# Prerequisites for sharing between neighbors: A study of a suburban neighborhood in Drammen, Norway

#### **Abstract**

The sharing of goods and services has been put forward as one way toward more sustainable consumption. In this paper we explore sharing in a middle-class neighborhood in a Norwegian city. We ask what influences and frames neighbors' current sharing practices. We contend that Polanyi's notions of exchange systems, specifically those of reciprocity and redistribution, yield valuable insights for our study. We show that the prerequisites for sharing to take place in neighborhoods vary with the form of exchange system. Reciprocal sharing requires close relations and interpersonal trust, whereas redistributive sharing requires an entity that organizes the sharing activity. Furthermore, these exchange systems can reinforce each other, boosting sharing in accordance with the affordances suited to each exchange system, and can encourage different types of social interaction.

#### **Keywords:**

Sharing, exchange systems, reciprocity, redistribution, trust

#### **Highlights:**

- Sharing in neighborhoods can take place by reciprocal sharing or through a system of redistribution organized by a trusted entity.
- The prerequisites for sharing to take place differ according to the various exchange systems.
- Items to be shared have features more or less suited to reciprocal and redistributive exchange systems.
- Reciprocal and redistributive exchange systems fulfill different purposes for sharing, and can complement each other in boosting sharing in neighborhoods.

# 1) Introduction

The sharing of goods and services has increasingly been put forward as one way toward more sustainable consumption with environmental benefits (Cohen & Kietzmann, 2014; Martin et al., 2019), as well as having positive social (Albinsson & Perera, 2012; Parigi et al., 2013) and economic effects (Sheth et al., 2011). Although not clearly proven (Frenken & Schor, 2017), some studies indicate that the sharing of goods and services may result in fewer carbon emissions compared to private ownership, due to less production of new goods and, possibly, to more sustainable use of existing goods (Cohen & Kietzmann, 2014). However, many sharing initiatives attract only marginal groups of people, thus limiting opportunities for sharing to be upscaled (Becker et al., 2017; Vasquez, 2016; Westskog & Aase, 2020). There is therefore a need for more knowledge on how sharing can be organized in order to design and implement policies and interventions that enable sustainable sharing

practices. In this article we ask which conditions encourage and limit sharing in neighborhoods and discuss the implications of our findings for encouraging sharing in neighborhoods.

Sharing is understood in many different ways. Belk (2007, p. 126) defines sharing as "the act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from others for our use," thus underlining that sharing is pro-social behavior with no debt involved. Collaborative consumption, on the other hand, is characterized by the same author (Belk, 2014, p 1597) as coordination of "the acquisition and distribution of a resource for a fee or other compensation," thus excluding sharing as defined above. Furthermore, Frenken (2017, p. 3) provides a definition of the sharing economy as "consumers granting each other temporary access to their underused physical assets ('idle capacity'), possibly for money" (Frenken (2017, p. 3), thus including transfers that involve compensation as sharing. We contend that Frenken's definition of the sharing economy is also valuable as a definition of sharing in general. For the purpose of this article, we follow Frenken's (2017, p. 3) definition when defining sharing. However, in our definition of sharing we include both access to goods and services that is granted permanently or temporarily and joint ownership of goods.

People share for many reasons. Several scholars show that economic motivations are important for those taking part in car sharing (Bardhi & Eckhardt, 2012; Bellotti et al., 2015). Social motivations are also important for some. Albinsson and Perera (2012) study alternative marketplaces where there is no need to swap items, but where things can be obtained for free. They show that participants often seek a sense of community in these arenas, and that a sense of community is also the outcome of sharing events. A study by Cone and Myhre (2000) on community-supported agriculture confirms that social motivations are both a driver and an outcome of participating in these activities. Environmental considerations may also motivate sharing (Botsman & Rogers, 2011), though they are not usually the most prominent driver for joining sharing schemes. Yet, as argued by Böcker and Meelen (2017), the sharing economy is not a coherent phenomenon, and motivations vary with the type of sharing scheme studied.

Our study explores sharing in Djupdalen, a suburban, middle-class neighborhood of detached and semi-detached houses in a Norwegian city. All residents are members of Djupdalen Residents' Association (DRA), which is an institution with rules and an elected board. We investigate what influences and frames neighbors' current sharing practices. The study included implementing initiatives to enable increased sharing among the neighbors and to study their effects in the manner of 'action research'. Theoretically, we lean mainly on Polanyi's (1944) forms of exchange, and on Ingold's (2010) notion of affordances in order to analyze our research questions. In the following sections we present our framework for analysis, methods used, and findings. We then discuss the

conditions that encourage and limit sharing in our case study and draw implications from the findings for encouraging sharing in neighborhoods

# 2) Framework for analysis

Sharing is a form of exchange of goods and services that does not adhere to market rules. As Lambek (2013, p. 154) rightly reminds us: "The world seems a considerably broader place than the shop floor or a shopping mall." In order to analyze access to goods and services outside the market, we contend that Polanyi's notions of reciprocity and redistribution yield valuable insight. Karl Polanyi (1886–1964) was profoundly critical of an economy where market transactions were the only means of exchange. He claimed that society would be demolished if the fate of human beings were directed by market mechanisms alone (Polanyi, 1944). Instead of perceiving the economy in terms of actors who make rational decisions in a competitive environment, he defined the economy as consisting of the production, exchange, and consumption of goods and services. He demonstrated how these systems had varied throughout human history, thus rejecting neo-classical economics' claim to universal validity. Modes of production have varied from slavery to feudalism to industrial economy, and consumption differs between people who eat ham and those who do not, etc. For our purpose, Polanyi's notion of exchange is most relevant because it defines how consumers gain access to products – to goods and services.

Polanyi (1944) contends that the exchange of goods and services between people is carried out according to four principles, or logics. First is the *market principle*, where the price of an item or service is determined by supply and demand. This is the only exchange mechanism of interest to neoclassical 'rational choice economics.'

The second principle is labelled *redistribution*, and implies that people pool part of their wealth in a central institution or person that redistributes it to the same people. The state is a good example: it collects taxes and builds roads, hospitals and universities for common benefit. Redistribution operates on different scales. In feudal communities in Pakistan, peasants hand over a share of their crops to the landlord, who entertains the same peasants in the men's house, where they are served food and tea (Barth, 1959); and on the global scale, UN member states pay an annual fee to the institution, which in turn redistributes it wherever needed.

The third form of exchange is *reciprocity*, which is based on mutual moral obligation. The point is that the receiver of a good or service will return a similar service to the giver on a later occasion. For example, if I borrow a cement mixer from my neighbor, I will permit him to borrow my car trailer whenever he needs it. Some writers distinguish between two forms of reciprocity: direct and indirect. The example of the cement mixer is a case of *direct reciprocity*, while *indirect reciprocity* implies that a generous lender of goods or giver of services obtains reputational benefits that may be useful to his community later on (Simpson & Willer, 2015). Sharing based on reciprocity is in the literature shown

to be dependent on interpersonal trust (Belk, 2009; Storper & Venables, 2004). Belk (2009, p. 717), for instance, underlines that "Sharing, whether with our parents, children, siblings, life partners, friends, coworkers, or neighbors, goes hand in hand with trust and bonding."

The fourth form of exchange is labelled *householding* by Polanyi, and refers to the distribution of food and other items in primary groups, usually in families where members get their shares *qua* family members, defined by consanguine (descent) or affinal (marriage) relations. This form is also called 'incorporation' because it incorporates children and spouses into tight-knit family units (Wadel, 1990).

In section 4, we analyze access to goods and services in DRA according to the principles of reciprocity and redistribution in particular. Redistribution and reciprocity as forms of sharing comply with Frenken's (2017) definition of the concept. According to this approach, we contend that the degree of sharing is concomitant with the occurrence of these two principles in the DRA neighborhood.

Polanyi (1944) claims that economic systems cannot be understood in isolation from the societies of which they are part. Production, exchange and consumption are *embedded* in social and cultural structures, which means that we must examine those structures in order to understand sharing practices. Which social and cultural circumstances encourage or delimit the scope for reciprocity and redistribution in DRA? We consider practices – in our case sharing practices – to be conditioned by human and material factors on various levels (Giddens, 1984; Sewell, 1992; Westskog et al., 2011; Strengers, 2013). The factors are social and material structures, norms and values, and material items. The social structural element that is most relevant in our study is the existence of the residents' association and its rules and regulations, while the material structure is the spatial location of streets and houses. Norms and values are attitudes related to sharing and the good life that surface during interviews. Finally, material items offer certain affordances (see below) that render them suitable for different forms of sharing.

The practice of sharing is primarily conditioned by structural and human factors, but the nature of the items that are shared also matters. Writing about animals and their environment, Gibson (1986) discovered that items have *affordances*; that is, they allow certain ways of being used by animals with the right skills. The concept was later applied to human society by Ingold (2010), who maintains that objects such as chairs and tables have affordances that enable people to conduct their routine activities. Rietveld and Kiverstein define affordances as "possibilities for action the environment offers to a form of life" (2014, p. 330). But an object cannot be utilized for any action: "There are certain *constraints* imposed on us by the materiality and layout of the environment as well as the practices and abilities that we have" (ibid. 334). Our use of material things depends on our skills, but it also depends on the affordances inherent in the things themselves. This insight has repercussions for our analysis of sharing practices in DRA. What is shared and not shared is a matter of the priorities and skills of the residents, but it is also a matter of the affordances inherent in the things being shared. Even if a person

favors reciprocity, some things have affordances that do not comply with that exchange logic. In section 5, where we discuss prerequisites for sharing in terms of Polanyi's exchange principles, the specific affordances of items being shared are included in the analysis.

## 3) Methods

The study was designed as an intervention study, whereby the researchers actively intervened to promote sharing in the suburban neighborhood of Djupdalen. The purpose was to study the effects of these interventions. The study was conducted by an interdisciplinary research group comprising an economist, two human geographers and a resident from the neighborhood in question. Our empirical material derives from a mapping survey, in-depth interviews before and after the intervention, participant observation at sharing events, and meetings with the DRA board and member households. We also had access to the DRA's Facebook group (without identification of the persons posting messages there). Throughout the research process, information concerning the study was provided to the DRA residents by letter mail. Informants were recruited through door-to door visits and by phone using the phone registry. The case study area and the different methods used are presented below.

#### 3.1. Case study area

Djupdalen Residents' Association (DRA) is located in Konnerud outside the city of Drammen (see map). Konnerud was historically a mining and farming community. Large residential areas were established during the 1980s, and today the area has 10,530 inhabitants. The DRA neighborhood consists of private detached and terraced houses that were originally inhabited by young families with small children. Today the area is inhabited by many elderly residents.

DRA consists of 153 member households that are organized in a residents' association. A residents' association consists of households residing in a delimited area, such as a neighborhood, village or apartment building. The objective of most residents' associations is to ensure a good and safe residential milieu in their area. Residents' associations have rules and a board that is elected by annual general meetings where all residents have a vote.

Djupdalen Residents' Association is responsible for maintaining communal property like playgrounds, roads inside the neighborhood, and a community hall. All member households pay an annual fee of EUR 440 (NOK 4,400). In addition, there are several garage associations in the neighborhood that collect their own membership fees.

According to the rules, membership of DRA is obligatory for all residents in Djupdalen, and residents are expected to comply with the rules adopted by the annual general meeting.



Figure 1: Map showing the location of the case study area.

#### 3.2. Project intervention

The research project financed the purchase of goods to be shared in the neighborhood, with a budget of approximately EUR 5,000. Early on it was decided to purchase a car trailer to be shared by the members of DRA. One board member was assigned responsibility for organizing the lending of the trailer.

Originally the idea was to intervene<sup>1</sup> by purchasing the car trailer alone and to study how it was shared and what effects the sharing had on social relationships and environmental awareness. However, following dialog with the board, a mapping survey and a meeting with the inhabitants to present the project, it became clear that other interventions were also of interest. A Facebook group was set up for sharing goods and services in DRA and for conveying messages to and from the board. A strategy for increasing use of the community hall was also devised. The community hall in DRA could usually be booked for social functions, meetings or other activities. It contains a kitchen and a room equipped with tables and chairs. The hall could also be used by persons or institutions outside of DRA. Previously, all users had to pay for renting the hall. It was not used very much before the interventions

<sup>&</sup>lt;sup>1</sup> Steg and Vlek (2009) recommend use of systematic intervention studies to understand and promote proenvironmental behavior. They suggest a four-phase study design with: i) identification of behavior in need of change; ii) assessment of factors of importance for this behavior; iii) Intervention studies to change behavior; and iv) evaluation of the intervention. A similar set-up was made for our study, with data gathering both before and after the interventions were made.

started. During the project, usage increased, due partly to removal of the rental fee. DRA member households can now use it for free, apart from a small fee for cleaning. The community hall has been refurbished through the voluntary efforts of several DRA members. In addition, a swap day for second-hand items has been organized, which is a novel activity.

Table 1 below gives an overview of the different interventions conducted during the project and the number of households/individuals that participated in the different sharing schemes.

Sharing activity/item	Number of participating	
	households/individuals, from	
	Aug 2018–Nov 2019	
Trailer	61	
Community hall, after	12 (of which 7 were DRA	
refurbishment	households), Jan 2019–Nov	
	2019	
Facebook – posts concerning	4/138	
sharing/number of members		
Swap day	10	
Voluntary refurbishment of the	12	
community hall on March 8		
and 9, 2019.		

Table 1: Number of households/individuals partaking in sharing activities organized during the project.

#### 3.3. Mapping survey

In the initial phase of the study, the research group carried out a short survey through door-to-door visits to a non-random sample of households. We asked whether they shared goods and services with friends/neighbors or others, and why. We also asked about their experiences of sharing, and whether they would contribute second-hand items for sharing among households in DRA or purchase second-hand items themselves. The residents were also asked what they considered to be important for a sharing scheme to work, potential pitfalls, and how it could best be organized.

A total of 55 households responded to the mapping survey.

## 3.4. In-depth interviews

In-depth interviews were conducted before and after the interventions were in place. We interviewed 14 families before the interventions (first interviews) and 11 after the interventions had been in place

for six to nine months<sup>2</sup> (second interviews). All informants were visited in their homes. The interview sample consisted of families with small children, teenage children, couples with adult children who had moved out, and single households. This kind of sample is labelled a 'purposive sample' (Gobo, 2004), where the objective is to cover all types of households in the DRA population. For more information, see the table below:

Informant	Age of informant	Participation in interviews	Household composition
I1	60+	Second	Woman
I2	50-60	First and second	Woman,
I3	25-30	First and second	Man
I4	60+	First and second	Couple
I5	30-50	First	Couple with three children
I6	50-60	First	Couple
I7	25-30	First	Couple with baby
I8	60+	First	Woman
I9	30-50	First and second	Couple with two children
I10	25-30	First	Couple with one child
I11	60+	First and second	Couple
I12	30-50	First and second	Man
I13	30-50	Second	2 adults with child
I14	50-60	First	Couple
I15	30-50	Second	Woman
I16	25-30	First	Woman
I17	60+	First and second	Woman
I18	60+	Second	Couple

Table 2: Overview of informants.

The interview guide focused on attitudes toward sharing, sharing practices and experiences, social networks, consumption habits and values, focusing specifically on what informants considered to be a good life. The second interviews focused on the households' experiences of the sharing schemes established in DRA and whether any notable changes had occurred in social relations, consumption habits or other aspects of interest. We also repeated the questions from the first interviews. Some of the families participating in the second interviews who had not taken part in the first interviews were asked more detailed questions from the interview guide.

All interviews were recorded, and detailed notes were taken covering the main topics of the interview guide to facilitate analysis of the data material. Detailed notes were also taken from meetings with the DRA board and informal meetings with its members.

# 4) Findings

We found that all four principles of exchange described by Polanyi (1944) are in operation in DRA. Residents buy most of the items they need from the market, where the price of an item or service is determined according to supply and demand (market exchange), and children are fed and are given

<sup>&</sup>lt;sup>2</sup> Interviews were conducted nine months after the Facebook intervention and six months after the trailer intervention.

Christmas presents by virtue of their kinship (householding). In the context of sharing, it is the other two principles – those of redistribution and reciprocity – that are of primary interest. The empirical data reveals that both of them operate simultaneously on different levels. Our results also show the manner in which social and cultural factors condition the sharing that unfolds under the two logics in operation in DRA and shape the sharing practices we observed.

## 4.1. Reciprocity

#### 4.1.1. The good neighbor

Reciprocity is a common logic of exchange in small networks that have evolved at the individual level, i.e. between friends, relatives and close neighbors. There are many such networks in DRA, and many extend beyond the residential area to include relatives in other neighborhoods and towns. A condition of reciprocity is the presence of close and many-stranded social relations between the exchangers, such as kinship, friendship, or spatially proximity. "I do not share much, but if I were to lend things to others it would be to people I know well" (I5), said a young family man. Others share a lot of things, but only in tight networks: "I can just walk into my neighbor's garage and borrow whatever I need without asking, and they do the same in my garage" (I18). One informant described his relationship with his closest neighbor in terms of kinship: "We have the key to her house and can go in whenever we have some errand there; she is just like a family member" (I18). The tendency for reciprocity to occur in close relationships is confirmed in the literature: "generosity decreases as the network distance between individuals increases" (Simpson & Willer, 2015, p. 52). The closer the tie, the more generous the partners and the greater the potential for reciprocal exchange.

Several informants said they only shared their things with people they trusted would treat them well and return them in the same condition. One informant stressed: "I am very concerned about my things and only share them with people I know" (I12). Another informant said he would worry that his neighbor did not treat his tools as he did. His concern that those who borrowed his tools would not treat them satisfactorily made him skeptical about lending them to neighbors and friends:

To me, the point of sharing is that I must know that my things are treated in a proper manner; that is my personal barrier. If I lend my electric saw to my father-in-law, who is even more concerned about his things than I am, I have no problem because I know that he takes care of things; and if he damages something he will surely refund it. (I7)

A few informants were quite explicit and conscious about the mutual moral obligations which reciprocal sharing implies. One informant expressed a fear of making others feel indebted to him; that would be embarrassing for both parties. He found it easier to give his surplus possessions to neutral institutions like the Red Cross or Norwegian Church Aid than to neighbors or friends who may not be able to reciprocate. To him, reciprocity should be practiced by peers who are more or less equal in

terms of wealth; otherwise it would amount to alms. This attitude is reminiscent of 'indirect reciprocity' (Simpson & Willer, 2015), according to which reputational benefit is obtained in the community of the giver by making a generous donation to an external party like the Red Cross. However, such donations have no reputational effects unless they are made public, which they usually are not.

#### 4.1.2. Attitudes towards sharing

Our interviews reveal almost universally positive attitudes toward sharing, and with some exceptions, those we interviewed and surveyed in DRA had shared something with people who were close, although the extent of sharing varied considerably.

Some, nevertheless, said that sharing was something they had learned to avoid:

What I don't have, I don't borrow. This attitude has been part of me since childhood; this is what my mother always told me. I buy what I need. I would not have borrowed from anyone. Nobody borrowed from each other when I grew up, but it is of course a matter of what people are used to. (from mapping survey, female, 50–60)

For a few elder informants who grew up in less affluent times just after the Second World War, sharing seems to be a sign of poverty, and is thus associated with shame.

Furthermore, the recurrent response of many elderly informants was that they did not see the need for sharing: "We have what we need, so sharing is not relevant" (I18). However, many of them added that they were more than willing to share what they had with their neighbors. For example, as one of them said: "I have a berry scoop to lend, and my meat press can also be shared" (I17). A more affluent couple with teenagers said they preferred to buy new sports equipment for their children, which they later passed on to other children in the extended family. Since they had the economic means to buy quality equipment, it felt good to know that they would be used several times. Thus, even people who do not see a need to borrow items are willing to lend them.

At the other end of the scale, some of the younger informants expressed a need to borrow and buy second-hand items for both economic and environmental reasons. "Our grass trimmer broke down the other day. It would be nice to have one to borrow in DRA. One would feel good and it's alright to get second-hand things" (from mapping survey, female, 25–30). Frugality was also mentioned as an important norm and motive for some elderly residents who shared with their neighbors: "I try to be frugal, like my parents taught me. We should repair things and wear them out" (I17). Some informants also consider sharing to be good if it contributes to widening and solidifying social networks. "I willingly lend things if I can obtain positive social relations in return," said a male informant (I9). He was relatively well-off and did not need to borrow things from his neighbors, but would appreciate the

social bonus that could be derived from lending to others. This attitude is, again, reminiscent of 'indirect reciprocity', where merit is given in return for lending an item or offering a helping hand.

#### 4.1.3. Promote community

Several of our informants commented on how the DRA neighborhood had changed in terms of age composition and everyday practices. When the area was developed in the early 1980s, most of the families that moved in were young couples with small children, whose finances were tight. The majority of the mothers stayed at home looking after their children. Those we interviewed who had lived there since the early days of DRA said that in those days many items were shared, from tools to kitchen utensils. At that time, shops were closed on Saturday afternoons and Sundays, so a lot of borrowing and lending of items took place during weekends. Parents looked after each other's children and met socially at street parties and on other occasions. One of the informants described what life was like back then as follows:

We moved to DRA in 1983. At that time, many houses were not finished inside and there was a lot of cooperation on carpentry and painting jobs and the like. We got to know each other during these activities. It was far livelier here then. Every family had small children who ran in and out of each other's houses. Life in the neighborhood was more social. We had street parties every midsummer evening, and with 28 families in our street, there was a lot of activity. (I4)

The situation has changed over the years. Fewer young people live in DRA and, according to some informants, there is less social interaction:

There's much less social activity nowadays. We don't see many children outdoors any more. Pre-school children visit each other in their homes outside school hours and play less with other children in the neighborhood. The social cohesion has vanished, too. Previously, we gathered more often in the evenings. We always made sure we had some cake in the house in case a neighbor dropped by. (I4)

When DRA was a newly established residential area, social activities were more frequent than nowadays. Several of our informants spoke warmly about these activities and expressed disappointment that they were no longer initiated.

The neighbors still share, but the extent of sharing varies widely. Close neighbors in some streets share a lot, while others share little. An elderly woman in one of the DRA streets served as a hub for sharing and community building. There, leftover food and all types of tools and services were exchanged, residents looked after each other's houses when neighbors went on vacation, and helped each other in a number of ways. In this case, relationship building was both a driver for sharing and an outcome of the activity, as one of the elderly woman's neighbors expressed it:

This is a tight-knit community. Immediately after I moved in, I was taken in. We also meet privately. My neighbor has been here for dinner and I have been invited to her. We have also gone to the movies together. I often go for walks with the neighbor across the street. I know the inside of all my neighbors' houses. (116)

The sharing of goods and services works in tandem with social interaction, thus strengthening relationships between people and promoting community. When we asked our informants to describe their idea of 'the good life,' the most recurrent answer was to have a rich social life. Several informants expressed a wish for more inclusive activities in the community hall, like various kinds of courses, joint beer brewing, lectures, and exercise classes. Such activities could increase interaction between neighborhood residents and thereby reinforce trust, which is a prerequisite for reciprocal sharing.

# 4.2 Redistribution

While reciprocity is taking place in small networks of closely related persons, redistribution is institutionalized on a higher level: the residents' association. All DRA member households are obliged to pay an annual fee of EUR 440 (NOK 4400). The fees are used to pay for various services, such as keeping feeder roads free of snow in winter, tending the common playgrounds, and maintenance work on the community hall.

In an effort to boost the degree of sharing, our project funded the purchase of a car trailer. A system for managing the trailer was immediately set up. The trailer is stored on common ground next to the community hall. One of the board members has been put in charge of the trailer. He receives bookings and issues the locker code to the users, for which they pay EUR 10 (NOK 100). Because it is costly to attach a PayPal service to the DRA account, users pay directly to the private account of the person in charge, who then transfers the money to the DRA account. This system is based entirely on interpersonal trust. The rules state that users must return the trailer in the same condition as when they received it.

The trailer quickly proved popular; during the months following its introduction in August 2018 it was used 61 times.

The trailer was included in the redistribution system of exchange, and that was not coincidental. A trailer has affordances that make it optimal for redistribution. It is used a few times a year by private owners, but occupies a substantial part of their plots that could be used for other purposes, such as a garden area or play area for children. Moreover, even a small trailer costs around EUR 700 (NOK 7,000) which is dead capital most of the year when it just stands idle. Accordingly, it is rational for the user to share it with others in a system of redistribution. In addition, it does not require specialist knowledge to operate and maintain (beyond a driver's license and an appropriate car), which also is an important feature of items being shared by many people.

A Facebook group for DRA was established during the project. The Facebook group was established according to the logic of redistribution because it is owned by DRA and operated by the board members, who are paid a modest fee for their services. Currently it has 141 members. The large number of residents that joined the Facebook group was positively surprising, considering that several of the DRA residents are quite old. As well as serving as a communication channel for the board, the Facebook group was established to increase social interaction in the neighborhood and to enhance sharing. Four people in the neighborhood have either wanted to share something or have requested something to be shared.

Even if the Facebook group has mainly been used for purposes other than sharing, it has increased the degree of communication among the residents. Newly settled residents and even residents outside the network can have a voice in local matters and be informed about events. This was confirmed in a *dugnad* (voluntary work) at the community hall, when five out of 12 volunteers did not know any of the more established residents.

On the other hand, Facebook could have a detrimental effect on social life. Instead of meeting their neighbors face to face, residents can simply stay informed online. Attendance at the annual general meetings is an indication of this risk. In 2018, before the Facebook group was set up, 50 residents attended the annual general meeting; in 2019, after the Facebook group was set up, only 20 residents attended. If the Facebook group caused a shift from face-to-face communication to online communication, a weakening of neighborhood networks and a concomitant decrease in reciprocal sharing could be expected.

A Facebook group established in such a small community as DRA may also deter people from actively using it for sharing, because everyone in the neighborhood can see what others post on the site. One informant said it was interesting and informative to follow the Facebook group. However, he would not post anything on the site himself because he wishes to "be on his own and not broadcast his life to the neighbors" (I3). Thus, while the Facebook group may have the positive effect of integrating newcomers into the DRA communication flow, it may have diminished the need for face-to-face contact.

# 5) Discussion

# 5.1 Sharing practices and motivations

There is agreement in the literature that many sharing schemes are only of interest to certain socio-economic groups. Car sharing, for instance, is shown to attract those living in densely populated areas with good access to public transport, who are young and flexible and with high levels of education and income (Becker et al., 2017). Studies of other types of sharing schemes, such as community-supported agriculture and sharing of cabins on hiking trips, are also demonstrated to appeal only to marginal

groups (Vasquez, 2016; Westskog & Aase, 2020). However, our study shows that sharing with neighbors, friends and relatives may be quite widespread, and most of those interviewed and surveyed had shared with neighbors or friends.

Our interviews reveal that the social aspect of sharing is an important part of the motivation for sharing. People wish to share out of benevolence and sometimes to obtain social benefits in the form of more friends and acquaintances, or to earn reputational benefits in line with the theory of 'indirect reciprocity' (Simpson & Willer, 2015). Indeed, when we asked our informants about their perception of 'the good life', nearly all of them gave high priority to a rich social milieu. Family, relatives, good friends and neighbors were essential ingredients for a happy life. Economic savings, environmental concerns and frugality were also cited as important reasons for sharing.

Different motivations for and practices of sharing may indicate that sharing should be encouraged and organized in different arenas, with different logics and set-ups to include more people in sharing activities.

## 5.2. Prerequisites for sharing according to the logics of reciprocity and redistribution

Sharing – in the sense of access to goods and services outside the market – takes place in DRA according to the logics of reciprocity and redistribution (Polanyi, 1944).

Reciprocity is common in tight social networks, mostly among close neighbors. Accordingly, the practice of reciprocity is conditioned by the material structure of the neighborhood; that is, the spatial distribution of dwellings. However, it is not proximity per se that encourages reciprocity. Our interviews reveal that reciprocity is unequivocally related to trust. Trust, in turn, is conditioned by face-to-face encounters and communication over time, to accumulate experience of other people's behavior. Whether trust derives from communication or whether it is a prerequisite for communication often depends on the context (Julsrud, 2008). In our case study of sharing in DRA, communication through face-to-face encounters is clearly a condition for trust and, ultimately, for reciprocal sharing. Such trust-generating encounters are more frequent among spatially close neighbors than among distant ones, thus explaining the high occurrence of reciprocity in close networks of next-door neighbors. This finding is in accordance with literature on reciprocity and trust (Belk, 2009; Storper & Venables, 2004).

Reciprocity is not a uniform notion, and there is a tendency to differentiate according to the household life cycle. Young people express a need to borrow tools and equipment and to swap clothes they cannot afford to buy themselves. At the other end of the life cycle, a few elderly residents associate borrowing with poverty and shame, and avoid sharing with others, but they willingly lend their things to more needy neighbors. Thus, there could be complementarity between young borrowers and older lenders in a generationally mixed neighborhood like Djupedalen.

Redistribution is organized by a central institution, like DRA. As membership of DRA is obligatory for all households, sharing schemes that are established through DRA provide all the residents of Djupdalen. Frenken (2017) discusses redistribution in relation to the platform economy, where central governments tax and redistribute income between winners and losers. Central governments take on the role of regulating the profits from the sharing economy to the benefit of wider society. Redistribution could also take place in institutions other than central or local governments. Libraries take on that role (Jochumsen et al., 2012), and so too could institutions like DRA. The intervention shows that material items for sharing can be incorporated into entities that were established for other purposes, as in the case of DRA.

The establishment of the Facebook group, was also implemented on the level of DRA, and is operated by the board. The Facebook page is operated according to the redistribution logic, but its intended function is to boost reciprocity. Users can publish items to lend or borrow to all the member households of DRA. It was too early to evaluate the full effect of the Facebook intervention during our project period because it will probably take time for residents to get used to it. However, the initial use of Facebook indicated much interest in following the DRA Facebook group, but little interest in posting requests for items or services from neighbors. Moreover, we learned through the interviews that many residents still wanted face-to-face meetings or events to boost social relationships in the neighborhood. A redistributive institution like DRA can also engage in establishing social arenas for people to meet face to face, potentially establishing reciprocal ties that may encourage sharing.

Several authors have pointed to that social networks have become more individualized and fragmented, causing a decline in community relations (Turkle, 2012; Dotson, 2017). They see the development of digital media as a key factor in the decline in meaningful face-to-face contact and communication. On the other hand, authors such as Hampton and Wellman (2018) argue for nuancing this picture. Densely knit networks might also impose control and repression of individuals which more loosely connected networks might avoid. In our case, the DRA neighborhood has experienced a decline in social activities and face-to-face encounters over the years, and many of its residents would like to see an increase in such activities. Our study also indicates that Facebook may reduce the need for social interaction because users can log in to Facebook in order to stay informed. Sharing activities requiring face-to face encounters organized by a redistributive institution like DRA might also help counteract a trend towards further individualization and fragmentation of the DRA community.

Our study shows that the prerequisites for establishing systems of sharing vary with the logic of the exchange system. An exchange system based on reciprocity requires interpersonal trust and close relations in order to operate, whereas a redistributive exchange system requires an entity that organizes sharing in, for instance, a neighborhood. Furthermore, as Grimen (2012) argues, institutions may also contribute to building trust in communities and wider society by creating "framework conditions for

development and maintenance of trust-based interactions" (Grimen, 2012: 85). Accordingly, the board of DRA could create framework conditions that increase communication and face-to-face encounters, and hence the likelihood of more reciprocal sharing, by organizing activities such as swap days, sharing schemes or street parties.

### 5.3 Different exchange systems for different things: the role of affordances

One reason for the simultaneous existence of the two logics of redistribution and reciprocity can be found in *affordances* of the things being shared (Rietveld & Kiverstein, 2014). According to the redistribution logic, large, bulky and solid items that are only occasionally used by a household and require little maintenance or specialist knowledge to operate are most suitable for sharing. Things like car trailers, cement mixers, scaffolding and ladders are not frequently used by a single household and require storage space. Moreover, the capital costs of such items are high when seen in relation to the time they are in use by a single household. When, on the other hand, investments are shared by the 153 member households in DRA in a redistributive manner, users can reduce costs dramatically and maintain the same utility.

Small things that are easily stored and require careful use are best suited for reciprocity. Electric drills, lawnmowers, grass trimmers, meat presses, camping gear, snowblowers and bikes have affordances that encourage sharing among people who trust each other. Hence, the different exchange systems (reciprocity and redistribution) can fulfill different purposes. Things have features which are more or less suited to reciprocal and redistributive exchange systems.

# 6) Conclusion

In this paper we have shown that the prerequisites for sharing to take place in neighborhoods vary with the exchange system. Reciprocal sharing requires close relations and interpersonal trust in order to take place, whereas redistributive sharing requires an entity that organizes the sharing activity. Our results indicate that the sharing of goods and services can expand and reinforce social networks and thereby improve quality of life, as well as have positive economic effects for some. In addition, the potential of sharing to reduce the environmental footprint of consumption (Cohen & Kietzmann, 2014; Martin et al., 2019) raises the important and valid question; how can the rate of sharing be boosted in neighborhoods like Djupdalen?

We contend that sharing can be encouraged in two ways. First, our intervention has proved that items for sharing can be integrated into entities that were originally designed for other purposes. Djupedalen Residents' Association has been responsible for common property since the early days of the neighborhood 30 years ago. By introducing the car trailer, our project utilized capacity that was inherent in an existing entity. Items with the appropriate affordances can successfully be shared

according to the logic of redistribution under the umbrella of entities that were originally designed for other purposes.

Sharing according to the logic of reciprocity, on the other hand, is conditioned by interpersonal trust. If the rate of reciprocal sharing is to be increased, how can interpersonal trust be strengthened in an institution like DRA? Interpersonal trust cannot be dictated by an institution; it is the outcome of positive experiences of interaction between people. Many residents miss the street parties and lively street life of earlier days. However, by increasing the rate of face-to-face interaction and communication, interpersonal trust (and mistrust!) can be reinforced (Julsrud, 2008). Opportunities for interaction can be initiated by DRA by reintroducing the street parties or by arranging courses, exercise classes or swap days in the community hall. In this way a redistributive system may have a role in organizing specific sharing activities or schemes as well as an indirect role in organizing activities that lead to more face-to-face interactions, thus generating trust that is prerequisite for reciprocal sharing.

Many urban neighborhoods share the same material and social structure of Djupedalen. Norway currently has approximately 2,050 residents' associations organized through a central institution for such institutions (Vellenes Fellesforbund, 2019), many with a structure similar to that of DRA, where houses are located close to each other. Many neighborhoods are also characterized by a differentiated population structure where newly established households and mature households stand in a complementary relationship to each other, because young people tend to be borrowers and older people are often willing lenders. The structural conditions for sharing in neighborhoods are thus in place in many towns and cities. If the goal is to increase the rate of sharing of goods and services in such neighborhoods, our study has shown that two initiatives can be valid. First, items with the right affordances can be redistributed by existing entities; and second, reciprocity can be encouraged by organizing more opportunities for resident interaction.

# Acknowledgements

The authors would like to thank all the informants for sharing their thoughts with us and the Djupdalen Residents' Association for its kind cooperation. We would like to thank Tom Julsrud for insightful comments on and suggestions to earlier drafts of the manuscript, Brigid McCauley for editing and proofreading, and our colleagues in the SHAREON project (Sharing Economy: Motivations, Barriers and Climate Effect) for their support and valuable input. This project is led by CICERO and funded by the Norwegian Research Council and Vestregionen (an association of 16 municipalities vest of Oslo), project no. 264472, whose support is highly appreciated.

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