

This Is Our City! Urban Communities Re-appropriating Their City



Gabriela Avram

Abstract In this chapter, the author examines a citizen-driven intervention regarded as “city hacking”; the initiative empowered citizens to organize themselves around a communal issue and enact urban interventions at economic, social, environmental, and cultural levels. Using a formula created for a TV show that provided scaffolding and brought the community together in a very short interval of time as starting point, during the development the formula was hacked and appropriated in a convenient way, shifting from the expected support of broadcast media to an assemblage of social media tools fit for the purpose. The lived experience and the concrete results demonstrated to the local authorities the value of openness, collaboration with local communities of volunteers, and social media usage. This development provides an example of top-down curation of bottom-up city-making initiatives, opening the way toward hackable institutions. Scaffolding community initiatives through creating flexible formulas anchored in social media channels that are easy to appropriate and adapt are presented as a promising avenue to investigate further.

Keywords Civic technologies · Digital media · Hybrid communities · Hacking Hackable · Scaffolding

1 Introduction

The extensive presence and availability of digital technologies that underline the smart city concept (omnipresent Wi-Fi and Bluetooth connectivity, various sensors connecting data, actuators for implementing changes in real time) have, at the same time, underpinned changes in the way citizens perceive, navigate, and act in the city and have increased the opportunities for people with similar interests to congregate.

Urban communities worldwide make use of technology to solve local problems and become more resilient, complementing the work of local authorities. Many of

G. Avram (✉)

Interaction Design Centre, University of Limerick, Limerick, Ireland
e-mail: gabriela.avram@ul.ie

© The Author(s) 2019
M. de Lange and M. de Waal (eds.), *The Hackable City*,
https://doi.org/10.1007/978-981-13-2694-3_7

these communities emerge online, through social media, before meeting face to face and moving to action out in the city. The digital platforms made available in various domains have led to the rise of the “platform society,” where, according to Ampatzidou et al. (2015), “it may become easier to ‘hack’ the existing fabric of our cities and appropriate it for our own uses.” Some of these platforms, built by activists, entrepreneurs, and civic hackers, create mechanisms for data sharing and assemble collaborative networks, creating “interfaces for people to see, touch, and feel the city in completely new ways” (Townsend 2013).

The urban communities I refer to here are communities of interest that are at the same time physically colocated in a particular geography and enabled/supported by digital technology that come together to address a perceived need of their city. This case presents a specific urban community that emerged in the aftermath of the recession in Ireland, following an example promoted by a TV show on national television.

Various communities with global reach, formed around specific activities or interests—like maker spaces, Transition Cities, OpenCoffee, CoderDojo—have spread worldwide via the Internet and social media. These communities make use of global resources to innovate, hacking the original models and finding solutions to local problems.

Here, I will focus on a particular aspect of active, collective civic engagement: participation in a community-based organization. I am primarily interested in how the existence and free availability of a template (or model/example) for a specific type of association/community facilitated the rapid creation and establishment of the organization in this case study (a mechanism I will label as “scaffolding”). By scaffolding in this context, I refer to building on an existing, known, available organization model, adopting its modes of interaction, roles, tools and functions, ideas and values. Thus, scaffolding has the advantage to provide a shortcut and introduce shared success criteria that are understood and adopted by all the active community members as part of the initial model. Here, scaffolding facilitates adapting solutions that have worked elsewhere to hack the design of the city, where hacking takes the meaning of using digital media platforms to mobilize citizens and share information, allowing them to contribute to the restoration of the city’s social fabric and resilience at a moment in time when the economic situation appeared desperate and the municipality was seen as inactive.

The model for Hackable city-making proposed by de Lange (2016) includes three levels: an *individual hacker attitude*, characterized by a “do-it-yourself ethics and professional amateurism,” a *collective set of hacking practices* (open innovation, collaboration, and sharing of knowledge and resources), and *the hackability of institutions*, (defined as “the structural affordances at the level of organizations and public governance to be open to systemic change from within or outside”).

In this case, the individual hacker attitude and the collective set of practices are easily recognizable; however, the institution perceived as hackable was not a local organization, but an existing TV show, the template of which was reused and adapted for attempting to change the city’s current situation while bypassing existing mechanisms and institutions.

Our case of “city hacking” from a medium-sized city in the west of Ireland goes beyond short-term interventions and shows how citizens can step to contribute their time and skills to provide alternative solutions to problems cities are confronted with. As phrased by Hill, “in the face of institutional collapse, active citizens are knitting together their own smart city, albeit not one envisaged by the systems integrators and technology corporations” (Hill 2013).

The case study involves an urban community from Limerick, Ireland. It takes its name—*Limerick Local Heroes*—from a TV show titled *Local Heroes*. The community initially came together in the autumn of 2011 through an online conversation facilitated by a Twitter hashtag, with the purpose to do something to reverse the downward economic and social trend caused by the recession affecting the city. An initiative group of 10 people was joined by approximately 50 others in the course of 2 months. At the outset, the general level of morale was low, since the local authority was stripped of resources in a country struggling to reduce public expenditure. Building upon an already established formula known to the general public via public television, the initiative tapped into an existing pool of local expertise, creativity, and solidarity. The campaign aimed at bringing people together to turn the situation of their city around. Everyone involved considered it a success, and it served as inspiration to a wide array of citizens. For many years before that, national media had promoted a negative image of the city, focusing on crime and unemployment and turning a blind eye to any positive stories. This bias generated a lot of grief locally. The Local Heroes initiative was seen as an opportunity to show the world the “true face” of the city—especially if they were to appear on national TV. A detailed description of the emergence of Limerick Local Heroes community and its evolution are given in the third part of this chapter.

The author joined the initiative group in early December 2011 as a volunteer. As a scholar with an interest in civic engagement and social media, she volunteered to support the group during the preparation and execution of the planned public events. The author’s approach was to build technology around the community requirements and to support its IT and communication needs to suit the digital skills level of the members.

In parallel with the design, implementation, and adoption of off-the-shelf tools and applications that members were already familiar with, the author undertook ethnographic observation and informal interviews, as well as documenting the developments as they took place.

The current chapter sets to present this case of civic activism, discussing the role of digital media in its development—with an emphasis on social media channels. Of special interest is the role of existing models, templates, guidelines, and principles that are available to urban communities to appropriate and use to scaffold their immediate civic action, like, in the case of maker spaces. Adopting such a model combines innovation (the model has to be adapted to local conditions) with becoming part of a global (or national) community. Inspiration and lessons learned are widely shared on social media, triggering conversations and connections between similar communities worldwide.

2 Background

2.1 *Augmented Cities and Hybrid Communities*

The setting of this study is the city—traditionally seen as “a dense ecology of impersonal social interactions occurring within recognizably public spaces” (Williams et al. 2009). Drawing on contemporary urban scholarship, Williams et al. (2009) advocate a perspective that is based on the users’ experience, rather than on the spatial view of the city. In this view, “users become actors embedded in global networks of mobile people, goods, and information, positioned in a fundamentally heterogeneous and splintered milieu” (ibid). People get involved in local communities that are connected to global communities via digital media platforms.

With the emergence of location-based media, a new dimension has been added to the physical city. The citizens’ movements and interaction with urban spaces are nowadays augmented with an “additional digital overlay” (Ciolfi et al. 2008) that has become part of the city canvas. The physical routes and their representation in the digital realm are intricately interwoven, and the “perceptions of and social behaviors in urban spaces” (Gómez de Llarena 2013) are altered by digitally mediated conversations.

The new urban infrastructure almost implicitly assumes an “Internet infrastructure overlaid onto the city” (Hill 2013). The connection between online social networks and the physical world is made seamlessly following the shift from static to mobile computing, and new layers of information are added to our surrounding spaces, reshaping them (Pucci and Mulder 2013). Rather than a new, separate layer, this represents an augmentation of spaces and interactions with information, forming a hybrid type of urban space. The urban social networks “borrow the dynamics, modes, and functionality of social media” without necessarily relying on them and prefer “a form of public, physical engagement with urban fabric” (Hill 2013).

Bringing into discussion the overlap of communities of place and communities of interest, Pucci and Mulder (2013) use the concept of “hybrid communities,” referring to the landscape of new social aggregations made possible by social and mobile technologies “appearing in the blur between physical and digital spaces, between online and offline interactions, as well as between global and local communities.”

2.2 *“Hacking the City” Initiatives and What Makes a City Hackable*

In a world where the top-down smart city discourse is still dominating mainstream media, the emphasis is on efficiency and effectiveness and citizens are seen mainly as producers of data and beneficiaries of the improved efficiency. The alternative approach argued for, among others, by Gurstein (2014) favors a “focus on social inclusion, enabling citizens, supporting communities”—what he calls “a community

informatics model.” Putting the emphasis on “smart communities” rather than on “smart cities” would “enable and empower citizens and support their individual and communal quests for well-being” (Gurstein 2014). The focus on citizen initiatives and potential tools that can support their attempts to improve city livability, rather than on technology, is characteristic for research coming from a variety of disciplines: community informatics (Carroll 2012), CSCW (Ciolfi et al. 2008), participatory design (Bødker and Zander 2015), urban informatics (Foth et al. 2011a, b), and urban interaction design (Smyth et al. 2013), to name just a few that inspired this work.

“Hacking the city” initiatives are often characterized by punctual and short-lived alterations brought to existing urban practices and places. It usually means doing things differently, in a clever manner, with less resources and making things work. Some of these initiatives fully rely on digital technologies, while others are using these solely to look for information and inspiration or to communicate with peers. Individuals, groups, networks, and communities are nowadays experimenting with digital technologies, enabling urban interventions of varied nature and coverage.

The Hackable City Manifesto by Ampatzidou et al. (2015) suggests a classification of these initiatives in three categories. The first category of projects is aimed at a more sustainable management of resources. In the Irish context, a whole range of such projects are concentrating on growing one’s own food (GIY—Grow It Yourself network), urban beekeeping, using the energy of the wind or waves, personal weather stations, and so on.

The second category of projects aims to improve social cohesion by bringing people together and encouraging them to interact. In the Irish context, community gardens, maker spaces, and cultural heritage community initiatives involving exhibitions and performances—to name but a few—would all fit under this category. However, citizen initiatives like Transition Cities and CoderDojo that focus on bringing people together to better manage existing resources (from energy to knowledge) are a crossover between the first and second categories.

A third category of projects seeks to improve the livability of specific locations in the city (Ampatzidou et al. 2015). Tactical urbanism interventions are “intentional actions changing their places” (Saitta 2014), where technology often plays a significant role. According to Saitta, sometimes intangible interventions (intangible because they often work with data and projections—rather than bricks and mortar) can create new affordances in the city. City games, augmented reality used as “functional graffiti,” mapping initiatives, media facades, and a wide range of public events can “relieve social pressure, draw attention or change how people see problems” (Saitta 2014). Material interventions in space like Park(ing) Day, pop-up parks, yarn bombing, food markets have the purpose to introduce temporary changes. While most of these initiatives are approved by the local authorities, unauthorized interventions like guerilla gardening, guerilla grafting, and seed bombing are also gaining momentum. The organization of hackathons is an attempt to bring volunteers with design and coding skills together with representatives of local authorities in order to build new software applications and platforms that could address city problems by making use of Open Data (Haan and Höffken 2015). Hackathon events inspire the creation of

new digital tools (e.g., the HitTheRoad¹ application that used Open Data to build the first aggregated metropolitan transport live schedule for Dublin) or can serve to design and build material interventions in place.

Many of these interventions are short lived and not part of a wider strategy. They allow citizens to get involved in city-making in a punctual, short-term way, to try things out.

In their *Hackable Cities Manifesto*, Ampatzidou et al. (2015) introduce the idea of opening the city for and encouraging changes, in other words, making the city “hackable.” Such a strategy would allow for successive incremental changes initiated by various stakeholders, aimed at making the city more resilient and more livable, with the direct involvement of its citizens. Using digital technologies, citizens would “open up urban institutions and infrastructures to systemic change in the public interest. It combines top-down smart-city technologies with bottom-up ‘smart citizen’ initiatives” (ibidem).

As mentioned earlier, this would involve the presence of individuals interested in city-making, of collective “hacking” practices (that can range from contributing to crowdsourced data on potholes to building street furniture), and open institutions, willing to share data and collaborate with other stakeholders (de Lange 2016).

3 Inhabiting the Augmented City

3.1 Global and Local Communities

Limerick is a city with over 100,000 inhabitants in the west of Ireland. The city, situated on the banks of the River Shannon, has a great natural position, a rich historical past, and a good reputation for gastronomy, sports, and culture. Between 2009 and 2013, Limerick was severely affected by business closures—especially by that of a Dell factory that was at the center of a whole ecosystem of local small companies. The region suffered acutely from the lack of jobs, unemployment reaching higher rates than in other parts of the country.

The wide availability of the Internet connectivity, mobile devices, and social media applications made it possible for several local hybrid communities to emerge—sometimes inspired by other national or global movements. I will introduce a few here, in order to provide more local context to the central topic of this chapter.

The local maker space, *miLKlabs* (made in Limerick labs), was inspired by similar groups worldwide. It came into being in 2010, following the creation of a mailing list for gauging interest, that progressed to face-to-face meetings after a couple of months. The central Web site Hackerspaces.org, containing a list of worldwide hackerspaces and advice on how to start and run them, as well as support received from similar groups in Dublin and Galway, provided the necessary inspiration. The group worked

¹<https://hittheroad.ie/about>.

on a series of projects organized workshops and tutorials and maintained a public-facing Facebook page, Google Group, and own Web site. The activity ceased in 2014, the year when a Fab lab opened in the city and paying for maintaining an own space became less attractive.

The *Limerick OpenCoffee Club* started to organize monthly meet ups in 2007; the @LOCC Twitter account and the #LOCC hashtag provided the main communication channel. The community was inspired by the global OpenCoffee model, offering a face-to-face meeting place for entrepreneurs, developers, and investors. The community formed around a specific venue—the lobby of a local hotel—and a fixed day—the first Thursday of the month. A Facebook page, a YouTube channel, and a Google Community were added one by one later. In 2013, the community migrated to a different venue and moved to an evening meeting time, rebranding as Start-up Limerick.

CoderDojo,² a global network of free, volunteer-led, independent, community-based programming clubs for young people, was initiated in June 2011 in Cork. The movement was consequently open-sourced. The Limerick-based Midwest CoderDojo group started in September 2011; it uses Twitter, Facebook, and a mailing list and has its own Web site. Parents register their kids for various programming workshops taking place almost every Saturday via the Web site. The community around these weekly events continues to grow, and the movement has spread worldwide. This is the only community still in existence and flourishing at the date when this chapter was written.

There are a few characteristics that these groups held in common: (a) a regular meeting place in the city, (b) regular dates and times, and (c) one or more digital media communication channels that allow them to coordinate and keep in touch and also to attract new members. Membership of such groups is usually loose—people show up if they are available and interested, and newcomers are always welcome.

The digital media platforms they use (Facebook, Twitter, Google Plus, WordPress) were all readily available, free to use, low threshold. In the case of OpenCoffee, for more than a year, the only platform used was Twitter, with conversations revolving around the #LOCC hashtag. In the case of miLKlabs, an individual interested in the creation of a local maker space created a Google Group, and people interested in this conversation joined and got involved. The initiator of the list left the city before the face-to-face meetings even started, but due to the nature of the platform, this did not affect the group. CoderDojo Midwest started with a Google Calendar, solely signaling the dates when meetings were going to happen. This way, troubleshooting and maintenance were kept to a minimum. The people who initiated these groups chose the tools they were familiar with, and whoever was interested had to flock to that channel. In time, the groups developed a more elaborated media presence (Twitter, Facebook pages or groups, WordPress Web sites)—when it was deemed necessary, and when specific members volunteered to take care of this.

For the majority of them, several administrators/moderators were appointed, to allow the community to grow and function whenever the initiators were not available.

²<https://coderdojo.com>.



Fig. 1 Backchannel Twitter conversation during Local Heroes TV show broadcast

The digital media platforms employed emphasized the openness of these groups to new people and new initiatives. As these were highly informal structures, they allowed for a lot of flexibility and made specific things happen, only to disappear when a more formal organization appeared to fill that need, or the need simply ceased to exist. All these local examples demonstrate how digital media is used by different groups to appropriate (“hack”) the city and its infrastructure.

Having described the context, I am now moving to presenting the case study that constitutes the focus of this chapter.

3.2 *Limerick Local Heroes*

In 2011, RTÉ, the Irish national radio and television broadcaster, created the *Local Heroes* show, in order to encourage local initiative (at national level) in “fighting back against the recession.” The first series, broadcasted in the autumn of 2011, focused on Drogheda, a town in the Boyne Valley (Fig. 1).

While the show was being broadcasted in November 2011, a number of individuals based in Limerick triggered a conversation on Twitter about starting a similar initiative in Limerick. A hashtag (#limerickurmylady) was spontaneously chosen for the conversation, inspired by a local anthem by Denis Allen titled “Limerick, You’re a Lady!”³.

The idea of the television show was to empower local communities to take their fate in their own hands, reinvent themselves, and create jobs. The RTÉ Web site offered a set of step-by-step instructions meant to help any community to replicate the actions seen happening in Drogheda: setting up a Town Hall meeting, finding hub, creating a team, running an Ideas Summit, creating a jobs buddy scheme, and a mentoring program for start-ups.⁴

³[http://en.wikipedia.org/wiki/Denis_Allen_\(singer\)](http://en.wikipedia.org/wiki/Denis_Allen_(singer)).

⁴<http://www.rte.ie/localheroes/>.

The Limerick group came together inspired by this shared goal: encouraging the locals to think outside the box and bring changes to the almost desperate situation by mobilizing local volunteers. These were people who shared the belief that complaining and blaming the local authorities and the central government were not going to lead to any positive change in the economic and social situation of the city. They had every intention to do it themselves.

While taking the successive steps recommended by the RTÉ guidelines, the group expected to gain national visibility by being the next city profiled in the show in 2012. However, as it took RTÉ time to find a new sponsor for the show, a call for new groups was only issued in December 2012, when the Limerick group was already in full swing, had hacked the template provided by creatively adjusting it to local conditions, and had created its own flavor of “local heroism.”

3.2.1 The Preparatory Phase

A small initiative group first met face to face in October, after having conversed on Twitter during the TV show. They continued to meet every Tuesday in a public city center venue. In the space of a few weeks, the group grew from 10 to more than 60 members. A date—30 January 2012—was set for the Town Hall meeting, recommended by the RTÉ guidelines as a first step for going public and getting the citizens’ support.

The group contacted RTÉ staff working on the show, inviting them to get involved in filming or broadcasting the Limerick Town Hall meeting. The answer was encouraging, but funding and show planning matters led to the suggestion to approach the issue in a DIY manner. The local group then invited the same film crew involved in the filming and production of the RTÉ series “Local Heroes—A Town Fights Back” in Drogheda, hoping that the footage could be broadcasted later on. RTÉ contacts committed to publish the video online on the RTÉ Local Heroes Web page and promote it through the show’s Facebook page and Twitter account. A local media company also volunteered to record the meeting and shared the edited footage on YouTube⁵ after the meeting, facilitating transparency and public awareness.

Four working groups (Logistics, PR & Marketing, Event Management and Networking) were formed, to focus on detailing responsibilities and assigning punctual tasks. Through their personal and social media networks, the members spread the word, inviting more locals to join the organizing team.

In a press release issued in preparation for the Town Hall meeting, the spokesperson for the Limerick Local Heroes Steering Group explained the motivations and goals of the group:

“Limerick Local Heroes was born out of a frustration amongst genuine Limerick people drawn from the arts, business, sporting & community sectors who believed their voices haven’t been heard in developing a future vision for Limerick, particularly in terms of job

⁵http://youtu.be/GN9BI_PC84o.

creation.” Press release, *Public Meeting to kick start Limerick Local Heroes Initiative*, 20 Jan 2012⁶

The Town Hall meeting was intensely promoted through local media channels, digital media platforms, and through volunteers who distributed flyers in popular weekend venues throughout the city. Rather than trying to hack existing structures, the group used the template provided by the TV show to build a new, open structure, making extensive use of digital platforms, but also targeting directly those who, for a reason or another, are not active on such platforms.

3.2.2 The Public Events

The preparation of the public events presented here was the focus of the Limerick Local Heroes initiative group ever since its emergence. The fourth section of this chapter will present in detail the role of digital media in the organization and running of these events. The initiative group followed a ready-made template that involved specific steps and events that proved successful somewhere else. This systematic approach was never questioned, and although the group added a local flavor and roles to the approach, the steps were strictly followed.

The Town Hall meeting took place on January 30, 2012, in a city center hotel that provided the facilities for free. The Eventbrite platform was used for registration, in order to keep a count of the tickets, but a lot of people just showed up on the day. The number of attendees exceeded 400. Short opening speeches were followed by interventions from the floor. The meeting facilitator, a well-known TV personality, made sure that the interventions were short and to the point. According to the brief he received, he welcomed any ideas for improving the current situation of the city, but emphasized that the proposers should be ready to assume responsibility for working toward them. Complaining about the current state of things was simply not on the agenda (Figs. 2 and 3).

More than 60 ideas were recorded during the night. Attendees who wanted to share ideas but did not manage to present them at the meeting were encouraged to submit them via the Web site. The open list of ideas was published online in the form of a spreadsheet.⁷ The ideas ranged from down-to-earth organization of festivals and major cleanup initiatives to more adventurous ones—like creating a boat bus line or building a monorail to connect the city with the university.

The date of a second meeting, titled The Ideas Summit, set for 2 weeks later was announced at the Town Hall meeting. During the following week, the echoes generated by the meeting and the positive reactions in the city led to an offer of a vacant shop unit in a central shopping center, to serve as hub for the Limerick Local Heroes, the offer that was accepted immediately. The hub was refurbished and brought to a high standard (modern lights, furniture, separated in three multifunctional spaces) with the help of a wide range of volunteers. Two weeks later, more than 300 people

⁶<http://limericklocalheroes.ie/publicmeeting/>.

⁷<http://tinyurl.com/LmkLHIdeas>.



Fig. 2 Preparing the Town Hall meeting

attended the Ideas Summit. The Summit was “designed to gather together a diverse group of people with a shared interest in Limerick’s future. The process aims to create a climate of possibility, a forum to help participants converse, think well together, share points of view and develop new ideas with a view to creating unifying and very realistic solutions” (excerpt from the Limerick Local Heroes blog post⁸).

The venue chosen for this meeting was Thomond Park Stadium, an iconic venue for Limerick. A well-known public personality accepted to be the event’s main facilitator, while 30 other local facilitators, coordinated by a Local Heroes local professional facilitator, took the responsibility of moderating the discussions at each table and communicating the ideas that came out of the discussion to the plenary. The attendees were seated at tables, in groups of 10. The 2 hours of intense discussions lead to some great ideas being put forward, most of them aiming to bring positive changes in Limerick.

Notes were taken on the sheets of paper that covered the tables. The content of these sheets was later on harvested, and the new ideas were added to the already existing list available online by the 30 facilitators (Figs. 4 and 5).

⁸<http://limericklocalheroes.com/register-for-the-idea-summit/>.



Fig. 3 Town Hall meeting

3.2.3 The Long-Term Run

For the following month, the efforts were focused on opening the central hub to the public and working with the citizens. The local business association found resources for financing a full-time project manager position for a year, to ensure that the hub would have dedicated staff. Four working groups called “pillars” were formed: Retail, Tourism, 3Es (Enterprise, Employment, and Education), and Community. These pillars coordinated the initiatives in each field and liaised with each other (Figs. 6 and 7).

During the previous phase, the regular weekly meetings in a local hotel were extremely important for coordination. After the launch of the hub, the activity of the group shifted to networking mode—members were available when needed and still met regularly, but coordination was delegated to the project manager. Two journalism students joined as interns for the summer, promoting and recording events organized with the support of the Limerick Local Heroes group. The role of the hub was to help people with initiative to access adequate support and find other volunteers who could make things happen.

A whole series of initiatives that were first brought up at the above-mentioned meetings developed and contributed—if not to an economic revival, to a sense of empowerment, hope, and confidence in the ability to change things through city-



Fig. 4 Ideas Forum

wide collaboration. To mention only a few, an annual film festival dedicated to Limerick-born actor Richard Harris, a series of lunchtime theater performances, and the participation in a national Tidy Towns competition were made to happen by the wide network formed around the Local Heroes group.

The successes of the Limerick group were the object of a RTÉ1 “Local Heroes Christmas Special” TV show in December 2012. The announcement of a new series of Local Heroes on RTÉ was made on that occasion. At this point, the Limerick initiative had taken a course of its own—maybe less telegenic, but more attuned to the realities of the city.

Between 2012 and 2013, the hub provided a meeting point for various groups and initiatives in Limerick city. Career counseling and CV writing sessions for the unemployed citizens were organized, job seekers were put in touch with local employers, and various initiative groups used the hub for their meetings.

After the funding made available for the project manager and the rental agreement for the hub ran out, the hub had to close its doors. The digital channels (Web site, Facebook page, and Twitter account) owned by the group, however, were active for another year, preserving the same ethos—supporting positive change in Limerick. In September 2015, the Facebook page had over 2,000 likes and the number of fans was still growing. The Web site went offline in 2014, and the Twitter account was rebranded in 2014 as @limerickcity.



Fig. 5 Drafting ideas

4 Digital Technologies for Civic Action

Various digital technology platforms were adopted ad hoc by the *Limerick Local Heroes* initiative. The *#limerickurmylady* Twitter hashtag played a major role in the formation of the group. It provided transparency and awareness, sharing the information about meetings and objectives with the group members and with the public at large, and proved to be an excellent coordination mechanism for the first steps.

Once the group started meeting weekly in November 2011, email exchange among the members of the group became the second major communication channel. A list of emails kept on evolving—for sharing details about the upcoming meetings and events, and the minutes of the meetings. The mechanism was not ideal, but it was favored as it allowed each member to select the recipients according to the subject of her message. Occasionally, some addresses were accidentally left out from messages intended for the whole group, creating coordination problems. The decision to use email was natural. An attendance list was circulated at every meeting, and one person took responsibility for adding every newcomer's address to the existing list of emails.

A Facebook page was created immediately after the first meeting. A Twitter account representing Limerick Local Heroes was set up by one of the members



Fig. 6 Getting the hub ready

(@LMKLocalHeroes), as well as a self-hosted WordPress Web site.⁹ Besides the three community members working in IT (the author included) and volunteering their time and services, several other members of the group volunteered to act as content editors once the channels were set up. The login details for the Twitter account were widely shared with the group, and all the members were encouraged to use it and to interact with it from their personal accounts using the dedicated hashtag, #limerickurmylady. All the members of the group who requested this were given administrator rights for the Facebook page, so that they could post promptly and answer to comments.

Eventbrite was used for free registration for both the Town Hall meeting in January and the Ideas Forum in February 2012, as preregistration allowed to capture participants' details. A newsletter was initiated in January 2012 and sent to all the members of the public who came to either of the public meetings and indicated they wanted to be kept up to date by leaving their email address or signed up for it later on the Web site. The digital media channels were complemented with announcements in the local press and radio broadcasts, posters and flyers, in order to reach out to the member of the public who were not online. A group of volunteers was present every Saturday in January and February at the Milk Market, one of the busiest spots in the city, offering leaflets and engaging in conversations with citizens.

⁹<http://limericklocalheroes.com> (gone offline in September 2014).



Fig. 7 Meeting with volunteers

An innovative touch was entering the ideas contributed during the Town Hall meeting into a Google spreadsheet and making it accessible from the Web site, for awareness and coordination purposes. At the Ideas Forum, some of these ideas were discussed at tables and new ones were added to the list and posted to the Web site via the spreadsheet. Starting with May 2012, the project manager and the two interns took responsibility for maintaining the Web site and the social media channels conversation, as well as the newsletter. Contributions from other members were always welcomed.

Reflecting on the choice of digital media tools, they were each suggested by members and accepted without resistance by the community. Each choice was discussed in plenary meetings, and because the majority of the members were well versed in using Facebook and Twitter, no training was needed. The face-to-face meetings insured that everybody was up to date with the short- and long-term objectives of the group, and taking turns using the Twitter account and posting to the Facebook page presented a consistent image to the outside world. On some occasions, a few members confessed that they refrained from posting when they were not sure they were striking the right note and passed the messages to the chairperson instead.

The previous experience of some of the members and the free availability of these digital platforms allowed the group to quickly set up a presence on several digital media platforms and to maintain the dialogue with the general public. Although this might not look like “hacking,” the fact that no approvals were needed, nobody had

to be hired, and all the platforms were set up in 1 week demonstrates the affordances of digital media platforms for civic engagement. However, this would not have been possible without the associated colocated practices and without the backing of media organizations involved.

These digital platforms served as an enabler for organizing the public events and, later on, the activity in the hub. They gave visibility to the initiative, allowed the group to ensure transparency for its activities, and supported open and flexible membership.

The use of these platforms also magnified the collective effort, keeping the initiative in the public attention.

Public awareness and support were important, so lurkers were always welcomed. These uninvolved spectators were made aware that if, at any point in time, they felt able to contribute something to the initiative, their contribution will be welcomed. The variety of media channels used allowed the group to reach a significant part of the local population. Multiple social tools were combined: a dedicated Web site/blog, Twitter, Facebook, a Tumblr blog from a complementary perspective, as well as being accompanied by a mailing list, a newsletter and print media. Although some content was shared across all channels, most of the times content was purposely created for each channel. The social media channels complemented each other and allowed the group to reach its target audience. In the economy of the project, specific “digital objects” (Crivellaro et al. 2014) like the *#limerickurmylady* hashtag, photographs from events¹⁰, and the list of ideas shared online played a very important role: They were used in online conversations, shared extensively across different channels, and in a way allowed those who were only marginally interested to witness what was going on.

Decisions for specific matters to be made public or kept inside the coordination group were made by the plenary. The members maintained close awareness of each other’s actions via email, Twitter, or phone, and all activities were well coordinated through the member’s self-organization efforts and without a formal hierarchy.

As the members of the initial group were coming from all paths of life and were motivated by the idea of changing things in their own city, they brought in their family members, friends, colleagues, and acquaintances and the enthusiasm of doing something instead of passively waiting for things to change touched many locals. The public events and the further developments captured the attention of local journalists, bloggers, artists, and so on. The following comment is an excerpt from a post by a very popular local blogger after the Town Hall meeting:

Ideas are not only good, but necessary. Without ideas, we’re nothing, but ideas in turn are nothing without a guiding framework and that’s something we desperately need to do before we go any further. We need vision. We need to identify the top-level issues and work from there. If we don’t do that we’ll be condemned forever to throw out random, and doomed, suggestions like monorails. (Bock the Robber 2012)

¹⁰<http://tinyurl.com/LLH-photos>.

5 Discussion

The case I presented is not a typical city hacking endeavor. The intervention was inspired by an official discourse promoted by the national television: In dark times, the citizens should get together and help turn their town around. While the initial motivation was to show the whole country that Limerick was a city capable of change, in time this shifted inwardly, and the main goal became connecting people who were willing to do something positive to improve resilience and livability in the city. It was a response to a problem the city was confronted with, and the solution was not a technological one. While activism took the front seat, technology and design played more of a supporting role. Involving a variety of individual local actors, the Limerick Local Heroes initiative avoided to associate itself with any political party or local institution. The initial group was made of business people, artists, unemployed, academics, and others, listening to the voices of their families, colleagues, and neighbors and bringing their stories to the fore. The aim was to support everyone in the city, irrespective of their social, professional, or ethnic backgrounds.

The local authorities watched the initiative unfolding, as their role and authority were not challenged. After a prolonged period of resource scarcity, they had come to recognize and appreciate the contributions the citizens could bring. When invited, public representatives came on board and supported the Limerick Local Heroes' actions. The local business community fully embraced the initiative and supported it (both morally and financially) throughout the whole period, as they were well aware that a change in the economic climate would benefit them too. As noted by Williams and her colleagues, these were "social actors *positioned* within flows of capital that structure these spaces, negotiating their circumstances via independent processes of mobility." The social settings were indeed "rich and familiar," and the environment was "already thick with information technologies and infrastructures, full of mobile people using mobile technologies" (Williams et al. 2009).

The steps followed fit well those described by Ampatzidou et al. (2015) in The Hackable City Manifesto.

The initiative started with the definition of the issue: "The local economic situation is dire; let us try to do something to change this." Rather than a single actor, a loose group of people who were simultaneously watching the same TV show were inspired to come together and follow the template of the TV show. The issue at hand was *communicated* through both digital media platforms and traditional media (local radio and newspapers) *to the general public*. Additionally, word of mouth and printed leaflets and posters were used in the city. Attention was paid to the graphical identity—the TV show logo was altered to read Limerick Local Heroes, offering a connection to something well known to the public and a specific local character. Group photographs including local VIPs (from rugby players to small business owners) helped people connect with the group and its values. This way, *a larger public became engaged with the issue*, through the online and offline campaigns, with many of the members of the public volunteering to help.

The platform for collaborating with the public started with the two public meetings: the Town Hall meeting and the Ideas Summit. The Web site played a similar role online. When the hub opened in spring, it became the main venue for meetings and activities. The platform allowed the *gathering, categorization, and transparent sharing of ideas* for local initiatives. During the two public meetings, and later in the hub, community members and volunteers were able to discuss the feasibility of various initiatives and the resources needed. Several of the initiatives formulated were *put in practice by citizens* who found each other due to the group's intermediation. Some of these initiatives took a life of their own and were continued by those who founded them. Some others disappeared after a year or two. Although the Limerick Local Heroes group ceased its existence, several of its former members are still collaborating in other local initiatives.

Ampatzidou (2013) critiqued the “widespread rise of active citizens” and the perceived lack of efficiency, representativeness, and accountability of such initiatives, showing that “self-organizing systems are quick and direct, but they are also temporary and have no real impact on legal structures.” Although the case presented here had, indeed, no impact on legal structures, I argue that it had an impact on weaving the social fabric and created trust, a precedent and opened the way for other citizen interventions. The quick and direct self-organizing system described was in existence for about 18 months, achieved its strategic goals and left a lasting impact on the city as a whole, and on the local authorities' appetite to partner with local organizations and communities in the future.

Saitta (2014) suggests three ways of evaluating the quality of alterations brought about: How they “change people's understanding of the city”; how they “create or help affordances”; and how they “help make spaces more human and alive.” In this case, the Limerick Local Heroes initiative has triggered a significant change in understanding the city, moving the balance toward a proactive attitude and taking pride in the city. Valuable communication and action affordances were created, and the city center gradually came back to life. Social media played a paramount role in this direction, contributing considerably to the transformation of a desolated and unfriendly space into a familiar place (Avram et al. 2013).

Saitta (2014) also showed that informality plays a vital role in urban interventions, making them possible “outside of sanctioned spaces,” but in many situations this is accompanied by a direct social cost. In this case, no permission was sought or obtained. Using a logo and a name created by the national television and following a pre-established formula and course of events, nobody questioned the legitimacy of the group. Its openness and lack of hierarchical structure led to decisions being taken by consensus in most of the situations. In this case, the informality of the group's work was complemented by formal elements taken from the formula of the TV show and later on by setting up a proper structure for the initiative. Rather than being the urban backdrop for designing and developing a technological intervention, like in many research-through-design approaches, or the field for experiments “in the wild,” in this case the city played the role of the object the community attempted to remodel, without the involvement of urban planners, just by mobilizing, connecting, and coordinating existing resources—mainly human actors.

6 Scaffolding—Potential Templates for Civic Activism

I defined scaffolding earlier in this chapter as building on an existing, publicly known, openly available model of community and adopting its modes of interaction, roles, tools, functions, ideas, and values. I showed how scaffolding inspired and facilitated the emergence of local communities such as miLKLabs (the local maker space), Limerick Transition City, Limerick OpenCoffee, and Midwest CoderDojo. While all these movements found their inspiration primarily online, the civic activism initiative presented here was triggered by a formula used in a national TV show (supposed to present a different Irish city every couple of months), before emerging and developing with the support of digital media platforms.

Scaffolding offers the advantage of providing a shortcut and introducing transparent goals and success criteria. Rather than trying to create a community from scratch, which involves at some point formulating a mission statement and goals (in any shape or form), embracing a ready-made formula that is open and hackable already implies adherence to the values exposed by the model. Scaffolding facilitates adapting initiatives that have worked elsewhere to hack the design of the city. It also provides communication with and support from a national/global community.

Building on an existing, known template for creating a community involves adopting and adapting its:

- Modes of interaction: face to face and/or online, frequency of, and preferred location for interaction;
- Digital tools, ranging from Google Calendars and mailing lists, through own Web sites to Facebook pages or groups and Twitter hashtags or accounts;
- Specific roles: champions, initiators, chairperson, founding members;
- Functions: providing a hub for facilitating networking, creating an own space, knowledge sharing facilitation;
- Goals and values: from providing free computer training to kids to creating jobs or supporting new entrepreneurs.

Scaffolding has the advantage that it gives those participating the feeling of being part of something bigger, putting the community on the map. Eventually, many of these communities outgrow their initial model and disappear. Such endeavors can have a remarkable impact on local communities. The social fabric is woven, and the network continues to exist when one community is gone; new initiatives are built on existing networks.

7 Conclusions

In this chapter, I examined a citizens' intervention that can be regarded as "hacking"; the initiative empowered citizens to organize themselves around a communal issue and enact urban interventions at economic, social, environmental, and cultural levels.

Starting from a formula created for a TV show that provided scaffolding and brought the community together in a very short interval of time, the formula was hacked and appropriated in a convenient way, shifting from the expected support of broadcast media to an assemblage of social media tools fit for the purpose.

The lived experience and the concrete results demonstrated to the local authorities the value of openness, collaboration with local communities of volunteers and social media usage. In recent years, initiatives like “Limerick City of Culture 2014” and “Team Limerick Clean-Up” have built on the former experience and networks, offering hackable, purpose-designed formulas and a social media platform to the public to organize their own events. Demonstrating trust and openness for partnership, this development provides an example of top-down curation of bottom-up city-making initiatives, opening the way toward hackable institutions.

References

- Ampatzidou, Cristina. 2013. Smart cities vs. smart citizens—PBL expert meeting on smart cities with Dan Hill. The mobile city. <http://themobilecity.nl/2013/11/01/smart-cities-vs-smart-citizens/>. Accessed 15 Aug 2015.
- Ampatzidou, Cristina, Matthijs Bouw, Froukje van de Klundert, Michiel de Lange, and Martijn de Waal. 2015. *The hackable city: A research manifesto and design toolkit*. Amsterdam: Amsterdam Creative Industries Publishing.
- Avram, Gabriela, John Slattery, Alan Ryan, and Laura Festl. 2013. On oral histories, communities and annotating the city. https://www.academia.edu/4268454/On_Oral_Histories_Communities_and_Annotating_the_City. Accessed 15 Aug 2015.
- Bock. 2012. Limerick local heroes meeting. Bock the robber. <http://bocktherobber.com/2012/01/limerick-local-heroes-meeting>. Accessed 29 Sept 2015.
- Bødker, Susanne, and Pär Ola Zander. 2015. Participation in design between public sector and local communities. In *Proceedings of the 7th international conference on communities and technologies*, 49–58. New York: ACM.
- Carroll, John M. 2012. *The neighborhood in the internet: Design research projects in community informatics*, 1st ed. New York: Routledge.
- Ciolfi, Luigina, Geraldine Fitzpatrick, and Liam Bannon. 2008. Settings for collaboration: The role of place. *Journal of Computer Supported Cooperative Work* 17 (2–3): 91–96.
- Crivellaro, Clara, Rob Comber, John Bowers, Peter C. Wright, and Patrick Olivier. 2014. A pool of dreams: Facebook, politics and the emergence of a social movement. In *Proceedings of the 32nd annual ACM conference on human factors in computing systems (CHI '14)*, 3573–3582. New York: ACM.
- de Lange, Michiel. 2016. Report: How self-builders are hacking Buiksloterham. The hackable city. <http://thehackablecity.nl/2016/02/01/report-how-self-builders-are-hacking-buiksloterham/>. Accessed 15 Aug 2016.
- Foth, Marcus, Laura Forlano, Christine Satchell, Martin Gibbs, and Judith Donath. 2011a. *From social butterfly to engaged citizen: Urban informatics, social media, ubiquitous computing, and mobile technology to support citizen engagement*. Cambridge: MIT Press.
- Foth, Marcus, Jaz Hee-jeong Choi, Christine Satchell. 2011. Urban informatics. In *Proceedings of the ACM 2011 conference on computer supported cooperative work (CSCW'11)*, 1–8. New York: ACM.
- Gomez de Llerena, C. 2013. ‘Re: UrbanIxD.’ *UrbanIxD summer school reader*, 34–45. <http://urbanixd.eu/documents-publications/>. Accessed 15 Sept 2015.

- Gurstein, Michael. 2014. Smart cities vs. smart communities: empowering citizens not market economics. *The Journal of Community Informatics* 10(3).
- Haan, Yannick, Höffken, Stefan. (2015). 'Hack your City'. In Planerin 3/2015. Special Issue: Digital Vernetzt [online], available at <http://www.srl.de/publikationen/planerin/artikelverzeichnis/1968-planerin-2-2015-räumlicheleitbilder-2.html>, [accessed 20 Sep 2015].
- Hill, Dan. (2013). 'Essay: On the smart city; Or, a 'manifesto' for smart citizens instead', City of Sound. 1 Feb 2013, [online], available at <http://www.cityofsound.com/blog/2013/02/on-the-smart-city-a-call-for-smart-citizensinstead.html>, [accessed 15 Sep 2015].
- Pucci, Emilia Louisa, and Ingrid Mulder. 2013. Agorà 2.0: designing hybrid communities. In *Proceedings of the 6th international conference on communities and technologies (C&T'13)*, 16–25. New York: ACM.
- Saitta, Eleanor. 2014. Playing with the built city. *Urban hacking. Cultural jamming strategies in the risky spaces of modernity*, ed. Günther Friesinger, Johannes Grenzforthner, and Thomas Ballhausen, 49–82. Bielefeld: transcript-Verlag.
- Smyth, Michael, Ingi Helgason, Martin Brynskov, Ivica Mitrovic, and Gianluca Zaffiro. 2013. UrbanxD: Designing human interactions in the networked city. In *CHI'13 extended abstracts on human factors in computing systems (CHI EA '13)*, 2533–2536. New York: ACM.
- Townsend, Anthony M. 2013. *Smart cities: Big data, civic hackers, and the quest for a new utopia*. New York: WW Norton & Company.
- Williams, Amanda, Erica Robles-Anderson, and Paul Dourish. 2009. Urbane-ing the city: Examining and refining the assumptions behind urban informatics. In *Handbook of research on urban informatics: The practice and promise of the real-time city*, ed. Marcus Foth, 1–20. IGI Global.

Gabriela Avram is Lecturer in Digital Media and Interaction Design, senior researcher at the Interaction Design Centre of the University of Limerick (Ireland) and an active member of the Adaptive Governance Lab. Building on a Computer Supported Cooperative Work and Knowledge Management background, her current research focuses on the design and development of technologies for civic engagement in urban communities. In parallel, she is also working on designing interactive technologies for cultural heritage settings with an emphasis on co-design. Gabriela has worked on numerous international research projects on topics such as: adult learning, cultural and social aspects of collaboration, distributed work practices, Open Source communities, and the adoption and uses of social media for work-related purposes in various environments. Currently, Gabriela is the chair of the COST Action CA16121 From Sharing to Caring: Examining Socio-Technical Aspects of the Collaborative Economy, that she initiated in 2016. Gabriela has published extensively in international conferences and journals. For a complete list of publications, check her personal website at <http://coniecto.org>.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

