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Research Article

E-petitions and mobilisation dynamics: the importance of local anchoring. An environmental case study

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Abstract

E-petitioning is a useful object of study for observing the potential emergence of a new relationship to politics and new forms of political participation. Access to a dataset of hundreds of thousands of users of an electronic petitioning platform, provides the opportunity to overcome a certain number of limitations that are associated with traditional methods of studying political participation, since it allows us to focus on the reality of the signatories' behaviour rather than on their declarations. We follow the traces left by the petitioners on this site to better understand the process of dissemination of an online petition, and its linked with offline activities.

Our examination of the three most signed petitions in the 'environment' category, combining an analysis of their petitioning dynamics and an analysis of the comments attached to them, allows us to show: firstly, that there is an interwoven relationship between the local anchoring of the mobilisation and the processes of dissemination by which petitions extend from local signatories to signatories who are geographically more distant; and secondly, that it is not accurate to imagine that just anyone can sign any petition, since petitioning dynamics proceed from one person to the next, whether these dynamics start from a pre-existing local anchorage on the ground, or act through a platform effect which is dependent on the attractiveness of the petition in question.

Keywords: e democracy, e petition, public engagement, environmental movements, digital mobilization, participation format.

1. Introduction

E-petitioning is a useful object of study for observing the potential emergence of a new relationship to politics and new forms of political participation. A number of authors [1-3] have suggested that we are facing a transformation of democracy. According to this view, petitions are, like demonstrations and boycotts, a form of political action arising from the people with the aim of issuing a challenge to power [4]. These authors consider that this particular movement is characterised by a greater capacity for initiative on the part of local groups, owing to a flexible, horizontal structure and more pragmatic and concrete demands. Others view such citizen participation more as a mark of mistrust [5], or as the expression of a digital democracy of 'counter-publics' that aims to challenge representative democracy with the help of digital tools, following the example of the alter-globalisation movement [6].

Petitions in themselves have been long seen as basic to the logic of numbers when addressing social movements, and as a mean to prove the wideness and strength of the digital public support of some collective organisation's claims. The digital format may favor a petition success in terms of number of signatures, because it lowers the participation costs and exceeds its geographical and the logistics limits. Despite public participation enforcement, some authors also highlight its countervailing power, sometimes marking its distrust towards democracy. Digital participation might result in counter participation, challenging contemporary democracy.

The environmental movement, as an embodiment of new social movements, became aware early on of the importance of internet tools for its mobilisations. Internet users in the environmental movement are characterised by the possession of a certain number of resources (they are militant, well informed, and can communicate in English). A study focused on petitions relating to environmental

issues should therefore be well suited to providing a greater insight into new practices of digital mobilisation. This paper focuses on a unique set of e petitions created by individuals or Ngos on a commercial website thus completing the growing literature on online petitioning addressing mostly governmental platforms. We are then focusing on a platform that allows citizens to follow their own agendas by creating and signing petitions. We can therefore analyse the territorial dynamics of successful online petitions, and the linkages between off and online mobilisations supporting such petitions.

Materials and Methods

Access to a database, such as that found on the website lapetition.be, provides the opportunity to overcome a certain number of limitations that are associated with traditional methods of studying political participation, since this allows us to focus on the reality of the signatories' behaviour rather than on their declarations. We will follow the traces left by the petitioners on this site. In most cases, we can list a set of data related to each petition that was assigned to the 'environment' category (text, time of launch, initiator of the petition—who is also responsible for assigning it to the 'environment category'—the dynamics of the organisation of the petition, information on the signatories: first name, post code and municipality, other petitions signed and/or initiated, the time when they signed).

In order to make our study as intensive as possible, we focus on the three largest petitions in terms of the number of signatures (each including more than 4000 signatures) in the 'environment' category, taken from among the 1034 online petitions relating to the environment that are visible on the lapétition.be website (see Table 1). A distinctive feature of the petitions in this category is that the comments associated with it are longer than the average, with a mean number of words above 50 [7]. Aside from the success of petitions in terms of the number of signatures that they manage to collect, the phenomenon of 'co-signing overspill' highlights the fact that successful petitions lead to a renewed interest in petitions

in general, according to [8]. All of these elements increase the interest of these petitions as an object of study. It should be noted that the three organisers of the petitions are connected to institutions, or at least associations. This includes two local elected officials: Claire Vandevivere, Municipal Environment Officer in the commune of Jette, to the north of the centre of Brussels; and Zoubida Jellab, municipal councillor for the commune of Bruxelles-Ville, and member of the Green Group. These two politicians share the characteristic of having initiated other petitions on the same site. Finally, petition 13119, entitled 'Save the Tridaine spring and the Rochefort Trappist Monastery', containing 11,034 signatures, was initiated by the Rochefort Trappist Monastery, which used the services of a communication agency to launch its petition.

Table 1. Characteristics of the petitions studied1

Chronological order	Petition number	Title	Launch date	Initiator/s	Place of origin	Number of signatures	71
1	8629	Stop the widening of the ring road. Preserve the Laerbeek Wood	03/11/2010	Claire Vandevivere, councillor of the commune of Jette	Jette	4753	local
2	9706	Stop the concreting of the avenue du Port and the felling of 300 trees	09/04/2011	Zoubida Jellab, elected representative belonging to the Green Group M-C Reine Stéphanie, Président of the neighboorhood committee	Brussels	8915	Global/local
3	13119	and the Rochefort Trappist	18/06/2013	trappistes de	Rochefort	11,034	local
		Monastery		Rochefort			

¹ The original titles of the petitions are, respectively, 'Non à l'élargissement du ring. Oui à la préservation du Bois du Laerbeek', 'Non au bétonnage de l'avenue du Port et à l'abattage des 300 platanes', and 'Sauvez la source de Tridaine et la Trappiste de Rochefort!'.

Despite the discontinuous and non-linear nature of the lapetition.be website, access to its database was all the more useful for monitoring signatories and their change over time (in terms of their territorial situation and the nature of their comments), as we were able to compare them with external sources (interviews, news media, websites) that provided information about their repertoires of action. The combination of these variables allowed us to better understand the process of dissemination of an online petition. Thus, depending on the case, either the forms of mobilisation used or the way in which the object of the mobilisation is presented may explain the success or failure of the petition, without it being possible to determine in advance which of these elements will be predominant. The effects of the website's design will not be discussed here; we refer interested readers to a previous publication that analyses the 'platform effect'.

Table 2. Analysis variables and local/global petitioner dynamics

Analysis variables	Local dynamics	Global dynamics	
Signatories' place of residence	Location close to the object	National, international	
Signatories' profile	Greater proportion of signatures from first-time users of the website	Greater proportion of signatures from regular users of the website	
Membership of networks	Offline/online	Mainly online	
Platform effects	Insignificant	Significant	

In order to better understand these territorial logics, which are based on other studies using other investigative devices [9], other types of information should also be used. Thus, the repertoires of action used can, depending on the case, either relocalise (when local activist networks play a greater role) or delocalise (through the role played by national media, social networks, and the platform effect) the petitioning dynamic. To this end, we collected, both from social networks and news media, elements relating to the petitions concerned (calls for signatures, debates, actions related to the petition, the mobilised actors). We then proceeded to identify the initiators of the petitions (from the two files in the database listing the initiators of petitions, or from their signatures, if they are present). This was

followed by interviews when possible (unfortunately only a limited number of interviews were carried out, as it was difficult to find people after several years, and sometimes when we managed to do so our request for an interview was refused).

Broadly speaking, we will use the term 'local anchoring' (or local dynamics) when the text of the petition, the starting point of the dynamics of gathering signatures, and the repertoires of action are local (petitions 13119 and 8629). Only petition 9706 presents a hybrid character with regard to these three criteria, since these two dimensions (the local and the global) are present at two different moments of its life cycle (see Table 1). The three petitions are notable for their local anchoring.





In the first part of our paper, we will highlight the importance of the dynamics of the local (geographical) anchoring of the mobilisations, which is based on field networks and is favourable to the gathering of signatures. We then analyse the modes of citizen appropriation of the issues raised by the petitions, through the study of the comments associated with the petitions on the lapetition.be website.

2. Local anchoring as the driving force for an online petition

In order to better understand the importance of local anchoring in the geographical dissemination of an online petition, we will try to cast light on two questions: To what extent do local online and offline modes of action favour local dissemination? What influence is exerted by the mobilised networks on the profiles of the signatories?

2.1 The importance of local online/offline repertoires of action

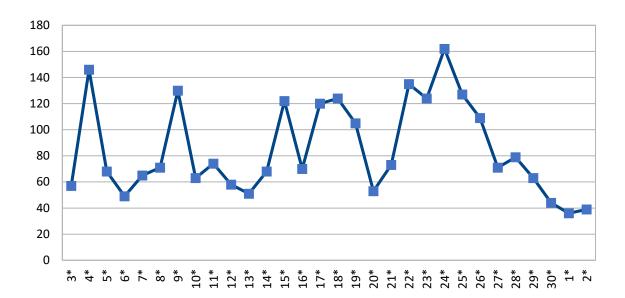
Studies both in France [10] and outside France [11] have highlighted the mobilising role that online petitions can play in relation to an offline mass movement, notably in relation to demonstrations.2 Access to the petition.be database will allow us to identify the links between the different repertoires of action used and the change in the number of signatures gathered over time of the online petitions studied.

² See also the case of the online petition 'For lower fuel prices at the pump!' in October 2018, which gathered 1.2 million signatures and contributed to the emergence of the 'Gilets Jaunes' (Yellow Vests) movement in early November of that year.

Petitions 8629 ('Stop the widening of the ring road [...]') and 13119 ('Save the Tridaine spring and the Rochefort Trappist Monastery') are characterised, on the one hand, by a strong local offline mobilisation (a press conference at the launch of the petition, creation of a collective in support of protecting the environment), and on the other hand, by the prevalent use of the internet (via the creation of the website www.tridaine.be, the setting up of a Facebook page, or the use of social networks to promote local mobilisation). For example, the municipality of Jette (petition 8629) repeatedly used demonstrations (five between 3 November 2010 and 4 October 2015) and the use of spectacular and festive repertoires of action (a depiction of the mayor transformed into Papa Smurf or Obelix) in order to arouse the interest of the media and the local population. The link between online and offline mobilisation can also be measured by the fact that the petition collected 5000 paper signatures, presumably local ones,3 in addition to the more than 4000 signatures collected on the lapetition.be website.

Figure 1. Petition 8629 ('Stop the widening of the ring road [...]'): number of signatures per day (from 3 November to 3 December 2010)

³ This seems to be confirmed by its initiator, Ms Vandevivere (see excerpts from her interview below).



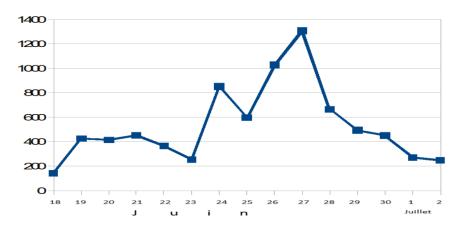
Many of the peaks in signatures for petition 8629 correspond to the dates of local mobilisations. The collection of signatures over the first 30 days is very erratic, with several peaks. The first one (5 November) corresponds to the launch of the petition and the distribution of the city newspaper 'Jette info' no. 180. The announcement, on 17–18 November, of the action 'Stop the widening of the ring road. Preserve the Laerbeek Wood' on various websites corresponds to a new peak. The preparations and actions surrounding the first demonstration in the Laerbeek Wood on 27 November may explain the last peak (21–25 November), especially as it also corresponds to the publication of several articles in major national news media, on DH.net and Lalibre.net on 20 November, and the launch of a Facebook page devoted to the defence of the Laerbeek Wood. However, this national media coverage and the use of digital means still led to the gathering of mostly local signatures.

As for petition 13119 petition ('Save the Tridaine spring [...]'), which began on 18 June, with a peak of around 400 signatures from 19 to 22 June, two thirds of the total number of signatures were gathered during the month of June (more than 7000 signatures), at a time of intense local mobilisation. In the following month the petition collected only a little over 1000 signatures, at a time

of lesser mobilisation. The initial increase in signatures can also be linked to the context: the day the petition was launched, 18 June, was marked by a press conference and the creation of a website and a Facebook page. Three days later the Trappist monks launched an appeal to the citizens of the communes of Rochefort and Marche-en-Famenne, which border the site of the Tridaine spring, which was relayed by the website created by the monks. This appeal asked them to send a letter supporting the petition to the authorities of these two communes before 28 June, the date of the end of the public enquiry concerning the Tridaine spring. The date of 28 June marked the peak of the mobilisation, with the collection of 1300 signatures. As the date of 28 June approached, the number of signatures continued to increase, which demonstrates the importance of local anchoring in the mobilisation of petitioners.

Despite the abolition of any territorial anchoring that digital technology offers, the signatures of the petitions examined are in fact dependent on concrete networks, which are largely determined by geographical constraints. This observation confirms that physical networks are not replaced by virtual networks [12]. Moreover, the geographical spread of signatures confirms that the internet constitutes 'one space among others' [13], and is connected to physical space. The use of social networks (Facebook) and a website can, however, constitute tools that promote local mobilisation through the localised information that they provide about the movement.

Figure 2. Petition 13119 ('Save the Tridaine spring [...]'): distribution of signatures in the first 15 days (18 June to 2 July 2013)



1.2 Signatory profiles and networks mobilised

In 2015, S. Wright called for work on the distinction between transient participants and 'superparticipants'. In an Australian study of over 17,000 e-petitions over a five-year period, [14] observed
that 76% of signatories signed only one petition. The authors concluded that it can be assumed that
the individual decision to publicly sign a petition, mostly using one's name, is not a casual,
unthinking act, which thereby challenges the 'clicktivism' hypothesis. The authors called for further
studies focused on the signatories of petitions, which we have attempted to do by adding a third
variable (that of signatories' membership of networks) to our research framework.

Indeed, petitions 8629 and 13119 are notable in gathering above all signatories who are not accustomed to using the petition website. This can be explained by the scale of the awareness-raising actions that were carried out to attract new signatures. Online and offline strategies were closely linked. For example, the publicity surrounding the online posting of petition 8629 'Stop the widening of the ring road [...]' on the lapetition.be website was followed by a physical mobilisation of citizens

of Jette, as Claire Vandevivere explains:4 'citizens could sign or take sheets of paper to get signatures from other people. One person brought me fifty signatures from their shop. We contacted the neighbourhood committees...'.

Table 3, on the propensity of the signatories of petition 13119 'Save the Tridaine spring [...]' to sign other petitions, according to their place of residence, indicates the diversity of signatory profiles.

Table 3: Propensity of 13,119 signatories to sign petitions, by place of residence

Place of residence	% at least 10 petitions	% at least 5 petitions	N=
	signed	signed in	
		'environment'	
		category	
Rochefort	5.1%	2.1%	428
Rochefort periphery	6.9%	1.3%	534
Bruxelles-Capitale	15.3%	4.1%	1208
region			
Rest of Belgium	8.4%	1.9%	6049
France	2.9%	0.6%	1150

This table presents three interesting results. Firstly, it can be seen that Rochefort and its periphery have only a relatively low proportion of individuals signing 10 or more petitions on the lapetition.be website. The explanation for this probably lies in the fact that the determinants of the decision to sign are more related to local and personal networks, as the contextual elements strongly suggest (see above). Conversely, a very high proportion of residents of the Bruxelles-Capitale region sign a high number of petitions. This is more a case of a population that signs either as 'consumers' of petitions who frequently access the site, or as individuals situated in highly politicised networks. The third

⁴ Interview conducted on 13 June 2017 with Ms Claire Vandevivere, Municipal Environment Officer.

interesting result is that of France: few petitioners resident in France sign a significant number of petitions on the site. Remarkably, however, among the first signatories in this petition who are resident in France there is a particularly high proportion of individuals who frequently access the website: 6 out of the first 20 signatories resident in France (or 30% of them) had signed at least 10 petitions on the site. They probably played a driving role in the dissemination of the petition.

Unlike the petitions discussed above (8629 and 13119), which are characterised by local mobilisation preceding network mobilisations, petition 9706 'Stop the concreting of the avenue du Port and the felling of 300 plane trees' in Brussels, is characterised by the temporal disjunction between network mobilisations and local mobilisations. Whereas the petition was launched in April 2011, with a little more than 1000 signatures, the local mobilisation only became intense in August, resulting in the second peak of signatures (almost 5000), out of a total of 8915 signatures.

Table 4: Petition 9706 ('Stop the concreting of the avenue du Port [...]'): signatory profiles in April-July and August 2011

Period	Number of signatures	signatures on	% at least 100 signatures on the website	% at least 8 signatures in the 'environment' category
April-July 2011	2463	2.6	1.3	4.1
August 2011	4990	0.9	0.3	1.1

Between April and July 2011, a large proportion of the site's regular users signed the petition. These are probably activists who are situated in major political networks and interested in environmental issues. The platform then plays a role in publicising and centralising the efforts of the organisers of

⁵ This is the only one of the seven petitions studied where the share of signatories who had signed at least 8 petitions in the 'environment' category (4.1% in April-July and 1.1% in August) is higher than the share of signatories who had signed at least 50

the petitions. At the same time, local actions in the neighbourhood ('adopt a tree' events, posters, picnics, etc.) attracted the attention of the Belgian media. In August 2011, when the situation was becoming more urgent, since the building work was beginning and the felling of trees was scheduled, a very large mobilisation developed beyond the circles of the earlier activist groups, and managed to rally shopkeepers, residents of the avenue du Port, and several associations, including those devoted to defending the city's historical heritage. Nightly rounds were organised to prevent the felling of trees. A giant poster was put up on the avenue between 3 and 8 August 2011. The media coverage of the cause also included television reports which were broadcast by national channels.6 This petition thus presents a hybrid profile combining, in the first instance, a large proportion of the site's regular users, and later an intense mobilisation of local citizen movements. This mobilisation, combining both online actions and actions on the local terrain, led to the building site being shut down on 5 September 2011, and to the abandonment of plans for felling trees. This last petition reveals that, in order to collect a large number of signatures and lead to a change in the public policy being targeted, a major local mobilisation does not necessarily have to take place at the moment of the launch of the petition, but can occur at a later stage. The additional factor of an 'imminent threat of danger' here played the role of an accelerator of local mobilisation.

Our examination of petition 9706 similarly shows that new information and communication technologies do not replace classic grassroots mobilisations, but rather combine with those forms of

petitions on the site (2.6% and 0.9%, respectively), i.e. the signatories to this petition have a greater interest in environmental issues than those in the other six petitions.

⁶ The interview conducted in November 2018 with a local resident who was involved in this cause highlights that the local mobilisation during the summer and the media coverage that followed were decisive in the abandonment of the project.

mobilisation that already exist. As our study shows, online and offline field actions often support a local dissemination of the petition, which is then accompanied by a higher proportion of individuals of local origin who are not regular users of the website. This territorial anchoring is all the more significant as it can generate the use of paper-based petitions alongside online petitions. It tends to transform ordinary citizens into activists in search of new paper signatures and potential first-time demonstrators. This confirms the analysis mentioned above based on petitions in Australia [14], which challenges the 'clicktivism' hypothesis. Our research also tends to corroborate those analyses that conclude that new technologies do not challenge traditional modes of action [15]. The media coverage of the cause, the mobilisation of social networks, and the use of the internet all make it possible to extend the geographical reach of this initial logic of mobilisation, thereby supporting a transformation of the petitioners' comments.

3. From the territorial enlargement of the mobilisation to the transformation of the petitioners' comments

Our objective here is, on the one hand, to highlight how a mobilisation that is initially local can expand to become global (i.e., national, or even international), by combining a static approach (based on an opposition between local and global dissemination) and a dynamic approach (one that views the local and global as being intertwined with each other). On the other hand, we will try to understand the influence of this widening of mobilisation on the changes in the signatories' comments.

approaches

2.1 Local and global dissemination of petitions: between static and dynamic

We will first consider the geographical spread of signatories in terms of an opposition between the petitions' local and global dimensions. Petition 13119, 'Save the Tridaine spring [...]', confirms the importance of the close interweaving between local mobilisation—which, as we have seen, includes local online and offline modes of action—and the national or even international dissemination of the petition, which we can follow over time. For a petition to widen its spectrum of dissemination (beyond the signatories in a given district or municipality, or even its periphery), it must also pertain to an issue that extends beyond local interests and relates to the general interest. This is a matter of social construction, as highlighted by framing theories [16].

The geographical approach to the dissemination of petitions, based on geolocation data or, in their absence, on indirect sources (interviews, newspapers, websites, etc.) leads us to emphasise the importance of the centre-periphery logic; this tends to suggest that the success of this mobilisation strategy relies primarily on local networks. The contribution of the commune to the total number of signatures is indeed the strongest on the first day of the petition, and then on the following days (29.1% and then around 10% of the daily number of signatures between 19 and 21 June, compared with an average of 3.8% for the whole period of the petition);; from the 3rd day it is then the area immediately to the west of Rochefort7 that contributes the greatest number of signatures (6% on the 3rd day and 5.5% on the 6th day, compared with 2.2% for the whole period); finally, Brussels and

⁷ This phenomenon is also found on the same dates, but at a lower level, in the area to the east of Rochefort (1.2% and 1.6%, compared to 0.8% for the whole period).

the rest of Belgium are substantially mobilised from 28 June, which corresponds to the 11th day of the petition—respectively around 60% and 13%, compared with 54.7% and 10.4% for the whole period); France and the rest of the world only contribute large numbers of signatures later on.

We can hypothesise that the dissemination of petition 8629, 'Stop the widening of the ring road [...]', follows the same centre-periphery logic, despite the absence of data on the geolocation of signatories for this petition.8 According to the Municipal Environment Officer of Jette, within five months, the signatures were coming not only come from Jette and Brussels but also from the periphery. Indeed, the success of the mobilisation of the petition against the ring road was such that it led Ms Vandevivere, the promoter of this petition, to launch the online petition 16432, entitled 'Stop flights over the Brussels region at inappropriate times' [17], on 20 October 2015, which was less successful than the first one, even though the means used were the same (a little more than 2,000 signatories).9 She explains the large number of signatures of the first petition with reference to the object of the petition (the Laerbeek Wood) for which, in her words, 'there was clearly more sympathy because of the idea of this green space, the greenery and the trees. Whereas for those who don't live in Brussels, regarding flights passing overhead when you live in Sambreville (which is not affected by the noise of aeroplanes), there's less solidarity with this issue.'

⁸ This petition does not record the signatories' commune, postcode, region, country, or nationality; this seems to indicate that the variables were not visible to the petitioners (either their own details or those of other petitioners) at the time.

⁹ It should be pointed out that the date on which we extracted data for petition 16432 (shortly before the interview of 13 June 2017 with Ms Vandevivere) differs from the date for the other petitions, since this petition was launched after we extracted data from the database on 12 February 2015.

In other words, in Ms Vandevivere's view, the object of the petition regarding flights over Brussels, which was marked by a NIMBY mobilisation [18] [19], explains the lower level of mobilisation in this case, resulting from an inability to extend interest in the petition beyond the Jette agglomeration and its surrounding communes. Thus, out of 2257 signatures in favour of the petition regarding flights over Brussels, there is a significant over-representation of the inhabitants of Jette (980 of the signatories, which corresponds to 1.9% of the population of the commune of 53,000 inhabitants, but 43.4% of the petitioners), which is far from negligible. For residents of the communes neighbouring Jette, the act of contributing, by means of signing a petition, to the proposed change in flight paths would entail the risk of being affected later on by those redirected flights. This would result in a lesser propensity for a wider dissemination of the petition, and a very local anchoring of the mobilisation.

The most important factor for the effectiveness of the petition would therefore lie in its ability to overcome oppositions between communities. 10 As the Municipal Environment Officer of Jette points out, the Laerbeek Wood is a community-based issue (as is the matter of flights over Brussels). However, the power of Flemish representatives is growing at both administrative and political level. According to Ms Vandevivere: 'in the development of this whole economic area, if they (the Flemish) want to widen the ring road, it's to allow the continued expansion of cargo traffic from the port to Zaventem'. In her view, this citizen mobilisation makes it possible to overcome political and inter-

¹⁰ It may seem strange for a commune to use a petition as a means of putting pressure on the Flemish regional authorities, who were supporting the project for a widening of the ring road. Indeed, according to a number of authors, e-petitioning is practised more by members of society who aim to challenge authority figures in the system of representative democracy (see our introduction) than by those who support it, let alone by political representatives themselves.

community power struggles, and to promote a common sense response to a project that the Flemish want in order to sustain the economic development of the Flemish part of the city, but which would have negative repercussions for the inhabitants of Brussels. Thus, the call for citizen mobilisation is presented as a means of overcoming community-based 'special interests', in the name of the general interest of environmental protection, which is symbolised in this case by the risk of destruction of the Laarbeek Wood. This amounts to a challenge to the theory defended by the proponents of representative democracy, according to which representatives alone embody the general interest, while citizens are marked by the diversity of their situation and of their social position. In this conception, democracy is reduced to the practice of elections by universal suffrage, and consequently to the system of representative democracy, which is embodied by elected representatives.

So far, we have contrasted the local and global dimensions of the geographical dissemination of petitions. These two concepts have the advantage of clearly marking the differences between local anchoring and dissemination beyond the infra-national level. However, the static nature of these concepts makes it more difficult for us to grasp the dynamics that exist between the local and the global. The concepts of territorialisation and deterritorialisation are suitable for thinking more about the local and the global in greater depth, no longer in terms of opposition but rather in terms of processes that intertwine with each other.

A double logic of 'territorialisation' (at the local level) and 'deterritorialisation' (towards the national, or even international level) is indeed apparent in the petitions 'Stop the widening of the ring road

[...]' and 'Save the Tridaine spring [...]'. The logic of territorialisation tends to highlight the importance of local mobilisation in the success (measured by the number of signatories) of the petition. This local mobilisation relates to the territorial dimension of the object of the petition (i.e., the Laerbeek Wood and the Tridaine spring in Rochefort), and tends to involve primarily (at least initially) the inhabitants who live near the site that is connected to the petition. This local dimension is also characterised by the means used to promote the mobilisation: whether they are offline tools (a paper petition, demonstrations, a local newspaper, etc.) or online tools that aim to promote local mobilisation (website, Facebook page, dissemination of information through social networks, etc.), which are closely connected. The local nature of the body targeted by the petition (the company l'Hoist in Rochefort, the Flemish regional government of Brussels) adds to this territorialisation.

The temporal and geolocation data associated with the variables 'repertoires of action' and 'profile of signatories' (petition 13119) allow us to consider the role of the periphery in the dissemination process. The dissemination of the petition from the centre to the periphery occurs within two days of the dissemination of the petition in Rochefort and its neighbouring commune, Marche-en-Famenne, which is to say that this is the time needed to disseminate the information coming from Rochefort (we should recall that the press conference, the creation of the website, and that of the Facebook page all occurred on the same date as the launch of the petition on 18 June). Moreover, our reading of Table 3 shows the very strong proximity between the profile of the signatories in Rochefort and those in its periphery. This set of elements leads us to think that the logic of dissemination is above all territorial, with a delay effect due to the distance from the place of origin of the petition.

Petition 9706, on the other hand, stands out from petitions 8629 and 13119 by the inversion of the terms of the process. In this case, deterritorialisation precedes territorialisation. This inversion does not, however, call into question the importance of local mobilisation. In one month (August 2011) this petition gathered nearly 5000 signatures, compared to half that number in the four previous months (April-July 2011), which nuances the observation, made by some, of the importance of the first days of online petitions for the dynamics of gathering signatures [18]. The study of this petition indicates that a mobilisation through networks is not necessarily sufficient to lead to the success of a petition. Indeed, it was not until the beginning of September that the Flemish Minister of Public Works in the government of the Bruxelles-Capitale region readdressed the decision to cut down the plane trees. The comparison between petitions 9706 and 13119 leads us to highlight the existence of a key factor for explaining the strong mobilisation of local signatories: the existence of an important date concerning the object of the petition: in this case, the scheduled date in August for the felling of the plane trees, or the date of the end of the public enquiry concerning the Tridaine spring.

Beyond the periphery, the capacity of an e-petition to influence decision-makers depends on the close interweaving of these two logics of territorialisation and deterritorialisation, which themselves involve the combination of online/offline actions. For mobilisation to be both local and national (or even international), beyond the repertoires of action used, it seems that the object of the petition or the arguments that accompany it must be conducive to appropriation by non-resident signatories, which thereby shows that the 'NIMBY syndrome' has been overcome (compare this with the relatively unsuccessful petition relating to flight paths over Brussels, which remained limited to a

'NIMBY' logic), and that the cause, which might initially seem to be one of local interest, can instead be interpreted in terms of general interest [20].

2.2. Centre-periphery logic and change in the comments of signatories

The analysis of the comments attached to online petitions can provide a better understanding of signatories' motivations and forms of commitment, and the way these can change over time [10].

The hypothesis of a local point of departure for the signatories of petitions 8629 and 13119 is confirmed by the comments attached to the text of each petition. A closer look at the comments made on 4 and 9 November 2010 (the beginning of petition 8629) shows that almost 22% of them (12 out of 56) refer to the proximity of the commentators to the Laerbeek Wood and the negative consequences that they feel. The author of the first comment of 4 November links their proximity to the ring road with their opposition to its expansion: 'as a neighbour of the ring road, I am absolutely against its widening'. The second comment on the same day highlights the negative consequences of the project on the heritage of the inhabitants of the site: 'Stop the noise and all this pollution, Brussels must remain a healthy city with our parks and woods'. On the first day of the 'Save the Tridaine spring [...]' petition, 14% (3 out of 22) of the comments also indicate a close relationship with the object of the petition: 'we cannot denature and endanger our beautiful city of Rochefort' (4th comment), whereas this is true of less than 2% (out of 53 comments) on the following day, and of none of the 119 comments that were made on the 7th day. We can observe that the number of comments increases with time, and therefore with the greater extension of the petition's geographical dissemination, which seems to attest to a reduced involvement in the petition on the part of local petitioners, who had been more numerous in the first few days. Indeed, we can hypothesise that the practice of commenting may be more common among regular users of the site, who have a greater mastery of it and of its features.

On the other hand, the change in the nature of the comments seems to correspond to the increase in the geographical range of the petitioners. Thus, an aspect of the issue may appear only at a later stage (as occurred for the petition 'Stop the widening of the ring road [...]'). With a small number of exceptions (only 3 comments, such as this one from 4 November: 'It would be criminal to surrender even an inch of land to Flanders!'), the reference to the inter-community aspect is only mentioned from the 17th day ('No to the Flemish diktat'; 19 November, 14:09), and becomes more abundantly present on the 21st day, on which a little more than 30% of the comments refer to it (10 comments out of 33). The Flemish are strongly stigmatised in these comments: there is talk of a 'diktat', 'arrogance', and 'stupidity'. Ministers are sometimes attacked personally with reference to another Flemish project with an impact on the inhabitants of Brussels: 'No to this stupid idea, is that great Flemish turkey ['dinde', a sexist term of abuse implying stupidity] Grouwels11 defending this project? How about we talk about the planes flying over the gardens of Jette from 6am onwards... good luck to you' (23 November, 17:28).

The inter-community issue, which is barely mentioned in the text of the petition ('The Flemish government plans to [...]'), becomes central in these comments, which constitutes a much more political reading of the issue which goes beyond its local aspects. On the contrary, the text of the petition focuses primarily on the environmental issue, which therefore indicates a complete

¹¹ B. Grouwels was at this time a Flemish member of the Brussels Regional Government (which, constitutionally, is required to be composed of equal numbers of French and Flemish speakers).

reappropriation of the petition by these signatories. This reappropriation tends to invalidate the hypothesis of the Municipal Environment Officer of Jette, according to which the object would concern a more general 'environmental' issue, whereas it appears to be more of an 'inter-community' issue. By entering into the logic of Flemish-Walloon community relations, the driving force behind the signatures becomes more a community issue rather than an environmental issue. This hypothesis is likely to help us understand the dissemination of the petition from the local to the national and international levels. This is in line with the theory of the strength of weak ties, according to which the passage into other spheres (here into the inter-community dimension) allows one to move beyond the proximal space of mobilisation [21] [22].

The temporal proximity to one another of the comments that focus on the more global aspect of the issues seems to attest to a reciprocal influence between them, as if the fact of reading the previous comment favoured the repetition of the same theme. We find here a particular modality of the platform effect, which is due to the presentation of the comments in chronological order. Thus, on 23 November, the first 6 comments that refer to the inter-community aspect were posted between 10:22 and 14:53, and 4 others were posted between 17:28 and 20:41. For example: 'We can't let something like this happen, it will only increase the powers of the Dutch speakers' (23 November, 12:43); and then a few minutes later, picking up the themes of the earlier comment, 'The Flemish are out of their minds, there are already too many vehicles on the road—and what are they doing about the CO2—and what about the inhabitants of this region??' (23 November, 13:01). We can hypothesise that this form of politicisation of the petition is related to the organisation of the first demonstration,

on 27 November, and the media coverage of the cause at the national level, which may also have presented the issue from an inter-community perspective.

This dissemination on a national or even international level can be accompanied by an increase in the generality of the discourse (as for the petition 'Save the Tridaine spring'), where an opposition emerges between, on the one hand, the interests of capital and profitability, and, on the other hand, the interests of nature, society, and children. 'How can they compare 20 years of extraction of limestone (a non-renewable resource) to the sustainability of an aquifer that provides a renewable source of high-quality water?' (24 June). 'We need to stand up against the power of money... and especially of certain greedy shareholders with neither law nor faith! Let's protect our springs!' (24 June).

Aside from the differences between these two petitions, they are both characterised by an opposition between the text of the petition and the tone used by their signatories. The tone adopted by the presentation texts is neutral, even administrative. These texts foreground the rationality of their claims by presenting arguments in favour of the petition. For example, the text of petition 8629 is presented as a logical demonstration: 'The government's plan is to enlarge the ring road... In order to do this [emphasis ours] 5 hectares of the Laerbeek Wood will have to disappear. This is why the commune of Jette... The widening of the ring road will not only cause,... it will also produce... The widening of the ring road will therefore have negative consequences... Whereas today....' Similarly, the text of petition 13119 is presented in the form of an explanation that emphasises the negative consequences of the project in a calm manner. Only the titles of the two petitions can be considered confrontational, with the use of capital letters, the rhetorical use of 'Non à' and 'Oui à', and the use

of the imperative in the injunction 'Sauvez' (see n. 1 above for the original titles of the petitions in French).

In contrast, the tone of the signatories appears more emotional. Numerous exclamation marks and question marks, and sometimes the use of capital letters, are intended to signify the signatories' vehement opposition to the proposed projects. The use of terms such as 'unthinkable', 'scandalous', 'unimaginable', 'shameful and stupid' (petition 13119), or 'aberrant', 'absurd', 'aberration', 'massacre', 'unacceptable', 'criminal' (petition 8629), demonstrates this strong opposition to the project. This is consistent with the findings of analyses that emphasise the link between internet technologies and the production and propagation of emotions [23]. Emotion is particularly generated by videos, which play a significant role in the mobilisations of large numbers of people [24]. Indeed, recent studies in neuroscience highlight the importance of emotion in cognitive processes and decision-making [25] [26], as well as in mobilisations [27], which was demonstrated by the record 17 million signatories that were gathered for an online petition following the emotion elicited by the death of George Floyd on 25 May 2020 in Minneapolis.

The availability of data allowing us to track the geolocation of signatories over time reveals the importance for organisers of petitions to first establish a local mobilisation and then disseminate this action more widely (petition 13119). It also shows that the object of the petition can act as either a brake or an accelerator to its dissemination, irrespective of the repertoires of action that are used to support it (as shown by our comparison between petitions 8629 and 16432, both launched by Claire Vandevivere). The use of petitions by certain elected officials also makes it possible to overcome the inertia of political divisions on issues of general interest (petition 9706).

Finally, the analysis of signatories' comments highlights the fact that, although we cannot speak of a deliberative public space (pp. 24–49) [28], they nevertheless represent spaces of freedom for a certain number of signatories, allowing them to move beyond the initially local character of the issue by emphasising its global dimension. Despite the effects of domination that are inherent in petitions, inasmuch as the petition is presented to potential signatories 'from above', the signatories themselves can reappropriate tools such as online comments, and thus take back power from the organisers of the petitions [29]. This desire to take back power can be observed in the extent of the reinterpretation of the petitions in terms of inter-community relations (the opposition between Flemings and Walloons), or in terms of of ideological values (the opposition between the relentless pursuit of financial interests and the need to protect nature).

Discussion

A growing body of research situates online petitions in the repertoire of action frequently used by those who participate in politics [32]. In earlier research on political participation, petitioning was seen as an activity similar to protest and repertoires of action used by social movements [30]. More recent research normalises petition signing as an individualised and symbolic form of participation, facilitated by the digital context [33-35]. Then the literature comparing online and offline participation in terms of political engagement and mobilization, wondering if one would replace the other [36-37]. Recent publications show that the interplay between on- and off-line participation is far more complicated and is linked to the political context. Others have made a distinction between high-cost and low-cost participatory acts,

where, in the latter case, the risk (perceived or real) to participants is reduced. Although the act of signing an online petition has a low cost, it can also be seen as an appropriate tactic for bringing about change. Thus, the use of such tactics could reduce the risk and costs of active citizen participation [38]. Our results tend to show that most people do not put their names on hundreds of petitions. In fact, most selectively sign a single petition on an issue that presumably affects them more specifically than others. Our examination of the three most signed petitions in the 'environment' category of the lapetition.be website, combining an analysis of their petitioning dynamics and an analysis of the comments attached to those petitions, allows us to show: firstly, that there is an interwoven relationship between the local anchoring of the mobilisation and the processes of dissemination by which petitions extend from local signatories to signatories who are geographically more distant. It seems to confirm that activism online and offline often intricates, producing hybrid formats of public participation [39], according to various courses of action and individuals [40-41]. Nevertheless, against popular misconception, the digital nature of a petition does not necessarily lead to the exceeding of its physical spreading area.

Secondly, that it is not accurate to imagine that just anyone can sign any petition, since petitioning dynamics proceed from one person to the next, whether these dynamics start from a pre-existing local anchorage on the ground, or act through a platform effect which is dependent on the attractiveness of the petition in question.

Our results allow us to answer some of the questions raised in the literature. It seems useful to relativise the importance of the particular qualities of the organiser of the petition in the mobilisation

dynamic. The role of the website's regular users can be decisive, even if they alone cannot explain the success of a given petition. Secondly, our results confirm the effectiveness of the dynamics of associative networks, which is connected to the use of new information and communication technologies. This also points to the digital divide and inequalities of access to internet, meaning that a part of the public would not be able to participate on-line but might be active during offline mobilizations. The inclusiveness of public engagement in that matter seems wider when both on-and off- lines activities are intertwined.

Finally, our results allow us to highlight the ability of signatories to appropriate the text of a petition, by linking it to other spheres of debate or by connecting it to themes of a sufficiently general interest to attract signatories with a wider range of profiles. Thus, e petitioning might widen the participation, not in a deliberative manner [42-43], reusing petitions as a mean to regain power over the initiators of the petitions.

This appropriation is carried out by an 'active minority' that has a strong impact on online petitions, which [43] terms 'power users'. According to Bermudez, these petitioners are not necessarily better educated or wealthier than others, but have more time to devote to this activity. The fact that some participants incur the transaction costs of registering on the lapetition.be platform to sign a single petition (and then presumably ignore numerous email invitations to sign subsequent petitions) shows, at the very least, that we should be cautious in supporting the hypothesis that signing a petition is a mindless form of 'clicktivism' [36].

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