

Participatory Media: Creating Spaces for Storytelling in Neighbourhood Planning

Jennifer Manuel, Geoff Vigar, Tom Bartindale & Rob Comber

Open Lab

Newcastle University

Newcastle upon Tyne, UK

{j.manuel2@ncl.ac.uk/geoff.vigar@ncl.ac.uk/ tom@bartindale.com/rob.comber@ncl.ac.uk}

ABSTRACT

Neighbourhood planning devolves power to communities to create their own planning policy but traditional forms of participation are still relied upon. And despite the ubiquitous nature of technology in society, digital participation methods are rarely used. In this paper, we outline fieldwork with two neighbourhood planning groups who used participatory media technology to improve engagement through the art of storytelling. We focus on the configuration of participatory media as a way to widen participation and enable story creation and sharing amongst citizens. We highlight that storytelling using media technology can provide a model *of* and a model *for* the way we ‘do’ neighbourhood planning whilst emphasising the challenges of ensuring processes are linked to tangible actions and encouraging the multiplicity of stories.

Author Keywords

Participatory media; new media; neighbourhood planning

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous

INTRODUCTION

Neighbourhood planning in the UK was created by the Localism Act 2011 [37] which gave new rights to citizens. It was a way to devolve power away from local and central government to local people at the lowest level [85]. The aim is to empower citizens to organise together to produce their own planning policy which will shape the future development of their area and will be officially adopted by the local authority [9, 42]. Citizen engagement in planning has been promoted for a number of years, but neighbourhood planning provides the first opportunity for citizens to have direct power to decide what development they do and do not want in their neighbourhood [9].

The move from local government shaping agendas to communities influencing their own neighbourhood coincides with the ‘story turn’ in planning which advocates for the narratives of everyday experiences to be combined into

political processes [65]. This is not always realised in practice, particularly as citizen participation in political matters remains fairly low [60, 80] and traditional engagement methods restrict the type of responses in consultations [5, 17].

Particularly in neighbourhood planning, finding new approaches to allow citizens’ stories to be shared and heard is essential, especially as the process relies on community input. Neighbourhood planning requires citizen participation to organise together to begin the process; to gain input from the wider public; and to enable the plan to pass a community referendum at the end of the process. Neighbourhood planning could be a futile endeavour if participation does not take account of the need for a multiplicity of citizens’ stories.

In this paper, we explore the process of sharing and listening to citizen stories in the neighbourhood planning process through the method of participatory media. Through a two-part process, we used storyboarding as a way to share individual’s stories and create new community stories before using the Bootlegger platform as a participatory media commissioning tool to capture these citizen narratives through video. We highlight the need for new, creative digital methods of engagement to widen participation and include new stories in neighbourhood planning. Through the discussion of our deployment, we demonstrate that i) participatory media storytelling can contribute to a model *of* and a model *for* neighbourhood planning; ii) the production of a video can highlight missing stories; and iii) synchronous participatory media technology opens a space for a multiplicity of citizen stories. Our reflections from the fieldwork highlight new possibilities for future participatory media technology as a conduit for storytelling that leads to authentic policy creation in neighbourhood planning.

RELATED WORK

Neighbourhood planning still relies upon traditional participation methods to engage citizens resulting in a multitude of issues as to whose stories are told and heard in the process. With a turn in HCI towards technologies for civic participation [7, 16, 30, 38, 68, 82], there is a huge potential to introduce new methods and, therefore, bring new voices into neighbourhood planning.

Neighbourhood Planning Participation and Storytelling

The UK town planning system was built on a foundation of representative democracy with elected councillors

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author. Copyright is held by the owner/author(s).
CHI 2017, May 06–11, 2017, Denver, CO, USA
ACM 978-1-4503-4655-9/17/05.
<http://dx.doi.org/10.1145/3025453.3025745>

representing the views of their community [75]. As the demand for more citizen participation grew, the requirements placed on consultation also grew [85]. Despite this, the methods and approaches used have a limited ability to reach out to the whole community and gather the stories of all actors in the process [14]. Town hall meetings, forums and formal events are still the common methods used along with the addition of drop-in events [5]. These can be seen as the legitimate way to participate [14] and do not account for more informal methods and individual and community storytelling. These traditional methods and formal planning processes require comments and input from citizens to relate to ‘material planning considerations’: a set of prescribed criteria which are the issues that are taken into when making planning decisions in the UK [62].

The ‘story turn’ in planning literature advocates for the representation of “space, life and languages” of a city through the use of narratives [67]. Narratives are seen as essential to the planning system as a way to promote change, show the origins of communities and to form the basis of policy [67]. By accounting for storytelling in the engagement of citizens, there would be increased opportunity for identities and meaning to be created by communities themselves [26], however, this has not been fully explored in planning practice on a day-to-day basis.

Considering the formal participation methods and the failure to take everyday stories into account, those who do participate are often of a certain demographic and background. The formal mode of communication suits and attracts citizens from a middle class, retired, professional backgrounds who have the time and resources to tell their stories [56]. Compounding this factor, is that the complexities of neighbourhood planning mean that ‘expert’ citizen activists from those backgrounds are most likely to participate [85] and are able to express their stories in the most appropriate format to suit the planning system.

Bearing these issues in mind, there is, therefore, a reliance on a rational choice model based on the self-interest of individuals [34]. This means that during decision-making, individuals will always prefer options that will benefit themselves rather than their community as a whole [34], making the bonding of individual and community stories difficult to achieve.

Although the issues above are true of the wider planning system, there is an argument to show neighbourhood planning suffers from the same problems [85] which can cause real challenges for a process which relies on citizen participation. One of the key issues, then, is the way in which engagement is carried out and how stories are captured. In his 2002 speech Robin Cook, the chair of the Government’s Cabinet Committee, said “There is a connection to be made between the decline in democratic participation and the explosion in new ways of communicating” [57] and there has been little done to improve the situation since. By considering this, it is possible to turn the self-interest model

around to create a more open one by thinking about the ways citizens want and are able to engage and share their stories in a political debate [34].

Aside from the traditional forms of citizen participation, there has been an increase in the use of digital technologies as a form of communication. These digital methods have aimed to involve a wider range of citizens and increase our interactions with one another [34, 28]. Digital technology has been seen to offer an opportunity to empower citizens and act as a democratisation of complex, elitist processes [19]. It has also been seen to be able to overcome ‘physical, temporal and spatial limits’ of traditional processes such as the benefits of reduced cost and increased access [4, 28]. Despite the advantages that have been heavily cited in literature [4, 28], there is a school of thought which shows that digital methods can still be exclusive and elitist [19, 5]. Digital technology provides alternative opportunities for those engaged in the process to share their stories [61] but struggle to reach those disengaged. Regardless of the benefits and disadvantages, digital technologies do provide new approaches to engaging citizens in neighbourhood planning that has not yet been explored. Rather than seeing digital technologies as the solution, it should be considered one method of a set of tools that include traditional methods to provide multiple communication channels by which to engage citizens in story creation and sharing [52].

HCI and Citizen Participation

There has been a growth of work in HCI for civic participation and community agendas to support citizens “on their own terms” [48]. Indeed, a wealth of research has focused on activism [1, 24, 49], opinion gathering [44, 77, 82], facilitating discussion and debate [8, 23], and action [59, 70] as well as the recognition of civic crowdsourcing for collective knowledge feeding into political decisions [32].

Of particular emphasis is the need for decentralized online forums as a way to engage non-activists and attract a broader demographic [39]. For example, *AmericaSpeaks 21st Century Town Meeting* [50] was an attempt to engage citizens virtually to allow them to participate in a way of their choosing. In addition, the appropriation of social media for the same purposes has also been explored [22] as well as GPS place-based mapping tools [32, 79] with a spatial focus on how to reproduce and represent urban spaces [24]. However, there has also been work which explores the notion of the difference between space and place which can draw an important distinction for the design of technologies in this area. With many applications relying on the spatial element of the everyday world, technology can often assume that citizens’ behaviour and interactions are also spatial when, in fact, sense of place and identity is essential to everyday experiences and interactions [33]. Technology which supports the everyday experiences “of and in physical space” is paramount and, therefore, research which builds relationships with local citizens to be able to work in their ‘everyday’ is also essential [38, 77].

Technology situated in the everyday world of citizens such as *Viewpoint* [38, 77] which takes the decision-making processes to the sites where everyday talk occurs, have provided the opportunity to gather feedback from citizens to support political decision-making. In addition, *Discussions in Space*, a project to engage with Brisbane residents, encourages discussions and questions about civic issues via a publicly visible screen [58]. It encourages “collective expression and public discourse” in place to engage citizens [58]. Other such technologies offer the possibility to communicate through mundane means yet have activist possibilities [34, 65, 66].

There has also been further work which specifically focuses on the need for citizens’ stories to be told, shared and heard. *StoryTrek* [40] enabled individuals to create a narrative through real-time, location-aware stories which are created whilst moving through physical space. It enabled citizens to use agency in creating their narrative whilst allowing them to consider alternative perspectives, reflect on their stories and, when used with other citizens, create a shared experience [40]. In addition, *I’m Your Body* [45] also used a location-based mobile storytelling platform to share thoughts and feelings about a place as a political tool. It was found that the inclusion of emotion behind political debates and arguments is key to understanding points of view.

Even those applications designed for storytelling still have a heavy focus on spatial applications rather than place and identity. There is a need to design technologies that allow for space and place to be represented whilst recognising the two characteristics are fundamentally different [33] and that citizen stories are crucial in civic participation.

Participatory Media and Citizen Participation

New media technology has become ubiquitous with citizens increasingly making use of multimedia communication channels in everyday life [52]. Considering the use of video, in particular, as a tool for community engagement, it has been found that it can provide “immediate and authentic feedback” and can strengthen and empower communities [35, 68]. Leading from this, participatory media emerged from the *Fogo Process* initiated by the National Film Board of Canada in the late 1960s which “pioneered the use of documentary for community development” [83].

Participatory video can be a tool for positive social change which provides the opportunity for deeper engagement [51, 65] and it allows the revelation of “hidden social relations and provoke[s] collective action” [54, 79]. It can provide a catalyst for community dialogue that wouldn’t otherwise occur, is easily accessible for most people and it can help with the formation of communities around particular issues or causes [6, 66]. Within political processes, such as neighbourhood planning, participatory video could be invaluable particularly as there has been a democratisation of mobile and web technologies as a way to produce, edit, distribute and communicate video [53, 72].

Examples of work which have focused on citizen story creation and sharing through participatory media include *Vox Populi* [7] which aimed to create community narratives; *Civic Life Online* [63] where youth publicly communicated issues they care about; and *Interactive Design Documentaries* [30] which facilitated encounters and exchanges across public and online spaces to catalyse community dialogues around specific issues. Further to this, *Collect Yourselves!* [74] and the development of a *MultiMedia Narrative* application [27] were developed to empower citizens to create digital narratives through web-based and mobile-based applications. However, both enabled the use of photography and audio but did not support the sharing of video which has been shown to be “an invaluable tool for showing spaces and places and people moving around in them...conveys emotions, body language and relationships in a way that photographs simply cannot” [68]. The ability to convey that emotion allows the capture of lived experience of place rather than simply showing a geographical space [68]. In addition, a narrative resource kit has been developed to support “stakeholder debate; animate community engagement; and develop and display community narratives” [26]. Not only did this seek to capture vernacular experiences by the citizens themselves, it enabled virtual engagement by interested citizens, new ways to capture lived experience and provided a way to contribute to the development of planning policy. Other work [29, 43] has shown that such methods can maximise participation and offer the opportunity for shared community narratives and histories.

From this previous work, it has been shown that providing a tool that communities can be in control of to create their own narratives in a way that suits them is essential. *Bootlegger* [5] was developed as a response to the need for footage that is captured in a more structured way and of an aesthetically higher quality than crowd sourced video. Originally developed for community commissioning of local event videos, the platform allows the use of templates and graphic overlays to plan what the community should capture. *Bootlegger* has been proven to support the creativity of citizens whilst engaging their inherent media literacy in the film making process to produce high quality videos. We see scaffolding the process of narrative capture as key in engaging citizens in neighbourhood planning [6].

STUDY DESIGN

We deployed the *Bootlegger* platform with two neighbourhood planning groups in North East England to capture their stories with video. This section will describe the field sites and the approach to the research as well as the methods used to engage participants in using the technology.

Bootlegger

Bootlegger [6] is a media commissioning platform that uses an easy to use camera style mobile app which connects to a central web platform to commission and aggregate video content. The tool supports “community contributors to

democratize both the commissioning and capture process, whilst retaining the core values of shot quality and content” [6]. Templates are used to define what each contributor should capture, and are fully customisable, allowing the community organiser to define various sets of videos that should be captured. Graphic overlays are used to help define visual elements of what to capture, whilst descriptions and length limitations help guide the creation of content. To initialise the process, we defined the initial set of shoot parameters in a template. Subsequently, citizens were able to change this to better represent what they wanted to capture.

Field Sites

The two neighbourhood planning groups involved in this study are at different stages in the neighbourhood planning process. The two areas also differ greatly in terms of the issues they face but, despite their differences, the use of Bootlegger as a participatory media tool could fit into a number of stages of the neighbourhood planning process (see Fig 1.). Testing the use of the app in both locations gave a broader view of how it could be used.



Fig. 1 – Neighbourhood Planning Process of which each stage can take up to 4-5 months

The first location is Kingston Park. Predominantly a residential area, Kingston Park also has a large retail park and the Newcastle Airport Industrial Estate. The area is under significant pressure with several large housing developments being built on the edge of the area. The neighbourhood planning group was established through the creation of a neighbourhood forum made up of 21 members of the community (as per the regulations). However, around 6-8 people attend the core steering group regularly all of whom are residents apart from one local councillor. The Chair of the steering group is an active citizen within the voluntary and community sector. The group are at the very early stages of the neighbourhood planning process and are beginning an initial community consultation.

Berwick-upon-Tweed is a coastal town in Northumberland. The neighbourhood planning group is formed through the Town Council and has a core steering group of around 14 members. The citizens who attend are a mixture of residents, councillors, business-owners and workers, and all are active ‘expert’ citizens. They are currently at the working group stage of the process where they work to gather evidence

about key planning topics (e.g. housing, tourism and built environment) before forming planning policy.

The lead author’s involvement with both groups began through discussions with planning officers and the neighbourhood planning Chairs in both areas. Both areas were keen to engage the wider community as much as possible, involving as many citizens in their neighbourhood as they can. Both groups also recognise that to do so, new methods and ways of engaging the community are required, particularly using digital technologies. In Kingston Park, they are keen to consider this from the early stages and Berwick have identified they are missing a range of voices in their past consultation processes but are keen to rectify this moving forward. Both groups would like to explore the use of digital technologies to reach populations that may otherwise not engage in such processes.

Method

In both communities, we used workshops as a way to engage the steering groups, allowing citizens to explore the use of Bootlegger whilst we were there for support and facilitation. As the two groups were at different stages of the neighbourhood planning process, two different workshops were developed.



Fig. 2 - Kingston Park Workshop – Example of material at each station

We ran one workshop with the steering group from Kingston Park. The video footage recorded as part of this workshop will be used as part of their initial consultation process. During the workshop, we provided a demonstration of Bootlegger before handing the technology over to small groups of the citizens. There was a small icebreaker to enable the groups to feel comfortable and familiarise themselves with Bootlegger. The main activity consisted of six stations around the room each focusing on a different planning topic: retail, housing, leisure, community, transport and growth (see Fig. 2). Each station provided some planning policy information from the city policy as well as some photographs

of the area to provide inspiration. There were a set of questions at each station and the groups would interview one another about their thoughts and opinions of their area.

In Berwick, we ran 6 workshops with 6 of the 7 working groups: tourism, transport, housing, built environment, natural environment and youth. The aim of these films would be to use in the wider community engagement in the future, but also as a way to communicate the progress of the neighbourhood plan. The workshops were an iterative process designed to capture media for whatever stage the working groups were at. We met in a café in Berwick to create a storyboard using post-it notes and pens focusing on capturing the key issues they would like to show in a story format (see Fig. 3). Once completed, we provided a demonstration of the app before handing the technology to the citizens. We then travelled around Berwick to film places and spaces that they had planned as part of the storyboard.

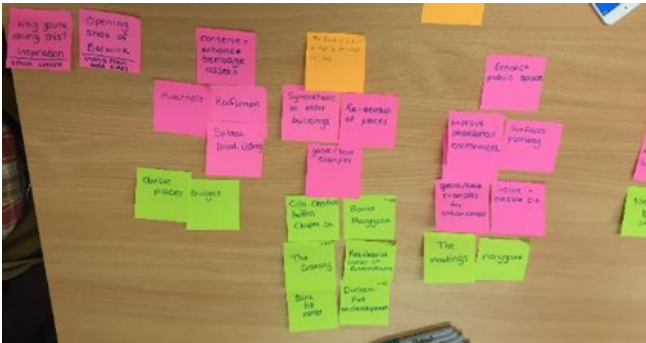


Fig. 3 Built Environment Working Group Storyboard

Data Collection and Analysis

We took a participatory action research (PAR) approach based on the foundation of action research which challenges the positivistic view that research must be objective and value-free and that, as researchers, our work is already embedded into a system of values [15]. Action research encourages those values to be recognised and considered. PAR is a “collaborative process of research, education, and action, explicitly oriented toward social change” [41]. It is a form of research which radically challenges how we collect data, what kind of knowledge we generate and what impacts it has [41].

Commonly, the process of PAR can be chaotic and ‘messy’ requiring the researcher to be flexible in their approach and recognise that the participants are experts in their own lives and communities [15]. It is generally a cyclical process of research, action and reflection by the researchers and participants so both can learn from their experiences [41]. Ethically, it also requires the researcher to be part of the process rather than independent and so must have an “evolving and adaptive awareness” of the power positions that exist [66].

The involvement of both areas came about through discussions with the Chairs of the respective groups. Through the lead author’s experience of working in the field

of neighbourhood planning, they became embedded in the community and, therefore, the research, helping the groups wherever possible as well as carrying out the study. This involved attending steering group meetings, building relationships and becoming more familiar with the area and the issues faced. This enabled the lead author to observe, contribute and interpret the interactions in this research. As in many PAR projects, after attending any of the neighbourhood planning group meetings or workshops, reflexive field notes were written. The participants also provided feedback during the workshops through informal conversations made possible through the relationship that had been developed with the lead author. This feedback was then included in the field notes.

FINDINGS

A total of 52 video clips were recorded at the Kingston Park workshop of which 9 were from the icebreaker activity. As the groups could choose which stations and questions they answered, it is clear from Table 1 that some topics were more interesting to the participants than others.

Working Group	No. of clips
Community	11
Housing	1
Leisure	10
Neighbourhood Growth	18
Retail	3

Table. 1 Number of clips per topic

From the 6 workshops in Berwick, a total of 330 video clips were generated. The amount of footage captured by each of the working groups differed greatly (see Table 2). The groups that recorded less footage had made decisions quite early in the participatory media process about locations, key messages and choosing to record the audio at a later stage. Groups with more footage, although they had created a storyboard, had made fewer decisions and were unsure about the narrative they wanted to create.

Working Group	No. of clips
Built environment	128
Natural environment	32
Transport	15
Youth	26
Tourism	33
Housing	95

Table. 2 Number of clips per working group

The average length of the clips for all of the footage recorded in Berwick was 27 seconds. As well as the meta-data collected from Bootlegger, we carried out a thematic analysis [10] to explore the qualitative data from field notes and considered the design implications for participatory media technologies.

Creating Spaces for Storytelling

The participatory media activities had a democratising effect, both in Berwick and Kingston Park. In the workshops in both areas, participants discussed the key issues that mattered to them. In each workshop there were one or two actors that were either from a planning background previously or were heavily involved in wider community activities, including activist causes. These ‘expert’ citizens often had strong views and tended to dominate the conversations by sharing their own stories. Through the use of the storyboarding activity and the process of filming, these actors’ voices were diminished slightly allowing the stories of other citizens to be genuinely heard and considered in the process.

For example, in Berwick, P5 was keen to portray their experience: *“I think we should stay focused on the streetscape on the main street, it’s too busy.”*. When others made suggestions, P5’s response was often negative: *“No, it’s pointless suggesting that. I know the businesses wouldn’t agree to that, they’d fight against it so it’s pointless to consider it.”*. P5 often positioned their own narrative above those of others in the group, however, by the end of the workshop, there were open discussions considering the stories of all citizens and the possibility of all ideas. In addition, P2 who is usually dominant in voicing their own agenda in steering group meetings and was initially dominant in the workshop, quieted his views to allow a more open space for storytelling to take place with other participants.

The discussions captured through the storyboarding, and the views and opinions captured during the filming would usually be discussed amongst a small group of citizens and would not be visible to the wider public. The use of participatory media opened the space for the stories developed during such activities to be out in the open, available to the wider group and to the public in future consultations. For example, in Berwick, citizens were beginning to discuss new ideas for the town that could be included in policy. Such ideas would not usually be available to discuss until the policy itself had been developed. In Kingston Park, videos were shared via social media at a very early stage which began to open the space for storytelling beyond the steering group with the wider public. Not only did the activities allow for the creation of a space for storytelling for all citizens involved, it also enabled hidden stories to be told within this space.

In both areas, the space for storytelling allowed citizens to reflect on their individual stories and consider what they meant when put together as a collection of narratives. Deciding what should and should not be included in the filming and, once situated in the neighbourhoods, what they did and did not film (which was often different to the initial plan) helped individuals consider the importance of bonding stories as a community as well as identifying that their own stories were often based on bias and assumptions.

In particular, P8 and P9’s stories were framed around their everyday practices of cycling and walking. This led their

focus for filming to be on the need for sustainable transport in Berwick with one of the participants stating *“We need more bike routes that are safe and we need to encourage people to walk into the town centre. Like the people who work in the centre, a lot of them could walk from home to work but they choose to bring the car”*. As the discussion continued, the sharing of stories together enabled reflection that allowed them to realise that their views were heavily biased because of their everyday experiences. P9 began to speak about other modes of transport: *“We do still need to consider cars and lorries. We need a way for lorries to get into the centre for deliveries. Plus, we said we want to encourage people to come here from further afield so we need to make sure they can come here by car”*. This began the formation of a new, more inclusive, community narrative, made possible by the creation of space for storytelling.

The same kind of situation occurred at Kingston Park where participants were discussing issues and stories framed from their own perspectives without much thought for others. Through the discussion, they began to change the conversation to think about transport networks for older citizens or young families, for example. There was a key difference between the two areas in that the space created for storytelling in Berwick using the structure of the storyboarding exercise promoted the reframing of individual opinions whereas the more unstructured space in Kingston Park meant the chance to think from other perspectives was only prompted on an ad hoc basis.

Finally, the space for storytelling also allowed the citizens to question the truth of the stories in a safe environment. When forming a more inclusive community story, created from individuals’ vernacular experiences, not all citizens would agree on others’ points of view. The ability to challenge and question all stories to decide on a shared story became a vital part of the process. For example, one working group in Berwick had formed their community narrative based on the stories of actors present in the workshops which resulted in a strong focus on the town centre of Berwick. They began to realise this:

P6: We need to be careful about what we’re saying and how we’re saying it. Think about it, if we’re sharing this with people, they’ll think we’ve ignored their neighbourhood.

P7: Yes, we have to remember that we’re supposed to be looking at the whole neighbourhood planning boundary. What do we want to include about that?

P5: I don’t think we have much information about the rest of the boundary.

P7: We don’t so what do we do? People will think we’re too focused on the town centre and we’re neglecting everywhere else.

This conversation highlights the questioning of the collective story they had already formed and, through this, they began to recognise that there were more stories to collect and

consider to form a full picture from other citizens who were not present.

Content Creation

In Berwick, the initial storyboarding activity was a way to elicit individual stories to begin to construct one, shared story. The creation of new stories is important to neighbourhood planning which looks to develop new, imagined futures. What became apparent was the difference between what the citizens planned to capture and what they actually captured once out filming the area. The discussion often created a shared story which citizens were satisfied with, however, once filming, citizens felt there were parts of the story missing or issues that had not been captured. In Kingston Park, there was less structure to plan the filming, however, the same was found in that citizens felt there was often something missing from the filming.

During the filming, P2 stated *“I don’t think we’ve covered everything, I think we need to go away and think more about this”* to which P3 responded *“I think we should get the rest of the group to have some input”*. This conversation took place after 1 hour of planning the filming and 2 hours filming in various locations around the town and was typical of instances from other workshop groups. They felt that the clips captured told the shared story they had planned but parts of the narrative were missing and this meant the story did not feel coherent to the citizens. They recognised that they had only captured part of the story and would like to gather more voices before completing the final, shared story they were aiming for whilst acknowledging that the video captured thus far was still valuable.

The content creation through the filming and, to some extent, the storyboarding activity helped the citizens to imagine a new future with a new story for their neighbourhood. The more creative method of participation meant that the citizens were more imaginative and told their stories in a more animated and interesting way which conveyed emotion and lived experience. For example, in Berwick, the tourism working group spoke of the town’s history as a way to frame the new imagined future for the town’s tourism. In another instance, the youth working group often became excited about the potential for the imagined future with P10 stating: *“There’s so much potential! There’s loads of space we could use for facilities for youth – they could have a skate park, music studios, dance studios, youth group facilities...there’s so many possibilities!”*. The citizens also recognised that the stories they create could be imaginative yet would still feed into planning policy. The content produced during this project can be directly linked to the reports from the working groups which will be used to draft planning policy. They were able to express their stories creatively without the restrictions of other formal methods.

The graphic overlays in Bootlegger were used by all citizens to help them capture higher quality footage with P10 stating *“Oh, that’s good. So I can just line up the landscape with the overlay? That’ll be helpful to make sure what I’m doing is*

okay then”. In addition, the shorter clips were favoured as *“they’re less daunting”* (P8). In Kingston Park, the graphic overlays were crucial to the citizens in supporting the media capture with many participants unfamiliar with capturing video on a mobile phone. The media literacy support enabled the citizens to focus on creating the creative content, rather than the additional stress of training to be able to capture video.

There had been strong reservations by some citizens about using a creative method that was not usually associated with planning but they still chose to attend and tell their story. Some citizens expressed hesitancy in using the technology with most stating *“I’m not very good with technology”* or *“I’m not very tech-savvy”*. Despite this, almost all participants became comfortable in using Bootlegger by the end of the workshop. In Berwick, the confidence of participants grew and by the end of each workshop, at least one member of each group was fully sufficient in using the app. P4 said *“Can I download this onto my own phone? Just I’d like to film some of the landscapes when I’m walking the dogs at sunrise”* and P10 said *“This is great. Now that I’ve had plenty of practice with you there, I’ll download it and get some more footage of the area. I’ll get others from the working group that couldn’t come today to do it as well”*. All of the working groups in Berwick said they would like to film more footage on their own, of which four groups have done so thus far.

At the end of the workshop, P5 who was reluctant to take part in such an *‘unusual’* way said *“Thank you for this. It was really good. I thought it would be pointless and I couldn’t see what difference it would make. I’m used to the older ways of planning that I used to do but it was really good”*. The creative methods did begin to break down some of the barriers once citizens were creating content, both in relation to using technology and using video as a useful method for neighbourhood planning.

Widening Participation

In Berwick, the workshops allowed people that would otherwise not get involved in neighbourhood planning to take part in a different, more creative, way to share their story. However, due to timescales, Kingston Park were only able to involve the steering group with a view to involving the wider community in the coming months which shows the future potential.

When first organising the workshops in Berwick, speaking with the Chair and members of the steering group, one participant was particularly keen to take part. P10, along with the Chair, thought that this particular method of filming and using mobile technology would be appealing to young people. This was also a factor that the steering group initially mentioned when the lead researcher was getting to know the area in that they felt that digital technologies would help them to involve a younger generation.

The youth working group, in one workshop, engaged

approximately 15 young people in the neighbourhood plan through the filming process. This included musicians, BMX bikers and army cadets, all of whom provided their stories of Berwick. This brought new perspectives to the shared community story that would otherwise have gone unheard. The lived experience of being a young person in Berwick was different to what other, older citizens had imagined. In addition, the young people were comfortable with this method of participation with P10 stating *"I think they [young people] were comfortable with being filmed. That first girl, the musician, she did it in one take. She's used to all this technology, though."*

Although these were the only instances of widening engagement at this stage, the participants in both areas recognised the need to involve more people in the process. Initially the groups were keen to engage a wider demographic and had specifically said this during prior discussions. However, it became apparent that they were unsure what widening engagement meant, what it would involve and why it was actually necessary. Through the participatory media workshop, they recognised they were not necessarily the 'experts' and they would need to engage and include stories from the whole community. One participant in particular who had previously dominated conversation with strong opinions said *"I think we need to use this media as a way to ask other people what they think and what they know. We've focused too much on the centre and the people that live in the other neighbourhoods will know more than we do. We could use the video as a way to ask them their opinions"*. Similarly, the transport working group recognised that the group members in attendance were keen cyclists but they should use the filming as an opportunity to invite stories from car users.

In Kingston Park, they recognised the value of the participatory media and were keen to include this in their initial three-month consultation with the wider community to invite new participation: *"We should hold some workshops with different groups to build up more interest and to get people's opinions. It'd be particularly good for youth groups or schools even"*. Subsequently, this has been accounted for in the group's engagement strategy.

The widening of participation and recognition of the need for more participation by the citizens, enabled hidden parts of the neighbourhood to be made visible as well as hidden issues that would otherwise not be discussed. Particularly in Berwick with the addition of youth engagement, areas of the town which had not been discussed were brought to the forefront of the discussion. For example, when speaking to the young musicians, they said *"There's nowhere for us to play and sing and record. We go to the youth centre, but that's not just about music. There's a tiny little place we can go to record, but that's it and it's not ideal. We really want to record more of our own music but there's nowhere to practice either"*. Highlighting the lack of places in the town that were suitable, the young people brought the current

facilities into discussion: facilities which would otherwise not have been discussed.

On the other hand, places in the town that were often discussed by citizens were often thought about through a different lens by the young people. For example, the BMX bikers stated *"There's nowhere to go on our bikes. People don't like us hanging around here [the Quay] but there's nowhere else"*. The Quayside had been discussed on a number of occasions by the citizens involved but the stories of other, minority groups had not been considered previously. However, through the participatory media and, in particular, the filming aspect, the young people were able to tell their story and contribute to a re-imagining of the future of the spaces and places in discussion.

Despite the positive aspects that storytelling brought to neighbourhood planning participation, the process of storytelling and content creation relied upon facilitation. The activities were facilitated through this research and, in many cases, citizens were reliant on the mediation and input of the researcher during discussions. This was particularly true when a new bonded community story was being developed:

Field notes: There had already been a long, detailed discussion about the issues in the town centre.

P5: We could use the film to showcase the town centre and we could even show what it was like before from some old photographs.

P6: I am a little concerned that we're too focused on the town centre still.

Researcher: Let's go back to the purpose of the film. What will it show? Do you want to show something from the whole area or do you want to use it as a way to say to the community, we need your help?

P6: We could. We could showcase the town centre and then ask for responses about other parts of the neighbourhood.

There was also the need to prompt the sharing of stories and help to configure the space so citizens felt comfortable sharing amongst a group. In addition, the facilitation also supported the citizens in making decisions about the stories that would be shared and how to create a new, shared story.

DISCUSSION

The use of Bootlegger as a participatory media technology in neighbourhood planning reveals a method of participation which can create spaces for storytelling to generate a more inclusive narrative. In the next section, we discuss how participatory media technology can contribute to a model of and a model for storytelling in neighbourhood planning and how, through the creation of a 'thing', stories can be debated and elaborated by citizens. We highlight the possibility for participatory media technology to allow for a multiplicity of citizen stories in neighbourhood planning and wider democratic practice.

Participatory Media as a Model of and for Neighbourhood Planning

A model of and a model for the way we 'do' planning

through storytelling has been previously developed [81]. The premise for storytelling as a model *of* neighbourhood planning focuses on the current planning practice whereby citizens' formal and informal interactions in their everyday lives could inform policy, but only by chance [11, 81]. Policy documents, in themselves, tell their own stories but they are often not representative of the communities they are referring to. Local government often represents places in policy as "clichéd...dry as dust...emotion has been rigorously purged" leading to documents that are "misleading at best, (dishonest at worst), about the kinds of problems and choices we face in cities" [67]. As citizen's stories are not prioritised on a day-to-day basis in planning practice, it is unlikely that they will link to policy outcomes [81]. In instances where these everyday stories do link to policy, the stories are often re-represented by planning officers who make assumptions about the meaning behind the narrative and filter the issues through the restrictive 'material planning considerations' that the UK planning system hinges on [62].

On the other hand, a model *for* storytelling in planning shows the way citizens' stories *could* be used to improve planning practice [81]. This focuses on creating spaces for citizens themselves to tell stories of their own "everyday vernacular experiences and practices" [43]. This would make participation more inclusive and democratic and those facilitating such processes have an important role in configuring the space to accommodate minority groups [67]. The importance of storytelling in the model *for* neighbourhood planning centres on stories as 'special', however even when the space for this is created, there is still a disconnect between stories and policy [67, 81].

The use of participatory media in this study provides a bridge in the gap between stories and their relationship to policy outcomes, and, therefore, a bridge between a model *of* and a model *for* storytelling in neighbourhood planning. This was highlighted through the example of the media in Berwick directly relating to the working group reports which will be used to form policy. A further three phases of citizens in Berwick and Kingston Park using the technology highlights the bridging of the models.

Firstly, the initial storyboarding exercise created that 'special' democratic space which was able to open up the discussion of citizens' stories. During the workshops in Berwick, citizens could contribute their stories one at a time, resolve conflicting views and make decisions about the creation of a shared understanding. Not only does this fit into the model *for* neighbourhood planning, it also encourages the move away from a self-interest model whereby citizens are only concerned about their own needs to more of a community-based approach [67]. Secondly, when citizens moved on to capture their stories through video, the technology was in the hands of the citizens themselves. In both Berwick and Kingston Park, citizens felt comfortable and confident with the technology to be able to film both during the workshop and afterwards without support. This

enabled citizens to create a representation of their own stories rather than being re-represented by planning officers. Finally, once the video was captured by citizens, it created a tangible outcome which linked to the formation of policy. The video in Berwick has lead directly on to policy formation in the next stage of the neighbourhood planning process and, in Kingston Park, it provides initial ideas of where policy could be focused in future.

The model *of* and model *for* storytelling in neighbourhood planning were never meant to be mutually exclusive, however, in current planning practice they often are [81]. However, by creating the space for a model *for* storytelling in neighbourhood planning, it also creates a new model *of*. The models are then reconceptualised using participatory media technologies which bridges the gap between the two.

Participatory Media to Create a 'Thing'

The media produced from the video capture creates an object which aims to represent the story of the citizen who created it. However, the final object highlighted missing stories and made those citizens *not* included in the process visible. In both Berwick and Kingston Park, the recognition by participants that their own knowledge was not sufficient and the realisation that other citizens would need to counter and add to their stories, highlighted those missing narratives and was key to this project. With this in mind, the video as the object has a common function to represent stories and, when this breaks down, we are left with a 'thing' [12, 13]. The 'thing' exists because it evokes conflicting political issues from different interest groups and, in this case, the counter stories or missing stories from citizens [46]. The 'thingness' portrays a multitude of different values, principles and opinions [46] that highlight who is assembled around it and, importantly, who is *not*.

Rather than creating a final object through debate and decision-making with a select group of citizens, the media is created at an earlier stage in the neighbourhood planning process. The participatory media enables the creation of the media to support earlier deliberation with a wider group of citizens. In both Berwick and Kingston Park, the 'thing' will be debated during further engagement with the public.

The media allows citizens to recognise these missing stories earlier in the neighbourhood planning process and question the truth of what is represented, a challenge which is familiar to others in how we can use digital tools to "make the invisible visible" [69]. For example, the built environment working group in Berwick created an initial story based on the town centre, but then began to question the truth of the narrative they were (re)presenting. The issue here, then, is one of representation: we can see that not only is it important to "rerepresent what is the object of concern" but also to "gather the legitimate people around" [46]. Although stories in planning literature are often presented as positive in and of themselves, when the spaces created for storytelling aren't inclusive, community-focused or, in other words, representative, they accept exclusivity in participation [81].

Now that the ‘thingness’ of the video has been recognised, the story that is represented can be built upon by those missing actors. By continuing to engage the public more inclusively and reflect on the representativeness of the citizens involved, the media can become more representative of the issues at play in that community. Storytelling, in a more subtle sense, is also common in everyday experiences of citizens through commenting, building or elaborating on the stories that already exist, providing conflicting accounts or adding to the detail [81]. In Berwick and Kingston Park, the citizens involved at this stage are keen to have the wider public add to the narratives and build upon the stories told thus far.

Synchronous Story Capture

We have shown that participatory media bridges the gap between the model *of* and model *for* storytelling in neighbourhood planning and that the creation of a ‘thing’ highlights missing stories, however, the focus in both cases remains very much on individual citizen stories. The debate, discussion and decision-making about individual’s stories leads to the production of one shared story. This creates a multitude of problems: which story is dominant; what makes one story more worthy than another; and which stories are told, heard and carry weight [67, 81]?

During this research, the use of the storyboarding exercise created the safe, democratic space that is recognised as important to share citizens’ stories [67, 81] but it became focused on individual narratives. It was counterproductive in promoting a *multiplicity* of stories by forcing citizens to share their stories one person at a time and make decisions about what should and should not be included in the video capture. As an example, in Berwick, the transport group shared their narratives of sustainable transport which they then began to question based on the recognition of missing stories. Rather than being able to include the narrative of sustainable transport and the stories of others, the group was forced to make a decision about what should and should not be included. This reverts back to traditional participation methods with discussion, debate and committee-like decision-making that promotes individual contributions in a model of consensus democracy and does not suit the process of storytelling [2, 78].

Participatory media technology can avoid the acceptance of individualistic narratives. It can go further to promote a multiplicity of citizen stories for neighbourhood planning through synchronous story capture by many people at the same time. The shared narrative was created through this process and represents different actors allowing for “differences in perspective, storyline and focal point” within the collective story [29].

This would allow the model *of* and *for* storytelling in neighbourhood planning to be realised more inclusively by opening the ‘special’ space for storytelling to be much broader. In other words, it provides the space where people can participate *together*, rather than simply as individuals, in

something that is defined. This focuses on citizens interacting as a group rather than as individuals. It also then enables citizens’ to question the truth of their own and others’ stories recognising they could be both true and false for different actors in different circumstances as “transparent, unmediated, undisputable facts” are almost ‘beyond reach’. The result is a shared story in which “coherence was not a product of an integrated plan, but rather an emergent quality of a nationwide collection of plurivocal narratives” [29]. This supports inclusivity and encourages the idea of agonistic pluralism which supports contestation between citizens’ stories as well as revealing the power influences at play [24].

The possibility for capturing synchronous stories through participatory media could not only benefit neighbourhood planning, but could contribute to other democratic processes where citizen’s views are important. Encouraging the agonistic model of democracy in civic participation more broadly through participatory media would allow ‘things’ to “become the centre of our attention” as a way to support (dis)agreement.

CONCLUSION

We presented the use of participatory media technology as a way to capture citizen stories to contribute to neighbourhood planning participation. Through deployments with two neighbourhoods we captured a total of 382 videos which together create multiple narratives of community stories. We have shown that the ability to capture citizen stories can provide a model *of* and a model *for* neighbourhood planning participation which can create media that reveals of missing stories. We argue that digital methods of participation should promote synchronous story capture to support inclusivity and the multiplicity of narratives not only in neighbourhood planning but in wider democratic processes. Future work will focus on the use of participatory media with other neighbourhood planning groups to continue to explore this area at different points in the neighbourhood planning process and more closely explore the link to policy.

ACKNOWLEDGMENTS

I would like to thank Berwick Neighbourhood Planning Steering Group and Kingston Park Neighbourhood Forum for allowing me to become part of their community and for taking part in this study. This research was funded through the EPSRC Centre for Doctoral Training in Digital Civics (EP/L016176/1). 'Data supporting this publication is openly available under an 'Open Data Commons Open Database License'. Additional metadata are available at: <http://dx.doi.org/10.17634/154300-35>. Please contact Newcastle Research Data Service at rdm@ncl.ac.uk for access instructions.

REFERENCES

1. Nader Afzalan and Jennifer Evans-Cowley. 2015. Planning and social media: Facebook for planning at the neighbourhood scale. *Planning Practice & Research*. 30, 3:270-285.

2. Phil Allmendinger and Graham Haughton. 2012. Post-political spatial planning in England: a crisis of consensus?. *Transactions of the Institute of British Geographers*, 37, 1: 89-103.
3. Sherry R. Arnstein. 1969. A Ladder of Citizen Participation. *Journal of the American Institute of Planners*. 35, 4:216-224.
4. Mariam Asad and Christopher A. Le Dantec. 2015. Illegitimate civic participation: supporting community activists on the ground. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1694-1703.
5. Mark Baker, Jon Coaffee and Graeme Sherriff. 2007. Achieving successful participation in the new UK spatial planning system. *Planning Practice & Research*. 22, 1:79-93.
6. Tom Bartindale, Guy Schofield and Peter Wright. 2016. Scaffolding Community Documentary Film Making using Commissioning Templates. In *proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 2705-2716.
7. Janak Bhimani, Toshihiro Nakakura, Ali Almahr, Masaki Sato, Kazunori Sugiura and Naohisa Ohta. 2013. Vox populi: enabling community-based narratives through collaboration and content creation. In *Proceedings of the 11th European conference on Interactive TV and video*. 31-40.
8. Erling Björgvinsson, Pelle Ehn, and Per-Anders Hillgren. 2010. Participatory design and “democratizing innovation”. In *Proc. PDC 2010*, 41-50.
9. Quintin Bradley. 2015. The political identities of neighbourhood planning in England. *Space and Policy*. 19, 2:97-109.
10. Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative research in psychology*. 3, 2:77-101.
11. Jeffrey C. Bridger. 1997. Community stories and their relevance to planning. *Applied Behavioral Science Review*. 5, 1: 67-80.
12. Bill Brown. 2003. A sense of things: the object matter of American literature. *University of Chicago Press*.
13. Bill Brown. 2014. Things. *University of Chicago Press*.
14. Sue Brownhill and Juliet Carpenter. 2007. Increasing participation in planning: Emergent experiences of the reformed planning system in England. *Planning Practice & Research*. 22, 4: 619-634.
15. Mary Brydon-Miller, Davydd Greenwood and Patricia Maguire. 2003. Why action research? *Action research*. 1, 1:9-28.
16. Nien-Tsu N. Chen, Fan Dong, Sandra J. Ball-Rokeach, Michael Parks and Jin Huang. 2012. Building a new media platform for local storytelling and civic engagement in ethnically diverse neighbourhoods. *New Media & Society*. 14, 6:931-950.
17. Maria Conroy and Steven Gordon. 2004. Utility of interactive computer-based materials for enhancing public participation. *Journal of Environmental Planning and Management*. 47. 19-33
18. Marit Kathryn Corneil. 2012. *Citizenship and Participatory Video*. AltaMira Press, USA.
19. William J. Craig, Trevor Harris and Daniels Weiner. 2002. *Community participation and geographical information systems*. CRC Press.
20. Clara Crivellaro, Rob Comber, Martyn Dade-Robertson, Simon J. Bowen, Peter Wright, and Patrick Olivier. 2015. Contesting the City: Enacting the Political Through Digitally Supported Urban Walks. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. 2853-2862.
21. Clara Crivellaro, Alex Taylor, Vasillis Vlachokyriakos, Rob Comber, Bettina Nissen and Peter Wright. 2016. Re-Making Places: HCI, ‘Community Building’ and Change. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. 2958-2969.
22. Clara Crivellaro, Rob Comber, John Bowers, Peter Wright and Patrick Olivier. 2014. A pool of dream: Facebook, politics and the emergence of a social movement. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 3573-3582.
23. Carl DiSalvo. 2012. *Adversarial Design (Design Thinking, Design Theory)*. The MIT Press.
24. Carl DiSalvo, Illah Nourbakhsh, David Holstius, Ayca Akin, and Marti Louw. 2008. The Neighborhood Networks project: a case study of critical engagement and creative expression through participatory design. In *Proceedings of the Tenth Anniversary Conference on Participatory Design 2008*. 41-50.
25. Jennifer Evans-Cowley and Justin Hollander. 2010. The New Generation of Public Participation: Internet-based Participation Tools. *Planning Practice & Research*. 25, 3:397-408.
26. Marcus Foth, Helen Klæbe and Greg Hearn. 2008. The role of new media and digital narratives in urban planning and community development. *Body, Space & Technology*. 7:2.
27. David Frohlich, Simon Robinson, Kristen Eglinton, Matt Jones and Elina Vartiainen. 2012. Creative cameraphone use in rural developing regions. In *Proceedings of the 14th international conference on Human-computer interaction with mobile devices and services*. 181-190.
28. Rina Ghose. 2001. Use of Information Technology for Community Empowerment: Transforming Geographic

- Information Systems into Community Information Systems. *Transactions in GOS*. 5, 2:141-163.
29. Bruce E. Goldstein, Anne T. Wessells, Raul Lejano and William Butler. 2015. Narrating resilience: Transforming urban systems through collaborative storytelling. *Urban Studies*. 52, 7:1285-1303.
 30. David Green, Clara Crivellaro and Jimmy Tidey. 2015. Interactive Design Documentary as a method for Civic Engagement. In *Proceedings of the ACM International Conference on Interactive Experiences for TV and Online Video*. 161-166.
 31. Derek L. Hansen, Jes A. Koepfler, Paul T. Jaeger, John C. Bertot, and Tracy Viselli. 2014. Civic action brokering platforms. *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing - CSCW '14*. 1308–1322.
 32. Mike Harding, Bran Knowles, Nigel Davies, and Mark Rouncefield. 2015. HCI, Civic Engagement & Trust. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15*. 2833–2842.
 33. Steve Harrison and Paul Dourish. 1996. Re-Place-ing Space: The Roles of Place Collaborative Systems and Space in Collaborative Systems. In *Proceedings of the 1996 ACM Conference on Computer Supported Cooperative Work*. 67-76.
 34. Gerard Hauser and Chantal Benoit-Barne. 2002. Reflections on Rhetoric, Deliberative Democracy, Civic Society, and Trust. *Rhetoric & Public Affairs*. 5, 2:261-275.1 mi
 35. Chris High, Namita Singh, Lisa Petheram and Gustav Nemes. 2012. Defining participatory video from practice. *Handbook of participatory video*, 35-48.
 36. HM Government. 2010. Decentralisation and The Localism Bill: an essential guide. HMSO, London.
 37. HM Government. 2011. Localism Act 2011. HMSO, London.
 38. Ian Johnson, John Vines, Nick Taylor, Edward Jenkins, and Justin Marshall. 2016. Reflections on Deploying Distributed Consultation Technologies with Community Organisations. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 2945-2957.
 39. Andrea Kavanaugh, Manuel A. Perez-Quinones, John C. Tedesco, and William Sanders. 2009. Toward a virtual town square in the era of Web 2.0. In *International Handbook of Internet Research*. pp. 279-294.
 40. Rilla Khaled, Pippin Barr, Brian Greenspan, Robert Biddle and Elise Vist. 2011. StoryTrek: experiencing stories in the real world. In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*. 125-132.
 41. Sara Kindon, Rachel Pain and Mike Kesby. 2008. Participatory action research. *International encyclopedia of human geography*. 90-95.
 42. Ben Kisby. 2010. The Big Society: Power to the People? *The Political Quarterly*. 81, 4:484-491.
 43. Helen G. Klaebe, Marcus Foth, Jean E. Burgess and Mark Bilandzic. 2007. Digital storytelling and history lines: Community engagement in a master-planned development. In *Proceedings of the 13th International Conference on Virtual Systems and Multimedia: Exchange and Experience in Space and Place, VSMM 2007*.
 44. Lisa Koeman, Vaiva Kalnikaitė, and Yvonne Rogers. 2015. “Everyone Is Talking about It!” *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15*, ACM Press, 3127–3136.
 45. Matthias Korn and Jon Back. 2012. Talking it further: from feelings and memories to civic discussions in and about places. In *Proceedings of the 7th Nordic Conference on Human-Computer Interaction: Making Sense Through Design*. 189-198.
 46. Bruno Latour. 2005. From realpolitik to dingpolitik. *Making things public: Atmospheres of democracy*, 14-44.
 47. Christopher A. Le Dantec. 2012. Participation and publics: supporting community engagement. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. 1351-1360.
 48. Christopher A. Le Dantec and Sarah Fox. 2015. Strangers at the gate: Gaining access, building rapport, and co-constructing community-based research. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 1348-1358.
 49. Yu-Hao Lee and Gary Hsieh. 2013. Does slacktivism hurt activism? *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13*, ACM Press, 811.
 50. Carolyn J. Lukensmeyer and Steve Brigham. 2002. Taking Democracy to Scale: Creating a Town Hall Meeting for the Twenty-First Century. *National Civic Review*. 91, 4:351-366.
 51. Nick Lunch and Chris Lunch. 2006. *Insights into participatory video: A handbook for the field*. InsightShare.
 52. Linda Macphersoon. 1999. Joystick not included: new media technologies are ideal tools for gaining stakeholder interest, acceptance. *Water Environment & Technology*. 11, 9:51-53.
 53. Lev Manovich. 2001. What is new media. *The language of new media*. 18-48.

54. E-J Milne. 2016. Critiquing participatory video: experiences from around the world. *Area*.
55. Claudia Mitchell, Naydene de Lange and Relebohile Moletsane. 2014. Me and my cellphone: constructing change from the inside through cellfilms and participatory video in a rural community. *Area*.
56. John Mohan. 2011. Mapping the big society. *Third Sector Research Paper*. Working Paper 62. Retrieved from <http://www.birmingham.ac.uk/generic/tsrc/documents/tsrc/working-papers/working-paper-62.pdf>
57. Giles Moss and Stephen Coleman. 2014. Deliberative manoeuvres in the digital darkness: e-democracy policy in the UK. *The British Journal of Politics and International Relations*. 16, 3:410-427.
58. Nancy Odendaal. 2006. Towards the digital city in South Africa: Issues and constraints. *Journal of Urban Technology*. 13, 3:29-48.
59. Sissel Olander, Tau Ulv Lenskjold, Signe Lousie Yndigegn and Maria Foverskov. 2011. Mobilising for Community Building and Everyday Innovation. *Interactions*. 18, 4: 28-32.
60. Gavin Parke. 2008. Parish and community-led planning, local empowerment and local evidence bases: An examination of 'good practice' in West Berkshire'. *Town Planning Review*, 79, 61-85.
61. Lindsay Pettingill. 2008. Engagement 2.0? How the New Digital Media Can Invigorate Civic Engagement. *Snovis Journal*. 8:155-161.
62. Planning Aid. 2016. Material Planning Considerations. Retrieved from <http://www.rtpi.org.uk/media/686895/Material-Planning-Considerations.pdf>
63. Howard Rheingold. 2008. Using participatory media and public voice to encourage civic engagement. *Civic life online: Learning how digital media can engage youth*. 97-118.
64. Matt Rogers. 2014. Problematising participatory video with youth in Canada: the intersection of therapeutic, deficit and individualising discourses. *Area*.
65. Leonie Sandercock. 2010. From the campfire to the computer: An epistemology of multiplicity and the story turn in planning. In *multimedia Explorations in Urban Policy and Planning*. 17-37.
66. Leonie Sandercock and Giovanni Attili. 2010. Digital ethnography as planning praxis: An experiment with film as social research, community engagement and policy dialogue. *Planning Theory & Practice*. 11, 1:23-45.
67. Leonie Sandercock. 2003. Out of the closet: The importance of stories and storytelling in planning practice. *Planning Theory & Practice*. 4, 1: 11-28.
68. Wendy Sarkissian. 2010. The Beginning of Something: Using Video as a Tool in Community Engagement. In *Multimedia Explorations in Urban Policy and Planning*. 151-165.
69. Ronald Schroeter and Marcus Foth. 2009. Discussion in space. *Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open 24/7*. 381-384.
70. Bryan Semaan, Heather Faucett, Scott P. Robertson, Misa Maruyama, and Sara Douglas. 2015. Designing Political Deliberation Environments to Support Interactions in the Public Sphere. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15*. 3167-3176.
71. Rachel Silcock. 2001. What is E-government? *Parliamentary Affairs*. 54, 1:88-101
72. Bailey Socha and Barabara Eber-Schmid. 2014. What is new media? Retrieved from New Media Institute <http://www.newmedia.org/what-is-new-media.html>
73. Jocelyn Spence, David Frohlich and Steven Andrews. Live Digital Storytelling.
74. Jocelyn Spence. 2015. Performing digital media design. In *Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition*. 401-402.
75. John Sturzaker and Dave Shaw. 2015. Localism in practice: lessons from a pioneer neighbourhood plan in England. *Town Planning Review*. 86, 5:587-609.
76. Nick Taylor, Keith Cheverst, Peter Wright, and Patrick Olivier. 2013. Leaving the wild. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13*, 1549-1558.
77. Nick Taylor, Justin Marshall, Alicia Blum-Ross, Justin Marshall, Alicia Blum-Ross, John Mills, Jon Rogers, Paul Egglestone, David M. Frohlich, Peter Wright and Patrick Olivier. 2012. Viewpoint. *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems - CHI '12*. 1361.
78. James A. Throgmorton. 2003. Planning as persuasive storytelling in a global-scale web of relationships. *Planning Theory*. 2, 2: 125-151.
79. Alain Touraine. 1981. *The Voice and the Eye: An Analysis of Social Movements*. Cambridge University Press, Cambridge.
80. Christopher Twitchen and David Adams. 2011. Increasing levels of public participation in planning using web 2.0 technology. *Centre for Environment and Society Research working paper series*.
81. Merlijn Van Hulst. 2012. Storytelling, a model of and a model for planning. *Planning Theory*. 299-318.
82. Vasilis Vlachokyriakos, Rob Comber, Karim Ladha, Nick Taylor, Paul Dunphy, Patrick McCorry and Patrick Olivier. 2014. PosterVote: expanding the action

- repertoire for local political activism. In *Proceedings of the 2014 conference on Designing interactive systems*. 795-804.
83. Peter K. Wiesner. 1992. Media for the people: The Canadian experiments with film and video in community development. *American Review of Canadian Studies*. 22, 1; 65-99.
84. Katharine Willis, Gianni Corino and Karen Martin. 2012. Developing a neighbourhood locative media toolkit. In *Proceedings of the 4th Media Architecture Biennale Conference: Participation*. 75-78.
85. Jane Wills. 2016. Emerging geographies of English localism: The case of neighbourhood planning. *Political Geography*. 53:43-53.