful and normative "ought" connected with an ideologically charged one-way process of assimilation to culturally dependent practices.

Sustainability transitions in the outdoors

The commercialisation of the outdoors can offset the potential benefits of heightened environmental awareness connected with nature experiences. The analysis has shown how TURBO caters to users' needs and contributes to economic sustainability, especially for parents, students and low-income families, as outdoor equipment is used, re-used, and given extended life cycles. While economic considerations are important for many users, we follow Selloni (2017, 16), who states that the idea of saving money is not opposed to doing something good for society and the environment. Building on the notion that direct experience can change attitudes and intentions, as much as attitudes may change behaviour (Fazio, Zanna, and Cooper 1978), we suggest that experience of TURBO as a well-functioning collaborative consumption practice may raise environmental awareness and change attitudes toward recycling, reusing, and sharing equipment. The users experience emotions of excitement, disappointment, enthusiasm, or boredom with the objects that co-constitute the practice of consumption, while the heightened intersubjectivity between agents and material objects gives a cultural dynamic and durability to such practices (Spaargaren 2011).

TURBO underlines the importance of care and maintenance of materials. According to Bradley and Persson (2022, 1333), this entails not only keeping materials in the resource loop, as is often the focus in the circular economy literature, but also slowing down the loop itself. Knowledge, distributed between people, material objects and social structures, is the antecedent of social practices (Sahakian and Wilhite 2014), and we argue that the transfers of knowledge and values at TURBO are a basis for sustainable new consumption practices. Thus, investigating cultural elements exposes how cultural change may be important in upscaling urban and non-capitalistic sharing innovations (Katrini 2018; Zimmermann and Palgan 2024). Through the utilisation of donated equipment and the transfer of knowledge about repair and maintenance among the volunteers, TURBO facilitates

collaborative consumption practices that incorporate core circular economy principles in access-based consumption (Acquier, Daudigeos, and Pinkse 2017; Kirchherr, Reike, and Hekkert 2017). A possible challenge is borrowing that leads to buying when users new to the activities begin participating regularly in outdoor life. Furthermore, money saved from participating in collaborative consumption practices could entail rebound effects if spent on other carbon-intensive products or services (Martin, Lazarevic, and Gullström 2019). We believe, however, that borrowing may lead to more well-thought-out and sustainable investments, based on knowledge of the correct equipment, while the raised consumer awareness and environmental values might offset rebound effects. Future research may investigate such quandaries.

Concluding remarks

This article contributes to an ongoing debate about the future of collaborative consumption (Fraanje and Spaargaren 2019; Schor and Vallas 2021), by addressing the understudied area of how to upscale practices of collaborative consumption of outdoor sports and leisure equipment when owning equipment is culturally embedded. Building on an emerging literature on the role of emotions, knowledge, and environmental values in social practices, we have explored TURBO as a place for encounters and situated practices, where knowledge is transferred, emotions of trust and affinity are created, and values favouring sustainable consumption are promoted. Our analysis further contribute insight into the cultural and contextual elements of collaborative consumption practices in local communities. The direct effect on private consumption lies outside the scope of this study, but in answering our research question we argue that the collaborative consumption practices at TURBO provide potential climate and environmental benefits through the lending of donated equipment, by extending life cycles of equipment through reuse and repair, and when borrowing equipment supersedes traditional consumption. Moreover, the practices at TURBO have been shown to destigmatise borrowing instead of buying and contribute to the democratisation of the outdoors, potentially benefitting public health, social inclusion, and environmental awareness.

Note

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