

ON THE IMPORTANCE OF POWER STRUGGLES IN THE DIFFUSION OF SOCIAL INNOVATIONS

The case of women suffrage in the Netherlands

Rick Hölsgens

Social Research Centre - Central Scientific Institute of Technische Universität Dortmund, Germany

Abstract: Diffusion of social innovations has become a key theme in social innovation research. In this paper I argue that the importance of power relations and opposition against social innovations should receive a more central position in this line of research. Using detours to the related fields of Science and Technology Studies and Transition Studies, the significance of (shifting) power relations in the diffusion of innovations is underlined. Through a historical case study on the institutionalisation/diffusion of women's suffrage in the Netherlands (1883-1919) it is shown that power struggles and shifting power relations are also key for the successful diffusion of a social innovation. With this paper I aim to bring power and empowerment to the agenda of social innovation researchers.

Keywords: Social Innovation, Power, Opposition, Voting Rights, Women's Suffrage, Netherlands

Introduction

An important and emerging theme in innovation research concerns the topic of social innovation, as opposed to technological innovations. Social innovations are becoming more and more recognized as the locus of change towards a more sustainable economy, characterized by more sustainable social practices. One of the main challenges social innovations see themselves confronted with, concerns the issue of diffusion. Although it is not a completely overlooked theme, I will argue in this paper that the role of power relations and opposition as barriers against the diffusion of social innovations, should receive more attention in studies of social innovations. The goal of this paper is to – by means of a historical case study – illustrate the importance of power relations and empowerment for the successful diffusion of social innovations.

In recent years, many authors have engaged themselves with the topic of social innovation and the theoretical as well as practical difficulties of

diffusion/ mainstreaming of these innovations (Howaldt et al., 2015; Howaldt et al., 2016; Santos et al., 2013). Howaldt et al. (2015), for instance, point at Tarde and his theories of diffusion through imitation. At the same time, researchers time have become engaged with innovators to see which problems they encounter, and to see how these can be overcome in practice (Hargreaves, 2011).

Building, often, on the works of Rogers (1962/1983), many innovation scholars tend to portray the diffusion of an innovation as an S-curve. The innovation starts with an invention that is slowly taken up by other actors, at some point the innovation gains momentum and spreads rapidly and eventually even the 'laggards' take up the innovation. This S-curve model was originally formulated for technical innovations, but taking a birds-eye perspective with hindsight, it will also fit to most social innovations.

In this linear representation, the focus of the analysis only lays with the users/ consumers who do, or do not, embrace the innovation. This linear and bi-polar view has been criticized; see for

instance Karnowski et al. (2011). Howaldt et al. (2015) stress Tarde's early twentieth century view on diffusion in which imitation (i.e. the uptake and further development of an innovation) not only refers to directly adopting the innovation. The diffusion process involves modification and re-invention of the original idea. Karnowski et al. (2011) also acknowledge the value of Tarde's view on imitation. In the development of their 'Mobile Phone Appropriation Model' (MPA) (first presented in Wirth et al., 2008), they show that adoption and diffusion of an innovation is not a binary Yes/No decision from the side of the consumer/adopter, but involves more complex decision making.

Even though these views allow for some more freedom for the adopters of an innovation and leave room to think with the invention so it fits the needs of the adopter, they still focus predominantly on the users/consumers accepting the innovation. Diffusion does not only depend on the uptake of an innovation by increasingly large shares of the population, but also on those forces trying to prevent its spread. Building on literature from related fields, supplemented by a historical case study, I will lay out some groundworks for a research strand on the diffusion of social innovation and its opposition. I argue that, for a proper understanding of the spread of many (social) innovations, and especially for a proper understanding of the problems and barriers social innovations may encounter, we should not only look at the adopters of the innovation. Opposition, and dealing with this opposition, is an at least equally important factor in the diffusion of social innovations.

Although social innovation scholars have recently started to acknowledge the importance of opposition and barriers (see for instance Howaldt et al., 2016), I build predominantly upon literature from the related academic disciplines of science and technology studies and transition studies to elucidate the importance of dealing with opposition and power struggles. These fields of study tend to engage themselves with technological rather than social innovations, but even though some cautiousness is thus in place in translating their findings to social innovations, I will argue that the aspect of competing social groups is also important to understand the diffusion of social innovations. This will be underlined with a historical case study on the diffusion processes of a successful social

innovation: the institutionalization of women's suffrage in the Netherlands (1883-1919).¹

The paper starts by introducing the dispersed topic of social innovations. Subsequently it will make a little detour to related innovation research fields and their appreciation of the importance of power struggles. Next, the diffusion (or institutionalization) of women's suffrage in the Netherlands will be addressed. This section presents a very short history of a topic that has filled complete books, but it will illuminate how the Dutch women's right movement and the 'initiator' of female voting in the Netherlands – Aletta Jacobs – have had to fight for their cause. The paper aims to contribute to the academic debate on social innovation and diffusion; it therefore concludes with a plea to include power relations more prominently in social innovation research.

Social innovations

Social innovations are becoming ever more present in academic and societal/ political debates; especially with an eye on a transition towards sustainability. Social innovations hold great promises as they aim at social change for the better. However, despite the growing momentum, a clear understanding of what social innovation is (and what it is not), is still lacking. The field of social innovation research is still in search of identity, as can be seen by the work of Pelka and Terstriep (2016), who found no less than 17 projects which were funded under FP7 that are still running, or ended less than 12 month ago, and that aim at the mapping of social innovations in Europe and beyond. This illustrates the popularity and relevance of social innovation, but at the same time it shows there is little consensus on what social innovations are and how they can be mapped. Rüede and Lurtz (2012) analysed over 300 publications on social innovation and determined that these could be split up in at least seven different categories, all with a different understanding of the concept and all with a different focus. Without delving into all different categories, the current approach should be seen in line with the category '*To change social practices and/or structures*'; the typical guiding question in this category, following Rüede and Lurtz, is: 'What

¹ To be able to understand the true power of opposition, future studies should overcome the asymmetry caused by the selection of successful innovations, by also studying failed social innovations. As the aim of the current study is also to show how innovators have dealt with the opposition they faced, it was chosen to focus on a successful example.

can we say about changes in how people interact among each other?’

The guiding definition of this kind of social innovations is provided by Howaldt and colleagues. They define social innovation as an intentional new combination or configuration of social practices in certain areas of social action, prompted by certain actors or constellations of actors with the ultimate goal of coping better with needs and problems than is possible by using existing practices (Howaldt and Schwarz, 2010, p. 89).

This definition is still broad. For the current study, one aspect therefore still needs to be specified. Social innovations may refer to changing practices of individuals (i.e. consumption behaviour) or changing social context (i.e. societal change). An example of a social innovation aiming at changing consumer behaviour is, for instance, the German *Stromspar-check*, which helps less fortunate families to save energy and therewith money.² The goal in this case is to change the practice of the individual (household), while at the same time contributing to societal challenges of climate change. An example of a social innovation aiming at societal change is the green movement that emerged in the 1960s. This movement, besides raising awareness among individuals, especially aimed at banning unsustainable practices such as the use of toxic weed killers or nuclear energy. It may be clear that there is a wide range of social innovations that fall in between these two extremes, but what is important to note is that social innovations may be directed at individual behaviour or at larger societal changes.

This has important implications for the diffusion of a social innovation. For the first type of innovation, diffusion is mainly dependent on individuals’ choices to do, or do not, change their behaviour. Therefore, the spread of this type of social innovation depends above all on consumer behaviour. This is difficult to influence; although interesting work is being done for instance in the fields of (environmental) psychology (Clayton et al., 2016) and behavioural economics (Dogan et al., 2014).

Women’s suffrage is an example of the second type of social innovation. It is an intentional new configuration of practices in the area of elections, prompted in the Netherlands by Aletta Jacobs and her fellow feminists, to better cope with the issue of gender inequality. In this case, individual actors are still important as ambassadors of the innovation, however, the diffusion does not depend on whether

individuals are willing to change their daily practices, but on changing societal practices or institutions and therefore play at a higher (i.e. more abstract) level. These changing societal practices can be expected to raise opposition among incumbent actors who see their position threatened by the new social practice. Therefore, in order to analyse the diffusion of this kind of innovation, opposition and power relations should be studied.

Innovation research and the importance of power and opposition

The academic field of innovation research is large and encompasses various academic domains, e.g. the systems of innovation approach (cf. Freeman, 1995) or the triple helix approach (cf. Leydesdorff, 2006). Studies in these fields tend to focus on technological, rather than social, innovations. The diffusion of social innovations is distinctly different from technological innovations because social innovations are immaterial and can generally not be patented and are usually not commercial. Nevertheless, insights from the diffusion of technological innovations can contribute important lessons for the study of social innovations. Therefore, a sidestep is made to the fields of science and technology studies (STS) and transition studies as these two strands of innovation research lay particular emphasis on the role of human actors, their interactions, and power relations.

As the field of transition studies partly builds upon science and technology studies, it seems natural to start with the elder discipline. The field of STS emerged in the 1980s with the works in particular of Pinch and Bijker (1984) and Bijker et al. (1987). In his early, and by now almost classic, paper ‘The electrification of America’, Thomas P. Hughes (1979) discussed the notion of system builders. Hughes described in detail how the diffusion of electricity in the United States was not only the result of an (technological) invention that needed to be adopted by consumers, but of active and effective system building. He focused on three main characters, with different roles, that were the dominant system builders and that made the diffusion possible, each by addressing a different hurdle (Edison as ‘Inventor-Entrepreneur’, Insull as ‘Manager-Entrepreneur’ and Mitchell as ‘Financier-Entrepreneur’). Although Hughes’ analysis was still somewhat linear, he demonstrated the importance of social actors and their interactions for the diffusion of an innovation.

Pinch and Bijker (1984) focused less on the importance of dominant individuals, but on relevant social groups. They criticized the linear view on

² <http://www.stromspar-check.de/>.

technological innovations resulting from hindsight analysis and showed that the development of artefacts depends on social groups that attach a meaning to the artefact. They illustrated that, for instance for the example of the bicycle, various designs existed in the late nineteenth century. Rather than examining only why the safety bicycle – the design as we know it today – proved successful, they also asked why other alternatives ‘died’ out, i.e. what ‘problems’ they encountered. “In deciding which problems are relevant, a crucial role is played by the social groups concerned with the artefact, and by the meanings which those groups give to the artefact: a problem is only defined as such, when there is a social group for which it constitutes a ‘problem’” (Pinch and Bijker, 1984, p. 414). Relevant social groups comprise of organized or unorganized groups of individuals that share a certain understanding of the artefact in question. These not only include users/consumers, but also groups that do not use the actual artefact, but still share a common understanding of the artefact. For the case of the bicycle this for instance included the ‘anti-cyclists’, who actively opposed cycling. It would reach too far to reiterate Pinch and Bijker’s history of the development of the low safety bike as we know it today (for a more elaborate description see also Bijker (1995)), but what is important to take along from the Social Construction of Technology, and STS literature in general, is that certain social groups often tend to favour different designs, or oppose certain products or services altogether. The eventual outcome, and thus the eventual diffusion of an innovation, is determined by power struggles and social construction and therefore does not only depend in the binary adoption vs. rejection of a new artefact.

The emphasis in STS thus lies with interactions among relevant individuals or social groups and with the struggles among these groups. STS scholars focus on the role of individuals and societal groups in the development of certain technologies. For social innovations, the role of the social groups may even be more important. As Pinch and Bijker’s example of the emergence of the safety bicycle illustrates, it is not only about the adoption of the new technology by an ever larger share of society to make an innovation successful; the power struggles between the social groups is equally important in determining the adoption of a certain artefact. There were certain social groups, with relatively a lot of power, who were not in favour of the safety bike. These tried to oppose the introduction and diffusion of the innovation. The increasing (political) power asserted by women in this period – women favoured the low bicycles –

coupled with technological innovations – the air tire – that convinced young men of the racing possibilities of the low bikes, eventually led to the general acceptance of the safety bicycle.

While STS by and large focusses more on changing technologies or artefacts, transition studies tend to focus on larger systemic changes. Transition studies build upon the work of Geels (e.g. 2002; 2004; 2005; 2011), who developed a theory on socio-technical change using a multi-level perspective (MLP). Geels has shown, in a plethora of case studies, how large systemic changes are inclined to follow a distinct pattern from niche innovation (or invention) to becoming mainstream by rivalling and eventually replacing the existing regime.

The basic premise of the MLP is that radically new innovations tend to happen outside the existing regime, which is comprised of the main actors that together build the socio-technical system around a certain product or service. These outside innovations can rival the existing regime. However, regime actors, which by definition are interconnected with each other and therefore build a relatively stable entity, will usually try to fight off this outside competition. Although, this has not always been sufficiently recognized in well-intended attempts to manage and support niche innovations, it is therefore important to be aware of the hostile environment these innovations face because they rival existing institutions, actors and practices. Initiatives aiming at the management of transitions through niches (i.e. strategic niche management) generally met limited success (Schot and Geels, 2008). What they oversaw – despite various criticisms (e.g. by Meadowcroft, 2011) – and what was actually already present in the original transitions literature, is politics and the opposition by the existing regime (Avelino & Wittmayer, 2015; Grin, 2010; see also Raven, 2012). Avelino (2011), Turnheim and Geels (2012), Hoffman (2013), Geels (2014), and Avelino and Wittmayer (2015), amongst others in the area of transition research therefore furthered the research on power relations and they emphasize the importance of power and politics again. In these recent works, the importance of power struggles and power relations between the different actors involved in the transition to sustainability are underlined.

The short excursions to the fields of STS and transition studies have illustrated how the diffusion of an innovation not only depends on its adoption by users or consumers (regardless whether with or without mutation in the imitation/adoption phase), but also on active opposition by relevant social groups. It will be shown in the next sections that

these lessons from STS and transition studies can, and should, be transmitted to social innovation research. In the next section I will first address the diffusion of a historical social innovation to underpin the theoretical claims with a concrete example. The social innovation in question is the emergence and institutionalization of women's suffrage in the Netherlands. It will be argued that the diffusion of this social innovation, which emerged with the 'invention' of female voting by Aletta Jacobs in 1883, was determined by struggles among different and often opposing relevant social groups and actors. The diffusion not only relied on increasing shares of the population adopting the notion of voting rights for women, but also on a power struggle.

Women's voting rights in the Netherlands – a very short history

The most important actor in the development of female emancipation in the Netherlands is beyond any doubt Aletta Jacobs, who was one of the main social innovators with regards to the first wave of the women's rights movement. In this short history I rely above all on her memoirs, published in 1924. This has the advantage that we can trace back the stumbling blocks and opposition experienced by the social innovator herself. An obvious downside is of course that this can lead to a biased picture. Her story is therefore triangulated with primary research and other secondary literature.

In 1871, Thorbecke, then in his third term as Minister-President of the Netherlands, granted permission to Aletta Jacobs to start with the study medicine at the University of Groningen; initially for just one year, but shortly before his death in 1872 Thorbecke arranged her permanent position as a student. Jacobs wrote in her memoirs that, with the support of relatively influential friends such as dr. L. Ali Cohen, the state inspector of medicine in Groningen, her father supported her by writing the liberal Thorbecke to ask for permission to enter medical school (Jacobs, 1924). Strictly spoken it was Aletta's father who received the permission to let his daughter attend the university (Mulder and De Jong, 2002). Jacobs graduated as first female doctor in 1878 and successfully defended her dissertation in 1879.

Although other women had already started taking the exam to become apprentice in a pharmacy, Jacobs' insistence to start a proper study at a university paved the way for female students in the Netherlands. Jacobs was a pioneer in terms of female engagement with social issues in the Netherlands. Engaged especially with her female patients and the

inequality she had also experienced in her own life, Jacobs more and more developed into a protagonist for the female rights movement. Although Jacobs was not the first to address the issue – John Stuart Mill, for instance engaged himself with the English debate that had started some years before, in his *The subjection of women* (Mill, 1869) – she was the first woman to actually register as voter in the Netherlands (De Wilde, 2007).³

In this period voting rights in the Netherlands were still restricted and based on income – or rather on the amount of tax paid.⁴ With her job as GP, Jacobs earned reasonably well and, not being married, she paid enough tax to be legally entitled to vote, so she thought. In 1883 she tried to register as voter in her city Amsterdam. Her request was denied, because:

“the addressee may base her claim on the law, but according to the spirit of the State institutions, voting rights are not granted to women. Even if one appeals to the law, it should be questioned whether women should be allowed the full pleasures of citizenship or civil rights. As far as civil rights are concerned women are, with the exception of their children, excluded from guardianship.” (Letter by the Amsterdam city council quoted in Jacobs, 1924, pp. 94–95)⁵

Even though no legal restrictions prevented a smooth and quick adoption of the social innovation of equal voting rights for men and women, the powerful social group of elite male politicians blocked it. However, not only politicians objected the female voting rights, not one lawyer of the Court protested against the decision and various newspapers expressed their disapproval about Jacobs' request. The *Algemeen Handelsblad*, for instance, underlined the reasoning of the Court of Amsterdam. The newspaper asserted that Jacobs interpreted the law to her own advantage, but not in spirit of the law, and neither in spirit of womankind. It added that there was “such a wide area of work for women (...) that it is not necessary for women to also get involved in politics.”⁶ Jacobs took the case to the Dutch Supreme Court, but the Court ruled that only men were considered ‘Dutch and resident’; if that were to include women, it

³ Shortly after graduating, Jacobs spent some time in London where she got acquainted with the English debate (Jacobs, 1924).

⁴ http://www.parlement.com/id/vhnnmt7ltkw9/historische_ontwikkeling_kiesstelsels_en.

⁵ Freely translated by the author.

⁶ *Algemeen Handelsblad*, 24 March 1883

would have been made explicit in the Constitution, so the Court ruled (Jacobs, 1924).

Nevertheless, the issue was also taken up in national politics. Parliamentarian Van Houten, the male feminist who had encouraged Jacobs to register as voter, proposed to make female voting rights explicit during the debates on the revision of the Constitution in 1884. He asserted that the head of a household should be eligible to vote and he saw no reason to restrict this when the head of the household is female.⁷ The discussion on the revision of the Constitution that took place at the time could have offered possibilities for female voting rights. At the same time it caused potential pitfalls.

The debate was not simply one of suppressed women against the dominant male elite. Jacobs received support from men as well as opposition from women. One of the members of the Supreme Court – a personal contact of Jacobs – wrote her that the Court’s ruling should not necessarily mean the end of things. He advised her to follow the same procedure and try to register again for the next elections, only this time supported by other women who would in theory be legally eligible to vote (i.e. those who paid tax) who would do the same in other municipalities. Jacobs favoured the idea, but was worried this could lead to a change in the Constitution so that it would be made explicit that only male inhabitants were allowed to vote; setting back the entire process. The number of women (theoretically) eligible to vote was limited, but Jacobs tried anyway. However, the disappointing reactions caused her to stop the effort; illustrating that even in the target group most directly affected by the social innovation, opposition existed (Jacobs, 1924). The new Constitution of 1887 cleared the ambiguity on suffrage; it declared that women were not allowed to vote.⁸

The new Constitution closed the door that had until then stood ajar. However, in 1893 seven female board members of the *Vrije Vrouwenbeweging* (Free Women’s Movement) decided to establish an organization with the goal to work for female suffrage again. Jacobs was invited to join. At first she rejected a leading position (also because of personal reasons), but in 1902 she became the president of the organization. Jacobs and the organization put a lot of effort in raising awareness through contributions in newspapers and

public talks (Jacobs, 1924). Although it is impossible to derive real quantitative conclusions from www.delpher.nl (database with digitized historical documents) a quick search for the key words ‘vrije vrouwenvereeniging’ results in 583 hits for the period 1890-1899 and 453 hits for the period 1900-1909 in newspapers; ‘vrouwenkiesrecht’ (women’s suffrage) resulted in 1260 and 7778 hits in these decennia.⁹ This illustrates the success of the movement to raise public awareness and bring the topic on the national agenda.

In 1905 a new opportunity emerged. The national elections were won by the political left, and although the formation of the government proved difficult and a minority government was eventually put in place, steps were taken to revise the Constitution; especially the article on voting rights was high on the agenda. The *Liberal Union* proposed to make article 80 on voting right blank, leaving it to the regular law to specify who has voting rights. Although the Union was not ready for voting rights for women at that time, it would make future change easier as it wouldn’t require a change of the Constitution (Oud and Bosmans, 1997). The organization for female suffrage formulated its own demanded version of article 80. It was presented to Queen Wilhelmina and Rink, Minister of the Interior; exemplifying the active lobbying undertaken by Jacobs and her fellow activists. The movement was still relatively small at this time, but by making use of the opposition, and the possibilities it offered for a rebuttal, the organization could convince more and more people to take their side; even among traditionally conservative social groups such as the Catholics (Jacobs, 1924).

Due to organizational difficulties (centred around the budget for the Ministry of War), the left-wing minority government fell and the right-wing conservative Heemskerk formed a new minority government in 1908 (Oud and Bosmans, 1997). The elections of 1909 were another set-back for the female voting rights movement as the cabinet led by Heemskerk that had been in place since February 1908 managed to reach a majority in parliament. Under the conservative Christian cabinet, possibilities for real change were small. Therefore the focus of the Free Women’s Movement was redirected at raising awareness and attracting new members (Jacobs, 1924). By the time of the next elections in 1913, the left-wing parties had the issue of voting rights for *all* men, and the

⁷ Voorstel van wet van den heer mr. S. Van Houten, tot herziening der Grondwet: Memorie van toelichting (1884), <http://resolver.kb.nl/resolve?urn=sgd%3Ampg21%3A18831884%3A001687>.

⁸ See http://www.parlement.com/id/vh8lnhrqsxzn/grondwetsherzieningen_1815_heden.

⁹ Search executed August 19th, 2016.

removal of prohibition for women, high on their agendas (cf. Van der Horst, 2013). Jacobs wanted more, but was also convinced that the anti-feministic government led by Heemskerck first had to be replaced first. The cabinet fell indeed, and the new cabinet put the revision of the Constitution back on the agenda.

The new Minister-President Cort van der Linden had expressed his will to govern based on the wishes of the people. So even though he had expressed himself to be against female voting rights before, the Free Women's Movement set up a petition and could hand over more than 165,000 autographs in their support, until the War stopped their further efforts. Cort van der Linden had also shown some hesitation regarding the implementation of female suffrage as its effects were unknown. Governments of countries that had already adopted women's suffrage were therefore requested by the Free Women's Movement to explain their experiences to the Dutch government (Jacobs, 1924).

During the War, the female rights movement kept protesting and lobbying. In the revised Constitution of 1917 a moderate success could be celebrated. Women were granted passive voting rights, which meant they were still not allowed to vote, but were eligible to be voted into parliament. Various parties presented female candidates. Although Jacobs writes that it was made sure they could not effectively be chosen she was actually placed high on the list of her own party *VDB* (*Vrijzinnig Democratische Bond* – predecessor of the current labour party); the reason she wasn't elected was that other men were chosen with preference votes.¹⁰ One woman was indeed elected. A new law proposal to grant voting rights to woman was handed in in 1918 by VDN-parliamentarian Marchant. Supported by developments in other countries, the female rights movement had taken their protests to the streets. Fearing more social unrest, the Christian right-wing government of Ruijs de Beerenbrouck, who was actually against the proposed law, eventually gave in.¹¹ Thirty-six years after Aletta Jacobs had spurred the debate in the Netherlands with her attempt to register as a voter, the social innovation finally met success with the institutionalization of equal voting rights for men and women.

Power and opposition in social innovation (research)

Judging with hindsight and from some distance, the adoption or diffusion process of an innovation may resemble a linear S-curve. Zooming in on the actual diffusion process it becomes clear that the implementation usually does not happen that smoothly. With this paper I aim to bring the issue of deliberate opposition by certain relevant social groups against social innovations on the agenda of social innovation research. As the detours to the fields of STS and transition studies have shown, (technological) innovations often meet, and meet, opposition on their way to diffusion/mainstreaming and the example of suffrage for women in the Netherlands illustrates that this is no different for social innovations.

An innovation often – though not always – challenges an existing regime or existing institutionalized system. The innovation may have advantages to many, and may therefore address social needs present in parts of society, but to others – often a fairly powerful elite – it will be disadvantageous. Schumpeter (1943/1994) already referred to this as the process of creative destruction necessary for the advancement of innovation. For the diffusion of social innovation the 'pain' from creative destruction can be equally severe.

In a paper presented at the *International Sustainability Transitions Conference 2016* Hölsgens et al. (2016) make clear that not all social innovations actually rival an existing regime. In other words, for certain innovations the power struggle may be more central than for others. Many social innovations aim less at large societal changes of the kind of the voting rights addressed in this paper, but more on changing practices of use. In these cases, the most important opposition may not come from vested interests and opposing actors, but from the difficulty of changing individual practices. Nevertheless, also these kinds of social innovations have to deal with a certain kind of opposition.

The topic of opposition and resistance should therefore receive a more central position in social innovation research. The EU-funded research project *SI-DRIVE* identified five key dimensions for the review and mapping of social innovations. One of these, under the overall heading 'Resources – capabilities and constraints' also touches upon the issue of empowerment and conflict (Howaldt et al., 2016). The barriers addressed in this report – based on the mapping of over 1000 social innovations – vary greatly. Political opposition and cultural

¹⁰ http://www.parlement.com/id/vi6da99jvsh5/90_jaar_vrouwenkiesrecht

¹¹ Idem.

barriers are listed among those factors hindering the diffusion of these innovations.

The case of the introduction of female voting rights in the Netherlands has shown that the social invention – although it could be argued this was an imitation of the invention made abroad – by Aletta Jacobs had to overcome a lot of opposition on its way to successful institutionalization. Both support and opposition often came from unexpected sides. Through awareness raising via newspaper contributions, public talks and rebuttals against opponents, Jacobs and her fellow feminists slowly managed to win larger and larger parts of society for their cause. Opposition remained until the end. Enhanced by the wider societal unrest resulting from the First World War, the louder voice of the women's movement, which by now had taken their campaign to the streets and was backed by international momentum, caused the right-wing, Christian, government lead by Ruijs de Beerenbrouck eventually to give in.

With hindsight, the diffusion of this social innovation may seem to have followed an S-curve; starting from Jacobs' first initiative with slowly growing support until the point where a tipping point was reached and the government gave in and the innovation became institutionalized. However, this view does not do justice to the actual barriers and opposition in the implementation phase. Although awareness raising and building up momentum was an important part of the strategy of the women's movement, dealing with the opposition it faced was equally important. Actively engaging in the discussion with opponents and refuting and combatting their arguments were crucial to convince more and more men and women of the need for equal (voting) rights for all.

In this process, Aletta Jacobs was a very important central actor with good connections, not only to her peers, but also to those with power. Having successfully studied at a university, and working as a doctor, Jacobs enjoyed a certain status and she had a wide network including influential individuals. After losing her case at the Supreme Court, one of the judges, who happened to be a personal contact, encouraged her to continue. Even though this road proved a dead-end, it is illustrative of the fact that Jacobs was well connected also among the more powerful elite.

Scholars analysing the diffusion of social innovations, both from a theoretical as well as an

empirical perspective, should acknowledge the importance of power imbalances. They should not only ask how can the diffusion of an innovation look, and how can it be strengthened, but also ask why is the innovation hampered? From a theoretical angle the power relations between innovators and other relevant social groups deserve more attention. This line of research should be built up upon a theoretical understanding of empowerment and power relations. Subsequently it should then ask how social innovations can be empowered: which empowerment strategies exist? How can the important system builders or relevant social groups be identified? And how can these more powerful groups or individuals be convinced to support the social innovation? The work by Hoffman (2013) and Avelino and Wittmayer (2015) provides an excellent starting point for this line of research to identify power relations among relevant actors. However, the relevant social groups, and therewith the relevant power relations, for social innovations differ from those of (socio-)technological systems. More (theoretical) knowledge of how they differ is still required, but it can be stated that as social innovations aim at societal changes rather than technological changes and that therefore both the innovators and those affected by the innovation differ. Socio-technical transitions tend to impact large market players that provide the main product or service in the relevant regime. Social innovations, on the other hand may also target certain political or cultural institutions and therefore have to deal with a completely different kind of opposition.

Parallel to enhancing the theoretical understandings of power relations in social innovations, empirical studies (historical and contemporary) are required to understand how shifting power relations contribute to the diffusion of innovations in practice. I therefore call upon empirical studies of a pragmatic nature, searching for the actors and actor groups relevant to the case at hand, and for the subsequent analysis of the power relations among these relevant actors. Both theoretical and empirical studies of power relations in social innovations are therefore needed in order to better understand this, for a successful implementation of a social innovation, crucial question.

References

- Avelino, F. (2011). *Power in transition: Empowering discourses on sustainability transitions*. Rotterdam: Erasmus University Rotterdam.
- Avelino, F. & Wittmayer, J. M. (2015). Shifting Power Relations in Sustainability Transitions: A Multi-actor Perspective. *Journal of Environmental Policy & Planning*, 1–22. doi:10.1080/1523908X.2015.1112259
- Bijker, W. E. (1995). *Of bicycles, bakelites, and bulbs: toward a theory of sociotechnical change*. Cambridge, MA: The MIT Press.
- Bijker, W. E., Hughes, T. P., & Pinch, T. J. (Eds.). (1987). *The social construction of technological systems: new direction in the sociology and history of technology*. Cambridge, MA: The MIT Press.
- Clayton, S., Devine-Wright, P., Swim, J., Bonnes, M., Steg, L., Whitmarsh, L., & Carrico, A. (2016). Expanding the role for psychology in addressing environmental challenges. *The American psychologist*, 71(3), 199–215. doi:10.1037/a0039482
- De Wilde, I. (2007). Jacobs, Aletta Henriëtte. (Original work published in BWSA 1988).
- Dogan, E., Bolderdijk, J. W., & Steg, L. (2014). Making Small Numbers Count: Environmental and Financial Feedback in Promoting Eco-driving Behaviours. *Journal of Consumer Policy*, 37(3), 413–422. doi:10.1007/s10603-014-9259-z
- Freeman, C. (1995). The 'National System of Innovation' in historical perspective. *Cambridge Journal of Economics*, 19.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case study. *Research Policy*, 31, 1257–1274.
- (2004). From sectoral systems of innovation to socio-technical systems. *Research Policy*, 33(6-7), 897–920. doi:10.1016/j.respol.2004.01.015
- (2005). *Technological transitions and system innovations: A co-evolutionary and socio-technical analysis*. Cheltenham, UK, Northampton, MA: Edward Elgar.
- (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1(1), 24–40. doi:10.1016/j.eist.2011.02.002
- (2014). Reconceptualising the co-evolution of firms-in-industries and their environments: Developing an inter-disciplinary Triple Embeddedness Framework. *Research Policy*, 43(2), 261–277. doi:10.1016/j.respol.2013.10.006
- Grin, J. (2010). Understanding transitions from a governance perspective. In J. Grin, J. Rotmans, & J. W. Schot (Eds.), *Routledge studies in sustainability transitions. Transitions to sustainable development. New directions in the study of long term transformative change* (pp. 221–319). New York: Routledge.
- Hargreaves, T. (2011). Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change. *Journal of Consumer Culture*, 11(1), 79–99.
- Hoffman, J. (2013). Theorizing power in transition studies: The role of creativity and novel practices in structural change. *Policy Sciences*, 46(3), 257–275. doi:10.1007/s11077-013-9173-2
- Hölsgens, R., Lübke, S., & Hasselkuß, M. (2016, September). *The MLP applied to social innovation?* IST2016 Conference, Wuppertal, DE.
- Howaldt, J., Kopp, R., & Schwarz, M. (2015). *On the theory of social innovations: Tarde's neglected contribution to the development of a sociological innovation theory*. Weinheim, DE: Beltz Juventa.
- Howaldt, J., Schröder, A., Kaletka, C., Rehfeld, D., & Terstriep, J. (2016). *Comparative analysis (mapping 1): Mapping the world of social innovation: A global comparative analysis across sectors and world regions* (SI-DRIVE No. D1.4).
- Howaldt, J., & Schwarz, M. (2010). Soziale Innovation - Konzepte, Forschungsfelder und -perspektiven. In J. Howaldt & H. Jacobsen (Eds.), *Dortmunder Beiträge zur Sozialforschung. Soziale Innovation: Auf dem Weg zu einem postindustriellen Innovationsparadigma* (pp. 87–108). Wiesbaden: VS Verlag.
- Hughes, T. P. (1979). The electrification of America: The system builders. *Technology and Culture*, 20(1), 124–161.
- Jacobs, A. H. (1924). *Herinneringen van Dr. Aletta H. Jacobs*. Amsterdam, NL: Van Holkema & Warendorf.
- Karnowski, V., Von Pape, T., & Wirth, W. (2011). Overcoming the binary logic of adoption: On the integration of diffusion of innovations theory and the concept of appropriation. In A. Vishwanath & G. Barnett (Eds.), *The Diffusion of Innovations. A Communication Science Perspective* (pp. 57–76). New York: Peter Lang.
- Leydesdorff, L. (2006). *The knowledge-based economy: Modeled, measured, simulated*. Boca Raton, FL: Universal Publishers.
- Meadowcroft, J. (2011). Engaging with the politics of sustainability transitions. *Environmental Innovation and Societal Transitions*, 1(1), 70–75. doi:10.1016/j.eist.2011.02.003

- Mill, J. S. (1869). *The subjection of women*.
- Mulder, W., & De Jong, E. (2002). *Vrouwen in de heelkunde: Een cultuurhistorische beschouwing*. Overveen, NL: Uitgeverij Belvédère/Medidact.
- Oud, P. J., & Bosmans, J. (1997). *Staatkundige vormgeving in Nederland* (11de herziene druk). Assen: Van Gorcum.
- Pelka, B., & Terstriep, J. (2016). Mapping social innovation maps: The state of research practice across Europe. *European Public & Social Innovation Review*, 1(1).
- Pinch, T. J., & Bijker, W. E. (1984). The social construction of facts and artefacts: or how the sociology of science and the sociology of technology might benefit each other. *Social Studies of Science*, 14, 399–441.
- Raven, R. (2012). Analyzing emerging sustainable energy niches in Europe: A strategic niche management perspective. In G. Verbong & D. Loorbach (Eds.), *Governing the energy transition: Reality, illusion or necessity?* (pp. 125–151). New York: Routledge.
- Rogers, E. M. (1983). *Diffusion of Innovations*. (3rd ed). New York: The Free Press (Original work published 1962).
- Rüede, D., & Lurtz, K. (2012). *Mapping the various meanings of social innovation: Towards a differentiated understanding of an emerging concept* (EBS Business School Research Paper Series No. 12-03).
- Santos, F., Salvado, J. C., Lopo de Carvalho, I., & Schulte, U. G. (2013). The life cycle of social innovations. In T. Osburg & R. Schmidpeter (Eds.), *Social innovation: Solutions for a sustainable future* (pp. 183–195). Heidelberg, DE: Springer.
- Schot, J. W., & Geels, F. W. (2008). Strategic niche management and sustainable innovation journeys: Theory, findings, research agenda, and policy. *Technology Analysis & Strategic Management*, 20(5), 537–554.
- Schumpeter, J. A. (1994). *Capitalism, socialism and democracy*. London: Routledge (Original work published 1943).
- Turnheim, B., & Geels, F. W. (2012). Regime destabilisation as the flipside of energy transitions: Lessons from the history of the British coal industry (1913–1997). *Energy Policy*, 50, 35–49. doi:10.1016/j.enpol.2012.04.060
- Van der Horst, H. (2013). *Nederland: De vaderlandse geschiedenis van de prehistorie tot nu* (11de druk). Amsterdam, NL: Prometheus - Bert Bakker.
- Wirth, W., Von Pape, T., & Karnowski, V. (2008). An Integrative Model of Mobile Phone Appropriation. *Journal of Computer-Mediated Communication*, 13(3), 593–617. doi:10.1111/j.1083-6101.2008.00412.x