

Civic Crowdfunding: Participatory Communities, Entrepreneurs and the Political Economy of Place

by

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B.A., Oxford University (2003)

Submitted to the Department of Comparative Media Studies
in partial fulfillment of the requirements for the degree of

Master of Science in Comparative Media Studies

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 2014

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Abstract

Crowdfunding, the raising of capital from a large and diverse pool of donors via on-line platforms, has grown exponentially in the past five years, spurred by the rise of Kickstarter and IndieGoGo. While legislative attention in the US has turned to the potential to use crowdfunding as a means of raising capital for companies, less attention has been paid to the use of crowdfunding for civic projects - projects involving either directly or indirectly, the use of government funds, assets or sponsorship, which may include the development of public assets. This project analyzes the subgenre of civic crowdfunding from three perspectives. First, it provides a comprehensive quantitative overview of the subgenre of civic crowdfunding, its most common project types and its geographic distribution. Second, it describes three *edge cases*, projects that, while uncommon, demonstrate the current limits, aspirations and potential future path of the subgenre. Third, it analyzes the historical and intellectual paradigms within which civic crowdfunding projects and platforms are operating: whether they are best located within the historical context of community fundraising, participatory planning, entrepreneurial culture or a combination of the three. In addressing these questions, the thesis will explore the potential benefits and challenges of using crowdfunding as a means of executing community-oriented projects in the built environment, and offer proposals for how public and non-profit institutions can engage with crowdfunding to realize civic outcomes.

Thesis Supervisor: Ethan Zuckerman
Title: Director, Center for Civic Media

Acknowledgments

Great thanks are due to Ethan Zuckerman and Jim Paradis, who have inspired, tested, challenged and significantly improved the research throughout.

I would also like to thank Xavier De Souza Briggs for encouragement and guidance at a critical moment in the process, and Kate Crawford for inspiring me to see this work as the first step in a longer research journey. I'm delighted to be continuing that journey from here on. Thank you to Sinan Aral for some sage advice in that regard and to Melissa Valentine for creating such an exciting opportunity.

Thank you to Jase Wilson, Sarah Shipley, Chris Gourlay, Louisa Addiscott, Tomas De Lara, Erin Barnes, Brandon Whitney, Niraj Dattani, Rodrigo Maia, Luciana Masini, Sean Connolly, Jordan Raynor, Alison Hynd and the MIT Public Service Center for giving me the opportunity to learn about so much of the wonderful work being done in the field.

Several other folks provided enthusiasm and interest in my project when I needed it most, particularly Lucy Bernholz, Susan Crawford, Archon Fung, Jess Goldfin, Rob Goodspeed, Aditi Mehta and Erik Duhaime.

Thank you to William Uricchio, Sasha Costanza-Chock, Heather Hendershot, Ed Schiappa and the rest of Comparative Media Studies for giving me such a wonderful platform to explore and research. Shannon Larkin, your unparalleled ability to make things better will be missed.

This project would not have been possible without the irrepressible creative force of Eduardo Marisca. I could not have wished for a better co-conspirator and friend over the past two years.

I am extremely grateful to Helena Puig Larrauri, Chris Peterson, Gavin Lawson and Conor O'Neill for their support and input.

And finally, thank you to Erica, for your creativity, meticulousness, and most of all, your tireless positive energy and calmness when both mine were absent.

Preface

I was living in Mumbai when I first heard about Spacehive, a UK-based crowdfunding platform that was helping a community group to finish the building of a \$1.2M community center in Pontypridd, South Wales, in 2012. It was a surprising story to me, for several reasons: I knew that Pontypridd was one of the poorest communities in the country, with close to seventy-five percent unemployment. Having grown up 20 miles away in a Newport public housing project, I had first-hand experience of the three decades-old erosion of social capital in tandem with the decline of coal and steel industries around which most of the region's communities had been formed. Institutional decline was commonly seen as a consequence of exogenous economic forces, over which individuals felt they had little influence. The discovery that this region was now engaged in large-scale organized community problem-solving — in this case a gap in funding — intrigued me.

I found the story intriguing enough that I decided to spend four months advising Spacehive after returning to London from India. I was asked to help community groups develop campaign materials and strategies, drawing on my seven years as a journalist at the BBC, Conde Nast and Bloomberg. It quickly became apparent to me, though, that the significance of the emergence of quasi-public crowdfunding projects extended far beyond fundraising. What crowdfunding offered was not simply a sophisticated way for communities to demand something, but a moment of organizational restructuring in which new forms and infrastructures were emerging that could open fresh pathways for communities to participate in shaping their environment. Spacehive was also in a position to create new operational structures. With this in mind, the company's founder Chris Gourlay and I developed a model to al-

low Spacehive to partner with non-profits and municipal governments. One of the outcomes was the creation of the world's first crowdfunding initiative led by a municipality, Bristol, an early example of a crowd-supported public-private partnership. Beyond the legal and policy questions the company faced, these experiments led me to reflect critically on the broader questions they raised. I was interested in the long-term sustainability of projects, the accountability and risk management of funding processes and the redrawing of the boundaries of work and civic responsibility these initiatives appeared to signal.

This thesis is the product of the two years since that I have spent exploring civic crowdfunding and some of its organizational and societal implications. These years have been a combination of research and practice: while studying the practice and system of civic crowdfunding, I have held workshops on crowdfunding, spoken on the topic at venues such as the Library of Congress and the technology industry festival South By Southwest Interactive, and advised senior officials in U.S. municipalities on crowdfunding. While I am enthusiastic about opportunities to engage with practitioners, my interest in the topic is rooted not simply in its current novelty or political currency, but rather its relationship to the social and organizational issues that underpin its development.

The goal of this project is to provide an overview of civic crowdfunding, to begin to explore these deeper issues, and to invite other researchers and practitioners to join me in that effort.

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Introduction

Crowdfunding, the raising of capital from a large and diverse pool of donors via online platforms, has grown exponentially in the past five years, spurred by the rise of Kickstarter and IndieGoGo. While legislative attention in the US has turned to the potential to use crowdfunding as a means of raising capital for companies, less attention has been paid to the use of crowdfunding for civic projects - projects involve either directly or indirectly, the use of government funds, assets or sponsorship, which may include the development of public assets. This emergent subgenre of civic crowdfunding has, thus far, been applied to projects as diverse as public parks, transport infrastructure, community centers, swimming pools, public festivals and education programs. In some cases these projects have been large in scale and have involved a range of actors, public, non-profit, for-profit and community-based, but the majority have been small-scale, geographically localized efforts executed by volunteer and non-profit groups.¹ These civic projects are occurring on both generic platforms that cater to a range of project types, and on platforms that specialize in civically-oriented projects. The rise of the subgenre has, however, been largely overlooked by scholars.

The majority of the academic literature to date considers crowdfunding as a broad, multi-genre activity and attempts to analyze it in terms of its size as a market, its archetypes and structures, its efficiency as a funding mechanism and its predictors of success. Estimates of the size of the crowdfunding market range from \$3 billion to \$5.1 billion per year (Deloitte, 2013; Massolution, 2013), with the vast majority of recorded activity occurring in the US and Europe. Methodologically

¹See Chapter 3 for an overview of the distribution of project types.

consistent assessments of the scale of crowdfunding are elusive, though, due to the lack of consensus over the definitional limits of the market. Danmayr (2014) provides one of the most comprehensive overviews of the many attempts to establish a typology of crowdfunding, ranging from considerations of fundraising dynamics, objectives of the venture and organizational embeddedness. Among the most widely used is a five-part typology of crowdfunding activity established by Massolution (2013): donation, reward, equity, lending and royalty-based. Best et al. (2013) derive from this typology two master types of crowdfunding, ‘crowdfunding’ (donation and reward models) and ‘crowdfunding investing’ (equity, debt and royalty models). They use these master types to locate crowdfunding in the conventional venture funding cycle, arguing that donation and reward-based crowdfunding is best applied to the ‘idea’ and ‘prototype’ stages of a venture, while equity and debt-based crowdfunding have the potential to address the lack of funding for more mature projects, from startups to early growth companies.

Many crowdfunding researchers have sought to connect and compare it to existing models of venture financing. Several studies suggest that crowdfunding theoretically overcomes the geographic boundaries of financing available to early-stage projects through venture capital, but in practice tends to produce a geography of investment similar to that of venture capital (Agrawal, Catalini, and Goldfarb, 2011; Kim and Hann, 2013). Mollick (2013) explicitly links the fields of crowdfunding and startup finance by referring to campaign creators as ‘founders’, in a comprehensive study that views crowdfunding as a “empirical setting where a wide range of nascent ventures are more easily compared, and thus can serve as a fruitful way of testing and extending existing [entrepreneurship] theory.” (Mollick, 2013, p. 14) Addressing the linkage from the perspective of backers instead of campaigns, Kuppuswamy and Bayus (2013) apply the social psychology of investor behaviors to crowdfunding, finding evidence of herding behaviors consistent with existing market theory.

As crowdfunding research matures, attention is beginning to turn from the outcomes and dynamics of crowdfunding purely as a financing mechanism like most others to the qualitatively unique aspects of crowdfunding and participant behaviors.

First, work has begun on understanding the communicative and social dynamics that influence crowdfunding. Several scholars find that project quality and the strength of personal social networks are a strong influence on success rates (Mollick, 2013; Cordova, Dolci, and Gianfrate, 2013), while Mitra and Gilbert (2014) show that particular words and phrases used in campaign materials can predict the outcome of Kickstarter campaigns. Second, Gerber, Hui, and Kuo (2012) and Hui, Greenberg, and Gerber (2014) are among the earliest scholars to conceive of crowdfunding in terms of the work being performed, and to begin to use qualitative methods to question the implications of the rise of crowdfunding for individual workers and groups. Marom, Robb, and Sade (2013) provide some fascinating early indications of gender homophily in crowdfunding that demonstrate the need for further exploration of the relationship between crowdfunding and demographic indicators, to enable a stronger understanding of its longer-term social implications. Due to the complex socio-political questions it raises, civic crowdfunding will benefit from further attention to these questions more than most other subgenres of crowdfunding. Indeed, one limitation of current research into crowdfunding is that it rarely considers particular genres of projects as being shaped by distinct institutional or political-economic circumstances of the industry concerned. Such a context-agnostic approach is impossible in the case of civic crowdfunding, which seeks to perform work that is inextricably linked to, and impacts, institutions such as government and non-profits.

In academic literature to date, there has been no consideration of civic or community-oriented projects — *civic crowdfunding* — as a distinct subgenre of activity, let alone one that faces unique challenges and questions. The use of the term can be traced to 2012, and is used by platforms such as Spacehive and Neighbor.ly.² The lack of interest in civic-oriented crowdfunding to date reflects not simply its newness, but also the fact that most related scholarship has originated from the disciplines of entrepreneurship, finance and computer-supported cooperative work (CSCW). Its

²Neighbor.ly was the first platform to use the term explicitly. Its usage and popularization seems rooted in Hall (2012), Zuckerman (2012) and Davies (2012). The Web domain *civiccrowdfunding.com* was registered by Davies on March 7, 2013. In January, lawmakers in Hawaii proposed the first legislation to use the term *civic crowdfunding* in a bill that aims to establish a pilot project to finance improvements to public schools in the state.

particular institutional and political implications for public and non-profit institutions and communities themselves might be more likely expected to emerge from urban studies, sociology, organizational behavior, communication and political science approaches to the topic. Among these disciplines, communication is the most advanced in considering crowdfunding generically, although the subgenre of *civic crowdfunding* would benefit in particular from the attention of all of them. Baeck, Collins, and Westlake (2012) is one of the few examples of research that considers the impact of crowdfunding on governments and foundations, including some specific consideration of civic or community-oriented projects.

One objective of this thesis is therefore to define for the first time the sub-field of *civic crowdfunding* as an application of the crowdfunding model and to begin to analyze how its implications and dynamics differ from other types of crowdfunding. In so doing, it raises questions that are relevant to researchers, platform owners, public and non-profit institutions and communities alike. It does so from three perspectives: the platforms that host civic crowdfunding projects, the projects and participants in them, and the broader ecosystem of stakeholders in community development. It provides a descriptive quantitative picture of civic crowdfunding, the first of its kind in published research, describes three case study projects, and analyzes the historical and intellectual paradigms within which civic crowdfunding projects and platforms are operating. Finally it highlights some of the most pressing challenges and questions it faces, and seeks to establish a foundation for further analysis of the topic by researchers, practitioners and policymakers.

Research Questions and Methodology

This project has six research questions.

1. How large is civic crowdfunding?
2. What are the most common types of civic crowdfunding project?
3. How geographically dispersed is crowdfunding as a phenomenon?
4. What are the dynamics of a large civic crowdfunding campaign?

5. How do civic crowdfunding participants conceive of their work?
6. How might civic crowdfunding impact existing institutions?

The research is organized in five chapters; chapters 2-4 each employ a distinct methodological approach.

Chapter One seeks to define civic crowdfunding and its limits as a subgenre within crowdfunding, to explore its historical analogs and to analyze which aspects of the phenomenon may be considered new or different. It finds that there is a rich history of collaborative fundraising for civically-oriented projects, and that civic crowdfunding represents the platformization of many of these practices. The emergence of platforms and the current consensus pricing model was supported by a combination of technological and market factors that arose in the second half of the 2000s. While platforms' models of participation and campaign dynamics differ, their relative similarity has led to the emergence of a set of recognizable crowdfunding practices. The combination of these practices and the technical architecture of platforms are the 'infrastructure' of civic crowdfunding — the structures and conditions by which it provides a context for action.

Chapter Two gives an overview of the field through quantitative analysis of a dataset of civic crowdfunding projects between 2010 and 2014. It explores the size distribution of projects, their geographic locations and presents a 14-part typology of project categories. The analysis divides crowdfunding platforms into two categories — generic platforms (GP), which host projects in multiple genres, and civic platforms (CP), which only host projects with a civic focus. It finds that, due to their greater maturity and scale, GPs are bigger providers of civic crowdfunding projects at present, but that CPs are growing in reach and audience. The data show that civic crowdfunding activity is mostly concentrated in large cities, likely due to the early stage and gradual dissemination of the concept. Like most crowd-oriented markets, there is a great size disparity between the largest projects, of which there are a handful, and the smallest, which are much more numerous. It notes that the median project in the dataset is a small-scale park or garden development that has the support of an existing non-profit organization, a finding that seems to run contrary to

the idea that civic crowdfunding will realize large-scale changes in public space and disrupt institutions.

Chapter Three addresses the disconnect between the current typical project and the aspirations of the field by discussing three ‘edge-case’ studies: highly visible but atypical projects that demonstrate the current limits and possible future of civic crowdfunding. The cases are a community center in Glyncoch, South Wales funded on Spacehive, a bike-sharing scheme in Kansas City, MO funded on Neighbor.ly, and a public art project in Sao Paulo, Brazil funded on Catarse. The cases demonstrate that civic crowdfunding can realize large-scale projects, that it can engage institutional donors and that it can build sustainable and replicable grass-roots movements, although few projects to date have realized these outcomes. If these outcomes are to be realized by more projects, the current model of crowdfunding will likely need to expand to incentivize more engagement by institutional donors and find better ways of sourcing and channeling non-monetary participation.

Chapter Four notes that the very wide spectrum of actors participating in or observing civic crowdfunding results in many contrasting and competing visions of how the process should occur, and what its implications are for the future of public spaces and services. It discusses three contrasting master paradigms, or visions, that are being advanced at present: 1. civic crowdfunding as a form of community agency, 2. civic crowdfunding as a manifestation of individual agency and 3. civic crowdfunding as a symptom and catalyst of institutional weakness. It uses a discourse analysis of projects selected from civic platforms to analyze the extent to which projects’ campaign materials reflect these visions. The chapter concludes that narratives linked to place-based community are common and that the theme of public sector decline is found in a significant minority of cases, while platforms use the rhetoric of entrepreneurship and ownership much more often than their users do.

Chapter Five offers concluding remarks and suggestions for further research in the field. It argues that since crowdfunding has yet to realize its potential as a highly transferable and scalable funding strategy in the civic space and tends to

distribute resources very unevenly, it remains a challenging activity for institutional participants to engage in. Nevertheless, their engagement is both essential to the field and could be an important factor in influencing its future development. The chapter offers four possible modes of engagement for civically-oriented institutions to adopt with respect to civic crowdfunding, and advocates that all participants in the process, from institutions to platforms to community members, collaborate in shaping the future of civic crowdfunding. Finally, it calls on the research community to address three issues that constrain our current understanding of, and contributions to, civic crowdfunding.

1. We need more robust and standardized data to enable deeper analysis of the character and impact of civic crowdfunding.
2. We need more socially-grounded research that recognizes the complexity of participants' motivations and grows crowdfunding research beyond the bounds of financial markets.
3. We need experimental research and practice that challenges existing civic crowdfunding models and seeks to improve on them.

Chapter 1

Civic crowdfunding and its histories

The first use of the term *crowdfunding* is credited to Michael Sullivan, the creator of the now-defunct fundraising website for video blog projects, Fundavlog, in 2006, although he did not concretely define it at the time.¹ Since then, crowdfunding has come to be understood as the raising of capital from a large number of individuals donating or investing relatively small amounts of money using Internet-based platforms in an environment of high mutual visibility among participants. Participants are constantly aware of the campaign's progress and others' behaviors, and this mutual visibility reinforces their sense of membership of a *crowd* and producing social benefits associated with belonging.² Its rise is often linked to the 2008 financial crisis, although there are several notable prior examples of online fundraising campaigns and platforms that closely resemble crowdfunding and have retrospectively been identified with the term³. In this chapter I will describe the emergence of crowdfunding as

¹Sullivan implies that the crowd will provide the majority of the funding for fundavlog projects, without defining the crowd itself, which we would assume to be users of the site. He writes: "Many things are important factors, but funding from the crowd is the base of which all else depends on and is built on. So, Crowdfunding is an accurate term to help me explain this core element of fundavlog." (Sullivan, 2006)

²See Benkler and Nissenbaum (2006)'s discussion of clusters III (benevolence, charity, generosity, altruism) and IV (sociability, camaraderie, friendship, cooperation, civic virtue) of virtue for a philosophical perspective on these motivations and their associated social benefits.

³Best et al. (2013) suggest that the financial crisis spurred the rise of organized crowdfunding.

a recognized field, the sub-genre of civic crowdfunding, and provide some historical context around methods of organized fundraising for civic projects that have been used in the past.

The widespread use and popularization of the term crowdfunding is most often linked to the founding of the U.S.-based platforms IndieGoGo and Kickstarter in 2007 and 2008, but there are some striking examples of crowdfunding-like activity prior to this period. In 1997, the UK rock group Marillion used their website, a Newsgroup message board and email to ask fans to help fund their U.S. tour, and raised \$60,000 (Golemis, 1997). Donors Choose, started in 2000, is a fundraising platform that enables public school teachers to solicit small donations for specific classroom resource needs. It has raised \$213 million across 409,599 projects since its inception (Choose, 2013), but does not use the term *crowdfunding*. ArtistShare and SellABand, launched in 2003 and 2006 respectively, are fan-fundraising platforms for musicians that use subscription and royalty based models; neither uses the term crowdfunding to describe their activities although several scholars have analyzed their projects as early examples of it (Agrawal, Catalini, and Goldfarb, 2011; Ward and Ramachandran, 2010; Ordanini et al., 2011).

A critical distinction between crowdfunding platforms and other types of on-line donation is the mutual awareness of donors. During a crowdfunding campaign the progress of the campaign and the participation of other donors is public. This enables a greater sense of collective energy and breaks down the “pluralistic ignorance” of donors, the mistaken belief of individuals that they are acting alone (Katz, Allport, and Jenness, 1931). Mutual awareness and a sense of membership is not particular to crowdfunding but is a strength of most social media platforms, and has been credited as a major contributor to social movements in the Internet era (Tufekci, 2014). The reason Kickstarter, which is built on this social model of giving, is so strongly associated with the origin of crowdfunding is that the platform achieved unprecedented levels of activity: it is to date the most successful donation crowdfunding platform in revenue terms, having raised \$761 million for successful projects (Kickstarter, 2013a), and web search traffic suggests the term “kickstarter” is more ubiquitous among

web users than crowdfunding itself ⁴. This is a sizable share of the overall market: crowdfunding platforms globally are predicted to raise \$3 billion this year, of which around one-third is donation-based (Deloitte, 2013).⁵ While Kickstarter’s brand is the most recognizable in the crowdfunding business, it represents one methodology — strict provision-point donation fundraising — and other platform vary greatly in their methodologies and rules.

Best et al. describe five principal types of crowdfunding: donation, reward, equity, lending and royalty (Best et al., 2013, p. 20). While there is a great deal of interest in the latter three types of investment crowdfunding, this thesis is concerned solely with donation and reward models, which account for 40 percent of this year’s estimated market.⁶ The primary reason for this distinction is that this project aims to analyze and isolate non-monetary motivations for participating in crowdfunding. A secondary reason is that the investment crowdfunding market is on the cusp of a major change: equity crowdfunding is soon to be made available in the United States, pending the approval of regulations proposed by the Securities and Exchange Commission (SEC, 2013). While the market is developing rapidly in countries including the UK, the entrance of the United States is likely to lead to a period of rapid growth, instability and change in the short term.⁷ The donation and reward market, by contrast, shows evidence of stabilization in models across countries, as will be discussed below. This chapter defines and frames civic crowdfunding in five ways. First, it proposes a concept of *civic projects* built on an exploration of the goods produced and the actors involved. Second, it discusses pre-Internet historical examples of organized fundraising for civic projects. Third, it considers the conditions necessary for its emergence as a business model. Fourth, it explores the dynamics underpinning online donation crowdfunding and how they differentiate the practice from historical examples of fundraising. Fifth, it makes the case that civic crowdfunding is a socio-

⁴Source: Google Trends

⁵Baeck et al estimated the value of the crowdfunding market to be \$1.5 billion in 2011 (Baeck, Collins, and Westlake, 2012)

⁶Deloitte predicts that reward-based platforms will raise \$700 million and donation-based platforms will raise \$500 million in 2013

⁷Examples of successful UK-based equity crowdfunding platforms are CrowdCube and Seedrs.

technical infrastructure that can be expected to impact incumbent infrastructures in the public, private and social sectors.

1.1 Delimiting Civic Projects

Civic crowdfunding projects can be defined most broadly as “crowdfunded projects that provide services to communities”. Delimiting projects as civic is, at the outset, is a challenging task, given that *civic* is a slippery and contested term. Civic is typically defined as relating to individuals’ membership of communities, or larger wholes.⁸ For the purposes of this discussion I consider definitions that develop the idea of *civic* towards the outcomes it encourages rather than the beliefs it may imply in a specific institution or system of governance. Almond and Verba (1963) suggest that a “civic culture” is one that supports participation in collective activities, while (Briggs, 2008) propose that “civic capacity” is the capacity of a group to create and sustain collective action towards a shared goal — a capacity that they argue can be developed over time. Guiso, Sapienza, and Zingales (2010) have offered the concept of “civic capital” to address the economics of cooperation more closely, a notion they define as “values and beliefs that help a group overcome the free rider problem in the pursuit of socially valuable activities.” Building on this notion of *civic* as a value that supports collective activities with outputs that benefit the collective, I have chosen to approach the question of what constitutes a civic crowdfunding projects from two directions: the goods being produced and the actors involved.

Civic crowdfunding projects would be expected to produce goods that are non-rival and non-excludable — that once produced can be enjoyed by all members of a community equally, perpetually, and without regard for their contribution. In other words, the expected output of civic project is a *public good*.⁹ But our definition

⁸Ehrlich (p. xxvi; 2000) writes that a “civically responsible individual recognizes himself or herself as a member of a larger social fabric and therefore considers social problems to be at least partly his or her own.”

⁹The term “public good” is of course a heavily contested concept. (R. H. Williams, 1995, p. 125), for instance, suggests public goods are often constructed as part of a rhetoric that reflects the interests of power holders. Furthermore, Calhoun (in Powell et al., 1998) argues that public goods do not exist in the abstract but must be “forged through deliberation” and agreed upon by

of civic project need not exclude projects whose chief good is not a public good, but which produce public goods as secondary benefits. For instance, a bike-share scheme such as those operating in Boston, London, Kansas City, Missouri and New York are not, strictly speaking, public goods since the bikes are rival goods: one rider using a bike reduces the ability of another potential rider to enjoy the good. However, a bike share scheme has additional outputs that are public goods, such as cleaner air, reduced traffic and greater public awareness of the benefits of exercise. Similarly, an arts center catering to a religious minority may technically be a *club good* if it charges admission for events. However, its presence in a community may contribute to greater inter-community understanding and dialog between faith groups. We may term these secondary benefits public goods.

Civic crowdfunding projects can therefore be defined as *projects that produce some non-rival benefits that serve either the non-excludable public or broad sections of it*. Crowdfunding projects may produce several types of goods, some of which are rival or excludable, but they should also produce public goods in order to be considered *civic*. In classic economic terms, civic crowdfunding projects may produce goods that meet the definition of public goods, club goods or common pool resources.

While it is possible to derive a definition of civic crowdfunding through the consideration of goods alone, an appreciation of the actors involved in the process is necessary to illustrate the difference between civic crowdfunding and other processes for producing the same goods. The conclusion that we expect civic crowdfunding projects to produce public goods creates an obvious tension with the idea that public goods that are most effectively produced by governments. Rather than engaging in a discussion of the merits or impacts of the private provision of public goods here and established hybrid public-private models, I would rather seek to highlight the configurations of actors that civic crowdfunding enables, which are material to understanding how it differs from other methods of producing civic outputs.¹⁰

communities. For the purposes of this argument, I adopt Mansbridge's functional definition that a public good is a good that once provided, cannot reasonably be withheld from any member of a group. See Mansbridge, p.9 and p. 12 in Powell et al., 1998.

¹⁰An authoritative, path-breaking account of the dynamics of the private provision of public goods is given Bergstrom et al, 1986. Their work has been expanded upon and critiqued extensively: see

In theory a civic crowdfunding project could be resourced by the crowd alone, or by a combination of the crowd and government (taxation). It could also be provided by the crowd and organized for-profit or non-profit interests, without government investment. However, it is likely that the optimal form of civic crowdfunding will occur at the intersection of all four interests, since public projects in the built environment that serve civic goals will impact or intersect with the interests of government, for-profit and non-profit organizations, and the crowd. That is to say, the perfect crowd for a civic project involves all actors, including a reasonable quorum of individual participants. This reasoning is consistent with popular theories of crowd wisdom, urban planning and democratic participation. Surowiecki (2005) argues that in crowd-based processes, diverse groups of people are likely to produce superior outcomes than homophilous groups. Jacobs (1992) writes that broad participation is a question of inclusivity, that “Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.” A process that involves all actors would also be stronger according to the three dimensions of participation described by Fung (2006): it has a broad “scope”, offers a common “mode” of participation (donations share a common platform and process, although they may vary in size) and grants complete authority to the group (the project can be realized as agreed upon). While the appropriate quantity of donors that could be considered quorum varies in every case, it can reasonably be expected that large-scale crowdfunding projects should attract hundreds or thousands of donors to be regarded as strong, authentic examples of civic crowdfunding. Projects that claim popular ownership or consent but show limited evidence of it in terms of donation activity may be criticized justifiably as using the term *crowdfunding* as a gimmick rather than an indication of broad-based participation.

Journal of Public Economics 91 (2007) for a 20-year review of the debate.

1.2 Histories of community fundraising and the Statue of Liberty

There is a rich history of organized fundraising efforts that meet the above definition of *civic projects* that long predate the Internet. Beginning in the 1830s, the UK public parks movement was built on a combination of investments by town councils and corporations and donations from individuals. In some cases wealthy patrons gave funds directly to the parks, while in others open calls to raise funds to buy the land on which the park would be created, known as public subscriptions, were issued. Three parks funded by public subscription were opened on August 22, 1846 in Greater Manchester — Peel Park, Phillips Park and Queen’s Park — and the trio are often cited as being among the oldest public parks in the world. The Phillips Park subscription raised £6,200, around \$220,000 at current prices (Park, 2013). Town corporations that had bought land for parks sometimes used subscriptions as additional financing for the development of the land, and often associated their campaigns with larger public events such as the Queen’s jubilee and other coronations (Jordan, 1994). In 1750, the year before he became a member of the Pennsylvania Assembly, Benjamin Franklin secured an agreement with the legislature to use public funds to match \$2,000 donated by individuals for the building of Pennsylvania Hospital (Larson, 1986, p. 211). Franklin is credited as the inventor of the concept of “matching funds”, which has become a common practice in modern philanthropy (CA, 1964). Of course, these subscriptions were not always successful, and were sometimes seen as favoring middle-class neighborhoods (where parks were more likely to be located) over poorer ones, such as in the case of Glasgow’s West End Park in the early 1850s (Maver, 1998).

Fundraising for public or shared goods has often been led by the private sector and is common across cultures. The financing of the US railroads was in many states led by private individuals, although the territory was originally a public resource. To be sure, investors had clear financial motivations for participating, and therefore railroad investing is much closer to the equity crowdfunding model than

donation and reward projects. It's worth noting that this model was not quite so successful in the UK: during the era of so-called "Railway Mania", many individuals lost money they invested in the railway network as a result of fraud and overoptimism about the returns their investments would generate (Odlyzko, 2012). Most often community fundraising is expressed in terms of funding a specific need rather than as an investment generating returns. *Manthan*, a Bollywood film about the "White Revolution" in India's milk industry, was financed with Rs. 2 (4 cents) donations from 500,000 worker-members of the Gujarat Co-operative Milk Marketing Federation (Lal, 1998). Burial societies, where members contribute subscriptions that insure money to be paid to their dependents after their death, remain an important source of economic and social support in countries such as South Africa and are usually understood as a response to the lack of public support for the poor (DGRV, 2003). In contemporary Peru, similarly, middle-class families often hold *polladas* (chicken parties) to raise money for health or education expenses from friends and family. In a typical *pollada*, organizers charge a ticket price for entry in exchange for a fixed amount of food and drink, such that the community contributes collectively to the fundraising effort under the guise of a social event. While these events are in some ways strong examples of collectivism, they also reflect the lack of a social safety net provided by government or institutions (Vega Murrieta, 2013). Nevertheless, the contemporaneous contribution, collective awareness and time-limited nature of the fundraising makes the pollada an interesting offline analog to web-based crowdfunding.

A telling and prominent historical example of a fundraising effort conducted with the scale, speed and centralization of modern crowdfunding is Joseph Pulitzer's 1885 campaign to fund the pedestal on which the Statue of Liberty platform now stands. If crowdfunding Web sites had existed in Pulitzer's time, he would today remain one of their most successful users. In his case, the platform used was the *New York World* newspaper, of which he was proprietor. The need for a Statue of Liberty fundraising effort arose unexpectedly, but with urgency: while the Bartholdi statue was funded and completed in France at the expense of the French government, the so-called American Committee that was appointed to manage the statue was

unable to raise sufficient funds to pay for the pedestal, leading to great uncertainty over the fate of the monument. *The World's* campaign was a triumphant rescue effort. Over a period of five months the newspaper raised \$100,000 (approximately \$2.3 million at today's prices) from more than 160,000 donors, ranging from children to elite businessmen. If launched today, the campaign would be understood as a quintessential crowdfunding campaign: an initiative that uses a single collection point to raise money from a very large pool of donors pledging amounts from pocket change upwards. So to what extent can we understand Pulitzer's project as one of the United States first — and most successful ever — civic crowdfunding campaigns?

Like modern crowdfunding campaigns, donations to *The World's* campaign were user-initiated and centralized. The newspaper did not send agents to canvass in the streets or go door to door, and its office acted as the single collection point. This was critical to the accountability of the fundraising effort and sped up the processing of cash and checks, allowing the newspaper to give daily updates on the previous day's donations. The sheer volume of updates from the newspaper — typically a column or more each day, resembles a diary format not dissimilar from a contemporary blog: it speaks to the reader in the first person, quotes directly from donors' letters and cites external links (other newspapers and magazines) that are relevant to the day's story. Daily updates and anecdotes are a key feature of crowdfunding campaigns, which typically seek to leverage personal experiences to engage the audience. Kickstarter advises project creators to “treat your project like a story that is unfolding and update everyone on its progress” and suggests sending pictures or links to backers regularly (Kickstarter, 2012c). Throughout the Statue of Liberty campaign, *The World* printed personal notes from backers such as “Inclosed [sic] you will find our mite \$1) contributed by three poor men to the Bartholdi Statue Fund” and the account of Phillip Bender, a cutter from Jersey City whose family (including eight children) gave \$2.65, itemized by name and amount.¹¹ This strategy continually reinforced campaign supporters' mutual awareness and collective identification. The

¹¹The newspaper lists “Philip and Eliza Bender, 50 cents each; (children) — Anna, 25 cents; Frannie, 25 cents; Leonard, 10 cents; Frank, 15 cents; Alice, 10 cents; Ralph, 10 cents; Carri, 10 cents; Miss Nicey 25 cents.” (*The World*, March 22, p. 3).

campaign offered rewards of \$100 worth of gold prizes, topped by two double gold eagles for the largest donor (World, 1885, March 18, p. 5). Some donors received granite models of the statue; it is unclear whether these models were made at the behest of the American Commission or Pulitzer, although the editor did receive an offer to produce statuettes from two local artists in April 1885 (Lipper and Pausch, 1885).

The historical significance of the campaign is its scale and speed, two strengths that researchers commonly attribute to online platforms. Pulitzer himself was cognizant of these strengths and the extent to which they represented an important improvement on the existing public subscription model. In announcing the success of the fundraising on August 11, 1885, the newspaper's editorial observed that "There have been many large sums raised by general subscriptions in the United States... but never before has a single agency, newspaper or anything else, raised so large a sum from so many people in so short a time." (World, 1885, August 11, p. 3) The importance of the project the attention of others at the time, including Erasmus Wiman, an infamous financier and property owner known as "The Duke of Staten Island" (Times, 1894). Writing to *The World's* managing editor Joseph Cockerill in the midst of the campaign in June 1885, he requested a meeting about "a project which, after the Bartholdi Statue is completed, would be a glorious a mission for the world," and suggested cryptically that his plan involves a development on Staten Island (Wiman, 1885). The newspaper's archives offer no evidence that Cockerill accepted the meeting, though, which was perhaps fortuitous: Wiman was jailed for defrauding the Mercantile Agency Association nine years later (Age, 1894).

To be sure, there are limits to the Statue of Liberty as an example of early civic crowdfunding. First, its appeal was partisan — reflecting the style of "Yellow Journalism" publications of the era. The campaign began with a direct appeal to American patriotism, anti-elitism and working class solidarity:

The World is the people's paper, and now it appeals to the people to come forward and raise the money. The \$250,000 that the making of the Statue cost was paid in by the masses of the French people- by the working men, the tradesmen, the shop girls, the artisans- by all, irrespective of class

or condition. Let us respond in like manner. Let us not wait for the millionaires to give us this money. It is not a gift from the millionaires of France to the millionaires of America, but a gift of the whole people of France to the whole people of America. (World, 1885, March 16, p. 1)

Saving the statue was presented as a way for the working classes to demonstrate their collective power, in contrast to the indifference of the Fifth Avenue elite.¹² The consistent use of anti-elite rhetoric through the campaign was fueled by the fact that, with a few notable exceptions such as the Mayor of Buffalo, Jonathan Sooville, the campaign struggled to attract funding from wealthy donors.¹³ On May 30, the newspaper announced the creation of the “List of One Hundred” sponsors who will each promise to donate \$250, on the condition that the campaign is able to find one hundred signatories. The list failed to grow beyond 43 and is abandoned, although those signatories donated the \$250 each they pledged (World, 1885, May 30, p. 1).

Throughout the campaign, *The World* was content to win over its detractors not by making the case for collectivism, but through brash antagonism. Within two weeks of the campaign launch, and with less than \$1,000 raised, the newspaper asserted, “The movement is certain to be a success. Take heed of this all ye croakers and laggards.” (World, 1885, March 21, p.1) As late as two days before the end of the campaign, *The World* reported that the fund is short of its goal by \$376.34 and that “this warns those who wish to be with us at the end that they should report at once.” (World, 1885, Aug 9, p.1) Despite the lack of backing from wealthy New Yorkers, this tactic was largely successful. Even though *The World* describes the American Committee’s fundraising campaign as a “disastrous failure”, the Committee was quick to support Pulitzer, and sought co-ownership of the newspaper’s campaign within a week of its launch.¹⁴ The success of the campaign spurred Pulitzer to create a fund for the strikers at the Hocking mines and later gave the newspaper the confidence to

¹²“Perhaps the country was not pushing for a Statue of Liberty, but now that it is tendered we should not act like a nation of untamed cowboys in regard to it.” (The World, March 18, 1885, p. 5)

¹³The May 30 issue reports that Sooville has donated his \$230 annual salary to the fund.

¹⁴In a letter to the March 23 issue, Williams Everts and the American Committee wrote, “Our means for carrying on the work have failed. We cannot believe that they will fail us in this, our last appeal.” (The World, March 23, p. 1)

pursue its most ambitious and best-known campaign, albeit not a fundraising one, on tax reform (Juergens, 1967, p. 311). The trajectory of Pulitzer’s work suggests that the Statue of Liberty Fund set the stage for his political organizing and that he recognized it in those terms rather than as a method of funding public goods. But, as a technical exercise, it merits comparison to modern examples of civic crowdfunding since it highlights three conditions for the success of a campaign: the ability to reach a large audience, to tell a story in real time, and to build a sense of community engagement and participation. Prior to the Internet, newspaper proprietors and owners of broadcast media were among the few individuals well placed to mirror these conditions, although as noted above, organized communities could replicate them on a small scale.

1.3 The conditions for crowdfunding

In trying to understand why crowdfunding emerged as a highly organized, accessible and scalable phenomenon across contexts in the late 2000s, despite a number of historical precedents, the underlying question being asked is: how did the model of the crowdfunding platform become a sustainable business? To be sure, not all crowdfunding platforms are for-profit ventures — DonorsChoose and IOBY are 501(c)(3)-registered non-profits — but most are. DonorsChoose’s records show it became self-financing in 2010, some ten years after it was founded (DonorsChoose, 2010). Kickstarter, a for-profit company founded in 2009, has generated at least \$35 million dollars in revenue since July 2011.¹⁵ As well as being the most commercially successful platform, Kickstarter is a useful touchpoint in business terms because the platform uses what has become the dominant pricing model in the market. While ArtistShare and Sellaband experimented before 2007 with subscription and royalty models, there has been a clear convergence across platforms since then around charging projects

¹⁵Kickstarter’s published statistics show that successful projects on the site have raised \$765 million as of December 1, 2013. The site had collected close to \$60 million from successful projects by July 2011 (Strickler and Benenson, 2011), and therefore the total funds collected since July 2011 are approximately \$705 million. Assuming the platform collects its 5% fee from each project, its revenues from fees would be \$35 million.

between 4 and 5% in platform fees and a similar fee for payment processing (usually levied by a third party such as Amazon Payments, Authorize.net or PayPal). The typical cost of capital in donation crowdfunding is therefore 8-10%.

The availability of affordable online payment processing is a necessary condition for the emergence of crowdfunding platforms. Online payments were widely available as early as 1996, when Authorize.net was started by Cybersource Inc.¹⁶ But it was not until several years after the first dotcom bubble that a more competitive market for payments emerged. In 2004, PayPal relaxed its focus on eBay transactions and launched PayPal Merchant Services, to cater to small and medium-sized merchants on the rest of the Web.¹⁷ Competition in the market accelerated after 2007 when Amazon launched Amazon Payments, which now processes Kickstarter funds; a year later the WePay launched its platform, which is used by Citizinvestor and Spacehive. The merits and demerits of payment processors is a debated topic within the crowdfunding community: PayPal has been criticized for freezing the accounts of crowdfunding campaigners using IndieGoGo, and in September published an official response in which it promised to review its policies for handling crowdfunding campaign funds (Barel, 2013; Hutchinson, 2013). It would be incorrect to say that the rise of payment platforms directly caused a rapid increase in online spending — US Census Bureau statistics suggest a steady growth in e-commerce in the past decade — but they represent a necessary, if not sufficient, condition for the rise of crowdfunding.¹⁸

The second technological explanation for the rise of crowdfunding is the explosive growth of social networks, which is cited as a critical factor by (Agrawal, Catalini, and Goldfarb, 2011). Kickstarter representatives have said in the past that more than two-thirds of traffic to campaign pages arrives as a result of social media referrals as opposed to direct traffic, although this figure may vary significantly across campaigns

¹⁶Cybersource was acquired by Visa Inc. in 2010.

¹⁷PayPal's move was significant because the business was seen as a survivor of the bubble. Its IPO in 2002 ended an 11-month drought in technology initial public offerings, raising \$70 million (Richtel, 2002)

¹⁸The Census Bureau reported that business-to-consumer e-commerce was worth \$194 billion in 2011, and its share of overall retail has increased between 0.3% and 0.5% for each of the past ten years. The Bureau publishes its statistics annually at <http://www.census.gov/econ/estats/>

(Pereira, 2012). Other statistics suggest that one in ten Kickstarter users were using Facebook immediately before visiting the site.¹⁹ Even in the case of a much smaller percentage of social media traffic, the rise of social media since the emergence of crowdfunding platforms has been meteoric: around the time of Kickstarter’s launch in 2008, Facebook had 100 million users; it now has over 1 billion (Facebook, 2013). Crowdfunding websites do, to some extent, mimic the style of the major social media platforms by encouraging frequent, personal updates from campaigners, and could indeed be regarded as a form of social media in their own right. Even Pulitzer, campaigning over a century earlier and with much less ability to encourage connections between members of his *crowd* realized the value of frequent, personalized updates. By publishing daily updates and naming every backer, often with a quote and their mailing address, *The World* constructed a dense tapestry of personal stories that identified the community and inscribed its history in real time.

A practice-based rather than a technological explanation for the growth of crowdfunding that is relevant to civic projects, is the success of President Obama’s presidential election campaign fundraising. Obama is widely reported to have raised \$500 million, much of which was contributed in amounts of less than \$100 (Weintraub and Levine, 2012). While success in a heavily-staffed and resourced election campaign may seem profoundly different from a crowdfunding campaign organized by a small team, several crowdfunders I’ve interviewed suggest that Obama’s fundraising strategy made them feel confident about the potential of small-value donations and encouraged them to pursue crowdfunding (*BikeWalk KC interview 1* 2013). Satorius and Polland (2010) and Guo (2008) make this connection explicitly, while (Kappel, 2008) writes “if nothing else, Obama’s fundraising figures are evidence of people’s willingness to give financial support to someone they believe in.”

The diverse set of conditions that supported the rise of crowdfunding suggest that the field is the product of a complex interplay between technology platforms and user practices. The technological apparatus it relies on predate its emergence by several years; the media platforms it uses grew concurrently with crowdfunding;

¹⁹Based on upstream traffic estimates from Alexa.com (Alexa, 2013).

the campaign strategies that it employs are at least a century older. Crowdfunding's crystallization into a defined field is a function of the success of specific platforms and businesses, but it is perhaps best understood as a mix practices and tools that has emerged gradually. I will now discuss in some of the practices that distinguish modern crowdfunding from other forms of fundraising, and the characteristics and functional choices that differentiate platforms from each other.

1.4 The practices and dynamics of donation crowdfunding

Crowdfunding in its modern, platform-based incarnation, is marked out by a number of persistent practices and dynamics. By exploring these dynamics it is possible to distinguish among platforms within the field, including their aims and orientations. I have identified three categories of dynamics that characterize donation crowdfunding platforms 1) participation dynamics, which impact the terms under which in which donors and project owners are able to start or access a project. 2) risk/reward dynamics, which pertain to the terms under which donors give funds to projects and the returns they may expect (if any) in advance. 3) funding dynamics, the conditions by which donors give and project owners receive funds after the successful completion of a project - i.e. the campaign has met the terms required to release funds. For a summary of these dynamics, see Figure 1-1.

There are three principal variables in participation dynamics. The first is whether or not the platform allows any individual to post a project on the site (*open posting*), such as IndieGoGo or Spacehive, or whether only certain categories of user are allowed. Citizinvestor, for instance, only allows government agencies and associated non-profits to originate projects. Second, some platforms choose to make the identity of all donors and the amount of their donation public (*public donations*), while others do not. Third, campaigns may have a limited lifespan, such as a time limit, or a mechanism whereby projects are terminated upon reaching their funding

Figure 1-1: Summary of platform dynamics

	Platform	Catarse	Citizeninvestor	Goteo	IndieGoGo	IOBY	Kickstarter	Neighborly	Spacehive
Participation Dynamics	Posting Type	Open	Gov orgs	Open	Open	Open	For-profit, individuals	Gov, civic orgs	Open
	Timing	Limited	Limited	2 Rounds	Limited	Limited	Limited	Limited	Limited
	Donation Visibility	Public	Public	Public	Public	Public	Public	Optional	Public
Risk / Reward Dynamics	Volunteering available	No	No	Yes	No	Yes	No	No	Yes
	Payment Type	Pledge	Pledge	Pledge	Pledge	Pledge	Pledge	Pledge	Pledge
	Rewards	Yes	No	Yes	Yes	No	Yes	Yes	No
Payment dynamics	Tax deductible for 501c3?	No	No	No	Yes	Yes	No	No	No
	All or Nothing	Yes	No	1 st Round Yes, 2 nd Round No	Optional	No	Yes	No	No
	Match funding available	No	No	No	Yes	No	No	Yes	Yes

target.²⁰

There are two risk/reward dynamics related to donation crowdfunding campaigns: the pledge system and the provision of rewards. The pledge system is, in economic terms, a *provision-point mechanism*, whereby funds are not delivered to a project unless the funding target is reached. Bagnoli and Lipman describe this arrangement as an “assurance contract” and were first to suggest it may be a more efficient way to deliver public and club goods by reducing the *free rider* problem (Bagnoli and Lipman, 1989). The concept has also been extended to participation by (Cheng and Bernstein, 2014), who propose that online platforms can be used to organize collective action given sufficient support. The ability of project creators to offer specific rewards at particular donation levels is common but not enabled universally by platforms. Campaign organizers in creative industries suggest anecdotally that rewards are a crucial ingredient of a successful campaign, and that offering the final product itself as a reward (usually at a slight discount to the projected retail price) tends to lure more backers. Rewards also allow campaigns to recognize and produce different outcomes for different types of backers: the reward received by a

²⁰Kickstarter projects have a maximum lifespan of 60 days. The platform chose to shorten the maximum lifespan from 90 days after its internal research showed that shorter projects had a greater likelihood of success (Strickler, 2011). Kuppuswamy and Bayus (2013) find that time limits on Kickstarter projects contribute to increased funding momentum in the final week of a project, driven by a sense of urgency, and instances of *overfunding* (exceeding the target amount) usually occur towards the end of a campaign. By contrast, Citizeninvestor automatically closes projects that reach their target amount.

large-value donor is typically significantly greater in market value and offers greater personal acknowledgment than a reward received by a \$5 donor.²¹

Finally, there are three principle variables related to funding dynamics that distinguish donation crowdfunding platforms from each other: first, whether funds are tax deductible at the point of donation or collection, second, whether organizations external to the project creator may offer to match fund amounts given by the crowd, and third, whether campaigns may collect funds even if the overall target amount has not been reached. Platforms' ability to offer tax deductible donations is usually a function of whether the platform itself is a registered 501(c)(3) organization, offers fiscal sponsorship to project creators, or the project creators themselves are collecting on behalf of an independently established non-profit organization. The organizational status of the platforms in my dataset is described in more detail in Section 2.4.

Platforms that allow campaigns to receive funds even if they do not reach their target amount typically arrange to do so before the campaign begins — not in response to failure — and make clear the use of “flexible funding”, as IndieGoGo terms the arrangement, on the campaign page. The expressed agreement with backers is that funds will be disbursed on the agreed end date of the campaign. In one sense, “flexible funding” arrangements break the *provision-point mechanism* model - because the funding target has not been met - although funds are still not taken from backers until a condition, in this case the stated deadline date, has been met.²²

The platforms that this project analyzes in Chapters 4 and 5, and from which the case studies in Chapter 3 are drawn, exhibit different configurations of these variables (see Appendix B). The characteristics common to all seven are the limited availability of campaigns, the pledge system and the availability of match-funding options.

²¹For instance, pledgers of more than \$2,500 to the Mario Warfare campaign “receive a prominent executive producer credit at the end of all remaining Mario Warfare episodes and the DVD version.” (Beat Down Boogie, 2012)

²²The San Francisco-based crowdfunding platform CrowdTilt has complicated this distinction by offering a “tilting point”, an intermediate funding goal which, if reached, allows the funds raised up to that point to be disbursed at the end of the campaign (Crowdtilt, 2013).

1.5 Crowdfunding as an infrastructure

Crowdfunding is often distinguished from other sources of fundraising because of the absence of traditional financial intermediaries (Mollick, 2013), but the rules established by the platforms, their choice of features and the payment processing networks upon which they rely, should be considered intermediary forces. As (Gillespie, 2010) observes, the rise of the use of the term *platform* to describe online tools belies the complexity of the relationship between software designers, technologies and users, and the interests and intentions embedded within it. All of the civic crowdfunding services being considered in this study use the term *platform*, yet the extent to which they go beyond the “content and distribution” model of the platform and stray into a curatorial role varies greatly. The dynamics and the technologies described above and on which crowdfunding Web sites rely imply particular choices and constraints, and the platforms themselves are critical actors in the process.

While building on the long history of community-led fundraising for civic projects, the platform model of crowdfunding has proven to be scalable and globally adaptable in a way that many previous forms have not. This scalability and adaptability suggests crowdfunding should not simply be regarded as an extension of established fundraising practices but rather that it can be understood as a new socio-technical infrastructure. Kreiss describes infrastructure as “the technical artifacts, organizational forms, and social practices that provide background contexts for action.” (Kreiss, 2012) In simple terms, crowdfunding could be said to provide a context, or occasion, for communities to request money for projects as well as an established process for how to do so. In her exploration of the term *infrastructure*, Leigh Star notes that it can mean “different things to different groups” but that “it is part of the balance of action, tools and the built environment.” (Star, 1999) This combination of the technical, organizational and social is critical to the success of civic crowdfunding. As a technical infrastructure it is a series of web sites that host campaigns and process their payments; as an organizational infrastructure it is a means by which communities can assume responsibility for development of projects; as a

social infrastructure it supports the circulation of ideas and the building of consensus around them.

As Leigh Star (1999) predicts, the infrastructure of crowdfunding has come to embody and develop conventions and communities of practice that influence its future development. These conventions are associated with what she calls the “master narratives” that infrastructures produce: dominant interpretations of how users experience and use infrastructure. In the case of crowdfunding, these narratives speak directly to incumbent infrastructures: campaigners tend to be seen as entrepreneurs engaged in a personal struggle for resources in the face of indifferent institutions (traditional funding sources such as banks, record labels or film studios). One crowdfunding campaign manager described the most typical Kickstarter campaign narrative as “the glorification of the hustling artist” in which “ambition is good, desperation is bad.” At the same time, crowdfunding campaigns focus on discreet products and outcomes, eschewing bureaucratic structures and costs associated with large organizations. One consequence of this “bootstrapped”, implicitly anti-organizational bias is that crowdfunding often renders invisible the significant work and resources required to run a successful campaign, which are underestimated by creators (Hui, Greenberg, and Gerber, 2014). These two features of contemporary crowdfunding — ubiquitous master narratives and the invisibility of work — are important starting points in analyzing which groups are best served by the current infrastructure, one of Leigh Star’s chief concerns. The wide variety of practices and values on which campaigns are built, their valences and social impacts, will be explored more fully in Chapter 4.

In conceptualizing crowdfunding as an infrastructure that has emerged as an alternative to incumbent ones, it’s important to consider the impact that it has on those incumbent infrastructures. Can an alternative method of getting something done not only get it done, but also exert influence on the existing, broken method? There are several ways in which this effect might be manifested, which will be discussed more fully in Chapter 4. First, as a demonstration of another route to influence: a community can use a crowdfunding campaign as a means not only to build something but also to signal support for an idea and a neighborhood. This could

mean, for example, that a community seeks to self-organize to create a community resource instead of lobbying a political representative to achieve the same goal, which will likely over time affect representatives perceptions of their influence and role. Second, by changing and expanding the range of people who are able to access capital or resources, alternative infrastructures expand the marketplace of ideas, values and choices available. Third, crowdfunding may compel actors to behave differently than they would using existing models: the crowdfunded musician is accountable and connected to his or her fans in a direct way—a relationship that would be difficult to establish through retail record sales or even live concerts.²³ Over the longer term, successful alternative infrastructures are therefore likely to influence the way that actors using incumbent infrastructures behave.

²³See Baym (2012) for further exploration of the use of digital channels to deepen the artist-fan relationship.

Chapter 2

The field of civic crowdfunding

As noted previously, crowdfunding has grown to become a multi-billion dollar industry, within which donation-based platforms raise more than one billion dollars per year. Civic platforms and projects are a small subset of the total, and are one of the newest subgenres to be recognized in the industry. This chapter seeks to describe and analyze the current state of civic crowdfunding using project data collected from a representative sample of active platforms. It does not capture every crowdfunding project that meets the definition of *civic* established in the previous chapter. Nevertheless, it includes data from the four known platforms that have identified themselves as belonging to the subgenre of *civic crowdfunding* (Citizinvestor, IOBY, Neighbor.ly and Spacehive) and three other platforms that have hosted projects that could be clearly identified as civic projects (Catarse, Goteo and Kickstarter).

This chapter seeks to answer a series of quantitative and geographical research questions: how large are most civic crowdfunding platforms, what is the typical size of a civic crowdfunding project, what are the most common types of project, what types of goods do they produce and how are the opportunities civic crowdfunding presents are concentrated towards particular sizes and types of programs?

The data show:

- 1,224 project campaigns have been launched since 2010
- 771 projects have been successfully funded
- \$10.74 million was raised (completed projects)

- 113,468 pledges were recorded (for all projects)
- The median pledge to all projects was \$62
- The median fundraising goal for a project was \$8,000
- The median amount raised by completed projects was \$6,357

The analysis that follows shows that the majority of civic crowdfunding projects currently are occurring on generic platforms that cater to a range of project types, but that the subgenre of dedicated civic crowdfunding platforms is growing. Projects on both types of platforms vary greatly in size and rate of participation, and a small number of large-scale projects have, to date, attracted the majority of the funds raised for civic crowdfunding projects.

There is an emerging *typical* crowdfunding project, which tends to be a small-scale garden or park project in a large city that produces a public good for an underserved community. These projects are by far the most numerous but have attracted less attention than large-scale endeavors. There is also early evidence that civic projects enjoy higher success rates than other types of crowdfunding project, but the data is not yet comprehensive enough to allow a robust claim to be made about the relative success rate of civic projects. Similarly, while the geographic distribution of projects shows a bias towards large cities, there is insufficiently granular geographic data to allow an analysis of the relationship between project distribution and demographic and socio-economic indicators.

2.1 Overview of platforms in the dataset

There are significant differences between the platforms considered, as discussed in Chapter 1: some are non-profit entities, some allow any individual or organization to post while others are restricted to government agencies, and variable platform fees are levied.¹ See Table 2.1 for a summary of the differences between the platforms in

¹See Chapter Two for a discussion of the history of and dynamics of pricing models, organization types and funding conditions.

Table 2.1: Overview of Civic Crowdfunding Platforms discussed in Chapter 3

Platform Name	Country	Currency	Open Posting	Flexible Funding	Fee	Entity Type	Est.
Catarse	Brazil	BRL	Yes	No	13%	For-profit	2010
Citizeninvestor	USA	USD	Govt	Yes	5%	For-profit	2012
Goteo	Spain	EUR	Open Source	2nd round only	8%	Non-profit	2011
IOBY	USA	USD	Yes	Yes	\$35*	Non-profit	2009
Kickstarter	USA	USD	Individuals, for-profit	No	5%	For-profit	2009
Neighbor.ly	USA	USD	Govt, non-profits	Yes	5%**	For-profit	2012
Spacehive	UK	GBP	Yes	Yes	5%	For-profit	2011

the dataset.²

The seven platforms being considered can be divided into two types, Civic Platforms (CP), which focus exclusively on civic projects, and Generic Platforms (GP), which host a wide range of crowdfunding projects. The four CPs are Citizeninvestor, IOBY, Neighbor.ly and Spacehive. The three GPs are Catarse, Goteo and Kickstarter. The CPs have subsections (“categories” or “tags”) that provide a way to identify civic projects, and the project data are drawn from these subsections, as described below.

CP projects offer the closest reading of how civic crowdfunding is operating currently, since the stated goal of the CPs being considered is to support projects that provide services to communities — the basis of the definition of civic crowdfunding established in Chapter One. GP projects are subject to categorization decisions made by platform owners and as such may contain cases that do or do not fit the definition of civic projects. Projects on Goteo were collected from the “Social” and “Cultural” categories, Catarse projects were collected from the “Urbanism” category and Kickstarter projects were collected from the “Civic” tag.³ IndieGoGo was ex-

²Notes to Table: * IOBY’s platform fee of \$53 applies to projects over \$1,000 only. IOBY charges an additional 5% to organizations that use it as a 501(c)(3) fiscal sponsor. Neighbor.ly founder Jase Wilson said in June 2013 the platform is planning to lower the fee (Wilson, 2013a).

³Kickstarter does not provide a category for civic projects, but it does allow projects to be tagged as “Civic” by creators and platform administrators. A Kickstarter project can be assigned only one of the 13 categories the site provides, but it may have a theoretically unlimited number of tags.

plored as a possible fourth platform for GP projects, but its current data structure does not support the identification of civic projects: 3,355 projects were collected from its “Community” category, but the data was too broad in scope and goals to be usefully compared to either the CP or GP projects.

Project data from the seven platforms was collected using a series of unique web crawlers, scripts written to capture chosen attributes.⁴ The scripts capture all relevant project data that is displayed on the sites at runtime — open, closed, successful and unsuccessful projects are captured, and their status recorded. The seven scripts were run on March 23, 2013, and captured eight attributes about each project. These are:

- Project Name
- Location
- Project Goal
- Amount Raised
- Number of Funders
- Funding Open (True / False)
- Summary text

From these fields, two further attributes were calculated, Average Pledge (mean) and Percentage Raised, to record projects that exceeded their goal. From the complete collection of projects, the compiled civic crowdfunding dataset, a number of subsets were constructed. These are referred to below by a label, such as “Compiled Civic Crowdfunding Dataset” and an identifier, such as CCFD1. For a breakdown of the datasets and their identifiers, see Appendix: Data Collection and Dataset Descriptions, p. 147.

⁴214 of the successful IOBY projects were not indexed on the site, although the URLs remained active. All the fields related to these projects except for the Number of Funders was supplied directly by IOBY. Using the URLs present in that data, the Number of Funders field was collected using a web crawler.

2.2 The scale of projects and platforms

The size of the Compiled Civic Crowdfunding Dataset (CCFD1), at \$10 million in a period of just over three years, is a very small percentage of the donation crowdfunding market, estimated at \$1.2 billion per year (Deloitte, 2013).⁵ Within this dataset, the relative sizes of platforms tells us a great deal about the maturity and growth rates of different types of platforms. It is clear that civic crowdfunding is largest in the United States, although participation rates and total project sizes are often higher in the projects from the UK and Brazil. Among projects, there is a very wide range in scale. The dataset contains campaigns that raised hundreds of thousands of dollars, and those that raised hundreds of dollars. The great variations in scale speak directly to the differing ambitions and expectations of project owners, and the types of uses to which civic crowdfunding is being directed.

2.2.1 CP projects

There were 489 CP projects with a combined goal of \$8.1M.⁶ The projects had raised \$4.1M as of March 25, 2014. Seventy-six projects had raised 50% or more of their target; 46 projects had attracted no backers. The mean percentage raise for a CP project is 31%. The extent to which a project must meet 100% of its target to be considered successful is a contested issue, which will be discussed below. The data show that IOBY is currently the leading civic crowdfunding platform in terms of the volume of projects (409), and participation level (5,423 pledges). Spacehive is the largest platform by amount raised for successful projects (\$1.98M); its participation level is the second-highest, at 1,714 pledges.

The median CP project is \$2,099, attracts an average donation of \$58.51 and a median of seven backers. Due to the large number of projects with low participation rates — 203 projects attracted fewer than five backers — it is worth comparing

⁵See Compiled Civic Crowdfunding Dataset (CCFD1) in Appendix: Data Collection and Dataset Descriptions, p. 147.

⁶Throughout this chapter, Spacehive projects in GBP are converted to USD at an exchange rate of 1 GBP = \$1.37. These projects are in the Civic Platform Projects Dataset (CCFD2) described in Appendix: Data Collection and Dataset Descriptions, p. 147.

these figures with the 283 projects that raised 50% or more of their target. Among these moderately successful projects, the median goal is \$1,150, the median number of backers for a project is 13, and the average pledge is \$92.17. Among the CP platforms, there is wide variance in project sizes: Neighbor.ly has the largest median goal, at \$39,813, while IOBY has the lowest, at \$1,725. The spread of average pledges across Citizinvestor, Neighbor.ly and Spacehive is \$105-\$159, while the average pledge on IOBY is \$52.

From this very first exploration of CP projects, we can conclude that IOBY projects tend to be smaller-scale and attract more, lower-value donations, while Citizinvestor, Neighbor.ly and Spacehive tend to skew towards higher-value donations, but with a lower rate of participation.

2.2.2 GP projects

The GP projects are much more numerous (726) than CP projects, and account for more than double the amount raised by CP projects (\$7.2M).⁷ Kickstarter is, unsurprisingly, as the most commercially successful of the platforms, the largest supplier of GP projects, with 356 projects that have raised \$5.26M. The Goteo categories covered have supported 363 projects worth \$1.88M, and Catarse has produced 15 urbanism projects totaling \$23,148.⁸ Kickstarter also has the highest level of participation in civic projects, with 72,360 pledges, compared to 31,374 and 1,079 for Goteo and Catarse projects respectively. Kickstarter and Goteo are each larger producers of projects that may be considered civic than the entire civic crowdfunding platform space combined.

The median GP project aims to raise \$7,672, attracts an average donation of \$60 and a median of 77 backers. GP projects, or more accurately, the platforms hosting them, have many fewer instances of low participation — 28 projects (3.8%) attracted fewer than five backers. As a result we observe less discrepancy when

⁷These projects are collected in the Generic Platform Projects Dataset (CCFD3). For an explanation of the dataset, see Appendix: Data Collection and Dataset Descriptions, p. 147.

⁸Exchange rates used: 1 EUR = 1.39 USD for Goteo; 1 USD = 0.43 BRL for Catarse.

Table 2.2: Overview of Project Sizes (CP and GP)

Platform	Projects	Raised	Median
GP Projects	726	\$7.2M	\$7,672
CP Projects	481	\$4.1M	\$2,099

adjusting for projects that raised 50% or more of their target. Among this subset of moderately successful GP projects, the median goal is \$7,330, the median number of backers is 86 and the mean donation is \$65.74. This is very close to the mean donation reported by Kickstarter, \$70.⁹ The average pledge per individual is relatively high compared to charitable giving overall, since it represents just under one tenth of the amount that US households give to non-religious charities each year.¹⁰

2.3 Growth of projects on civic and generic platforms

Constructing a time series of data collected from the platforms was challenging due to the lack of reliable date information on some of the platforms. For many of the unsuccessful projects, date information was entirely absent. In some cases, approximate dates (sufficiently accurate to group projects by quarter) could be derived using the completion date of the projects and postings by project owners. This section focuses on 271 CP projects for which accurate date information could be obtained, and all 429 successful Kickstarter projects, in order to analyze rates of growth.¹¹

The number of completed, successful projects on civic platforms continues to grow, although the rate of growth has fluctuated significantly by quarter and by year. 2012 saw the biggest overall rate of growth for successful CP projects (92%), with quarterly growth ranging between 5% (Q4) and 39% (Q1). The explosive growth

⁹See Kickstarter (2012c) 2012. Kickstarter reported that the mode donation is \$25. Since CCFD1 does not contain every donation paid to the platforms, it is not possible to calculate the mode donation.

¹⁰Among the 67% of US households who donate to charity, those that give to secular causes donate around \$863 per year, according to the 2013 Giving USA annual report (USA, 2013).

¹¹For more on methodology and collection process, see “Dated Projects Dataset (CCFD4)” described in Appendix: Data Collection and Dataset Descriptions, p. 147.

Table 2.3: Successful projects posted 2011-2013, quarterly growth

Period	CP Total	QoQ	Rate	KS Total	QoQ	Rate	CP + KS	QoQ	Rate
Q1 2011	6	6		6	6	100%	12	12	
Q2 2011	92	86	1533%	12	6	100%	104	92	767%
Q3 2011	100	8	9%	18	6	50%	118	14	13%
Q4 2011	109	9	9%	32	14	78%	141	23	19%
Q1 2012	151	42	39%	55	23	72%	206	65	46%
Q2 2012	171	20	13%	90	35	64%	261	55	27%
Q3 2012	199	28	16%	154	64	71%	353	92	35%
Q4 2012	209	10	5%	233	79	51%	442	89	25%
Q1 2013	230	21	10%	301	68	29%	531	89	20%
Q2 2013	244	14	6%	349	48	16%	593	62	12%
Q3 2013	265	21	9%	410	61	17%	675	82	14%
Q4 2013	271	6	2%	429	19	5%	700	25	4%

Table 2.4: Successful projects posted 2011-2013, annualized growth

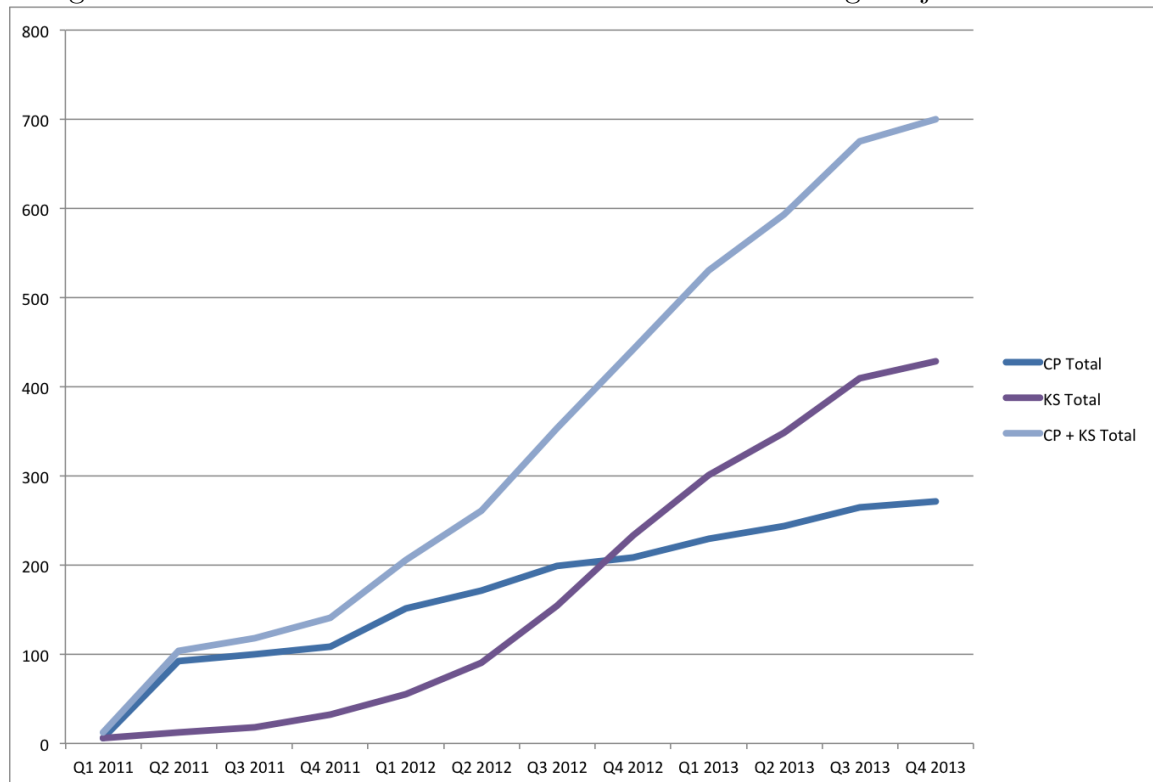
Period	CP Total	CP YoY	Rate	KS Total	YoY	Rate	CP + KS	YoY	Rate
FY 2011	109	100		32			141		
FY 2012	209	100	92%	233	201	628%	442	301	213%
FY 2013	271	62	30%	429	196	84%	700	258	58%

in 2012 is partly explained by the fact that three of the platforms launched during this year and were actively recruiting projects. The rate of growth stabilized in 2013 to 30% growth year-on-year, with quarterly growth rates of between 2% and 10%. Civic projects on Kickstarter show a similar growth trend, with rapid growth in 2012 (628%) followed by stabilization in 2013, although the annual growth rate (84%) is still very high. Taken together, there were 141 successful CP and Kickstarter projects by 2011, rising to 442 by 2012 and 700 by 2013. These findings are summarized in Tables 2.3 and 2.4.

The posting of successful CP projects and civic projects on Kickstarter has yet to find a consistent, steady rate of growth, but platforms continue to add projects each quarter and the annual growth rate is strong. Figure 2-1 shows that during 2011, CPs had posted more civic projects than Kickstarter, and that Kickstarter appears to have overtaken CPs in the final quarter of 2012. While this crossing in fortunes is intriguing, it is difficult to draw firm conclusions from it, since Kickstarter did not introduce a “Civic” tag until January 2013 and projects posted before this date were

retrospectively tagged.¹² What is clear is that in the past year, the growth in civic projects on Kickstarter continues to outpace CPs, which is not surprising given the platform’s dominance of the donation crowdfunding market.

Figure 2-1: Total Number of Successful Civic Crowdfunding Projects 2011-2013



While three years’ of data makes long-term trend analyzes problematic, it is notable that in each of the three years, the fourth quarter was the slowest in terms of growth. Several civic crowdfunding campaign managers have remarked in interviews for this project that the fourth quarter of the year is the least attractive moment in the year to seek financing since foundations and potential large donors are likely to be finalizing commitments from the past year and are less willing to invest in new projects than at the start of the year. The variations in quarterly growth can be seen in Figure 2-2 below.

These data are further evidence that civic crowdfunding is a nascent subgenre, and that CPs are yet to establish themselves as brand names of the caliber of Kick-

¹²See the following section, “The problem with success rates and Kickstarter’s hidden civic success”.

Figure 2-2: Successful Projects Added, Quarter on Quarter



starter. Nevertheless, they continue to supply a small but steady stream of success stories that are helping to re-confirm the idea that civic crowdfunding is a viable form of financing for these projects.

2.4 The problem with success rates and Kickstarter’s hidden civic success

In the description above, I used the assumption that projects that raise more than 50% should be considered moderately successful. This approach was necessary because the CP platforms in the dataset all offer “flexible funding”, which means that project owners may receive the funds even if the project doesn’t reach its goal. Without this clear marker of success or failure, analysis of the success rate of CP projects is problematic and may be an area that platform owners change as they seek to build their reputation and improve their position as competition for their services

increases.¹³

In GP projects, however, we have a clearer indication of success, since each of the three platforms specifically designates projects as successful only if they reach either their target amount (Kickstarter and Catarse) or an agreed minimum (Goteo).¹⁴ Here we see some striking indications of the success of GP civic crowdfunding projects. Catarse urbanism projects have a success rate of 33% (4 of 12 completed projects), Goteo projects have a 68% success rate (223 of 327) and Kickstarter “Civic” projects have a success rate of 80% (281 of 352).

The performance of Kickstarter civic projects is striking. While the median size of a successful civic project on Kickstarter (\$6,437) is similar to the average successful project across categories (the mode is between \$1,000 and \$10,000), if Kickstarter were to have a “Civic” category for projects on the site alongside the likes of music, video games and movies, it would be the platform’s most successful category in terms of proportion of projects funded. Its 81% success rate surpasses Dance (70%) and is almost twice that of the average project (43.86%).¹⁵ However, despite civic projects’ success, they remain a minority pursuit on Kickstarter. The total of 356 projects bearing the civic tag would make it a quarter of the size of the smallest category (Dance) and the smallest category by project value (\$5.26M compared to \$5.99M for Dance). Assuming that Kickstarter collects 5% on every civic project and does not offer differential rates to certain campaigns (there is no evidence to suggest that it does), civic projects earned Kickstarter \$263,000 in revenue up to March 4. This suggests that civic projects are a small but significant subset of Kickstarter projects, but further growth is likely necessary for the company to consider either recognizing civic projects as a separate category.¹⁶ Were Kickstarter to create a civic category rather than manually tagging projects at the time of creation, it is likely

¹³See Conclusion, “Data Quality and Transparency”.

¹⁴Goteo campaigns occur in two rounds: the first round is an *all-or-nothing* campaign in which the project owners only receive the money if they raise their target amount, and the second round is a flexible funding campaign in which the project needs to reach at least the agreed minimum for the project, which is published when the project launches.

¹⁵Statistics published by Kickstarter on March 22.

¹⁶Kickstarter is understood to have considered creating a Civic category in the past, but rejected the idea due to problems defining and delimiting civic projects from other categories.

Table 2.5: Overview of Project Sizes (CP and GP)

Variable	Projects	Mean	Std. Dev.	Min	Max
Goal	1223	\$14,740	52750.57	0	\$1,083,670
Raised	1223	\$9,502	40855.78	0	\$1,085,040
No of Funders	1222	92.97	204.7256	0	3,175
AvgPledge	1222	\$204.36	1069.424	0	\$25,030.56

that the number of civic projects would increase, but it is unclear what impact that would have on its success rate. Currently projects are tagged at the time of creation. Projects that began before the civic tag was introduced in January 25, 2013 were reviewed and tagged retrospectively by Kickstarter, although the platform has not published a clear methodology for the tagging process.

2.5 The distribution of wealth and activity in civic crowdfunding

Is civic crowdfunding in its current state an open and well-distributed means of participation? If civic crowdfunding has the potential to supplement or replace existing public services, does it distribute resources evenly, or does it privilege certain groups and activities?¹⁷ While these questions demand analysis over several years, we can begin to address them by examining the extent to which the opportunities crowdfunding has supported to date are concentrated towards particular sizes and types of endeavour.

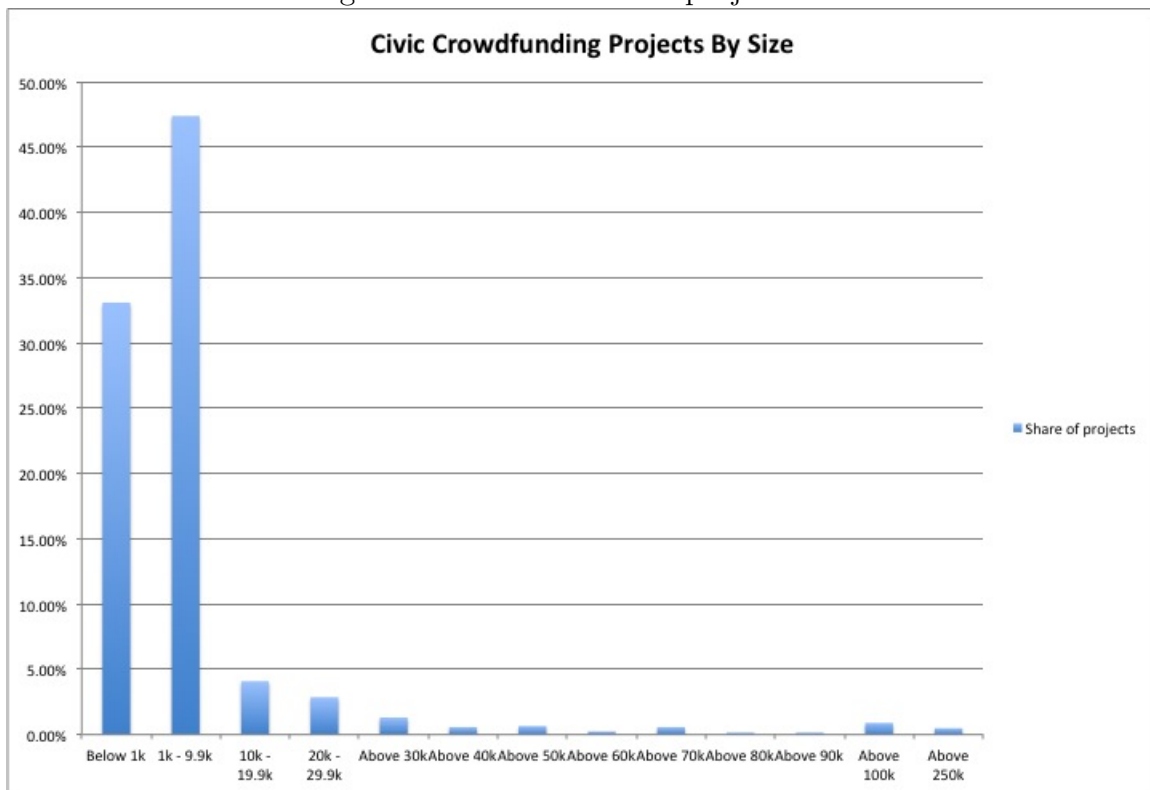
The data show clearly that there is significant variation in the size of civic crowdfunding projects, shown by the high standard deviation of project sizes. The amount raised varies a similar amount, since the amount campaigns raise is conditioned by their goal amount, and on most platforms it is possible, though less common, for campaigns to raise more than their target amount, often called *overfunding*. The highly variable scale of expected and actual activity means that the number of funders participating in projects also varies significantly, from zero to 3,175.

¹⁷See Chapter Four for a fuller discussion of the political implications of civic crowdfunding supplementing or substituting for public investment.

This distribution is not all that surprising, given that large open online markets commonly produce Pareto, or “Long Tail” distributions (Clauset, Shalizi, and Newman, 2009). Agrawal, Catalini, and Goldfarb (2013) find that crowdfunding platforms tend towards highly skewed markets, where a small number of projects account for the vast majority of funds raised. In the case of the civic crowdfunding dataset, the top ten projects by value (0.8% of the total number of projects) accounted for 29% of the total revenue raised (\$3.2M). The civic project data shows two remarkable similarities in distribution to Kickstarter projects across all categories: 11 percent of civic projects have raised more than \$20,000; while 12.5% (7,295) of Kickstarter projects have done so. Meanwhile the same share of Kickstarter and civic projects — 2% — have raised above \$100,000.¹⁸

Figure 2-3 and Table 2.5 show the distribution of civic crowdfunding projects by value.

Figure 2-3: Distribution of project sizes



¹⁸1,181 Kickstarter projects and 14 civic projects have raised above \$100,000. Figures published by Kickstarter on March 22, 2014.

Table 2.6: Distribution of crowdfunding projects by size

Project size	Share of projects	Civic Platforms	Generic Platforms	Total Projects
Below 1k	33.09%	293	112	405
1k - 9.9k	47.39%	158	422	580
10k - 19.9k	4.08%	18	32	50
20k - 29.9k	2.86%	3	32	35
Above 30k	1.31%	2	14	16
Above 40k	0.57%	1	6	7
Above 50k	0.65%	2	6	8
Above 60k	0.25%	0	3	3
Above 70k	0.57%	4	3	7
Above 80k	0.16%	1	1	2
Above 90k	0.16%	0	2	2
Above 100k	0.90%	3	8	11
Above 250k	0.49%	4	2	6

The great disparity in project sizes is an indicator of the immaturity of the civic crowdfunding market. It has been proven many times as a means of delivering small-scale outcomes, and on a few very visible occasions it has been applied to large ones, but participants are yet to apply it to the full range of possible projects. A very large size distribution also suggests that competition between civic crowdfunding projects for attention and resources may become a challenge, since larger projects are likely to be much better resourced and therefore able to attract a disproportionate amount of media attention, and therefore potential donor attention.

2.6 Types of projects and the goods they produce

Does this disparity in size, and the large number of relatively small projects, reflect the abundance of a particular type of project? To analyze the types of work being performed by civic crowdfunding, I applied a 14-member typology to CP projects.¹⁹

As Table 2.6 shows, most projects appear in typically lower-cost categories. The most common Garden / Park project is a community garden for which the project

¹⁹The development of the typology and the coding of projects in this section was carried out as part of the research for Goodspeed and Davies (2014), which contains its own analysis of the dataset with respect to the planning process. One project in the set, Discover NYC Pop-Up Cafes on IOBY, could not be categorized or coded due to an HTTP Redirect Loop. Its size and amount raised were given in the IOBY dataset.

Table 2.7: CP Project Categories

Category	Count	%	Mean Goal
Garden / Park	140	28.6%	\$14,165
Event	70	14.3%	\$8,042
Education and Training	56	11.4%	\$5,179
Food	35	7.1%	\$3,060
Environment and Wildlife	28	5.7%	\$1,516
Maintenance and Renovation	26	5.3%	\$43,365
Public Art and Monuments	24	4.9%	\$28,752
Technology	21	4.3%	\$30,910
Organization	18	3.7%	\$4,464
Facility	15	3.1%	\$97,585
Streetscape	13	2.7%	\$23,220
Media	20	4.1%	\$3,749
Other	11	2.2%	\$17,690
Sport	6	1.2%	\$2,876
Mobility	5	1.0%	\$146,015

owners are attempting to raise funds for gardening supplies such as soil and seeds, and therefore does not require large capital investment. Alongside lower cost projects, the data also show a bias towards temporary or less permanent projects. For instance, if we make the assumption projects in the events, education and training, food and media categories are short-term in focus (181 projects in total), we can conclude that at least 38% of projects are short term interventions.

The task of categorization of projects (See Table 2.6) was often challenging. In some cases project owners’ intentions for spending the money they raised are not entirely clear: some organizations outline their mission and a range of activities, such as education and outreach, events and specific projects. In these cases, projects were categorized “organization” to reflect that the funds would likely be used, at least in part, to fund running costs. In other cases it was necessary to decide on the primary focus of a project: for instance, several of the maintenance and renovation projects were focused around a specific event, such as a cleanup day. They were coded as Maintenance and Renovation rather than events since the principal outcome of the project is presumed to be the maintenance and renovation of a specific area or monument, not the fact of the gathering itself.

Table 2.8: Goods Produced by CP projects

Type of Good	Count	%
Public Good	242	49.5%
Private Good	104	21.3%
Club Good	89	18.2%
Common Pool Resource	53	10.8%

Understanding the type of activity or good that civic crowdfunding projects produce (See Table 2.6) is critical to analyzing whether the definition of “civic goods” that we would expect to see in the field given in Chapter Two corresponds with real projects. To address this question, each of the CP projects was coded along the two classic economic dimensions of goods: whether the good being produced is excludable or non-excludable, and whether the good is rival or non-rival.

The data suggest that the assertion made in Chapter Two, that civic goods are typically non-excludable, is broadly correct, since the majority of projects are either classic public goods or common pool resources. Nevertheless, the high proportion (20%) of private goods indicates that a large number of users of civic crowdfunding platforms believe that the *civic* quality of a project relates to the overall goals of the organization / person involved, rather than the production of a specific type of good, since many of the private good projects involved fundraising for the maintenance or organizational costs of non-profit organizations.

The process of coding which type of good was being produced by a project was not straightforward. For example, the accessibility of gardens and parks to the general public or lack thereof (their excludability) was not always clear from the project pages. Gardens with clearly limited audiences, such as gardens created within schools, were categorized as club goods while gardens that offered a reasonable expectation of public access were coded as public goods. Meanwhile, many of the Education and Training projects have a broader civic mission that may involve a public good, but the training programs themselves are in practice are both excludable and rival, since they have limited capacity and are often recruiting directly. Therefore it is important to make a distinction between the specific good being funded in the campaign and the broader mission of the organization, as suggested above.

Table 2.9: The matrix of goods produced by CP projects

Private Good (21%)	Common Pool Resource (11%)
Club Good (18%)	Public Good (50%)

Below are four example cases of each type of good.

Private Good: Somerville Mobile Farmers' Market (Citizinvestor). The City of Somerville raised \$3,240 in December 2013 to fund matching grants for low-income families at two housing projects to spend at a mobile farmers' market (Citizinvestor, 2012). The scheme could not be funded using tax revenues due to state law restricting the spending of tax dollars on excludable goods, and had previously been funded by a corporate donation. Due to high demand for the scheme, the donation was spent and consequently the city decided to experiment with a crowdfunding campaign to meet the additional demand. Since the grants are only available to particular households (they are excludable) and they are finite in number, and therefore rival, the scheme is a private good.

Common Pool Resource: Pollos del Pueblo (IOBY). Cypress Hill Local Development corporation, a registered non-profit, raised \$6,286 from 71 donors in July 2012 to fund the creation of a community chicken farm in Brooklyn, New York, from which the group distributed free eggs to local residents and visitors to promote healthy eating (IOBY, 2012b). The eggs are a natural example of a common pool resource, since they were provided to any member of the public seeking them, but were finite in number, and therefore rival goods.

Club Good: Paint the Town Green (Neighbor.ly). Give us a Gig, a non-profit organization, raised \$11,136 from 111 backers in September 2012 to fund the expansion of Google Fiber to underserved neighborhoods in Kansas City, MO and KS (Neighbor.ly, 2012). In the context of the campaign, access to fiber was only supplied to the targeted neighborhoods, and therefore the good being produced (fiber access) was excluded from residents from elsewhere in the city. The good was non-rival since,

once provided, all households in those neighborhoods could use the service without reducing their neighbors' ability to do so.

Public Good: Make Mansfield YOUR hotspot! (Spacehive). Mansfield Business Improvement District, a public-private partnership between the town of Mansfield UK and the local business community, raised \$50,484 from 27 funders in January 2013 to provide a free public WiFi internet network (Spacehive, 2012c). Access to WiFi was open to residents and visitors to the town, and the proposed capacity was theoretically infinite, therefore the good being provided was public.

2.7 Replicability

While the CP data shows a tendency towards low-cost, temporary public goods, there is some evidence of emerging replicability of crowdfunding as a strategy, evidenced most prominently in three ways: 1) a single group using the technique repeatedly for different types of projects in the same geographic community, 2) a single group or individual crowdfunding repeated iterations of the same project (usually an event) over several years, and 3) groups crowdfunding projects in different locations based on a common model. I derived the following observations on projects with similar names, cross-checking to verify whether the group or individual organizing the campaign was consistent. In the CP data I found 17 examples of projects or groups that had used crowdfunding twice, five examples of three-time crowdfunding users and one example of four-time usage.

The most common method of replication was annual events held over consecutive years. Going Green is a free environmental conference held in Queens, New York, which has met its fundraising target on IOBY every year since 2011, raising \$443.00, \$2,038.00 and \$1,000.00 respectively. Hike the Heights, a sponsored hiking event to promote walking in Brooklyn, met its targets of \$1,502.00 and \$2,493.00 in 2011 and 2012, and in 2013 raised \$2,640.00 of a \$4,139 project (the campaign is still marked as open on the IOBY site).

Other campaigns used replication to expand a project or create it in phases.

The Java Street Garden in Brooklyn, New York, had two successful phases of crowd-funding: the project met its target of \$625 in its first campaign, and more than doubled its second campaign target (\$472), raising \$1,027. The Garden is currently seeking \$21,809, but has not yet recorded any donations according to the IOBY site. Sustainable Flatbush, also in Brooklyn, funded a garden (raising \$1,090), a compost scheme (\$421) and is in the process of fundraising for a herb garden (\$2,772 raised of \$3,104 as of March 22).

There was only one clear example of a project using more than one platform for a similar purpose: The Brownsville Student Farm raised \$24,282 on Kickstarter in November 2011, but was unable to complete the construction as planned, and in October 2012 used IOBY to raise \$5,339 to finish the project.²⁰

2.8 Projects by location

In the final phase of the data analysis, I coded both CP and GP projects by city and state location (Table 2.8). Close to two-thirds of the projects (768, or 63%) were based in the United States. For the purposes of comparison with population data and to enable an exploration of the geographic distribution of civic crowdfunding, the following analysis will focus on US-based projects.

The states that provide the greatest number of projects are New York, California, Illinois, Florida and Oregon (Figure 2-4). The dominance of New York-based projects (49.5% of US projects) is not surprising, since both IOBY and Kickstarter are based in the city, and IOBY tends to recruit projects for its platform. This might also explain the performance of Florida, since IOBY has a secondary headquarters in Miami. The remaining states provide 30% of the projects, led by Massachusetts, Tennessee, Texas, Missouri, Michigan and Pennsylvania.

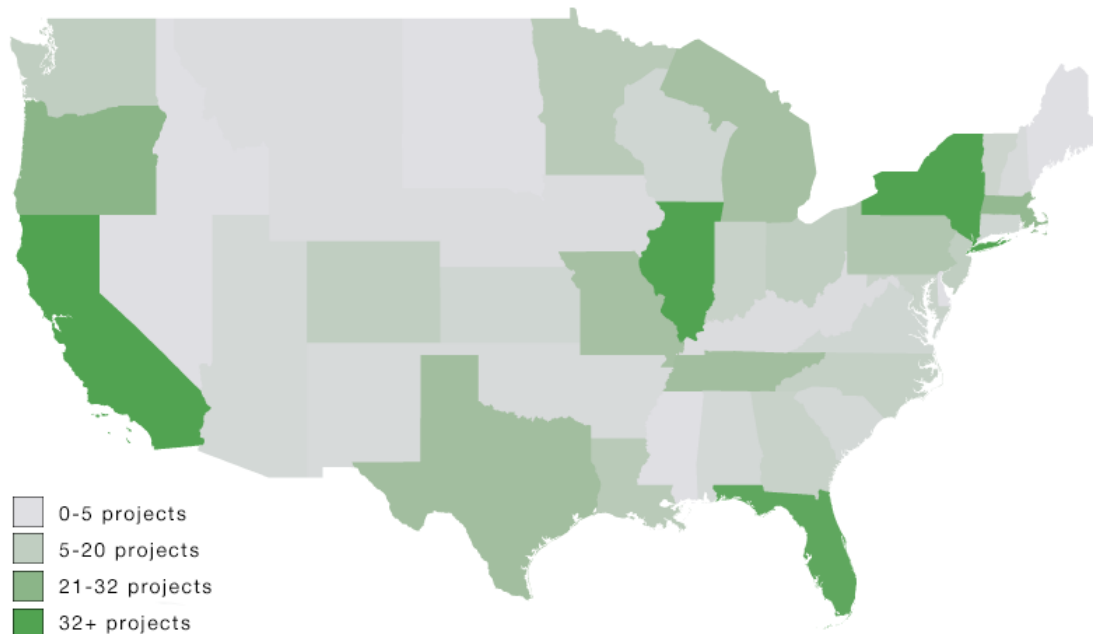
This clustering in headquarter cities is also borne out by comparisons with state median income and population data. Neither population nor median income is

²⁰Brownsville Student Farm Project, Kickstarter. <https://www.kickstarter.com/projects/89439509/brownsville-student-farm-project>. Brownsville Student Farm, IOBY. <https://ioby.org/project/brownsville-student-farm>.

State	T1	T2	Total	Share of US
NY	313	67	380	49.48%
CA	16	57	73	9.51%
IL	5	28	33	4.30%
FL	25	5	30	3.91%
OR	7	14	21	2.73%

Table 2.10: US civic crowdfunding projects by state

Figure 2-4: Indicative map of projects by state



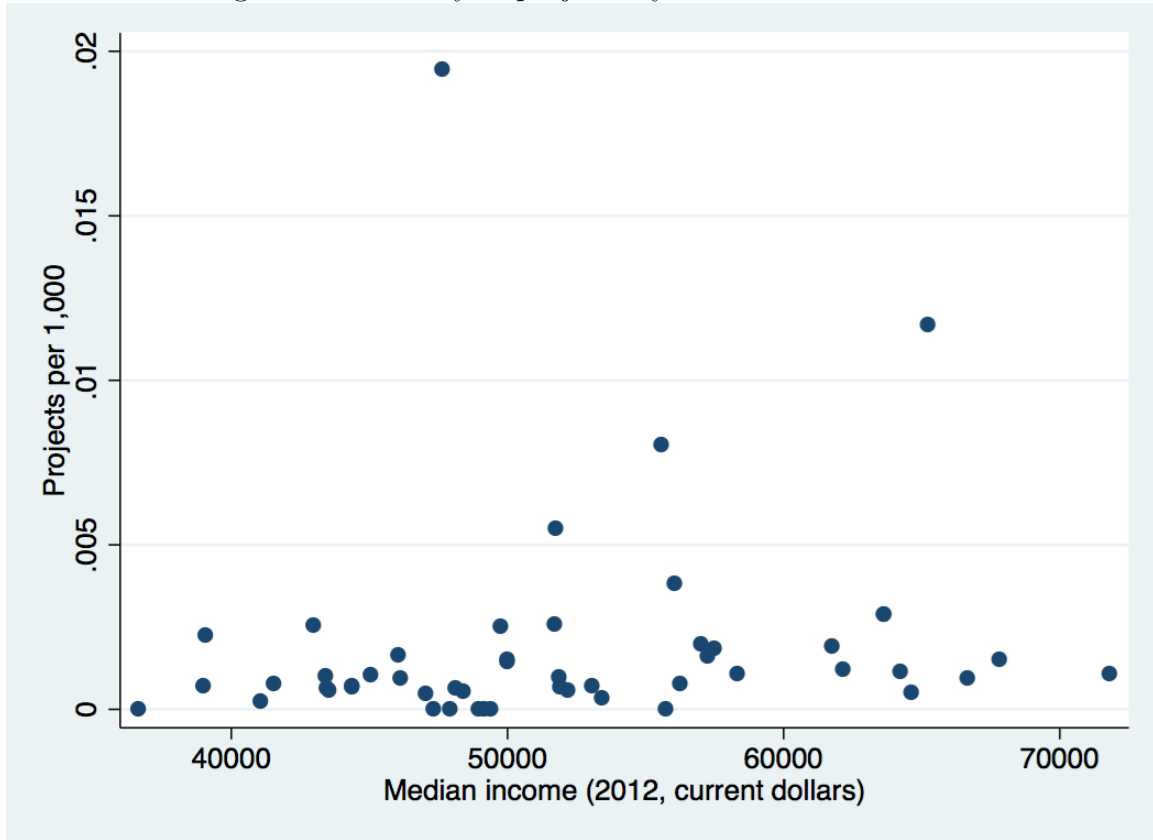
a strong determinant of the density of projects in a given state, as Figures 2-5 and 2-6 show.²¹

The states that have the five densest areas of civic crowdfunding activity, as indicated by number of projects per capita, are New York, DC, Vermont, Oregon and Rhode Island (Table 2.8). Four of the five states have a median income of above the 2012 national average of \$51,017. Nevertheless, the number of data points for the majority of states is too small to draw strong conclusions regarding the relationship between the state a project is located in and the demographic profile of the state.

The dataset does not contain sufficiently granular location information to

²¹Median household income 2012, current dollars, taken from Median Household Income by State - Single-Year Estimates (<http://www.census.gov/hhes/www/income/data/statemedian/>).

Figure 2-5: Density of projects by state median income

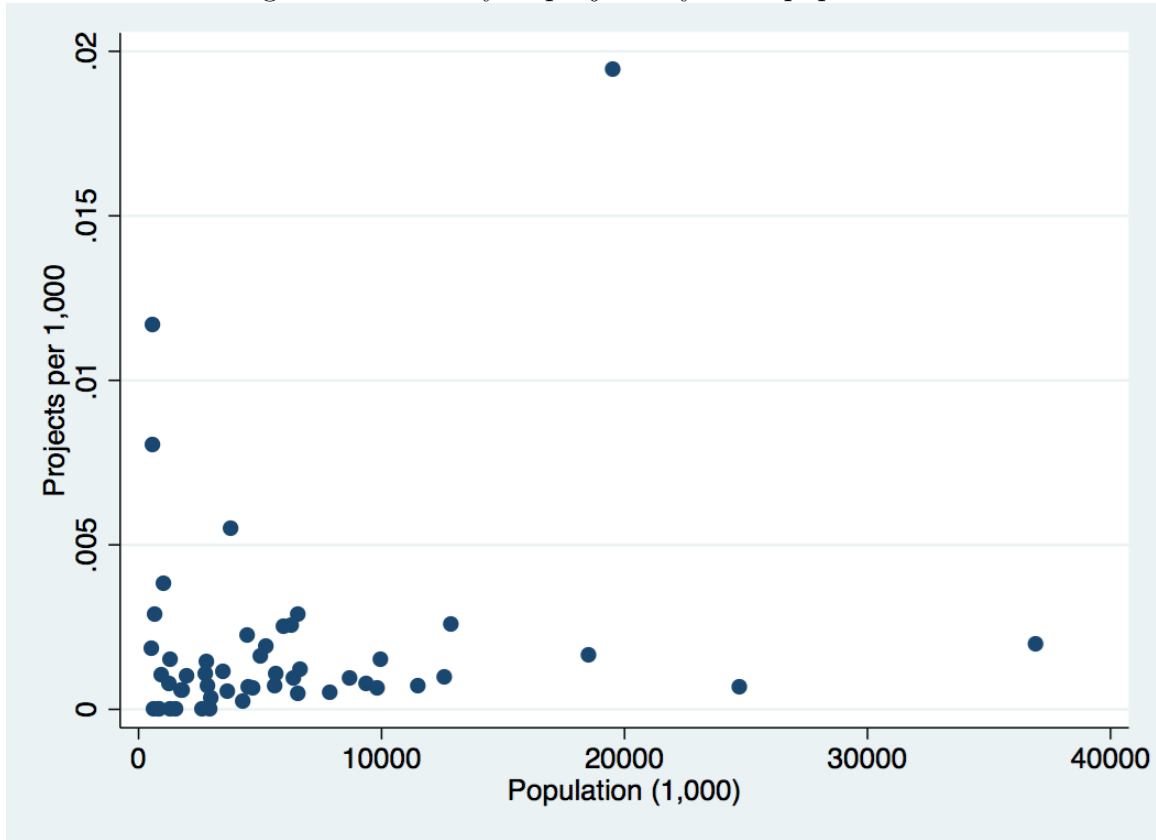


enable a mapping of all T1 and T2 projects by neighborhood, and therefore to allow a thorough analysis of the demographic profile of project locations. Goodspeed and Davies (2014), analyzing a subset of the IOBY projects in the complete dataset, find little evidence of a link between the presence of IOBY projects and lower median income, although the analysis shows that the percentage of residents with an income below the poverty line is slightly higher (20.2% compared to 18.3%). Internal research by Citizinvestor finds that the median household income in the neighborhood in which

State	Total	Share (US)	Pop (1,000)	Projects / 1,000	Median income	vs Nat Median
NY	380	49.48%	19,541	0.019446292	47,680	-3,337
DC	7	0.91%	600	0.011666667	65,246	14,229
VT	5	0.65%	622	0.008038585	55,582	4,565
OR	21	2.73%	3,826	0.005488761	51,775	758
RI	4	0.52%	1,053	0.00379867	56,065	5,048

Table 2.11: The densest US states for civic crowdfunding by median income profile

Figure 2-6: Density of projects by state population



a project occurs “has little to no bearing on the project’s chance of success” on the platform, although the research does not give details on the overall distribution of projects by median household income (Citizinvestor, 2014).

2.9 The typical civic crowdfunding project

Using what we know about the median CP project — that it seeks to raise \$2,099, is most likely a park or garden project, attracts an average donation of \$58.51 and produces either a public or club good — it is possible to describe the most typical civic crowdfunding project using a real example. For this discussion I have chosen “Philadelphia’s Mill Creek Urban Farm”, a project on IOBY that raised \$2,039 from 45 donors in March 2012 (IOBY, 2012a).

Four aspects of the campaign mark it out as a typical example of those found in the dataset: the fact that the project occurs in a major city (Philadelphia), the

campaign’s goal of producing a club good, Mill Creek’s clearly articulated and locally-focused civic mission and its established history as a community organization.

The principal good produced by the campaign is the farm stand, which is a club good since it is excludable (the food is not given away for free). There are also other secondary goods being produced. The campaign text describes using donations to fund four linked activities: operating a farm stand, buying supplies for the stand, training apprentices to run the stand and organizing a youth leadership program. It seems reasonable to conclude that the farm stand was the principal good being produced and funded; it is possible that the organization could have funded the training program as a separate project, given education and training programs were the third-most popular project category in the dataset.

The project makes its social justice mission and interest in economic redistribution very clear in the campaign materials. Its appeal is also very locally-focused to residents of Philadelphia:

Our neighborhood farm stands provide fresh, organically-grown produce to an under-served community that has otherwise limited access to healthy food. Local residents can buy the food at affordable, below-market prices, and we are also the only stand in the area that accepts Farmers’ Market Nutrition coupons and Supplemental Nutrition Assistance Program (SNAP) benefits.

Furthermore, the project page highlights the problem of vacant lots in Philadelphia and the issue of “food deserts” — neighborhoods lacking access to fresh food — and in the section “Why We’re Doing It”, describes its ideal that “local communities work together to build an environmentally and economically sustainable urban food system.” This suggests the primary focus of the campaign is on the local communities that would participate directly in the creation of that food system, i.e. the communities of Philadelphia.

Finally, Mill Creek’s ability to raise the funds seems to be at least partly contingent on the fact that it is a well-established non-profit with organizational structures. It was first registered as a 501(c)(3) organization in 2005 and has a five-

member board of directors, one of whom is a professor. In 2012 the group sold \$6,000 worth of fresh produce to 665 customers, and worked with 600 volunteers who gave a total of 2,000 hours of labor to the organization. Therefore the organization was likely well practiced in the types of organizing activities that would have been instrumental to a successful crowdfunding campaign.

The fact that Mill Creek was started by a non-profit organization with an eight-year track record raises the question of whether crowdfunding is most likely to succeed when used by established groups or whether it can provide a means of organizing and a pathway to funding entirely new projects. Civic crowdfunding platforms often suggest that their goal is to be transformative by engaging new audiences in community-based activity. In much the same way that civic crowdfunding aspires to large-scale projects but currently delivers smaller-scale change, this goal seems yet to be fully realized — although there are examples of groups becoming involved in community-based work for the first time through a crowdfunding campaign.

2.10 Problems with the data

The process of collecting the data described above revealed that there are significant knowledge gaps due to the lack of reliable and consistent project data across platforms. First, the dataset was assembled through a combination of web crawlers and individual requests made to platforms. None of the platforms was willing to grant access to a functioning API, and in most cases this was due to the site’s developers not having built an API, even for internal use. Data collected through web crawlers was vulnerable to changes in sites’ page structures — a problem that arose three times during data collection — and the process was much slower overall than consuming an API.

In the civic crowdfunding space, where platforms are keen to establish their

credibility and provide high quality, transparent data to institutions and communities, it would be advantageous for platform owners to create APIs to allow properly structured access to project data. Platforms could determine the level of data to make accessible to the public and to researchers, although public agencies should demand that projects that involve public funding be subject to a high level of transparency, as is consistent with existing policy in most municipalities.

In several cases the data published on the web by platforms later proved to be incomplete or incorrect. For instance, in some cases, unsuccessful projects were found to have been deleted from websites, while in others, successful projects were found to be incorrectly indexed following completion. Location information for projects was only available at the city level except in the case of IOBY, meaning that detailed geographic analysis of projects was not possible. In most cases it was impossible to determine the exact block location of a project even after reading all the published campaign material. Measures to improve the quality of platforms' published data would be an invaluable contribution to research and participation in civic crowdfunding.²²

Furthermore, understanding how crowdfunding campaigns are operating, and the impacts they are having on community organizing and civic engagement are in many of these cases only possible through participant interviews and close readings of campaign materials, as I will begin to explore in Chapters 3 and 4. Combining these insights with quantitative approaches will enable us to move in the direction of broad and deep understanding of crowdfunding, towards what Tricia Wang calls “thick data” (Wang, 2013).

²²See “The Road Ahead for Civic Crowdfunding”, p. 142.

2.11 Conclusions

The compiled dataset and the subsets of it discussed in this chapter show that there is an emerging “typical” crowdfunding project, and that it tends to be a small-scale garden or park project in a large city, and likely produces a public good. It is also notable that the average civic crowdfunding project is more likely to be successful than a crowdfunding project in another category, such as music or film. However, it is also clear that there is a very wide spectrum of civic crowdfunding project sizes, types and experiences. While there is no conclusive evidence to suggest that civic crowdfunding is more likely to serve underserved or wealthier communities, spatial analysis shows that the distribution of resources and attention is extremely unequal across the United States. While certain cities have begun to build a base of organizations that are familiar with civic crowdfunding, some of whom have been able to use it successfully more than once, the vast majority of the country has not yet experimented with civic crowdfunding in its contemporary form. We can also observe that the specialized civic crowdfunding platforms have yet to build the same following that Kickstarter or Goteo has. This has led to clustering of projects around the cities in which platforms are headquartered, rather than a generalized spread of the concept.

While these distributional inequalities may be neither surprising nor troublesome in a market for consumer goods, they have political and ethical implications for civic crowdfunding actors endorsing the idea that the field can serve the interests of a broad public. To be sure, the geography of opportunity may shift as more communities and regions become familiar with the process of crowdfunding civic goods, and the growth of the practice may lead to a reduction in the reliance of large projects on high-value patrons. Nevertheless, as more municipal governments engage with civic crowdfunding as a means of incubating community-led projects, and in some cases, as a new method of disbursing discretionary investments, more robust analysis of the

field will be required to support the effective application of civic crowdfunding. Since the analysis reveals significant gaps in platform data that impair that work, it will become incumbent on participants to highlight, and on platforms to address, issues of data quality, transparency and accountability.

From the point of view of community members, civic crowdfunding remains too new to be seen as a natural part of participating in one's community. Currently it is a very intentional form of participation, and is not an ambient feature of the participatory landscape. In the future, if the density of projects increases, it may be possible for individuals to browse for projects in their community and use crowdfunding sites as a means to source opportunities to contribute to local projects, either as a donor or volunteer. In its current state, civic crowdfunding offers a useful snapshot of the activities of many existing small-scale non-profits and points to the emergence of new ad-hoc groups seeking to perform similar work, but does not in itself seem to encourage longer-term engagement. It may well be a highly productive research topic to follow the longer-term impact of projects on the attitudes of residents in crowdfunding project locations to their neighborhood, but that work is outside the scope of the data collected.

The typical civic crowdfunding project as described in this chapter also does not serve to illustrate the ambitions of the field, and particularly platform owners. While the Mill Creek case (in (Section 2.8)) is a coherent example of an existing organization leveraging crowdfunding to support independent public service work, it does not speak to the potential of civic crowdfunding to create new links between the crowd and government, or to fund large-scale public goods that might otherwise have been provided by government, with the assistance of the private and prominent non-profit organizations. These ambitions are far from being realized in the majority of typical civic crowdfunding projects, but they are present in a minority of cases. Three highly visible examples of these less typical cases will be discussed in the following

chapter.

Chapter 3

Three Edge Cases of Civic Crowdfunding

The previous chapter identified a disconnect between the average, or *typical* civic crowdfunding project, a small-scale community garden realized with the guidance of an existing non-profit, and the types of projects to which the subgenre aspires: scalable public-private partnerships that are capable of delivering infrastructure and services and mobilizing communities to improve the public realm. In this chapter, I will explore three projects that provide early indications of how civic crowdfunding might fulfill these aspirations. They are *edge cases* because they are dissimilar to the majority of other cases in the dataset, although their relative success and larger-than-average scale means that they are also among the most prominent civic crowdfunding projects to have emerged since 2011. The accounts draw on interviews with campaign organizers, supporters, platform owners, relevant policymakers, and anonymized donor data and publicity materials obtained from the campaigns.

The first case, “Glyn Coch Community Center”, is significant both for its scale and as an example of how crowdfunding can be used as a means of filling a gap in public investment. Glyncoch remains the largest overall civic project by

value to which crowdfunding has contributed (although the amount raised was a small proportion of the total) and the first civic crowdfunding project to be funded among the projects in the complete dataset. The Center had raised the majority of the funding it required from local and national government sources, but turned to Spacehive to host a crowdfunding campaign when it faced a shortfall and was unable to secure further grants.

The second case, “Sustain Kansas City B-Cycle”, is also significant for its large scale — it is the second-largest project in the dataset — but was selected primarily as an example of how civic crowdfunding campaigns can be used to attract institutional donations. The campaign, which sought to fund a bikeshare scheme for Kansas City, failed to win large-scale grass roots support from residents, but it did leverage donations from existing institutions, including corporations, non-profits and universities, very effectively. The success of the campaign in this respect also set the stage for the non-profit group which organized it to lobby successfully for further institutional backing in a successor campaign to expand the bikeshare scheme.

The final case, “Pimp My Carroça”, is a public art project involving waste pickers in Sao Paulo, Brazil that demonstrates the potential of civic crowdfunding to mobilize community action in a way that can be replicated across cities. Pimp My Carroça was, at the time of the campaign, the second-most funded project on Catarse, and the first to propose an urban intervention related to a civic issue. Its success as a grass-roots movement led to the creation of a similar campaign in Curitiba a year later, and the group are planning to crowdfund further initiatives in other Brazilian cities.

These edge cases together serve to illustrate three aspects of what civic crowdfunding aspires to be, at least in the view of platform owners: a scalable organizing mechanism that is capable of bringing the crowd and institutions together to realize

large-scale projects.¹ In some respects the cases demonstrate early successes in these areas, while in others they are examples of failures, and highlight challenges that civic crowdfunding may face more often as it evolves and grows.

3.1 Case One: Glyncoch Community Center

The Glyncoch Community Center crowdfunding campaign was a project undertaken to support the building of a community center in an underserved neighborhood in South Wales, UK, hosted on the UK-based Spacehive platform between December 2011 and March 2012. It is notable as one of the earliest built environment civic crowdfunding projects in the dataset to be fulfilled. The campaign was led by Louisa Addiscott, a youth and play development officer at Glyncoch Community Regeneration Ltd (GCRL), a non-profit organization owned and operated by residents of the village. The community center project had already raised the majority of the funds required to proceed, but had a shortfall of 5% that it was struggling to fill. Its organizers decided to become one of Spacehive’s launch projects, and succeeded in raising the money required from a mix of corporate, individual and community-organized pledges.

3.1.1 A Community Used to Fundraising

The community of Glyncoch in South Wales, like many in the region that once depended on the coal mining industry, has for the past three decades suffered from a high rate of poverty and scarce community resources. Its first community center, built by the local council in 1977 and operated by local volunteers, was historically an important resource for recreation and learning opportunities for the town’s 3,000 residents. The existing building structure was publicly funded, although equipment

¹The discourse analysis in Chapter Four provides further indications about the aspirations of platform owners for the future path of civic crowdfunding.

and furniture were paid for by the local community, members of whom organized a series of bingo games in their homes to raise money.² By 2010 the building was in a poor state of repair, and, despite a council-commissioned report calling for its replacement, no progress had been made.³

In March 2010, several of the volunteers who operated the existing building and its programming created Glyncoch Regeneration Ltd. (GCRL), a non-profit organization they hoped would be a means to organize a fresh effort to build a new community center.⁴ In April 2011 GCRL was appointed the host organization for Communities First, a UK government anti-poverty scheme targeting deprived localities. As a result of the contract, GCRL was given a budget of £260,000 and was responsible for 10 staff members, several of whom had previously been working in the community as part of previous government initiatives. Over the following six months the group collaborated with the local authority, Rhondda Cynon Taf council, to design a new center, appoint a project manager and select a construction company.⁵ GCRL organized a series of public consultations at the existing center and a local school to hear feedback from community members. GCRL raised close to the full amount it required for the original proposal, £850,000 (\$1.4M), from a mixture of European Union, UK government and private sources. Close to the end of 2011, however, the project lost £200,000 of its funding after several funders withdrew, which Addiscott attributes to the economic recession: “A lot of the funders were unnerved by the recession,” she says (*Glyn Coch Community Center Interview* 2013). GCRL was able to make up some of the shortfall from their existing funders — the Ag-

²Exact dates unknown. I met several residents who had participated in the bingo games on a field trip to Glyncoch, May 2013. They recalled that the games had occurred fortnightly over a period of several months, but were not able to provide documentation to confirm the amount raised or the exact dates.

³Pontypridd and District Housing Association commissioned the planning consultancy Ashton Associates Inc. to produce a report and business plan for a new community center (*Glyn Coch Community Center Interview* 2013).

⁴GCRL became a registered UK charity in June 2011.

⁵Capita Symonds were appointed project manager; Encon Construction Ltd. were hired to build the center.

gregates Levy Fund granted the project an extra £100,000 and Rhondda Cynon Taf council invested £50,000 — but the project remained £30,000 short of the amount required. At this time GCRL feared that more of its backers might withdraw their funding if the project was delayed further, and that the new community center was at risk (*Glyn Coch Community Center Interview* 2013).

In December, GCRL was introduced to Spacehive — at that time a brand new civic crowdfunding platform that was yet to close its first project — by Your Square Mile, a mutual organization focused on civil society initiatives.⁶ None of GCRL’s board members had prior experience of crowdfunding platforms. Addiscott says the group saw the opportunity as a chance to expand their reach and attract greater publicity. “We thought, its a new way to do things that we haven’t tried. [Spacehive] said they could tap into lots of new philanthropists, including some bigger ones.” (*Glyn Coch Community Center Interview* 2013)

3.1.2 Celebrity Endorsements, Broadcast Amplification and a Last-Minute Flurry

The Glyncoch Community Center campaign benefited from an accumulation of attention that began with endorsements from local celebrities garnered via social media, was amplified by broadcast media coverage and culminated in the capture of corporate donations. The case demonstrates how the interaction of multiple social networks, local and remote, personal and professional, is necessary for a successful campaign, particularly when the immediate resources of the community impacted the campaign are very limited, as was the case in Glyncoch.

The campaign opened on December 7, the same day as Spacehive’s launch, listing an overall goal of £791,433, of which £29,433 needed to be raised. The campaign did not offer rewards to backers. The Glyncoch group held their first fundrais-

⁶Spacehive opened its platform on December 7, 2011.

ing event on January 31, a sponsored bicycle ride with the neighborhood police force. Over the course of the next month, they held a series of local fundraising events in the community, many of them light-hearted sponsored activities such as having a volunteer sit in a bathtub filled with baked beans; one woman completed a “sponsored silence” standing outside a local shop for two hours, raising £200. The campaign attracted support via Twitter from a number of celebrities active on social media, such as the British entrepreneur and founder of lastminute.com Martha Lane-Fox (68,500 followers), and the former Welsh rugby player Scott Quinnell (54,200 followers). Overall social media outreach was limited, though, with only four tweets posted between Jan 31 and February 20.

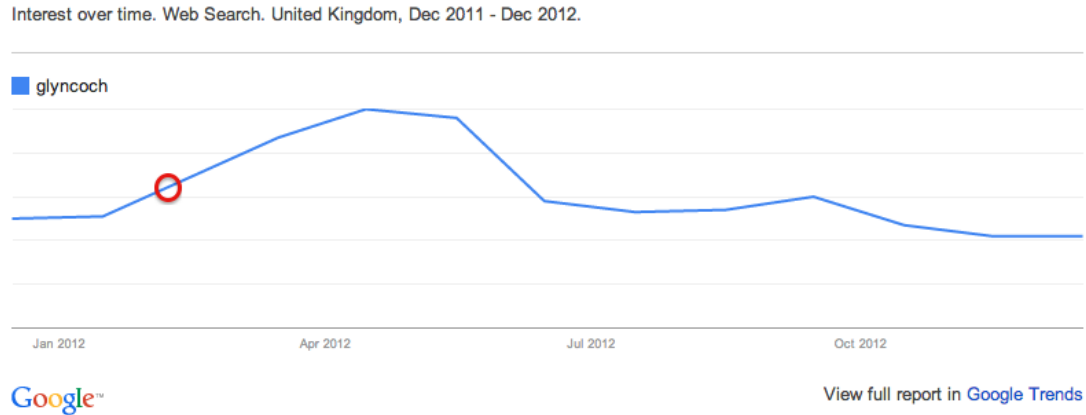
Progress towards the funding target during the first two-and-a-half months was slow, however, and the group had raised less than £5,000.⁷ On February 21, 2012, the British comedian Stephen Fry tweeted to his four million followers about the campaign under the hashtag #sandwichsacrifice.⁸ His tweet was retweeted by 82 users and favorited by 16, and 68 tweets were posted to the #sandwichsacrifice hashtag. The campaign also dramatically increased its engagement on the platform, posting 29 tweets that day, many of which were responses to pledges users were reporting they had made. The timing of the tweet coincides with a rise in web search traffic for the term “glyncoch” that peaked in April at the close of the campaign, although overall search volumes were small, between 50 and 100 searches recorded per month (see Figure 3-1).

Addiscott says the biggest impact Fry’s intervention had on the campaign was to stimulate national broadcast media interest. Addiscott and Chris Gourlay of Spacehive appeared on numerous national television and radio stations in the week fol-

⁷Donation data taken from Case Study Backers Dataset (CCFD5) in Appendix: Data Collection and Dataset Descriptions, p. 147.

⁸Fry’s tweet read: “Well, it seems you can crowdfund a community centre for the price of a cucumber sandwich. Join in! <http://bit.ly/yAzAdY> #sandwichsacrifice” <https://twitter.com/stephenfry/status/171911014240096256>

Figure 3-1: Web search traffic for the term “glyncoch” recorded by Google Trends



lowing the tweet, which in turn brought the attention of new potential funders.

Things changed when Stephen Fry tweeted about crowdfunding a sandwich. From there the local newspapers, TV picked it up. That allowed us to expand our marketing campaign. It went as far as America, New Zealand. We had our on the ground marketing campaign, but we were waiting. The key things we were looking for was the big organizations to come in and give their donations. When one or two started seeing that it was making it big on television, other corporates wanted to buy into it. (*Glyn Coch Community Center Interview 2013*)

On the day Fry’s tweet was posted, the consultancy firm Deloitte agreed to pledge £1,000 to the campaign. By March 14 the campaign had raised £7,000, and the campaign organizers held a “family night” event for local residents to boost support for the campaign. Ultimately, however, the vast majority of the funding (73.3%) was raised in the final two days of the campaign, March 20 and 21, as a result of two corporate-linked donations, from Moondance Foundation (£10,000) and Tesco Charity Trust (£12,000). The campaign ended at £792,021, which was £588 ahead of its goal. In total, donations by corporates and foundations linked directly to them were 86.9% of the funds raised during the campaign, at £26,100 (\$43,441) — see Table 3.1.2. Ninety-four individual donations were recorded, totaling £1,559.85 (5.2%), and offline community fundraising in Glyncoch (counted as a single donation) raised £2,361.55 (7.87%). Including the government funds already committed

Table 3.1: Pledges to the Glyncoch campaign by category

Source	Amount Pledged (GBP)	% of Total Raised
Corporate	£26,100.00	86.94%
Community	£2,361.55	7.87%
Individual	£1,559.85	5.20%
Median donation	£10.00	
StDev	£1,547.95	

prior to December 2011, the crowdfunding campaign contributed 3.8% to the overall project.

Excluding the funds already raised, the smaller but important influence of community and individual backers, and the on-the-ground campaign by GCRL, is clearer. Table 3.1.2 shows that organized community donations — mostly solicited in person and given in cash — contributed slightly more to the fundraising effort than the 94 pledges made through the Spacehive site. The number of individual contributions within the category of community-organized pledges is not known, due to a lack of record keeping at the time.

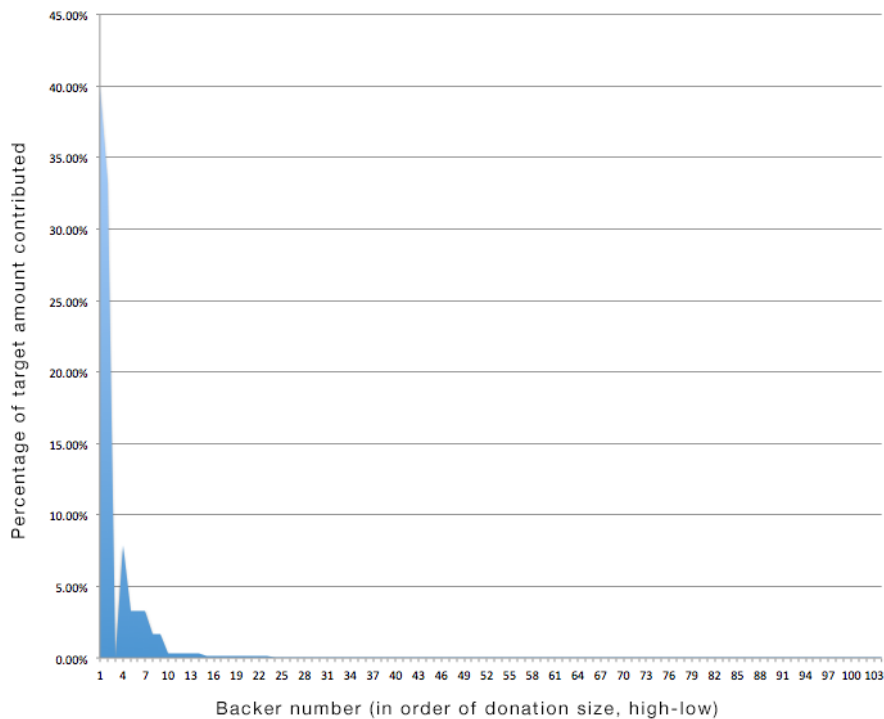
3.1.3 An Exercise in Attention, and a Stage-Setter for Spacehive

The major contribution made by crowdfunding to the Glyncoch project was, according to its organizers, publicity. By connecting an otherwise under-resourced community to national media and social media personalities, the crowdfunding process enabled the group to capture the attention of corporate philanthropists who ultimately funded the majority of the funding gap. As Addiscott explains:

I think because there was so much publicity around the project, people bought into it. Without the promotional side of it, for me to do that from my job perspective is difficult. We needed the likes of Spacehive to give us those connections in avenues we wouldn't have had. There's no way I would have gotten Steven Fry to tweet. (*Glyn Coch Community Center Interview* 2013)

The backing of Fry, and subsequently corporate sponsors, came after the community had already demonstrated significant local support for the project, though. In this sense while the community did not exercise direct financial agency over the project, the crowdfunding campaign provided a means for it to collectively articulate demand to external audiences, which itself could be seen as a type of civic agency.⁹ This ability to connect with these audiences was critical, since there were insufficient resources in the community to fill the funding gap. The median donation to the Glyncoch campaign was £10, but these small contributions were ultimately outweighed by larger, corporate ones, as the figure below, of contributions arranged by size in descending order, shows.

Figure 3-2: Pledges to the Glyncoch campaign by amount



Despite the imbalance between large and small donations to the campaign, the two types of funding sources do seem to be mutually dependent. It is unlikely that

⁹See Chapter 4 for an exploration of different types of agencies exercised in civic crowdfunding projects, and Chapter 5 for a discussion of the concept of “civic roles” played by crowdfunding.

the Glyncoch would have been able to attract the interest of corporate donors without the combination of network and exposure provided by the Spacehive campaign and demonstrated grass-roots support for the project.

The pattern of attention followed a path that scholars are beginning to establish as typical: social media attention provided an impetus for national broadcast media coverage, broadcast media acted as an amplifier and ultimately proved to be the most significant driver of attention towards the campaign (Graeff, Stempeck, and Zuckerman, 2014). It's questionable whether crowdfunding campaigns will be able to attract backing from prominent backers who have only a loose connection or interest in the project in the future. The novelty associated with civic crowdfunding campaigns will surely diminish over time, as will their newsworthiness to broad audiences. This raises questions about the sustainability of projects in under-resourced communities such as Glyncoch, which depend on attracting wider audiences in order to succeed.

Although Glyncoch may have benefited from being the first project of its kind in the UK, it also started civic crowdfunding on a strong footing since it was fulfilled on time and within its budget. The community center was one of the earliest built environment projects in the dataset to be fulfilled, which is significant since most crowdfunding sites offer few intrinsic protections to backers to ensure projects are delivered. The center was built during the summer of 2012 and by 2013 was operating a full program of community events.¹⁰ Its legacy has not been, to date, to encourage further crowdfunding campaigns in Glyncoch — there have been none since — but as Spacehive's first public success, it should be credited with catalyzing the growth of the platform. Spacehive has funded 30 projects and has 189 projects in either design or fundraising stage on its platform.¹¹ The case has also been cited

¹⁰Site visits to the center were conducted on May 22 and 23, 2013.

¹¹Figures correct on February 24, 2014.

by US-based platforms in pitches to investors.¹²

3.2 Case Two: Sustain Kansas City B-Cycle

“Sustain Kansas City B-Cycle” is one of the most ambitious civic crowdfunding campaigns staged to date, and is significant because of its success in leveraging institutional donations. It did not meet its targets in amount raised or volume of engagement generated, but its failure in those respects reveals tensions and challenges that civic crowdfunding campaigners are likely to encounter in the future as they seek to expand in scale and reach. The campaign was run on the Neighbor.ly platform between August and October 2012 to raise funds for a public bikesharing scheme for Kansas City, MO and was managed by Bike Share KC, a registered non-profit that was created to own and operate the scheme.

Bike Share KC is supported by BikeWalkKC, a registered non-profit that advocates for cyclists and pedestrians in the city. The funds raised for the bikesharing scheme and its operating costs are managed solely by Bike Share KC. The scheme had received seed funding and was installed a month prior to the crowdfunding campaign, which was marketed as an attempt to raise funds for operating and expanding the bikeshare scheme. The campaign aimed to raise a total \$700,000 including funds committed prior to August 2012, and was successful in raising a total of \$419,298. However, most of these funds were raised from donations of \$5,000 and above, and the campaign failed to gather a significant number of small donations.

3.2.1 A Challenging City for Cyclists

Kansas City has long been a challenging city for bicycle advocacy groups. It was placed last out of 50 cities in a study of biking accessibility by the Census Bureau

¹²Several platforms have privately thanked Spacehive and mentioned their use of the Glyncoch case.

in 2007, as noted by Eric Bunch, creator of the blog KCbike.info and later the executive director of BikeWalkKC (Bureau, 2007; Bunch, 2007). Bunch and others had organized group rides and social events and campaigned for investment by the city in resources to support bikers, but concerted efforts to bring a public bikeshare scheme to Kansas City began in 2011, shortly after the official launch of BikeWalkKC in March of that year. Throughout its first year the group met with councilmembers and potential funders seeking support for a bikeshare scheme. On May 6, 2011, BikeWalkKC showed the first demonstration bike station in the city. On October 17th, members of BikeWalkKC published a Request for Proposals to invest in a bikeshare scheme, and on November 23rd Bike Share KC was incorporated as an independent non-profit entity. Bike Share KC signed a seed funding agreement with the insurer Blue Cross Blue Shield Kansas City on January 6th, 2012, which funded a study of potential sites for bikeshare stations and the creation of a business plan.

In parallel with this effort, Bike Share KC continued to lobby local legislators to support the idea. Sarah Shipley, one of BikeWalkKC's co-founders had significant experience of lobbying on similar issues, having worked as a marketing and events manager at Rails to Trails Conservancy in Washington DC for four years and the League of American Bicyclists for three years. The organization argued that the summer of 2012 was an opportune time to pilot a bikeshare scheme because the upcoming All Star baseball game at the Kauffman Stadium on July 10 would bring thousands of tourists whose needs could be well served by bikesharing. This argument was attractive to lawmakers, who had sanctioned a 0.375 percent increase in sales tax to fund a \$250 million renovation of the stadium and were betting on the game to be an economic boost to the city. The bikeshare scheme was a way to move tourists around the city efficiently and presented Kansas City as a modern, visitor-friendly destination. On January 26, 2012, the city council passed a resolution praising the idea of a bikesharing scheme based on a public-private partnership and "with little

or no cost to the city.” The city also committed to increasing the number of bike lanes available in the city. Following the passing of the proclamation, the planning department agreed to waive the permitting fees, which would otherwise have totaled close to \$75,000, according to Bike Share KC.

Following several months of work on the business plan, the group held a second demonstration of a single station on April 6. One month later, Blue Cross Blue Shield Kansas City signed as a title sponsor of the scheme, securing enough funds to place an order for the first twelve stations and bikes. Bike Walk KC was then able to place its order for bikes and stations from BCycle, a Madison, WI-based, public bikesharing joint venture between the healthcare company Humana, the advertising agency Crispin Porter + Bogusky and Trek Bikes, a major bike manufacturer.¹³ With an expected manufacturing turnaround of 3-4 weeks, this meant that Bike Share KC would have a little over a month to install the stations in time for the All-Star Game. Despite these time pressures, they were successful, thanks to hundreds of hours of volunteer time. The first 90 bikes used by the scheme were assembled from BCycle kits by volunteers at two sessions organized by Bike Share KC, on June 6 and 12.

On July 3rd, the first bike stations were installed, and the baseball game ultimately drew a sold-out crowd of 40,000. In the first month, the scheme was used by more than 1,200 riders who made 4,000 trips. But the future funding of the scheme was unclear and the scheme had not achieved the widespread visibility its founders had hoped for. While Blue Cross Blue Shield’s contribution would fund the scheme for up to three years in its limited pilot form, Bike Share KC and BikeWalkKC’s founders felt that the scheme would need to raise more capital to be sustainable and build towards further expansion.

¹³BCycle currently provides equipment to bikesharing schemes in 23 US cities, 20 of which are public systems.

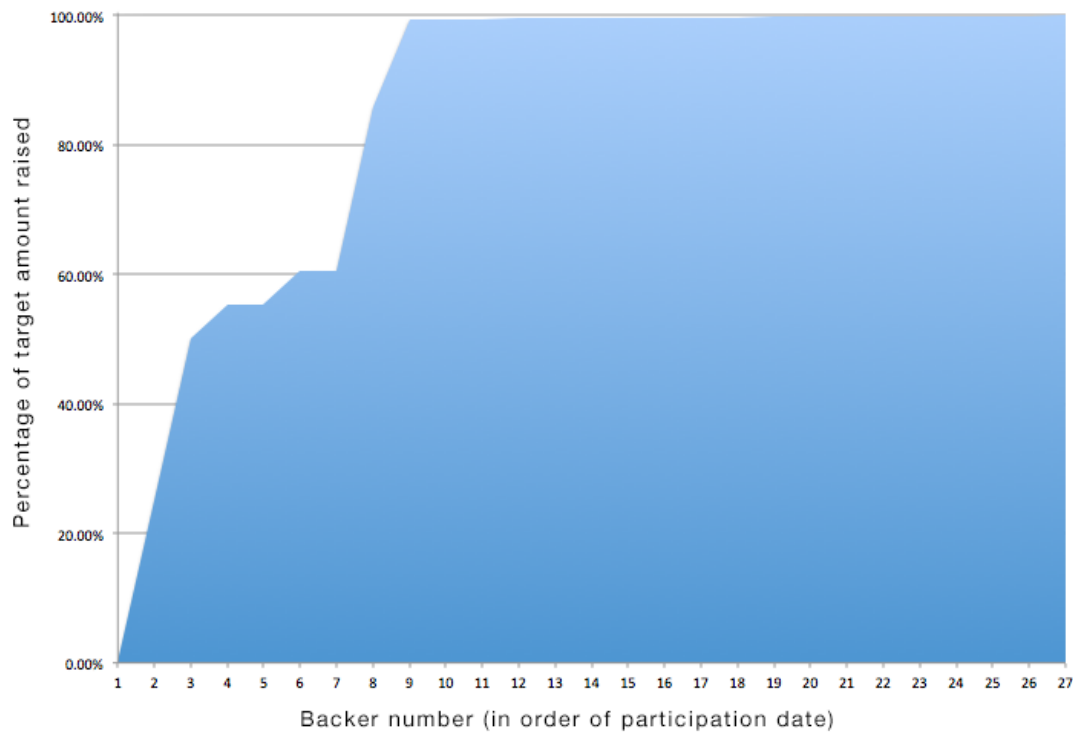
3.2.2 Hitting the Highs, Struggling with the Lows

BikeWalk KC opened their campaign on Neighbor.ly on August 15, 2012. At the time the target of \$700,000 reflected the \$319,523 that had already been committed by Blue Cross Blue Shield. In the following two months, the campaign attracted a further 27 backers, 6 of whom were institutions - Cafe Gratitude, Lockton, MRI Global, Olin School of Business at Washington University in St. Louis, Ringoti, River Market Community Association - and two of whom who opted to remain anonymous. Subtracting the funds donated by Blue Cross Blue Shield, the campaign raised \$99,775 from 27 backers. Most contributions (20) were recorded in July — 17 were made in the opening week of the campaign — with 3 in August and 2 each in September and October.¹⁴ The pattern of the donations over time is shown in Figure 3-3. While the median contribution was \$60 and the mode was \$10, the vast majority of the donations (\$99,000, or 99.2%), came from six backers who gave \$5,000 or more. The 21 remaining backers contributed \$775, 0.78% of the total. Pledges were highly localized to Kansas City. Sixteen of the 20 backers who gave their location were based in the city, and only one of the remainder was based outside of the states of Missouri and Kansas. The campaign closed on October 12, 2012, with a total of \$419,298 raised for the project overall. The total was 59% of the \$700,000 goal but was enough to pay for 12 bike stations.

The Sustain Kansas City B-Cycle campaign page follows most of the conventions associated with contemporary crowdfunding campaigns. The page includes a one-minute video in which the founders, Shipley, Eric Bunch and Eric Rogers, make the case for the bikeshare scheme and ask supporters to donate. During the campaign period, backers were offered 17 different rewards at different levels. The most popular reward claimed was a one-week pass for the bikeshare scheme, at \$10. The

¹⁴Donation data taken from Case Study Backers Dataset (CCFD5) in Appendix: Data Collection and Dataset Descriptions, p. 147.

Figure 3-3: Pledges to Sustain Kansas City B-Cycle as a percentage of the target, in chronological order



highest-value rewards claimed were 4 of the 12 spots at \$25,000 for donors to place their logo on the end cap of a bike-sharing station for one year. Perhaps the most surprising difference between BikeShareKC’s campaign and comparable campaigns, though, is the lack of social media engagement. While several scholars have traced connections between the success of crowdfunding campaigns and the frequency and nature of social media updates, the Bike Share KC campaign did not use social media in any significant way (Greenberg et al., 2013). During the period of the campaign, BikeWalkKC made 21 Facebook posts and 41 Tweets. None of these postings mentioned the crowdfunding campaign.¹⁵ While BikeWalkKC’s social media following is relatively modest — it currently stands at 1,359 Facebook likes and 1,509 Twitter followers — the lack of updates is a surprising omission. Shipley says that she focused

¹⁵These results can be reproduced using the Twitter search string “<https://twitter.com/search?q=from%3Abikewalkkc%20since%3A2012-08-12%20until%3A2012-10-15&f=realtime>”.

her outreach efforts on local bloggers, email blasts and offline interactions such as neighborhood groups, council meetings and other public meetings related to community development, and estimates that she spoke about the campaign approximately once a week in some form (*BikeWalk KC interview 1* 2013).

Given the group's earlier success in organizing 100 volunteers to help assemble bikes, it seems inaccurate to suggest that the campaign lacked support in the community. There was, however, clearly a failure to channel this support into small-value online donations. This may be explained partly by the lack of social media presence, and also the difficulties of processing payments at in-person events: Neighbor.ly does not offer a mobile application, which prevented the campaign from collecting small donations at social events in the biking community.

The imbalance between large-donor donations and small-dollar ones in the campaign, and the paucity of small-dollar donations overall, points to the conclusion that, despite its success in raising an additional \$99,775, the Bike Share KC campaign fails to demonstrate the potential of online crowdfunding campaigns to widen the donor base and increase participation in the funding of civic projects. This may partly be explained by the team's own skepticism about the potential of crowdfunding and inexperience in the method at the time. Shipley says that she focused her attention on face to face, rather than online donations, drawing on her experience of traditional capital fundraising campaigns.¹⁶ She admits that prior to the campaign she was "ignorant of what crowdfunding was" but was interested in using the Neighbor.ly platform due to its local proximity and potential to top up Bike Share KC's existing fundraising efforts. (*Bike Walk KC interview 2* 2014).

At the beginning of the campaign, I was targeting the highest donors first, which as a traditional fundraiser, you're supposed to. For non-traditional fundraising like crowdfunding, I now know that you need to target the largest overall groups first. That was my mistake from the beginning.

¹⁶The campaign page on the Neighbor.ly site describes the effort explicitly in those terms: "We need your support to finish our capital campaign".

(BikeWalk KC interview 1 2013)

Shipley's focus on larger donors, while in her view mistaken, made her aware of an important tension between existing fundraising practices and crowdfunding, particularly in the civic and non-profit space: that larger donors are skeptical of giving to crowdfunding campaigns. None of the six large donors who contributed during the campaign period did so via the Neighbor.ly website. There are several possible explanations for this reluctance to participate, including but not limited to: the payment processing and platform fees were unattractive to donors; donors did not want their contributions to be made public, and donors were cautious about being associated with a nascent phenomenon that they feared might disrupt or even cannibalize existing fundraising efforts. Shipley says that the donors she worked with expressed a combination of these motivations. For some, she says, the process required to approve a public corporate donation was felt to be too lengthy, and in some cases would take longer than the two-month lifespan of the campaign. In almost all cases, she says larger donors "just didn't get the idea of crowdfunding. It didn't resonate with them." *(BikeWalk KC interview 1 2013)* As a result the campaign was not in most cases able to benefit from further publicity through its sponsors, who might ordinarily have been expected to promote the campaign through their own support networks.

3.2.3 A Beacon for Future Campaigns

The failure of the BikeWalkKC campaign to either reach its target or garner a significant number of small-dollar donors may be attributed partly to the lack of social media outreach and the reluctance of larger donors to participate in the campaign either directly or more publicly. Had the campaign's organizers been able to align these backers with the aims of the campaign more successfully, they may have been able to persuade them to offer their donations as matching funds, which might have been an additional stimulus for individual donations. Nevertheless, Bike Share KC

was also an extremely ambitious campaign: even discounting the funds donated by Blue Cross Blue Shield, the target of close to \$380,000 made it by far the largest crowdfunding campaign hosted on a civic platform at the time.¹⁷ Moreover, at the time the campaign had opened, only 24 Kickstarter projects had raised more than \$500,000.¹⁸ Had Bike Share KC been posted on Kickstarter in 2012, a year in which the platform funded 18,109 projects, it would have been among the top 1 percent of projects by size. Instead, the project was posted on Neighbor.ly, a site that was yet to fund its first project.

The fact that the campaign was a “flexible funding” project that allowed Bike Share KC to receive the funds raised despite not meeting their \$700,000 target meant the campaign could easily be presented as a success. The volunteer effort to assemble bikes showed the group had the ability to marshal sufficient resources and support to realize its immediate goals, even if the long-term viability of the scheme remained elusive.¹⁹ The bikeshare scheme was popular enough to be considered a success, too: in 2012 and 2013, riders made 100,000 trips on Kansas City BCycle, according to internal data.

The twin success of the bikeshare scheme and the apparent success of the crowdfunding campaign was important for several reasons. First, it built visibility for the bikeshare scheme and Neighbor.ly itself, which could be leveraged in future campaigns. In July 2013, the 816 Bike Collective, a Kansas City-based bicycle repair and training center for underserved youth, ran a crowdfunding campaign to complete the refurbishment of its new buildings, in which they partnered with Bike Walk KC

¹⁷As discussed in Case One, Glyncoch Community Center had an overall target of £792,000 (\$1.3M) including previously committed funds. £40,000 (\$66,800) of the total was raised during the crowdfunding campaign.

¹⁸In February 2012, six months ahead of the Bike Share KC campaign, Kickstarter hosted its first one-million-dollar campaign, the Elevation Dock.

¹⁹IOBY and Spacehive encourage campaigns to solicit volunteers for campaigns through their platforms. IOBY founder Erin Barnes encourages campaigns to think of the crowd as a source of labor and skills as much as funding, which she terms *crowdresourcing*. See Chapter Four for a discussion of IOBY’s approach.

on rewards, offering daily and annual memberships to backers (Collective, 2013). The campaign collected \$15,593 from 202 backers, short of its \$82,816 target, but sufficient to continue some of the refurbishment work. Donor data show that almost a quarter of backers, 46, claimed rewards related to the Kansas City bikeshare scheme, contributing \$3,463 in total.²⁰ Second, the apparent success of the Bike Share KC campaign enabled Shipley and her colleagues to build trust with larger donors for the future expansion of the scheme.

Traditional fundraising can be so secretive that some potential large donors are uncomfortable putting their name out there, in public. Now that we've done one successful crowdfunding campaign, lots of the people I talked to are more comfortable with the idea. (*BikeWalk KC interview 1* 2013)

In January 2014, Bike Share KC launched another crowdfunding campaign on Neighbor.ly to extend the scheme, and this effort won investment of over \$300,000 from three major donors: the Federal Highways Commission, the Kaufman Foundation and the Nelson Atkins Museum of Art. The campaign raised a further \$6,930 from other donors on the platform.

As an early and highly ambitious example of civic crowdfunding, the first Bike Share KC campaign is instructive as much for its failures as for its successes. The case highlights the tension between existing fundraising practices and crowdfunding, and the often divergent outreach strategies that are required by the two approaches. While crowdfunding was not a critical ingredient in the initial creation of a bikeshare scheme, its importance as a signaling device has grown since the first campaign. Bike Share KC does not expect to continue to finance the bikesharing scheme indefinitely through crowdfunding and grants, but aims to extend it as far as possible throughout the city and demonstrate public demand, with the ultimate intention of persuading the city to contribute to its operating costs. The likelihood of success is extremely difficult to predict based on available data. Nevertheless the group's goal suggests

²⁰Neighbor.ly shared backer data related to this project in anonymized form.

that the first campaign, and its successor, should be interpreted not as an attempt to fund civic infrastructure but rather as a civic engagement and lobbying device — an attempt to build an alternative infrastructure that exerts influence on existing institutions.²¹

While the outcomes of “Sustain Kansas City B-Cycle” in grassroots fundraising were disappointing, its significance as an early movement in civic crowdfunding in Kansas City may be that it foreshadowed more effectively run campaigns that have emerged since, benefiting from Neighbor.ly’s increased visibility, more experienced campaign teams, and the growth in awareness of civic crowdfunding more generally.

3.3 Case Three: Pimp My Carroça

3.3.1 Background

Mundano, a 27-year-old artist from Sao Paulo, began painting the carts belonging to waste pickers in his home city in 2007. He wanted to give visibility to the workers (*catadores*), who make a living picking up trash and recycling it. Sao Paulo recycles less than 1% of its 17,000 tonnes of daily waste, and the *catadores* are responsible for close to 90% of the recycling activity (Offenhuber, 2012; Viva, 2012). Mundano observed that *catadores* are either ignored by the rest of the city, or face complaints or even abuse from drivers and police officers, who blame them for blocking traffic. As an artist, his intervention was to befriend a waste picker and offer to paint his cart, as a way of making it more visible to traffic around and giving each person he worked with an individual identity.

Over five years he painted 160 carts in cities around Brazil (Mundano, 2012b). The murals often contained political messages, such as “One catadore does more

²¹See 1.5, “Crowdfunding as an infrastructure”.

than an environmental minister” (Viva, 2012) and “*Se eu pudesse eu reciclava os politicos*” (If I could I would recycle the politicians). His primary intent, though, was to increase public awareness of the *catadores* and the contribution they make to the sustainability of Brazilian cities, with messages such as “*Eu carro no pollu*” (My car does not pollute) and “*Eu reciclo, e voc?*” (I recycle, what about you?) (V2, 2009).

These people... support their families through a living based on our waste. So I started a project to give them visibility, self esteem and recognition... Youre probably thinking: “Why are they invisible?” They work in the middle of the city, silently. They do work for everybody and nobody notices them. Or if they do, they say, “theres a homeless person.” Its totally wrong... Theyre employed people, working honestly. I painted 160 carts in different cities, putting local messages to make people think about this problem. This is my life’s mission. (Mundano, 2012b)

In early 2012 Mundano decided to create a crowdfunding campaign in order to spread his movement and attract more collaborators from the general public in his home city. It was named *Pimp My Carroça* (Pimp My Wagon, or PMC), a name inspired by the MTV series “Pimp My Ride”, in which contestants have their cars refitted and redecorated by professionals. Mundano worked on the campaign with three other local graffiti artists with whom he runs *Parede Viva* (Living Wall), a graffiti collective and education program. The group’s goal was to raise BRL 20,000 (\$8,511) to fund supplies to paint 20 waste pickers’ carts at a public event. The *catadores* would also be given free medical consultations from local doctors who had volunteered their services. They listed the project in the “Art” section of the Catarse platform, which had been founded in Sao Paulo one year earlier. As is common to crowdfunding campaigns, *Parede Viva* created a short video explaining the story of the *catadores* and their motivations for the project. They posted a budget itemizing how the the BRL 20,000 would be spent (Mundano, 2012a), including a plan to make a documentary film about the movement and the public art event. As rewards to backers, they offered credits to backers in the documentary, vinyl stickers, t-shirts, recycled bottles and

artwork.

3.3.2 Reaching the Target, and Accelerating Beyond

The PMC campaign opened on March 27, 2012, and during its first five days raised almost a quarter (22%) of its target (See Table 3.3.2 and Figure 3-4).²² During this time PMC gathered donations at a rate of 34.8 new backers per day, with a median donation of BRL 20. This was the most rapid period of backer acquisition in terms of numbers, earning the campaign BRL 1,714 per day, to a total of BRL 8,570 by the end of the month. The rate of new supporter acquisition slowed during April, to 8.76 per day, although the mean donation rose slightly, to BRL 30. By the end of April the campaign was just over halfway to its target of BRL 38,200. On May 3 the campaign received by far its biggest donation up to that point, of BRL 3,000, from a backer in Rio de Janeiro. It was the third-largest individual pledge the project received. A week later, two days before the deadline of May 11, the campaign met its target after the 704th backer pledged BRL 100. Up to this point, the median donation had remained at BRL 30. However, shortly after the original target was met, the rate of backer acquisition rose sharply, to 29 backers per day. The median donation jumped to BRL 50 during this period, and the campaign's average raise per day rose to BRL 8,556 thanks to the two largest donations given to the campaign — BRL 10,000 on May 10 and 7,005 on May 11, both from Sao Paulo-based backers.

In the three day post-target period, the campaign raised BRL 25,669, more than it had raised in March and April combined.²³ While the three largest backers — two of which participated in the final three days of the campaign — accounted for 31% of the overall raise, the prevailing pattern of pledges is a fairly consistent pace of small donations clustered around BRL 30. This points to a very successful outreach

²²Donation data taken from Case Study Backers Dataset (CCFD5) in Appendix: Data Collection and Dataset Descriptions, p. 147.

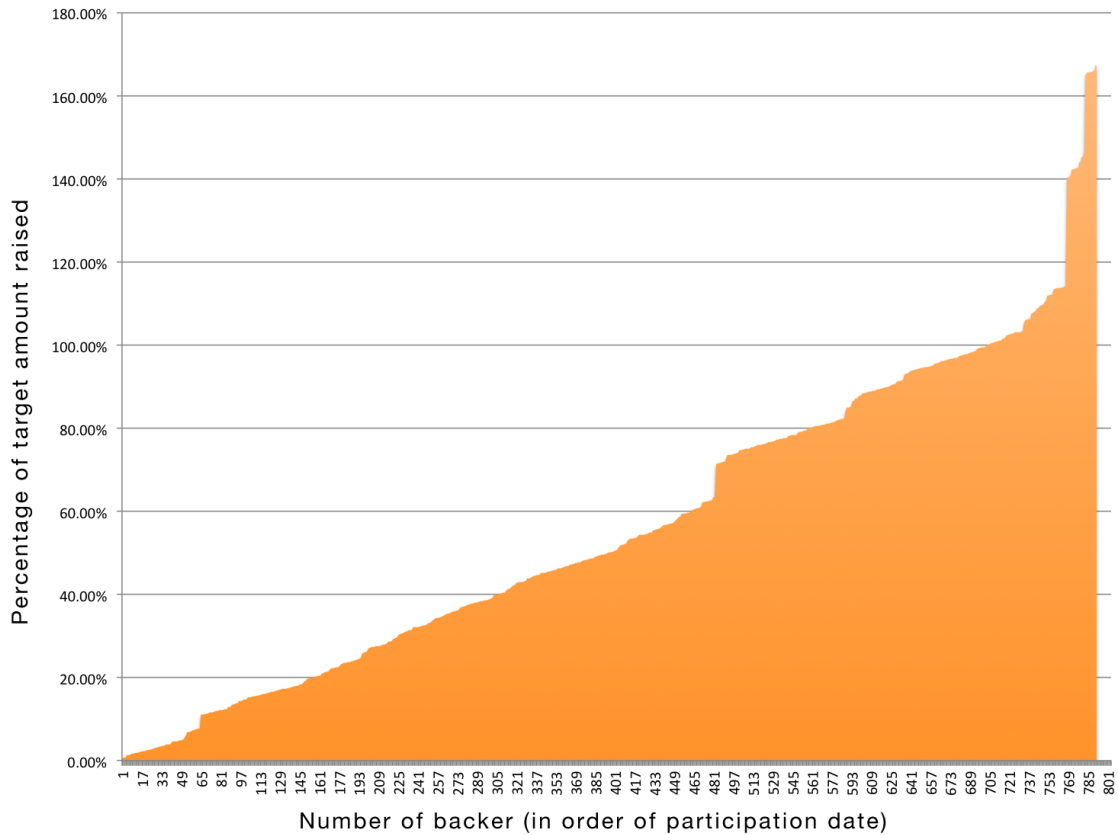
²³One backer was recorded on May 14 due to a delay in payment processing.

Table 3.2: Pledges to Pimp My Carroça by date

Date	Amount Pledged (BRL)	% of Target Pledged	Median Pledge	Mean Pledge	StDev
March 27-30	8570	22.40%	20	49.25	101.32
April 1-31	12783	55.90%	30	48.6	55.73
May 1-9	16928	100%	30	63.4	197.57
Post-target	25669	167.40%	50	291.69	1288.79

strategy by the PMC campaign. With that in mind, it is notable that close to half of the campaign’s 792 backers, 346, were first-time users of the Catarse platform.²⁴

Figure 3-4: Percentage pledged to PMC by number of backers



During the campaign PMC’s outreach efforts were focused on email outreach, in-person communication and the social media accounts of the members of Parede Vida (PV). Mundano tweeted 93 times about the campaign on his Twitter handle

²⁴The data used to analyze pledging amounts and behavior was anonymized; the Catarse site shows backer identities where available, but does not reveal individual backers’ pledge amounts. In order to preserve the privacy of that information, no comparison of the two datasets was made. The past activity of the 36 backers who chose to remain anonymous is unknown.

mundano.sp, receiving mentions and retweets from several Brazilian celebrities with large Twitter follower bases, such as Sergio Marone (399,000) and film director and television host Marcelo Tas (5,000,000).²⁵ Mundano gave two TED talks and numerous other public appearances, many of which are not documented on social media. The group posted one update to the Catarse platform itself, on May 8, announcing that Marcelo Tas supported the campaign, attaching a picture of Tas holding a PMC t-shirt. PMC did not create a Facebook page until May 13, two days after the campaign ended. It has since attracted more than 10,000 Likes (Carroca, 2012).

The reach of the campaign was highly localized: Four out of five backers (631) listed their address as being in Sao Paulo. Nevertheless, the project did receive nationwide attention and attracted backers from 17 of Brazil's 27 states. The six largest states donating to the campaign were Sao Paulo, Rio de Janeiro, Rio Grande do Sul, Parana, Minas Gerais and the Distrito Federal, who accounted for 93% of all backers (737). Perhaps unsurprisingly, these six states are five of the country's wealthiest, with a GDP per capita 60% or more higher than the national median.²⁶

3.3.3 Building a Movement and Creating a Successor

The PMC campaign was a great success in terms of surpassing its goal and achieving broad-based, small-dollar support for a civic issue. The large proportion of first-time crowdfunders is an encouraging sign of engagement. On June 5th, over 1,000 supporters of the campaign gathered in Sao Paulo for the "pit-stop" event, at which Mundano and the PV team painted the carts of 50 waste pickers. Following the event, waste pickers and their supporters marched to the center of Sao Paulo to hold a rally, at which they presented a manifesto calling for labor protections for

²⁵The social media analytics service Topsy recorded 100 mentions of the phrase "Pimp My Carroça" during the campaign, citing Marone and Tas as two of the biggest drivers of posts featuring that string, alongside Mundano. See <http://topsy.com/s?q=%22pimp%20my%20Carroça%22&mintime=1332867659&maxtime=1336755619>.

²⁶Santa Catarina has the fourth-highest GDP per capita (BRL 26,011) but contributed only 3 backers. The median GDP per capita is BRL 14,787.

waste pickers (Viva, 2012). The group was invited to participate in several events and exhibitions — *Setembro Verde* (Green September) in Matilha Cultural, *Conexo Cultural So Paulo* (Cultural Connection) at the Museum of Image and Sound in July 2012, and the Fortaleza-based music festival FMF (*Feira da Música de Fortaleza*). As planned, the team made a short documentary film, which was released and circulated online.

In September 2013 PV opened a second PMC crowdfunding campaign on Catarse, for *catadores* in Curitiba. It raised BRL 44,888, 117% of its target, from 502 donors. Backers for the campaign were split between Curitiba’s state, Parana, and Sao Paulo, which contributed two-fifths of the backers. The Curitiba “pit stop” event attracted 29 *catadores* and their families, 150 volunteers and doctors.

PMC Sao Paulo and its Curitiba spinoff are effective examples of a tactical civic, urban interventions that can attract broad-based support from crowdfunders. PV has been able to grow and retain its digital community since the first campaign, evidenced by its 10,000 Facebook followers — a platform the group hadn’t even used collectively before the Sao Paulo campaign. Although the campaign did not elicit a public response from policymakers, this was not the campaign’s primary intended output. While Mundano and PV are happy to make rhetorical challenges to the political establishment, their theory of change is centered on public engagement and education — changing the discourse around waste pickers. In this respect the campaign can claim success in having built a movement around sustainability issues, resourced by crowdfunding. PV continues to use the PMC Sao Paulo Catarse page as a place to engage supporters and has posted eight updates to January 2014, including news from Sao Paulo and Curitiba. Their latest update suggests that they are considering crowdfunding further events for *catadores* in other Brazilian cities in 2014.

We once again appreciate your involvement... continue watching our movement, which only continues to grow and has no ambition of stop-

ping anytime soon.²⁷ (Carroca, 2012)

3.4 What the Three Edge Cases Suggest About the Future of Civic Crowdfunding

The three cases described above illustrate three functions that civic crowdfunding can perform. It can be a form of community seed funding for a project; it can bring large organizations into the fundraising process alongside individuals; and it can build scalable movements. Few campaigns have performed these functions to the extent and scale that Glynncoch Community Center, Sustain Kansas City B-Cycle and Pimp My Carroça did, and none that I have encountered have performed all three simultaneously at scale. This is because civic crowdfunding is a challenging process for campaign teams. Running a successful campaign is a time and resource-intensive process and usually depends at least in part on volunteer labor that may be difficult to quantify.²⁸ A successful crowdfunding campaign also requires a range of media and outreach strategies, a diverse base of supporters and the careful cultivation of momentum and attention over the course of the fundraising period.

The Glynncoch and Kansas City cases suggest that large-scale civic crowdfunding campaigns require the participation of institutional donors, which raises questions about the agency of communities to realize projects alone. Is the primary role of communities to raise large sums, or rather to articulate demand, provide seed funding and labor for an idea and attract the attention of institutions? There are as yet no examples of civic crowdfunding campaigns on platforms created since 2008 that have raised more than half a million dollars without the participation of institutional donors. This is not in itself an indication of the failure of civic crowdfunding, since

²⁷Original text: “Agradecemos o envolvimento... continuar acompanhando o nosso movimento, que felizmente s cresce e no tem ambies de parar to cedo!”

²⁸See Hui et al (2014), discussed in 5.2.

infrastructure projects are often based on an unequal mix of public and private funding, but it does indicate the need for a dialog between communities and institutional donors. Platforms that want to realize larger projects therefore need to support this dialog and should consider providing a *match-making* service between institutional donors and projects, enabling both sides to find appropriate partners. Furthermore, the importance of volunteer labor provided to campaigns and resulting projects should not be underrated, since it creates opportunities for very broad participation in civic crowdfunding that are not constrained by financial resources. This is a common pattern found in the broader non-profit sector.

Finally, the participatory impact of civic crowdfunding is not limited to the donations given to a single campaign. The successes of PMC and Sustain Kansas City B-Cycle bolstered the community movements both groups had built and provided a context for further engagement between organizers and their supporters. Mundano leveraged this opportunity most successfully by turning PMC into a directly replicable campaigning model and developing a social movement. Meanwhile Bike Walk KC used the success of the pilot and its donor engagement as the foundation for more ambitious donor acquisition for its second campaign. The contribution of the Glyncoch campaign to community participation in the neighborhood is the most difficult to quantify since GCRL has not held any further fundraising campaigns, a somewhat ironic consequence of the campaign's success realizing a self-sustaining resource. The long-run impact of crowdfunding on civic engagement and participation is difficult to estimate at this early stage, but the cases suggest that strengthening is at least possible, if not inevitable.

Chapter 4

Three competing visions of civic crowdfunding

The rise of civic crowdfunding has prompted a wide range of competing visions of what it represents and how researchers can best understand its underlying dynamics and longer-term implications. This chapter draws on literature from across the fields of urban planning, sociology, philanthropy and political economy in order to address this question, applying theoretical viewpoints to projects hosted on online crowdfunding platforms. I consider three possible theoretical framings that help contextualize field and to draw out its potential consequences, and use a discourse analysis of campaign materials related to 274 projects from four civic crowdfunding platforms — Citizeninvestor, IOBY, Neighbor.ly and Spacehive — to support claims about how the three framings are used.¹ The analysis does not cover the views of donors, but rather focuses on project creators and the platforms who host that activity.

First, we may consider civic crowdfunding an expression of community agency, a monetary extension of the participatory planning movement that has developed over several decades. Does the introduction of small-money influence into the system rep-

¹See “Discourse Dataset (CCFD6)” in Appendix: Data Collection and Dataset Descriptions, p. 147.

resent a further shift of the locus of power towards communities, in the way envisaged by Arnstein and others, and does it naturally dovetail with participatory budgeting initiatives being tried in the US and elsewhere? (Arnstein, 1969) Can it ever be a form of community self-organization of the kind envisaged by Castells, resisting the priorities of power holders, or a form of collective problem solving? (Castells, 2012)

Second, I analyze civic crowdfunding as evidence of the triumph of individual agency, the social form that Neff and Hacker call a “venture society”, in which individuals assume increasing levels of risk and embrace the ubiquity of finance in exchange for greater access to capital and opportunities (Neff, 2012; Hacker, 2006). Is the use of ownership rhetoric in some campaigns evidence that crowdfunding donors are behaving as investors and entrepreneurs? How does the individual framing reflect or mask inequalities in opportunity and capacity to participate? Does it create hype and attention around “venture society” while operating like a more traditional form of fundraising?

In framings one and two I consider the extent to which civic crowdfunding is either a community or an individual pursuit along two dimensions: the nature of a project’s backers’ relationships to each other, and their expectations and motivations for action. My first framing considers civic crowdfunding as a form of co-operative social movement, while the second discusses it as a platform that supports certain types of personal agency. Put another way, framings one and two contend with the question of what kind of social capital is being used and created in civic crowdfunding. Crowdfunding directly supports the idea that social and economic capital are homologous — sociologists’ primary motivation for developing the concept — but is it Coleman’s version of collective social capital, that creates a shared resource, or is it the use of ties by individuals to get things done? (Manza, 2006; James S. Coleman and James Samuel Coleman, 1994)

In my third framing, I consider an alternative explanation for the rise of civic crowdfunding: the erosion of public institutions. I discuss the political economy of the subgenre, weighing the argument that it is a response to, and encourages, the decline of municipal spending and faith in government services. Lange and Brabham suggest, for instance, that crowdfunding is driven by, and encourages, the shrinkage of public goods and a shift to event-driven priority setting that may not provide for the longer-run health of communities (Lange, 2012; Brabham, 2009). But the inability or unwillingness of institutions to solve particular problems or serve certain communities may also lead to the conclusion that crowdfunding is an additive innovation rather than a replacement for existing structures.

This discussion is intended to provide a theoretical grounding for the field that illuminates the range of possible visions of crowdfunding that exist rather than to favor one over the other. In so doing it makes the case for as-yet unexplored empirical, qualitative research into civic crowdfunding projects and platforms to develop our understanding of how individual projects advance the visions described and create new hybrid forms.

4.1 Civic Crowdfunding as Community Agency

The first framework from which I examine civic crowdfunding posits that it is an expression of community agency. This approach works in two ways: 1) that backers of projects share common goals and interests, that is, that they are behaving as *communities*; and 2), that projects themselves increase communities' ability to influence the development of the built environment and the planning process. Within this framework, crowdfunding is best understood as a form of community organizing and collective action, and campaigns should be analyzed in terms of the strength of the groups they produce and whether or not the goods resulting benefit those groups

as intended. To analyze the extent to which a sense of community is a critical part of the DNA of civic crowdfunding, we must define the type of community of which we're seeking evidence.

Brint (2001), revisiting the long-debated sociological problem of what constitutes a community, suggests there are five basic types:

1. Communes and collectives: people who have frequent in-person interactions, hold some common beliefs and likely live in a common geographic area)
2. Natural communities of place: people who have frequent in-person contact and are associated by taking part in shared activities in a common geographic area)
3. Elective communities: people who choose to associate, usually in person, according to shared activities or beliefs)
4. Imagined communities: people who share ideas and beliefs but do not have regular in-person contact)
5. Virtual communities: people who share common activities but rarely meet in person).

For Brint, communities are distinguished by whether they are based on beliefs or activities, and whether members' primary means of interaction is in person or remote. Civic crowdfunding complicates both distinctions, since it involves the physical geography of project locations - where a project will be built - and the geography or network of people who support it. For crowdfunding to be an authentic expression of community, it should reflect ties that individuals feel to a larger whole and a desire to participate in a project for reasons beyond the benefits they may accrue as an individual.

Brint's community types 1 and 2 — collectives and communities of place — are evident in a large number of civic crowdfunding projects. The Spacehive initiative “Transforming Tottenham”, is a curated page on the site that displays projects that benefit the North London neighborhood. The page was started by Kay Horne, a

supermarket manager from another area of Greater London, Waltham Cross. Horne was seconded to the area as part of a pilot by the non-profit organization Business in the Community, which funded 20 private sector managers in 2012 to work on community projects in deprived neighborhoods in the UK.² The Spacehive page was one of Horne's initiatives, and has raised £15,853 (\$26,000) across four successful campaigns: a community garden, a playground slide, a public art memorial and an art exhibition. Two were unsuccessful, one is currently live. The largest successful campaign "Global Garden, Global Kitchen", was for a community garden, and says its aim is to "grow our community through practical skills, training and volunteering." (Spacehive, 2012b).

The importance of a place-based conception of community is evident from the way that some platforms describe themselves. IOBY co-founder Erin Barnes says the platform is "a place for citizen-led, neighbor-funded change", while her co-founder Brandon Whitney says Jane Jacobs' attention to small-scale, local urban interventions was a direction inspiration for the team:

One of the ideas that resonates most for me about Jane Jacobs work is the size and scale of cities compared to the people that live in them, and how neighborhoods and sidewalks represent how people interact with each other. One of the things that IOBY is about is small scale actions building up to a much larger impact. (Foundation, 2013)

Jordan Raynor says that an important motivator for users of Citizinvestor is loyalty to their city:

It's... a symbol of the deepest form of citizen engagement. Citizens so committed to the continued creation of their cities, that they're willing to put their money where their hearts are, for the public good. This spirit of civic generosity is alive and thriving across US cities today. (Raynor, 2013)

Spacehive describes itself in specific geographic terms, as "the new way for you to

²The secondees were described as 'business connectors' and the goal of the program was to connect communities with existing resources available to them in the business community and local government (R. Williams, 2012).

improve your local area” (Spacehive, 2011). Founder Chris Gourlay suggests that place-based loyalties can and should apply to all categories of actors, in the crowd, the non-profit and for profit sectors.

It makes sense to throw the funding process open, maximize the sources of funds, and allow anyone who wants these projects to happen to get behind them. (Spacehive, 2013c)

The data to date suggests that for most civic crowdfunding project creators, the primary focus in raising money is community types 1 and 2. IOBY specifically requires that initiators of projects live within the same city as the project, and analysis by the organization of its backer data finds that the majority of project backers live within two miles of the project location.³ Spacehive, Citizinvestor, Kickstarter and IndieGoGo enable users to search for projects according to geographic location; Neighbor.ly, Catarse and IOBY do not currently. Among the projects reviewed, 194 (70.8%) make a clear appeal to a specific geographic community and had a place-based intervention that pledgers themselves could access, either permanent (buildings, parks, gardens), semi-permanent (art installations, exhibitions) or short-term (events).

The appeal to community types 3 and 4 — focused primarily around activities rather than place — is an established rhetorical strategy in non-civic projects. Amanda Palmer, quoted on Kickstarter’s “What is Kickstarter?” page, says that when participating in a campaign, “you immediately feel like youre part of a larger club of art-supporting fanatics.” (Kickstarter, 2013b) In the Discourse Dataset, appeals to to issue-based communities were commonly an additional layer on top of an appeal to place-based community. One hundred and nine projects (39.8%) appealed to both place and issue-based communities. A minority of cases, 69 (25.2%) appeal to issue-based communities without reference to geographic place, such as cause-based campaigns and published materials, and 58 of these cases are found on IOBY, where many of the projects are linked to environmentalist causes. In the projects studied,

³Conditions given in (IOBY, 2013c); analysis by IOBY.

the issues covered include environmental causes, children's education, health issues such as obesity and national pride.

In several cases, campaigns that appeal to issue-based communities present their projects as potential templates for other geographic communities to adapt. The Roseland Community Wind Farm campaign, says that if it raises its target of £29,013 to build a turbine project in Shirebrook, Derbyshire, it will “probably [be] the largest wholly-owned community windfarm in the country” and “will establish that community-owned power generation like wind, solar and hydro is the way forward for renewable energy in the UK, and for funding community needs.” (Spacehive, 2013d)

So to what extent does the appeal to community of one sort or another translate into greater agency for those groups? Civic crowdfunding projects may be an opportunity to activate latent social capital by giving a community an opportunity to uncover a demand for a shared resource or to engage a community in a collective problem-solving process. As Ostrom argues, social capital is often invisible until it is in use — and can disappear if not called upon (Ostrom, 1994, p. 32). To be sure, community agency, or social capital may not even require economic capital. Jacobs' famous account of community action in the Back of the Yards area of Chicago explains how residents were able to rehabilitate some 5,000 houses in the 1950s using the skills and training within the community, such as construction and plumbing. The community had previously created its own Council to coordinate its interests, and acted to organize in the face of indifference from both government and private-sector lenders. Jacobs argues that “in effect, the Back-of-the-Yards already operates as an administrative district, not formally or theoretically, but in fact... which usually depends wholly on internal cross-use for its foundation.” (Jacobs, 1992, p. 424) This resource-led model inspires IOBY, which invites users to donate their time as well as their money, and the platform describes itself as a ‘crowdresourcing’ platform in

order to emphasize non-monetary contributions.⁴

Nevertheless, civic crowdfunding creates an opportunity to convert social capital into economic and/or political capital. The fact that the process allows groups to organize more cheaply and at greater scale increases the the spectrum of projects being proposed and has the potential to build new agencies rather than simply being a voice for existing ones. Chris Gourlay of Spacehive says that the platform is “creating a way for communities to get projects off the ground that wouldn’t have otherwise happened. It’s communities voting for change that they want with their wallets.” (Spacehive, 2013c) In cases where communities are to initiate and realize projects largely without the need for the consent of outside institutions, crowdfunding functions as a direct intervention mechanism in which organized economic and social capital produces an outcome directly.

For projects that may later require the consent of government, the success of a campaign may create the political capital necessary to win those approvals, or agency may be exercised within the framework of existing planning processes. Planners have been thinking for several decades about how to improve public consultation processes, which are often as maligned as they are lengthy. There have been numerous important attempts to make the process more participatory and transfer agency to the people who are affected by the outcome, from Sherry Arnsteins famous “Ladder of Participation” to the more recent participatory planning work of Caesar McDowell, Mario Luis Small and others (Arnstein, 1969). At the top of Arnstein’s ladder is “Citizen Control”, in which there is no intermediary between the community and the funding mechanism for a project; the community also exercises complete managerial control. A community-organized civic crowdfunding campaign could be seen as an extension of these principles: a new tool in the armory of a community organization wanting to exercise agency over their members’ environment. Not every civic crowdfunding project

⁴“ioby is more than a funding platform. We call ioby crowd-resourcing because we want you to get all the resources you need for a successful project.” (IOBY, n.d.)

delivers this level of control to its funders, and complete community control may not be the optimal outcome for every type of facility or service, but for community-led campaigns on the platforms being studied, that potential exists.⁵

In a significant minority of cases, projects were engaged in active cooperation with government. 27 projects (10%) reviewed mentioned partnerships with public agencies, for investment, permitting and development purposes. This may occur in the context of a city-owned project, or a community-owned one. The City of Tyler, TX, has agreed to ‘match fund’ crowdfunded donations to the “Children’s Park of Tyler” campaign on Neighbor.ly, to expand a neighborhood park and if the project raises its \$130,000 target by December 30, the city will assume responsibility for the ongoing maintenance of the park. By contrast in the Gowanus neighborhood of Brooklyn, the New York City Department of Transport is acting as a consultant to the “Living City” project currently fundraising on IOBY, advising on suitable sites for new signage to highlight environmentally friendly sites and businesses to visitors.

There are important limitations to the comparison of civic crowdfunding and participatory planning regimes. At the time of writing, civic crowdfunding websites do not offer the type of deliberative process that most participatory planning practitioners would deem an essential feature of community agency. DiSalvo argues that “agonistic pluralism”, the capacity for dissent and disagreement when making decisions, is critical when designing with a community (DiSalvo, 2010). Further, Barber (2004) argues that “strong democracy” exists only when deliberative processes reach the grass roots of institutions by the reproduction of those processes at all levels. If the only options for participation in a process are to green light or reject a project, how does crowdfunding support deliberation within a diverse community? The work of building agreement and consent would have to be undertaken prior to posting the

⁵See Case Study 3.1, Glyncoch Community Center.

campaign and therefore the core of the participatory process would not be supported by crowdfunding. In the future, platforms could support soliciting community input before moving a campaign to the fundraising stage.

Crowdfunding in its current form also requires that participants have real dollars to ‘vote’ with and this fact alone may skew participation. The presence of real money introduces differential agencies — an individual with more resources is able to increase their influence over the process — and undermines the notion that crowdfunding is an egalitarian form of preference expression (or in economic terms, a means of revealing preferences) as opposed to simply a funding mechanism. The complex intermingling of funding and preference expression is salient, too, because civic crowdfunding is occurring after more than ten years of intensive experimentation with symbolic money as a representation of agency through participatory budgeting.

A range of models of participatory budgeting have been tried in countries including Albania, Australia, Congo India, the United States and Brazil, the home of the most well-documented initiative, in the city of Porto Alegre (Wampler and Hartz-Karp, 2012). Although outcomes have varied widely, in the case of Porto Alegre, participatory budgeting has been praised for its contribution to reducing patrimony and protecting the process from the large underlying wealth inequalities in Brazilian society.⁶ Almost one in five (fifty-one) of the civic crowdfunding projects reviewed makes reference to supporting underserved populations or minority communities. These campaigns are most commonly found on IOBY and Neighbor.ly, although they exist on all four platforms.

Agency over the outcomes of a process implies that communities should en-

⁶(Sousa Santos, 1998, p. 482) argues that participatory budgeting made transparent “a democratic political struggle centered on different conceptions of fair distribution of scarce public resources in an extremely unequal society.” Commenting on participatory budgeting in Latin America more broadly, (Cabannes, 2004, p. 42) points out that under-resourced groups’ interests are not always adequately supported: “Little attention is being paid to increasing the participation of traditionally excluded social groups, such as immigrants and illegal workers, African-Americans, indigenous peoples, HIV-positive people, gays, lesbians, bisexuals and transsexuals, elderly people, disabled people and street dwellers.”

joy some degree of ownership or control of the assets being produced. This is not always true of civic crowdfunding projects: the outcomes of projects started by government bodies on Citizinvestor, for instance, are managed and owned by those agencies. Neighbor.ly accepts projects from — and therefore produces projects that are managed by — municipalities, authorized government entities, public-private partnerships and private or non-profit organizations “whose mission caters primarily to civic infrastructure” (Neighbor.ly, 2013a). IOBY projects are more commonly run by 501(c)(3) organizations; the platform offers 501(c)(3) fiscal sponsorship to community groups that are not registered as non-profits. Spacehive’s model allows for government, for-profit and non-profit entities to initiate and therefore manage the outcome of projects through the Project Delivery Manager framework (Spacehive, 2012a). Under the PDM framework, the entity or individual responsible for the project signs a contract agreeing to deliver the promised outcome on behalf of the funders. There is yet to be an instance of non-delivery on a Spacehive project, however, so the legal consequences for a PDM of non-delivery are essentially untested.

In cases where civic crowdfunding project assets are managed by the community, such as in Glyncoch, the projects may seem to resemble examples of social enterprise. Alperovitz describes the recent rise of worker-owned co-operatives, public enterprises and credit unions as examples of “wealth-democratizing, institution-building trends” that are shifting the organization of capital away from corporations and towards individuals and communities (Alperovitz, 2013). Subscription-based Community-Supported Agriculture has been identified as a form of crowdfunding by (Barrette, 2011), who describes it as a “communal business model”. However, it is important to reiterate that there is no direct ownership or shareholding in community assets offered by the civic crowdfunding platforms being considered, since these arrangements would likely constitute “equity crowdfunding” and necessitate compliance with regulations established by a national financial authority. In the community

framing of civic crowdfunding, therefore, backers contribute to projects that produce shared assets from which they benefit but over which they have no specific ownership. Their behaviors could be said to reflect a desire to participate collectively, solve problems and impact planning processes more so than to fund or to own assets.

4.2 Civic Crowdfunding as Individual Agency

Civic crowdfunding in some ways resembles an individualistic pursuit. Returning to the underlying notion of *the crowd* and the role played by the rise of crowdsourcing in adding legitimacy to the idea of crowdfunding, we should distinguish classic *crowd* notions of participation from *collective* or *community*-based notions of participation.

As noted in chapter 2, *crowd* theories such as “collective intelligence” advanced by (Levy and Bonomo, 1999) and (Jenkins, 2002), among others, are typically rooted in the idea of disaggregated individuals, not collectives: the members of the collective do not engage in a dialectic process, but rather in sum their expressions of individual will produce a result. Brabham (2009) praises the power of crowdsourcing in the planning process for its ability to “aggregate” rather than “average” public opinion, but cautions that *crowd* activities are commonly “coupled with an individualistic, libertarian mentality that seems pervasive on the web” (Brabham, 2008). This reading is supported by Turner’s analysis of the late 1960s “New Communalist” movement, which he argues has been a powerful influence on Internet culture. He argues that the mix of loosely connected individuals, technology and non-hierarchical social forms is a “countercultural ideal” and that many of the same individuals involved in the movement sought to reproduce its ideas when they became Silicon Valley entrepreneurs in the following decades (Turner, 2005, p. 513).

One of the forces underlying the rise of scalable Internet-supported crowd

behavior is the collapse in transaction costs: Shirky posits that the Internet makes activities possible that were previously beneath “the Coasean Floor” - the level below which the political or material incentives associated with an activity are insufficient for power-holders or large organizations to engage in it (Shirky, 2008). The collapse in transaction costs is dual: both the cost of forming a group, but also the cost to the individual of participating in one.

It may be argued that crowdfunding reduces the participation requirement to an online donation and makes little attempt to bring individuals together. So-called digital activism has been critiqued as reducing political expression to “clicktivism” or “slacktivism” by (Gladwell, 2010) and others. The apparent lack of connection between participants in some campaigns may be no impediment to the success of civic crowdfunding, though. Granovetter’s classic argument for the strength of “weak tie” networks seems to apply both as an explanation of the success of civic crowdfunding projects to date, and also serves as an apt analogy for the individualistic conception of crowdfunding campaigns: that they are the agglomeration of many small risks (Granovetter, 1973). Although “weak tie” crowdfunding campaigns may be effective at solving problems, they are unlikely to forge stronger ties since campaigns demand little or no interaction between participants. By this logic they would also have very little hope of creating the trust necessary to build collective social capital (Ostrom, 1994, p. 31).

Answering the claim that online participation tends toward low-risk, weak tie activity that has little collective civic value, though, (Zuckerman, 2013) distinguishes modes of participation along a scale of “thin” to “thick” engagement, arguing that many individuals prefer “thicker” forms of engagement, and that they have employed new means of expressing their desire for change. It could be argued that civic crowdfunding platforms that offer users the opportunity to volunteer alongside contributing funds — such as Citizinvestor, IOBY and Spacehive — enable progress

towards “thicker” forms of engagement, which are less individualistic and are likely to forge stronger ties between participants. Among the 194 active IOBY projects reviewed, 110 (57%) actively solicit volunteer input. Jase Wilson, founder of Neighbor.ly, says that in the urban context, an emerging idea is the “do-it-yourself city”, in which individual citizens feel empowered to propose and attempt to action changes to the urban environment.

Advocates of individually-oriented notions of agency presume a certain amount of equality of opportunity and propensity to participate — or seek to provide it through rules and incentives. In the case of civic crowdfunding, there is yet to be sufficient research into the extent to which projects attract very selective involvement by subgroups. Nevertheless, the history of sociological studies of placemaking suggest that factors such as race, social class and life stage may be a strong influence on individuals’ likelihood of taking an active role in shaping their neighborhood ⁷. Hui, Greenberg, and Gerber (2014) relate class to crowdfunding with their finding that most crowdfunding campaigners on Kickstarter earn revenue amount to less than the minimum wage, suggesting that the current crowdfunding model may be structurally biased in favor of those who have alternative income sources or are independently wealthy. This potential for participation bias is not unique to the crowdfunding of civic projects, but it suggests that an unfettered, individual agency model of civic crowdfunding will produce very uneven results and will as a whole be much more attractive to particular types of backers.

So how are individual backers invited to conceive of their participation in crowdfunding campaigns by the platforms? Citizinvestor asks visitors to “invest in the public projects you care most about,” advancing the idea that the individual should effect change that is meaningful to them and supports their interests. Raynor says that users of the platform conceive of themselves as benevolent investors in the

⁷Gans (1982) quoted in Briggs, Popkin, and Goering (2010, p. 261)

public good:

We discovered... that if given the opportunity citizens who love their city would be willing to pay, above and beyond what they already pay in taxes, for the public goods they care about most. We discovered this group of citizens who were passionate about investing in cities, who we called Citizinvestors. (Raynor, 2013)

The framing of the crowdfunder as a philanthropist or micro-philanthropist is a common interpretation of the field (Kappel, 2008). This interpretation advances the idea that the act of pledging is both benevolent and an expression of individual social capital that grants backers “social kudos” due to their association with worthwhile projects (Klaebe and Laycock, 2012). Neighbor.ly appeals to this instinct directly, telling visitors to its website home page: “Want to earn perks while enhancing cities? What you do matters.” (Neighbor.ly, 2013c) This statement builds on well-established ideas in philanthropic theory. Zamagni et al. argue that philanthropic donors or pledgers contribute in order to gain “regard” on two levels, acknowledgment and value:

The ultimate benefit is self-worth... The term ‘regard’ has two meanings: The first is ‘to be noticed’. The second is ‘to be valued’. It is this benefit of exchange, the warm glow of acknowledgment, which constitutes the authentication device in the ‘economy of regard’. (Zamagni, Bruni, and Ferrucci, 2013, p. 286)

For the pledger to a civic crowdfunding campaign, there are several authentication devices: their pledge is likely to be acknowledged by a personal email from the platform, their name and pledge amount may be recorded on the campaign page (with their consent), their individual profile page — if they have one — may show a record of the campaigns they have backed and they may receive a reward depending on the size of their pledge and the conditions of the campaign. The backer will also likely

be invited to share their activity on social media platforms — Kickstarter offers a pre-filled Tweet that typically reads “I just backed [project name] on Kickstarter” and shares the campaign URL. The development of the identity of the user through their activity or involvement in a project is of course not unique to crowdfunding. The movements scholar McAdam coined the expression “the biographical impact” to describe the benefit the individual feels as a result of being involved in a cause or movement (McAdam, 1989). In his reading, an activist’s participation becomes a micro-narrative that can be inserted in to his or her own personal narrative and identity. Internet scholars such as Judith Butler find that users of online social networks often behave in similar ways, selecting which photographs and personal updates to share in order to construct “performative identities” that indicate their desired personality, status or social class (Butler, 1993).

The presence of a financial transaction offers adds another possible layer to the individual identity of the backer: the interpretation that backers are entrepreneurs and investors and therefore can be analyzed as such. This is a popular reading among business scholars; several have compared ‘herding’ behaviors of crowdfunders in non-civic projects to conventional financial markets, and (Kim and Viswanathan, 2013) suggest that so-called “expert investors” who are the most informed about a product may influence other crowdfunders to back projects.⁸ Plus Pool, a Kickstarter project to build a floating swimming pool in New York City’s East River, cultivates the notion of backer co-ownership by offering those who pledge \$25 or more named tiles around the pool (PlusPool, 2013).⁹ For some, ownership rhetorics denote greater attachment to a cause — the notion of ownership as stakeholding. Ownership is highly specialized in crowdfunding, since backers contribute to specific projects rather than organizations. This is consistent with the rise of “problem solving philanthropy” in

⁸See also Kuppuswamy and Bayus (2013) and Agrawal, Catalini, and Goldfarb (2011).

⁹Fundrise, a Washington, DC-based real estate crowdfunding platform, is one of the few to support equity ownership of projects. It has funded two successful projects in the city to date, and has three others active.

the past decade, which emphasizes directing resources to problems rather than bodies, and the growth of issue-based political donations at the expense of membership groups (Brest et al., 2012; Karpf, 2012).

For others, ownership culture and in particular entrepreneurship is part of a larger transfer of risk from institutions to individuals. Gina Neff, drawing on Jacob Hacker’s book “The Great Risk Shift”, suggests that personal risk taking has become ubiquitous in the technology industry and is framed in terms of personal entrepreneurship. Her argument is supported by, but does not explicitly cite, (Powell, 2001)’s explorations of the decentralization of capitalism and the turn towards project-based work in place of employment tied to a single company. Neff follows the embrace of entrepreneurial, individualistic work culture in New York City’s Silicon Alley during the first Internet bubble, and argues that while workers perceive that they possess greater agency as entrepreneurs, they are being asked to shoulder risk that they are unable to conceptualize or manage effectively. The increasing personalization and attachment of personal worth to serves to increase workers’ perceived sense of control while reinforcing their blindness to structural causes that may limit that agency. As one interviewee says:

With an internet startup the things that you did could affect the value of your holdings. So it gives you a sense of power. More of a sense of worth. [My dad] worked for thirty-five years and he plays a lot of golf but his golf game still stinks.

As a result, the calculations that workers use to make decisions — what Don Slater calls ‘social mathematics’ — are flawed, and ultimately lead to excessive short-term risk taking and to workers blaming themselves for the failure of companies or products (Slater, 2002). Gourlay suggests that entrepreneurship is a theme in the field of crowdfunding partly because Internet users are more likely to embrace entrepreneurial ideas than is typical in (British) society at large:

It’s a more liberal place, it’s a more entrepreneurial place. It’s an ecosys-

tem where ideas can rise and fall quite effectively. Almost a Darwinian place. (Spacehive, 2013c)

Few of the projects reviewed made explicit reference to entrepreneurialism. Only eleven (4%) directly use the term, four of which were found on Neighbor.ly. The most successful of these was the LAB Miami, which raised \$31,895 in November 2013 — outstripping its original \$30,000 target — to build an entrepreneurship center called an “Idea Garden” in the once blighted Wynwood district of the city. Its campaign page says that the project will apply “the artistic, ‘do-it-yourself’ creative vibe of Wynwood” to “the civic needs of the neighborhood” (Neighbor.ly, 2013b). It remains to be seen what shape the group’s entrepreneurial approach to civic problem-solving will take. While it was outside the scope of this project to collect and analyze the opinions of donors, they are likely another important area of investigation in understanding the extent to which entrepreneurial instincts are a significant force in civic crowdfunding.

Nevertheless, the association of crowdfunding with an entrepreneurial paradigm leads Lange (2012) to reject it as an appropriate model for urban planning. She argues that the hyper-temporality of fundraising campaigns means that large-scale, long-term projects will either fail to raise funds, or will falter at a later stage due to the absence of institutional support. The risk calculus associated with civic crowdfunding is comparable with entrepreneurship, although it is seldom presented in popular media as a high-risk activity. Kickstarter data shows that the majority of projects on its site fail: the average success rate is 45 percent. On IndieGoGo the estimated success rate is much lower according to third-party statistics — possibly as low as 10 percent of projects are fully funded.¹⁰ Civic crowdfunding is yet to experience large-scale or high profile failures, but early indications are that its success rate may be higher than conventional crowdfunding. IOBY has funded 282 projects to date,

¹⁰Data collected by The Verge magazine showed that 9.3 percent of the of 142,301 projects analyzed reached their target. IndieGoGo is reported to have disputed the figures due to the inclusion of test projects but has declined to provide alternative figures publicly (Jeffries, 2013).

83 percent of the total posted on the site (IOBY, 2013b).

The linkage between individual entrepreneurship, risk taking and the chances of failure is not straightforward in crowdfunding, since at the moment of pledging, the risk in the transaction is not being assumed by the pledger, but by the campaign. A campaign is an invitation for the pledger to speculate on the success of a project. This is a common behavior for an entrepreneur in a private goods market; the failure of a project is seen simply as evidence of a poor product-market fit and the entrepreneur will likely move onto a new project having learned from the failure. However, for projects that are expected to provide public goods and services, the cost of failure is likely much greater and the individual's ability to regenerate and begin a new project may be lower. As classic public goods theory shows, there are goods that the market — and therefore disaggregated individuals — is unlikely to provide efficiently and, as a result, government investment is likely required. Whether crowdfunding will be found to be too speculative and individual an activity to provide these goods will likely depend on the number of prominent failures — and therefore exposures of the risk involved — it produces.

4.3 The Political Economy of Civic Crowdfunding

The political and economic context in which civic crowdfunding has emerged may go a long way to explain why certain communities, individuals and institutions have come to pursue a fundraising method that may be all at once a new collectivism, a new form of individualism and a process carrying unknown risks. This third framing posits the idea that civic crowdfunding should be understood not as an expression of community or individual agency, but as both a response to and a catalyst for the weakening of institutions including government.

The narrative in the United States that municipal and local governments are in crisis is rooted in the fact that, as a result of the Recession, expenditure on liabilities such as social welfare is outstripping income increases and appears to be reducing the amount that administrations spend on capital investments. Figures from the United States census show that state and local capital spending dropped 5.5 percent in 2011 and 2.8 percent in 2010 even as overall expenditure rose.¹¹ The National Association of State Budget Officers found that in 2012 state revenues remained some \$20.8 billion below their 2008 levels, while McNichol, Oliff, and Johnson (2011) suggest that the United States experienced “the largest collapse in state revenues on record” between 2007 and 2012. The threat of a looming fiscal crisis seemed to be confirmed in July 2013 by Detroit’s \$18 billion Chapter 9 filing, the biggest municipal bankruptcy in US history. There have been 37 other filings by institutions linked to municipalities since January 2010 (Governing, 2013).

This recent financial history has led to widespread reports in the popular press that state and local government is in crisis. Aspects of the issue have been taken up by the NBC television comedy series, “Parks and Recreation”, which centers around the lives of local government workers in the fictional town of Pawnee, Indiana. In the show’s first season Deputy Parks Director Leslie Knope, played by Amy Poehler, starts a public fundraising campaign for the creation of a new public park due to a shortage of council funds to pay for the project — Citizinvestor later published remixed footage from the episode as part of a promotional video and sent a spoof promotional email purporting to be written by Knope (Citizinvestor, 2013b; Knope, 2013). In the sixth season a neighboring town, Eagleton, files for bankruptcy and is absorbed by Pawnee. While the reality of cuts in municipal investment is demonstrable, the narrative of impending bankruptcies may be overstated. Thirty of the bankruptcy filings since 2010 have been submitted by subsidiary utility authorities

¹¹2011: Capital spending -5.5%, overall expenditure +1.5%; 2010: Capital spending -2.8%, Expenditure +4% (Barnett and Vidal, 2012; Barnett and Vidal, 2013)

and special districts rather than so-called “general purpose” entities — the central governments of cities (Governing, 2013). Of the eight “general purpose” filings in the past three years, three have been dismissed. Standard and Poors’ analyst Gabriel Petek suggests that the number of municipalities filing for bankruptcy is likely to remain low, and even points out that the narrative of fiscal crisis can impair the ability of government to function and may not deliver the expected fiscal benefits.

By volunteering to travel the path of bankruptcy, a municipality is embarking on a negative campaign of sorts. A municipality can’t be liquidated. Doing so requires the city to argue on behalf of its own financial weakness and inability to perform the functions for which municipalities exist in the first place. (Petek, 2012, p. 5)

An alternative path to bankruptcy is for municipalities to ask and expect citizens to contribute their own resources to fill gaps in government budgets. This is being conceptualized in some cases as a financial necessity and an opportunity for citizen participation or investment. But while the language of participation and agency may be attractive on the surface, the possibility that municipalities may be unable to provide even the most basic services points more to profound fiscal and political weakness than to the development of more participatory and responsive institutions.

Andrew Travers, chief executive of the London borough of Barnet in 2011 made a presentation in which he presented “the graph of doom”, revealing that the borough would be unable to fund any services other than adult and child social care by 2015. He said that Barnet, which has a population of 331,500 — comparable in size to St Louis, MO — faced an infrastructure funding gap of £88 million (\$144 million) in 2011-16. As a solution, he outlined the concept of a “commissioning council”, backed by a series of partnerships with private and community organizations. In Travers’ model, the council would “provide clear information, tailor services for residents [and spend] every pound as efficiently as possible” while residents are expected to “make best use of opportunities [and] do all they can to support themselves,

family, community.” (Travers, 2011) The model is an extension of an earlier austerity program known as easyCouncil, named after the budget airline easyJet, in which Barnet council rationalized budgets and outsourced the delivery of some social and environmental services to private providers (Mulholland, 2010). While Barnet is yet to use crowdfunding, it operates a page on the crowdsourcing website Pledgebank, on which citizens can make a pledge to carry out a particular task that benefits the community, and advertise their pledge to attract other supporters of the idea to help. In some cases this implies significant investment of unpaid labor by citizens. In October 2011 Barnet launched the “Adopt a Street” scheme in response to claims that the council was not providing adequate street maintenance, waste collection and shoveling during the winter. The scheme invites residents to take the responsibility for the provision of those services. The council provides training and, where required, additional resources such as grit and paving stones. Seven streets have been adopted as of March 2013.¹² Councilor Dean Cohen describes the scheme not in terms of a shift in responsibility, but as a form of citizen agency:

Our officers will be on hand to assist when needed, but this is essentially all about the residents they now have the power to improve the services which influence the look and feel of their local area. (Njolinjo, 2013)

The Barnet case highlights the fact that if institutions become severely weakened, there may be two contrasting but equally significant outcomes: first, that individuals and communities will have a greater ability to shape and participate in public goods, and second, that they may be called upon to fund those goods, or go without them altogether. After citizens in Colorado Springs, CO, with a population of 431,800, voted against tax increases in 2009, the city decided to tackle its \$24 million budget deficit by closing public spaces such as swimming pools, community centers and museums, and ending services including trash collections in parks, public water foun-

¹²Barnet Council’s PledgeBank page does not display the streets that have been adopted. See (Cocker, 2013).

tains. It cut 550 public employees. The assumption that many in the city's council made was that the public would volunteer to fill the gap, a move that has been described as "Do-It-Yourself government", an eerie echo of the language being used to describe community-led improvements to neighborhoods (Patton, 2010). The Parks and Recreation department, which saw its budget cut by 82% in the first year of cuts, 2010, now asks individuals and groups to "adopt" one of the city's parks or 100 flower beds, and recruits volunteers to staff four historical sites in the city (Springs, 2013). The move was described by one business leader as a way to "find out what the tolerance level is for people", in other words, to discover the services that citizens are willing to pay for via taxation or to sustain with their own resources (Booth, 2010). This is an approach that Kettl has described as a "vending machine" model of government, in which citizens expect to engage with government almost entirely as a service provider, and don't expect to pay for services from which they don't benefit directly (Kettl, 2008, p. 29).

The rhetoric of municipal economic distress is common among civic crowdfunding platforms. But the characterization of citizen funding for public goods varies between unfortunate necessity and bold opportunity. Neighbor.ly founder Jase Wilson says starkly that "cities are going broke." He argues that the decline in municipal bond valuations and the ability to insure those transactions affordably is a key reason why US municipalities and citizens are interested in civic crowdfunding.

There is a growing intolerance of debt as an idea among the younger generation. Our essential public services are cut because our cities are being held hostage. There is a growing intolerance of debt.

The cheap money ride might be over... It's time to take a serious look at the way we fund things. (Wilson, 2013b)

Meanwhile, Spacehive's Gourlay suggests that the fiscal weakness of municipalities creates previously unavailable opportunities for innovation and problem-solving:

Were trying to open up public space, boost sources of innovation, to boost sources of ideas, to make it easier for communities to get stuff done in their

local area. We think there is a real opportunity to do that now because of the economic situation. (BBC News, 2012)

Gourlay’s interpretation is fitting for cases in which civic crowdfunding is being used to fund projects and initiatives that provide new public goods that had not historically been provided by government in the past, while Wilson’s is more appropriate for campaigns that replace goods that government either provided or would have been expected to provide.

Twelve of the projects in the Discourse Dataset (CCFD5) (4.4%) refer directly to cuts in government spending or lack of public funding as a motivating factor. Discounting IOBY projects, among which only one percent of projects made reference to government budgets, just over one in ten projects (12.5%) on Citizinvestor, Neighbor.ly and Spacehive makes specific reference to a shortfall in government funding. Citizinvestor in October 2013 hosted the first civic crowdfunding campaign to be started by a bankrupt city, Central Falls, Rhode Island. The campaign’s rhetoric appealed to notions of necessity and opportunity simultaneously. The city, led by 27-year-old mayor James Diossa, raised \$10,044 in two months to fund five trash and recycling containers in Jenks Park, which the campaign web page describes as “one of the few greenspaces [sic] available to the public for outdoor recreation.” The project was framed both in terms of utility and public art: the containers will be produced by the Steel Yard, a local non-profit that, according to the campaign, “specializes in the fabrication of place-specific, functional public sculpture.” The Steel Yard will solicit public input regarding the design of the containers and build an “artist team” to create the final designs (Citizinvestor, 2013a). During the campaign, Citizinvestor helped the city organize a clean up of the park, attended by 100 volunteers. Raynor remarked that, based on population size, the turnout was “the equivalent of 43,000 New Yorkers going to clean up Central Park on a Saturday.” (Raynor, 2013)

The Spacehive campaigns “Loop de Loop” and “Light Up Stalybridge This

Christmas” both carry a strong air of resignation with respect to the future of public funding. The “Loop de Loop” project, which successfully raised £10,559 to convert a toilet block in Frome, Bristol into an art gallery, notes: “The toilet block was abandoned by the District Council in 2007 and has been a boarded-up eyesore in the centre of town ever since.” (Spacehive, 2013b) A campaigner for the Stalybridge group, which raised £2,699 to pay for Christmas lights in the town center, writes on their fundraising page:

Lasting memories are made when families watch the spectacle of Santa turning on the lights, distributing sweets to the children, and usually having to be rescued by the local fire service. I am sure every child can remember this wondrous sight, but regrettably, this year will be different due to cost. The absence of Christmas lights will be a constant reminder of better times. In these times of austerity the Council has some hard decisions to make. They will be making a contribution but that leaves a gap to bridge to have the special festive lights. Stalybridge Business Forum in conjunction with Stalybridge Town Team is determined to restore the civic pride of Stalybridge and raise funds to ensure this is done as quickly and cost effectively as possible. (Spacehive, 2013a)

The argument that civic crowdfunding is being used as a way to perpetuate the idea that public institutions are in decline and therefore that citizens will be called upon to resource public goods increasingly in the future is advanced by Brabham, in discussing the impact of the success of Kickstarter on public arts funding.

Governments may begin to see crowdfunding as a viable alternative to public funding for the arts, which has come under scrutiny in the United States and abroad in the wake of the Great Recession. If small groups of fans are willing to crowdfund these artistic products into being, the political logic may go, then why should taxpayers be expected to foot the bill? In weak economies, sites like Kickstarter could pose real threats to public funding. (Brabham, 2013, p. 39-40)

Yellow House, a Park Slope, New York City-based non-profit organization, cites cuts in public arts funding as the motivation for its IOBY campaign to raise \$5,110 for scholarships for artists and arts students. The “Why We’re Doing It” section of its campaign description includes: “Over the years government funding for the arts has

been cut by nearly 70%. It is up to Yellow House NYC and other nonprofits like us to make the arts a vital part of community life once again.” The campaign has so far raised only \$75 of its total (IOBY, 2013a).

While these campaigns tend to emphasize the Great Recession and the current state of government as causal factors, it’s worth remembering that communities producing public goods in the face of scarce public resources is a well-established phenomenon. Ostrom describes this activity as “public entrepreneurship” and advocates in its favor, in order to improve public services that are available to communities, particularly underserved ones (Ostrom, 2005). She argues that government frequently lacks adequate resources to produce services and the incentives of the market may not align with those of communities. She points out that studies have “repeatedly found communities of individuals in urban and rural areas who have self-organized to provide and co-produce surprisingly good local services given the constraints that they face.” (Ostrom, 2005)

A more compelling argument for civic crowdfunding causing the weakening of public institutions would be that it causes the privatization of goods that were previously public. A prominent recent example of this phenomenon occurred in Oakland, CA in October 2012, when three crowdfunding campaigns emerged in as many days to fund private security patrols in the wealthy Lower Rockridge and Uplands neighborhoods of Oakland, CA. While private security patrols are common in the city and the campaigns were apparently welcomed by the local police, the campaigns demonstrated the ability of crowdfunding campaigns to replicate rapidly and consequently raised concerns of a “contagion effect” catalyzed by crowdfunding (Davies, 2013c). The two *clone* campaigns that followed the first, used adopted the same language, platform and proposed hiring the same local security company. Two of the campaigns reached or exceeded their target, and the trio collectively raised \$60,101 (Davies, 2013a). Critics of the crowdfunding campaigns argued that not only did

they indicate the inadequacy of the city’s police force and contribute to the widening wealth gap between neighborhoods, they also made the process of privatizing security much easier, faster and therefore more attractive to wealthy neighborhoods. Furthermore, by giving well-resourced communities the option to direct their resources to private solutions to the policing problem, the campaigns also disincentivized those communities from lobbying to increase public funding for policing that might have benefited a broader range of Oakland residents.

If civic crowdfunding campaigns is presenting potential replacements for the provision of public spaces and services, what kind of replacements are they? In addressing this question it is helpful to test campaigns against what Zukin argues are the two most important principles of public space: “public stewardship and open access” (Zukin, 1995, p. 139). In these terms, campaigns that lead to the transformation of public goods and services into goods and services that are not transparently managed and open to all represent an undercutting of the public good. Among the Compiled Civic Crowdfunding Dataset (CCFD1), there are two contrasting examples of methods of delivering municipal WiFi, through public and private ownership. In Kansas City in September 2012, the non-profit organization “Give us a Gig” raised \$11,136 on Neighbor.ly, more than twice its original target, to subsidize WiFi provided by Google for poorer neighborhoods of the city in both Missouri and Kansas.¹³ In Mansfield, UK, a group led by the town’s Business Improvement District raised £36,850 (\$60,250) on Spacehive in January to fund a free WiFi network that is operated by the town authority and is free to residents and visitors (Sky News, 2013).

The long-run implications of civic crowdfunding of public goods are as yet uncertain, although the consequences may be significant. Bernholz, Reich, and Cordelli

¹³The Google Fiber project agreed to provide the infrastructure in neighborhoods where a sufficient proportion of residents agreed to pay a deposit of \$10. The campaign adopted the slogan “We Can Do Better” to encourage donations, and allowed donors to specify which neighborhood they would like to support. Funds from donors who did not express a preference were assigned to one of nine neighborhoods in the city listed on the campaign page (Neighbor.ly, 2012).

(2013) warn that the source of funding chosen for public goods has substantial long-term impacts and that it is unwise to be entirely “sector agnostic”. They argue that over-reliance on the private sector or citizen-led groups may lead to the undervaluing of “low-return outcomes”, such as initiatives that serve the poorest in society, a neglect of “unmeasurable outcomes” such as civic engagement and trust, and confusion of regulatory accountability. Consequently they suggest that institutions need to establish “good fences” to ensure the separation of public, private and non-profit sectors. By contrast, the political economic framing of civic crowdfunding seems to imply either a convergence of the three, or a replacement of the public sector with private and social resources.

Chapter 5

Conclusions and Further Work

This thesis has found that civic crowdfunding is a small but rapidly growing subgenre within the field of donation-based crowdfunding. Its emergence since 2008 has been facilitated by the same technological and market conditions that supported the rise and subsequent success of Kickstarter and IndieGoGo, but it is also inspired by models of community fundraising and resource pooling that long predate the Internet. As discussed in Chapter Two, currently the average civic crowdfunding project is small in scale, tends to draw from a geographically localized funding base, and likely has a connection to a non-profit or mission-driven organization concerned with community gardens or parks. Meanwhile, most platform owners and some incumbent institutions have larger and more diverse ambitions for the future of civic crowdfunding, and see its role as a new mechanism for public-private partnerships capable of realizing large-scale projects. In a small minority of cases, such as the three edge-case projects described in Chapter 3, civic crowdfunding has begun to fulfill some of those ambitions. It shows the potential to realize larger-scale infrastructure projects, to create collaborative funding pools that include individuals, community groups, government, non-profits and the corporate sector, and to build models for funding projects that can be replicated in other localities. For the center of gravity of civic

crowdfunding to shift further in the direction of these potential outcomes will likely require existing institutions, including government, large non-profits and the for-profit sector, to engage more comprehensively with the process. This is not a straightforward endeavor, since the restructuring that broader adoption of civic crowdfunding may involve raises complex socio-political questions, such as those analyzed in Chapter 4.

The goals of this concluding chapter are four-fold. The first is to summarize the current state and limitations of civic crowdfunding. The second is to outline the challenges that institutional actors face in engaging with the process and offers a framework of four pathways that institutions can follow with respect to civic crowdfunding. Finally, recognizing the limitations of this study as an early foray into a new field, this chapter outlines a research agenda for further inquiry into civic crowdfunding by researchers and practitioners.

5.1 The current state and limitations of civic crowdfunding

The *typical* civic crowdfunding project — a community garden run by a non-profit in a large city — is a reflection of the subgenre’s natural earliest adopters, its lowest-hanging fruit and its current limitations alike. Small-scale non-profits are natural early adopters of civic crowdfunding because they are among those best placed to benefit from, and not be overly disrupted by, the process. To these organizations, fundraising is a hard-won, grass-roots activity focused on relatively small, locally-focused donor outreach, and is usually performed by volunteers. Crowdfunding platforms provide a way to make this process more efficient and offer the potential to reach a broader audience. Within this subset of organizations, fields such as community gardening are the low-hanging fruit in the civic space because they are relatively

resource-light, uncontroversial initiatives that can be realized in a short space of time. They pose few of the questions of resource distribution, consistency of service and equality of access that crowdfunding public transport or security would. For this reason, it is perhaps fortunate that community gardens have become the archetype of what is straightforward to achieve with civic crowdfunding, since the subgenre has several unresolved questions related to equality and access that are likely to become more pressing as it grows.

First, while the promise of transferability and scalability in civic crowdfunding is attractive, the data show that the geography of civic crowdfunding is uneven. Projects are typically concentrated in large cities, particularly those in which civic crowdfunding projects are headquartered. This is due in part to the outreach that platforms are carrying out in order to grow their businesses, and partly to the demonstration effect of having a critical mass of successful projects in a given city. In one sense civic crowdfunding might seem like an easier match for smaller municipalities, where infrastructure projects are smaller and existing social networks may be naturally denser as a function of geographic spread. But smaller municipalities may also be less connected to the discourse around crowdfunding and may have less experience of the methodology of other fields, such as film or music. It seems likely that over time some of these differences will decrease, as crowdfunding continues to scale in other industries. But the spread of access to crowdfunding and literacy in using it for civic projects should not be taken for granted. As discussed in Chapter 4, civic crowdfunding represents both an opportunity and a challenge for public institutions and large non-profits; some may see it as a threat to their models, and others may need to restructure their models in order to engage with it. As with the emergence of any disruptive socio-technical system, the adaptation of and contests with incumbent institutions may be a drawn-out and unpredictable process of change.

Second, like other crowd markets, civic crowdfunding exhibits the same poten-

tial for highly unequal distributions of resources and attention. Large-scale projects seem destined to attract the most attention partly because they are minority cases, outliers that show the possibilities of what civic crowdfunding may be capable of. It is surprising and encouraging for civic crowdfunders to note that this project found evidence that civic projects on Kickstarter enjoy much higher success rates than other categories. However, this evidence is preliminary and the argument that projects with a civic mission are more popular than those without requires further study to be fully proven and understood. It may be, for instance, that civic projects tend to be clustered at a scale that is well suited to the Kickstarter model, and that a civic theme alone would not be sufficient to improve a project's chances of success on the platform. The apparently higher success rate enjoyed by Kickstarter projects described in Chapter Two is even more curious since the projects are not prominently identified as having been tagged *civic* by the platform. There is no *intentional civic movement* on Kickstarter, since project owners cannot self-describe as *civic* at the time of creation and there is little incentive to seek to associate with other civic projects since the tagging feature is not prominently represented on the platform.

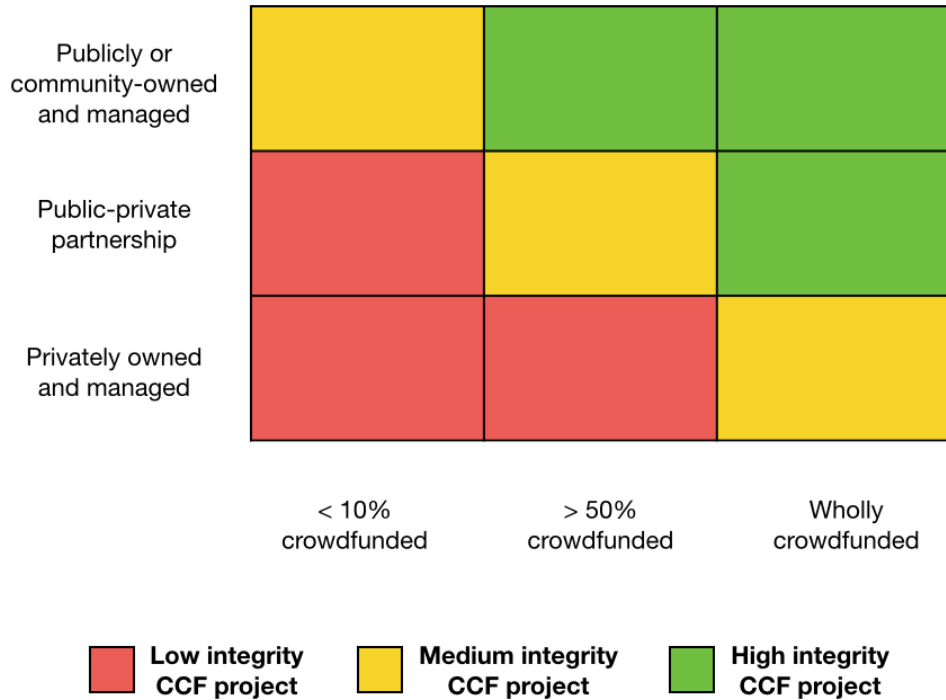
The intentional civic movement that does exist in crowdfunding — civic crowdfunding platforms (CP) such as Citizinvestor, IOBY, Neighbor.ly and Spacehive — has not yet reached the scale enjoyed by the civic categories on generic platforms (GP), but the gap between the two is closing. Civic crowdfunding platforms continue to seek ways to differentiate themselves from the generic model, to understand which types of projects that are not well-suited to the Kickstarter model and to provide an outlet for participants who are not currently well-served by it, such as governments and large non-profit organizations. At the same time, Kickstarter, IndieGoGo and other large generic platforms are developing their own strategies for working with new partners. Public agencies and non-profits will be faced with the choice of whether to accept the cost of capital and distribution of control associated with partnering with

large generic platforms, to partner with dedicated civic platforms, or to attempt to build their own fundraising platforms.

As more organizational forms and methods of deploying civic crowdfunding increases, the question of what constitutes an authentic civic crowdfunding project becomes more contested. Is crowdfunding a form of demand signaling, seed funding, or partial funding, and should a project raise all of its capital via a crowdfunding platform in order to be considered an authentic example of the subgenre? As described in Chapter 4, we are forced to consider the possibility that civic crowdfunding can be used as an engagement strategy — or, less positively, as a “gimmick” — by large projects, to give the impression of crowd input. The proportion of the project’s overall funding that is derived from crowdfunding can therefore be considered one important variable in assessing its integrity as an example of civic crowdfunding. A second variable, also described in Chapter 4, is the extent of community ownership or management of the asset being produced. In other words, is the crowd giving money to a supposedly community-oriented asset over which the community has no control or ownership, because the underlying asset is owned by a private institution, such as a real estate developer? The exemplar civic project would be expected to offer the community complete ownership and management of the asset, and its integrity as a civic project would decrease as the ownership and management of the asset decreases.

Figure 5-1 shows these two variables plotted as a matrix, with the exemplar civic crowdfunding project located at the top-right of the diagram, while a tokenistic or gimmicky implementation of civic crowdfunding is located at the bottom-left. This diagram is intended not as a rigid means of assessing projects, but rather as an illustration of two key considerations in analyzing civic crowdfunding projects.

Figure 5-1: The *integrity* of crowdfunding projects by funding mix and level of community ownership



5.2 The Institutional Challenges of Civic Crowdfunding

As public agencies, civic and community organizations consider ways in which they can or should engage with civic crowdfunding, they are faced with a range of complex questions related to the consequences of doing so. The process of crowdfunding frames projects in a specific way, it introduces new interactions between the funders and the recipient that may not have existed in the past, and it inherently challenges existing funding models and their associated dependencies. The most pressing questions can be broadly divided into three categories: inequality, power and the future of institutions. I'll now discuss those four categories of challenges.

5.2.1 Inequality: What the Crowd Wants to Fund

The highly unequal geographic and size distributions of crowdfunding described in Chapter Three present possibly the most complex problem that potential participants in civic crowdfunding face: equality. For some organizations, such as for-profit ventures, the precise distribution of resources may not be a pressing concern, as long as markets are being found and needs are being met. For government, organizations that have a stake in achieving positive social impact, and communities that are historically underserved, though, distribution of opportunity is an inflection point. If the growth of civic crowdfunding widens the gap between socio-economic groups, between large cities and smaller ones, and between communities, it may become another market-led activity that needs to be regulated or resisted.

Organizations and policymakers may regard the geographic spread of civic crowdfunding as a literacy issue, that is, that greater awareness of the potential benefits of civic crowdfunding will encourage a more diverse range of participants. But participation or lack thereof may also reflect the availability of resources. For instance, will members of underserved communities possess the skills necessary to make a compelling video for a crowdfunding campaign?¹ Will underserved communities have the spare capacity necessary to operate a campaign, an activity that Hui, Greenberg, and Gerber (2014) find returns less than the minimum wage even for creators who receive the funds they raise? Currently it is not possible to investigate this question satisfactorily, since the granularity of location data supplied by platforms is not sufficient to allow a neighborhood or block-level analysis. The quality of data across a number of interest areas inhibits systematic analysis of the demographic profile of civic crowdfunding; this is an urgent issue that scholars should seek to address.² While the work of understanding the current profile of the field is ongoing, organizations that have

¹Hargittai (2008) provides a comprehensive discussion of the barriers to participation that different types of technological literacy present to underserved communities.

²See “The Road Ahead for Civic Crowdfunding” below.

resources to invest in crowdfunding campaign do have an opportunity to influence the shape of the process: a municipal government, for instance, could offer differential rates of match-funding for projects depending on the socio-economic profile of the neighborhood in which they are located. A scale of variable match-funding based on an indicator such as household income could therefore be used to incentivize projects that serve underserved communities.

The question of equality of opportunity does not end with geography and socio-economic profile, however. The data show that the most popular projects, gardens and parks, are among the least controversial potential applications of civic crowdfunding. Funding for controversial or divisive projects is rare in civic crowdfunding; the number of controversial projects in crowdfunding as a whole is low, although a handful of cases have raised ethical or philosophical questions (Davies, 2013a). There are large swaths of projects that serve critical community needs that attract controversy, such as drug rehabilitation clinics and family planning clinics. It remains to be seen whether civic crowdfunding will be able to take on and deliver these types of projects, given the apparent relative difficulty of doing so. If crowdfunding remains a vehicle most oriented towards advancing projects that are uncontroversial, it will confirm the suspicion held by many that it serves well-resourced, technologically-savvy, majority communities much more than others. This tendency does not prevent governments and community organizations that seek to address these inequalities from leveraging crowdfunding for particular projects, but it underscores the importance of their continuing to pursue mission-led work.

5.2.2 Civic Influence: For Whom, From Whom?

The notion that civic crowdfunding transfers power to communities and individuals is a common theme in the rhetoric of projects and platforms. Platforms do provide a lower-cost means of organizing groups around an issue and processing funding from a

large number of donors, and in this respect, may reduce the number of intermediaries required to realize a civic project. But it is important to note that crowdfunding does not entirely “disintermediate” the process. It creates new intermediaries, the platforms, which have their own sets of rules. It also does not disconnect participants from existing inequalities in power and resource; in some cases, it may magnify them. If we follow the argument that civic crowdfunding is likely to reflect existing power relations and the role of capital, then we might expect to see that crowdfunding becomes co-opted by powerful actors such as international banks in the future (Dey and Marti, 2012). To date we have not seen evidence of this in the case of civic crowdfunding, although it is too new a field to have fully involved larger financial players.

Creative crowdfunding does show evidence of co-option by larger interests in some industries. This is manifested in the growing number of projects raising over \$1 million on Kickstarter, which have emerged since February 2011.³ The video games industry shows the most evidence of concentration of funds: \$1 million-plus projects account for 40% of the the total raised in that category on the platform. Prominent software companies such as Double Fine Studios and Obsidian Entertainment have participated in these campaigns. In the music industry, by contrast, there has been little participation by artists under contract with large record labels, and even though the category accounts for the most successful Kickstarter campaigns to date (14,045, 27% of the total), only one, Amanda Palmer, has raised \$1 million (Kickstarter, 2012a). Notably, the music category has seen one of Kickstarter’s most high profile celebrity failures: the Icelandic musician Björk canceled a campaign to fund the porting of her Biophilia app to Windows and Android in February 2013 after just ten days and £15,370 (\$25,160) raised, of a £375,000 (\$614,000) goal. Björk’s crowdfunding campaign team wrote that it believed their fundraising target was “too

³The first million-dollar project was the Elevation Dock (Kickstarter, 2012b).

optimistic” and “too gigantic” and that they hoped to be able to carry out the project in the future for a lower cost (Biophilia, 2013). This is not necessarily a surprising remark given that the norm of attempting to raise large sums is yet to be established in the music category. The growing prominence of large-value campaigns as a significant share of the overall activity on the platform is, however, clear. Davies (2013b) finds that one in seven dollars given to a successful Kickstarter campaign to date went to million-dollar projects. The Video Game category has produced the greatest number of fully-funded crowdfunding projects at this level (34 projects), followed by Technology (13) and Design (9).

The potential of civic crowdfunding to be co-opted by existing power holders represents a significant challenge for governments and community-focused organizations. But there are also challenges of which they have significant experience. Civic crowdfunding does not, intrinsically, lend itself to co-option more easily than any other mechanism of resource pooling, although its novelty and association with innovative technology sometimes may prove to be a (convenient) distraction from the power dynamics which may impact and shape it. For instance, a real estate developer could invite a community to crowdfund a small portion of a proposed project — such as funding the programming of events in a public space — in order to give the community the impression of co-ownership related to the development and reduce the chances of organized opposition, even though the crowdfunded capital may give community members little or no additional control of the direction of the overall project. It will be important for organizations that seek to serve communities to guard themselves and their constituencies against these distractions and to approach crowdfunding with the same critical distance with which they would any other means of delivering a project.

5.2.3 DIY Institutions, or Weakening Institutions? Four Pathways for Engagement

As discussed in Chapter 5, crowdfunding can be seen as an opportunity to remake and open government in a way that strengthens the relationship between communities and government, or it can be seen as a reflection of the weakness or failure of institutions. The current state of crowdfunding leans towards the latter, since platforms mostly function as alternative infrastructures that realize projects without the need for input from governments or civic-focused organizations. Generic crowdfunding platforms may see no need to shape their models to encourage participation by these stakeholders, but most civic platforms are seeking to do so. This moment of reshaping is a critical opportunity for governments and civic organizations to influence how civic crowdfunding impacts and supports their work.

It is incumbent upon institutional stakeholders, governments and non-profits, to engage meaningfully with community members who are pursuing civic crowdfunding and the platforms themselves, in order to develop collaborations that strengthen the link between institutions and communities rather than weaken them. For governments, this means using civic crowdfunding to open up the design of public space and develop ways that institutions and community members can work together to co-create better shared resources. Hawaii may become the first state-level government to explore this idea. In the first legislation to use the term *civic crowdfunding*, in January 2014 lawmakers proposed legislation establishing a pilot scheme for school maintenance projects (Davies, 2014). For non-profits, this means using crowdfunding platforms to connect with and support groups and individuals who are pursuing projects consistent with their missions. At the present time, numerous municipal governments and civic organizations are wrestling with these questions and what their role should be in the process. I will now outline four possible pathways for institutional engagement in civic crowdfunding that have been tried with some success to

date. They are: *Promoter*, *Curator*, *Facilitator* and *Platform*.

Promoter. In this pathway, the organization acts as the main fundraiser, taking responsibility for receiving and spending the money, using an existing platform. This is the most conventional model, and has been successfully executed by several groups. In April 2013, the Chicago Parks Foundation raised \$62,113 for the expansion of the city's Windy City Hoops basketball social program (IndieGoGo, 2013). The benefit of the *promoter* approach is that it gives the organization complete control over the messaging associated with the campaign. The drawbacks are that the organization also bears all of the risks of failure, and organizations with large existing funding sources will need to justify carefully why they're asking for additional money.

Curator. The organization draws attention to crowdfunding projects that support its values or benefit its community, most likely by hosting a page on an existing crowdfunding website. New York City Council was one of the first organizations to adopt this model by creating a Kickstarter page, and the city of Bristol earlier this year partnered with Spacehive to promote projects by the local community (Matthews and Taylor, 2013). As a curator, the organization can leverage the best grass-roots ideas in the communities they serve. It is also presumed to have exercised some degree of due diligence on the campaigns it promotes, and so is likely to be held partly responsible if campaigns fail to reach their funding targets or to fulfill their projects.

Facilitator. The organization supports its members, subsidiaries or partners who want to use crowdfunding to fund their projects by providing training and expertise. The City of San Francisco's upcoming Living Innovation Zones scheme, a public-private partnership that invites community groups and local companies to propose temporary uses for under-utilized spaces in the city, will encourage potential partners to explore crowdfunding as a means of raising capital for their projects (Exploratorium, 2013). The benefit of this approach, also being explored as part of the

New York Department of Transportation’s Plaza program, is that it has the potential to scale the use of crowdfunding and enable a larger pool of individuals to use it, and reduces the responsibility carried by the organization.

Platform. An organization creates its own crowdfunding platform and hosts campaigns entirely on its own site. There are few examples of this among government and community organizations, although private foundations and corporations have explored the model. The Long Now Foundation is using this model to build a salon space and library for its members, and has raised almost half of its \$495,000 target. IBM Research created its own pilot platform to encourage competitive innovation, and found that the experiment produced high participation rates and extensive inter-departmental collaboration (Muller et al., 2013). Most organizations, however, would probably use a “white label” version of an existing platform (likely for a reduced fee) although at least one reasonably robust open source codebase exists.⁴ An organization could simply use a widget for a payment platform such as WePay on a web page, although it would then either need a manual solution to handle the other affordances of crowdfunding (such as rewards, match-funding and funder profiling) or miss out on them altogether.

All of the above approaches may or may not involve financial investment by the organization, which would most likely take the form of match funding. In every case constituents will want to know why the organization is asking for money - especially if it is acting as promoter or platform, and therefore receiving the money directly. Well-known artists such as Zach Braff have been on the receiving end of similar critique, and Braff went to great lengths to rebut it. Braff was criticized publicly by director James Franco for his campaign “Wish I Was Here” which raised \$3.1 million on Kickstarter, and posted a video to rebut allegations that he was an inappropriate

⁴“White labelling” is a practice whereby Company A buys a product from a third-party and adds Company A’s branding to the product such that it appears to originate from Company A, not the third party.

user of the platform (KickstartedMovie, 2013). Large players may have significant resources to direct towards crowdfunding, but as a result they may need to justify why they're asking the crowd instead of professional investors (or taxpayers).

Civic organizations of all types are beginning to think about the different roles that they might play in the crowdfunding process beyond the basic model of creating an account and starting a campaign like any other. One of the reasons for that evolution is that the proliferation of crowdfunding platforms is revealing the fact that the underlying payments and project management technology is relatively straightforward to replicate. Crowdfunding as a technical process is something that the vast majority of organizations with a web presence could implement quickly. But the best existing platforms provide many other social and strategic layers to the process that civic organizations may not have the capability or desire to provide. These might include campaign advice and management, a social network of would-be funders and connections to larger funders and interest groups. Civic and public organizations would do well to focus on the social and strategic aspects of the process in deciding which route into crowdfunding makes sense for their projects.

5.3 The Road Ahead for Civic Crowdfunding

For researchers and practitioners in such a new area of interest as civic crowdfunding, there is a wide range of unanswered and potentially fruitful questions to be addressed in the coming years. This thesis began to explore issues such as levels of access to crowdfunding, the success rate of projects, the distribution of resources and the impact on institutions, but there is much further work to be done. For these inquiries to be productive, however, progress is necessary on three fronts: data quality and transparency, socially-grounded research and experimental practice. This project seeks to be a first step to inspire and support that work.

Chapter 2 presented the first compiled dataset related to civic crowdfunding in seeking to describe and quantify the field, but there remain significant knowledge gaps due to the lack of reliable and consistent project data across platforms. Providing appropriate access to crowdfunding data would also help to highlight problems and gaps in the information currently being collected, an issue that this project contended with. Going forward, as we seek higher standards of data and transparency, it will be possible to address deeper questions and challenges such as those of equity, power and access raised in Chapter 4, more concretely. Platforms and organizations will of course choose very different methods to address these questions, in ways that support their objectives, but having a richer spectrum of possibilities for inquiry and action will benefit the whole community greatly.

While better data may to some degree provide a more secure footing from which to begin critical analysis of civic crowdfunding, this is only one aspect of the research agenda. Given the potential long-run implications of this subgenre of activity for communities and institutions, it is important for researchers to use quantitative data and qualitative inquiry to take up questions that are socially grounded. Much of the academic research on crowdfunding to date has focused on comparisons of the process with other means of financing projects, such as venture capital, and analyzes of its efficiency and productivity in those terms. As explored in Chapters Three and Four, the appropriate point of comparison for civic crowdfunding is likely not financial markets, but government and non-profit investment. Furthermore, it has significance and implications far beyond the pure allocation of capital. Future research should seek to compare patterns of civic crowdfunding participation and funding to a wide range of other socio-economic indicators and to investments made over time by government and non-profits.

This project was in many respects limited by its time horizon of five years, since it was in most cases impossible to determine the long-run impact of a crowd-

funding campaign (if any) on a community's socio-economic health and its ability to attract investment from government or other sources outside crowdfunding platforms. Many of the broader implications of civic crowdfunding will only be observable through longer-term study.

As we develop more accurate and detailed understandings of the civic crowdfunding process, its participants and its implications over time, exciting opportunities will emerge for experimental practice and research.⁵ It will be possible to test and analyze the four engagement models described above by building new platforms, processes and new features within existing ones. Working in tandem, researchers, organizations and platforms will be able to design variations on the conventional crowdfunding process that may better suit particular local circumstances. For instance, platforms could experiment with campaigns that enable communities to select from a pool of competing proposals for the same public space, and distribute funding after a series of rounds in which the least popular ideas are eliminated. Another possible intervention could be for platforms to enable municipalities to open city-wide crowdfunding competitions in which government could offer differential rates of match-funding depending on the socio-economic profile of the area, to incentivize investment in poorer communities. These scenarios are merely two examples of experiments that would provide rich material for researchers and institutions to understand the dynamics of civic crowdfunding more clearly and establish best practices.

The examples also point to the opportunity and potential positive impact that institutional players could have on civic crowdfunding by engaging more actively with its design and development. Currently most institutions participate in the process relatively passively, as donors or sponsors, but crowdfunding platforms could learn a great deal from the array of fundraising techniques that institutional players have developed prior to and independently of crowdfunding. In much the same way that

⁵Some encouraging early discussion of these opportunities was raised at the CHI 2014 conference (Gerber, Muller, et al., 2014).

the rise of crowdfunding suggests that existing funding mechanisms are ripe for disruption, institutions and researchers would do well to apply this notion of disruption to the crowdfunding platforms themselves, and to push for new models that are more participatory, transparent and deliver civic outcomes more effectively.

Appendix: Data Collection and Dataset Descriptions

This section describes the datasets used in this project, collection methods and known issues. Each dataset is referred to by a descriptive label and an identifier, CCDF(x).

Compiled Civic Crowdfunding Dataset (CCFD1)

The Compiled Civic Crowdfunding Dataset contains projects collected from the seven platforms studied (Catarse, Citizinvestor, Goteo, IOBY, Kickstarter, Neighbor.ly and Spacehive) between June 2012 and March 23, 2014. Data was collected using scripts written in Python and run on MIT servers and my local machine. For verification purposes, data was sought from all platforms, and was successfully obtained from IOBY, Neighbor.ly and Spacehive. Manually obtained data was in most cases used to add missing or deleted projects to the dataset. The dataset includes projects that were both open and completed at the time of the final data collection, on March 23, 2014.

The following attributes are recorded for each project in CCFD1.

- Project Name
- Location
- Project Goal

- Amount Raised
- Number of Funders
- Funding Open (True / False)
- Summary text

From these fields, two further attributes were calculated, Average Pledge (mean) and Percentage Raised, to record projects that exceeded their goal. See 2, “The field of civic crowdfunding”, p. 45.

Civic Platform Projects Dataset (CCFD2)

CCFD2, Civic Platforms Dataset, is a subset of the Compiled Civic Crowdfunding Dataset that includes only projects from the four civic platforms (CP): Citizinvestor, IOBY, Neighbor.ly and Spacehive. For dates of collection and reliability information, see CCFD1 above. See 2.2.1, “CP projects”, p. 49. The typology of CCFD2 projects with respect to activity type, good produced (“Types of projects and the goods they produce”, p. 2.6) and location (“Projects by location”, p. 2.8) was carried out as part of the research for Goodspeed and Davies (2014) and is described further in that paper.

Generic Platform Projects Dataset (CCFD3)

CCFD3, Generic Platforms Dataset, is a subset of the Compiled Civic Crowdfunding Dataset that includes only projects from the three generic platforms (GP): Catarse, Goteo and Kickstarter. Catarse projects were collected from the site’s “Urbanism” category, Goteo projects were collected from the “Social” and “Cultural”, and Kickstarter projects. See 2.2.2, “GP projects”, p. 50.

Dated Projects Dataset (CCFD4)

CCFD4, Dated Projects Dataset, contains 271 projects from CCFD2 and the 429 Kickstarter projects from CCFD3 for which accurate date information could be obtained. For many of the projects in CCFD2, no start or end date was published on the platform’s website. In some cases dates were given in the data supplied directly by the platforms themselves. In other cases, I derived estimated project activity dates by collecting the dates of comments published on project pages. In most cases this allowed an estimate of project start and end dates. In cases where the dates of a project’s fundraising campaign, the project was excluded from CCFD4 to avoid errors in relative growth data. See 2.3, “Growth of projects on civic and generic platforms”, p. 51.

Case Study Backers Dataset (CCFD5)

CCFD5, Case Study Backers Dataset, contains data concerning the backers of the three case studies described and was obtained from the platforms directly — Spacehive, Neighbor.ly and Catarse. The data was supplied in anonymized form and was derived from platforms’ payment processing records and user databases. All subsequent analysis was conducted independently for the purposes of this research project. No further verification of the data was sought.

Discourse Dataset (CCFD6)

CCFD6, Discourse Dataset, is an earlier subset of 274 projects in CCFD1 that was collected and analyzed on December 5, 2012. Using the “Summary Text” field, projects were tagged for explicit references to four themes. 1) place-based community, 2) interest-based community, 3) redistribution of wealth between communities, and 4) shortfalls or reduction in public spending. One day later, I repeated the tagging

process on the same data for consistency. See 4, “Three competing visions of civic crowdfunding”, p. 101.

Bibliography

- [1] The Age. “A New York forger sentenced to five years in Gaol.” In: *The Age* (June 22, 1894), p. 3.
- [2] Ajay K. Agrawal, Christian Catalini, and Avi Goldfarb. *Some Simple Economics of Crowdfunding*. National Bureau of Economic Research, 2013. URL: <http://www.nber.org/papers/w19133> (visited on 03/23/2014).
- [3] Ajay K. Agrawal, Christian Catalini, and Avi Goldfarb. *The Geography of Crowdfunding*. Working Paper 16820. National Bureau of Economic Research, Feb. 2011. URL: <http://www.nber.org/papers/w16820> (visited on 09/16/2013).
- [4] Gabriel Abraham Almond and Sidney Verba. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton University Press, 1963. 582 pp.
- [5] Gar Alperovitz. *What Then Must We Do?: Straight Talk about the Next American Revolution*. Chelsea Green Publishing, 2013.
- [6] Sherry R. Arnstein. “A Ladder of Citizen Participation.” In: *Journal of the American Institute of planners* 35.4 (1969), pp. 216–224. URL: <http://www.tandfonline.com/doi/abs/10.1080/01944366908977225> (visited on 09/16/2013).
- [7] Peer Baeck, Liam Collins, and Stian Westlake. *Crowding In: How the UK’s businesses, charities, government, and financial system can make the most of crowdfunding*. London: Nesta, Dec. 2012.

- [8] Mark Bagnoli and Barton L. Lipman. “Provision of Public Goods: Fully Implementing the Core through Private Contributions.” In: *The Review of Economic Studies* 56.4 (Oct. 1, 1989), pp. 583–601. DOI: 10.2307/2297502. URL: <http://restud.oxfordjournals.org/content/56/4/583> (visited on 11/29/2013).
- [9] Benjamin Barber. *Strong Democracy: Participatory Politics for a New Age*. University of California Press, Feb. 1, 2004.
- [10] Tomer Barel. *PayPal and Crowdfunding*. PayPal. Sept. 11, 2013. URL: <https://www.paypal-forward.com/leadership/paypal-and-crowdfunding/> (visited on 11/28/2013).
- [11] Jeffrey Barnett and Philip Vidal. *State and Local Government Finances Summary: 2010*. U.S. Census Bureau, Sept. 2012. URL: http://www2.census.gov/govs/local/10_summary_report.pdf.
- [12] Jeffrey Barnett and Philip Vidal. *State and Local Government Finances Summary: 2011*. U.S. Census Bureau, July 2013. URL: http://www2.census.gov/govs/local/summary_report.pdf.
- [13] Elizabeth Barrette. “Crowdfunding: A Communal Business Model.” In: *Communities*. Fellowship for Intentional Community 152 (2011). URL: communities.ic.org/articles/1484/Crowdfunding (visited on 09/16/2013).
- [14] Nancy K. Baym. “Fans or friends?: Seeing social media audiences as musicians do.” In: *Participations* 9.2 (2012), pp. 286–316. URL: <http://www.participations.org/Volume%209/Issue%202/17%20Baym.pdf> (visited on 05/06/2014).
- [15] BBC News. *London parents crowdfund new playground*. YouTube. Dec. 3, 2012. URL: http://www.youtube.com/watch?v=puJVfHvJf_8 (visited on 12/07/2013).

- [16] Yochai Benkler and Helen Nissenbaum. “Commons-based Peer Production and Virtue.” In: *Journal of Political Philosophy* 14.4 (2006), pp. 394–419. URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9760.2006.00235.x/full> (visited on 04/27/2014).
- [17] Lucy Bernholz, Robert Reich, and Chiara Cordelli. *Good Fences: The Importance of Institutional Boundaries in the New Social Economy*. Stanford Center on Philanthropy and Civil Society, 2013. URL: http://issuu.com/stanfordpacs/docs/good_fences (visited on 10/09/2013).
- [18] Jason Best et al. *Scaling Innovation: Crowdfunding’s Potential for the Developing World*. Information for Development Program (infoDev), The World Bank, Oct. 2013.
- [19] *Bike Walk KC interview 2*. In collab. with Sarah Shipley. 2014.
- [20] *BikeWalk KC interview 1*. In collab. with Sarah Shipley. Oct. 2, 2013.
- [21] Biophilia. *Bjork: Biophilia App for Android and Windows 8 - Kickstarter Update*. Kickstarter. Feb. 7, 2013. URL: <http://www.kickstarter.com/projects/501402653/bjork-biophilia-app-for-android-and-windows-8/posts/400800> (visited on 11/30/2013).
- [22] Michael Booth. *Colorado Springs cuts into services considered basic by many*. The Denver Post. 2010. URL: http://www.denverpost.com/news/ci_14303473 (visited on 12/08/2013).
- [23] Daren Brabham. *Crowdsourcing*. Cambridge: MIT Press, 2013.
- [24] Daren Brabham. “Crowdsourcing as a model for problem solving an introduction and cases.” In: *Convergence: the international journal of research into new media technologies* 14.1 (2008), pp. 75–90. URL: <http://con.sagepub.com/content/14/1/75.short> (visited on 12/01/2013).

- [25] Daren Brabham. “Crowdsourcing the public participation process for planning projects.” In: *Planning Theory* 8.3 (2009), pp. 242–262. URL: <http://plt.sagepub.com/content/8/3/242.short> (visited on 09/16/2013).
- [26] Paul Brest et al. *A Decade of Outcome-Oriented Philanthropy*. Stanford Social Innovation Review, 2012. URL: <https://ctbookstore.org/files/publications/4-19%20Paul%20Brest%20panel%20transcript.pdf> (visited on 12/03/2013).
- [27] Xavier de Souza Briggs. *Democracy as Problem Solving: Civic Capacity in Communities Across the Globe*. The MIT Press, July 18, 2008.
- [28] Xavier de Souza Briggs, Susan J. Popkin, and John Goering. *Moving to Opportunity : The Story of an American Experiment to Fight Ghetto Poverty: The Story of an American Experiment to Fight Ghetto Poverty*. Oxford University Press, Mar. 3, 2010. 319 pp.
- [29] Steven Brint. “Gemeinschaft Revisited: A Critique and Reconstruction of the Community Concept.” In: *Sociological Theory* 19.1 (2001), pp. 1–23. DOI: 10.1111/0735-2751.00125. URL: <http://onlinelibrary.wiley.com/doi/10.1111/0735-2751.00125/abstract> (visited on 09/22/2013).
- [30] Eric Bunch. *KC in Last Place for Bike Commuting*. KCBike.Info. June 18, 2007. URL: <http://kcbike.info/2007/06/18/kc-in-last-place-for-bike-commuting/> (visited on 02/12/2014).
- [31] US Census Bureau. *American Community Survey 2007*. Washington, DC, June 2007. URL: http://www.census.gov/acs/www/data_documentation/2007_release/ (visited on 02/12/2014).
- [32] Judith Butler. *Bodies that matter: on the discursive limits of sex*. routledge, 1993. URL: <http://books.google.com/books?hl=en&lr=&id=ZqiIgwQiyFYC&oi=fnd&pg=PR1&dq=Butler,+J.,+Bodies+that+Matter:+On+the+>

- Discursive+Limits+of+Sex,+Routledge+(1993)&ots=TAx2oGlhff&sig=Ne640aPxn6zLcLxaI3HoNKvUyZ4 (visited on 12/02/2013).
- [33] CA. “The first matching funds in history: Another franklin first.” In: *CA: A Cancer Journal for Clinicians* 14.5 (1964), pp. 187–187. DOI: 10.3322/canjclin.14.5.187. URL: <http://dx.doi.org/10.3322/canjclin.14.5.187>.
- [34] Yves Cabannes. “Participatory budgeting: a significant contribution to participatory democracy.” In: *Environment and Urbanization* 16.1 (2004), pp. 27–46. URL: <http://eau.sagepub.com/content/16/1/27.short> (visited on 12/01/2013).
- [35] Pimp My Carroca. *Pimp My Carroca Facebook page*. Facebook. May 13, 2012.
- [36] Manuel Castells. *Networks of Outrage and Hope: Social Movements in the Internet Age*. 1st ed. Polity, Sept. 4, 2012. 200 pp.
- [37] Justin Cheng and Michael S. Bernstein. “Catalyst: Triggering Collective Action with Thresholds.” In: *CSCW ’14*. CSCW. Baltimore, Maryland, Feb. 15, 2014. URL: http://hci.stanford.edu/publications/2014/Catalyst/catalyst_csw.pdf (visited on 11/05/2013).
- [38] Donors Choose. *Donors Choose - Impact*. 2013. URL: <http://www.donorschoose.org/about/impact.html> (visited on 11/25/2013).
- [39] Citizinvestor. *Clean Up CF: New Bins in Jenks Park*. Citizinvestor. Oct. 3, 2013. URL: <http://www.citizinvestor.com/project/clean-up-cf-new-bins-in-jenks-park> (visited on 12/08/2013).
- [40] Citizinvestor. *Do projects in rich neighborhoods perform better than those in poorer neighborhoods?* Citizinvestor. Feb. 13, 2014. URL: <http://blog.citizinvestor.com/post/76530391900/do-projects-in-rich-neighborhoods-perform-better-than>.

- [41] Citizinvestor. *Pawnee, IN and Citizinvestor*. Citizinvestor. Mar. 6, 2013. URL: <http://citizinvestor.com/pawnee> (visited on 12/08/2013).
- [42] Citizinvestor. *Somerville Mobile Farmers' Market*. Citizinvestor. Dec. 2012. URL: <http://www.citizinvestor.com/project/somerville-mobile-farmers-market> (visited on 04/28/2014).
- [43] Aaron Clauset, Cosma Rohilla Shalizi, and M. E. J. Newman. "Power-Law Distributions in Empirical Data." In: *SIAM Review* 51.4 (Nov. 4, 2009), pp. 661–703. DOI: 10.1137/070710111. URL: <http://epubs.siam.org/doi/abs/10.1137/070710111> (visited on 04/15/2014).
- [44] Sue Cocker. *Adopted streets Spring into action*. Barnet. Adopted streets Spring into action. Mar. 5, 2013. URL: http://www.barnet.gov.uk/news/article/253/adopted_streets_spring_into_action (visited on 12/08/2013).
- [45] James S. Coleman and James Samuel Coleman. *Foundations of Social Theory*. Harvard University Press, 1994. 1020 pp.
- [46] 816 Bike Collective. *Help The 816 Bicycle Collective Overhaul The New Hub*. Neighbor.ly. July 2013. URL: <http://neighbor.ly/projects/816-bike> (visited on 02/17/2014).
- [47] Alessandro Cordova, Johanna Dolci, and Gianfranco Gianfrate. "The Bearable Lightness of Crowdfunding: Evidences from Technology Projects." In: 4th European Conference on Corporate R&D and Innovation CONCORDi-2013. Seville, 2013.
- [48] Florian Danmayr. "Web 2.0 and crowdfunding platforms." In: *Archetypes of Crowdfunding Platforms*. Springer, 2014, pp. 7–48. URL: http://link.springer.com/chapter/10.1007/978-3-658-04559-3_2 (visited on 04/20/2014).

- [49] Rodrigo Davies. *Hawaii Proposes the First Civic Crowdfunding Legislation*. rodrigodavies.com. Mar. 24, 2014. URL: <http://rodrigodavies.com/blog/2014/03/24/hawaii-proposes-the-first-civic-crowdfunding-bill.html> (visited on 03/24/2014).
- [50] Rodrigo Davies. "The Ethics of Civic Crowdfunding." In: *Center for Digital Ethics and Policy* (Dec. 2013).
- [51] Rodrigo Davies. *What does the wealth distribution of crowdfunding look like?* Nov. 21, 2013. URL: <http://rodrigodavies.com/blog/2013/11/21/spreading-the-crowdfunded-wealth.html> (visited on 11/30/2013).
- [52] Rodrigo Davies. *What's wrong with crowdfunding your own security?* rodrigodavies.com. Oct. 10, 2013. URL: <http://rodrigodavies.com/blog/2013/10/10/whats-wrong-with-crowdfunding-your-own-security.html> (visited on 12/08/2013).
- [53] Deloitte. *Technology, Media & Telecommunications Predictions 2013*. Deloitte, 2013.
- [54] Pascal Dey and Laurent Marti. "Civil Society and the Need to Zoom In - Enacting the Social through Crowdfunding." In: *Democratization, Marketization and the Third Sector*. ISTR 10th International Conference. University of Siena, Italy, July 10, 2012. URL: https://www.alexandria.unisg.ch/export/DL/Laurent_Marti/218124.pdf (visited on 09/16/2013).
- [55] DGRV. *Burial societies in South Africa: History, function and scope*. 2. ECI-Africa Consulting (Pty) Ltd, Sept. 2003. URL: <http://www.dgrvsa.co.za/Publications/Burial%20societies%20in%20South%20Africa.pdf> (visited on 11/29/2013).

- [56] Carl DiSalvo. “Design, democracy and agonistic pluralism.” In: *Proceedings of the Design Research Society Conference 2010*. Design Research Society Conference. 2010.
- [57] DonorsChoose. *DonorsChoose Financial Statements FY 2010-2009*. Financial Statement. New York, Oct. 15, 2010. URL: <http://www.donorschoose.org/docs/DonorsChoose.org-FY-2010-Financial-Statements.pdf>.
- [58] Exploratorium. *Exploratorium Living Innovation Zone*. Indiegogo. Sept. 3, 2013. URL: <http://www.indiegogo.com/projects/474961/fblk> (visited on 03/30/2014).
- [59] Facebook. *Facebook Reports First Quarter 2013 Results*. Facebook. May 1, 2013. URL: <http://investor.fb.com/releasedetail.cfm?ReleaseID=761090> (visited on 11/28/2013).
- [60] Rockefeller Foundation. *2012 Jane Jacobs Medal Recipients Erin Barnes, Brandon Whitney, and Cassie Flynn*. Mar. 14, 2013. URL: http://www.youtube.com/watch?v=QVEP_g4thFw (visited on 12/07/2013).
- [61] Archon Fung. “Varieties of Participation in Complex Governance.” In: *Public Administration Review* 66 (2006), pp. 66–75. DOI: 10.1111/j.1540-6210.2006.00667.x. URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6210.2006.00667.x/abstract> (visited on 09/16/2013).
- [62] Herbert J Gans. *Urban Villagers: Group and Class in the Life of Italian-Americans*. The Free Press, June 1, 1982.
- [63] Elizabeth M. Gerber, Julie S. Hui, and Pei-Yi Kuo. “Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms.” In: *Proc. of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*. 2012. URL: <http://www.juliehui.com>.

- org/wp-content/uploads/2013/04/CSCW_Crowdfunding_Final.pdf (visited on 09/16/2013).
- [64] Elizabeth M. Gerber, Michael Muller, et al. “Crowdfunding: An Emerging Field of Research.” In: *CHI '14 Extended Abstracts on Human Factors in Computing Systems*. CHI EA '14. New York, NY, USA: ACM, 2014, pp. 1093–1098. DOI: 10.1145/2559206.2579406. URL: <http://doi.acm.org/10.1145/2559206.2579406> (visited on 05/05/2014).
 - [65] Tarleton Gillespie. “The politics of platforms.” In: *New Media & Society* 12.3 (2010), pp. 347–364.
 - [66] Malcolm Gladwell. “Small Change.” In: *The New Yorker* (Oct. 4, 2010). URL: http://www.newyorker.com/reporting/2010/10/04/101004fa_fact_gladwell (visited on 09/16/2013).
 - [67] *Glyn Coch Community Center Interview*. In collab. with Louisa Addiscott. May 22, 2013.
 - [68] Dean Golemis. *British Band’s U.S. Tour Is Computer-generated*. Chicago Tribune. Sept. 23, 1997. URL: http://articles.chicagotribune.com/1997-09-23/features/9709230071_1_music-fans-newsgroup-marillion (visited on 11/25/2013).
 - [69] Rob Goodspeed and Rodrigo Davies. “Civic Crowdfunding and the Planning Process. Manuscript in Preparation.” In: (2014).
 - [70] Governing. *Bankrupt Cities, Municipalities List and Map*. Governing. Dec. 3, 2013. URL: <http://www.governing.com/gov-data/municipal-cities-counties-bankruptcies-and-defaults.html> (visited on 12/07/2013).
 - [71] Erhardt Graeff, Matt Stempeck, and Ethan Zuckerman. “The battle for ‘Trayvon Martin’: Mapping a media controversy online and off-line.” In: *First Monday*

- 19.2 (2014). URL: <http://firstmonday.org/ojs/index.php/fm/article/view/4947>.
- [72] Mark S Granovetter. “The strength of weak ties.” In: *American journal of sociology* (1973), pp. 1360–1380.
- [73] Michael D. Greenberg et al. “Crowdfunding support tools: predicting success & failure.” In: *CHI’13 Extended Abstracts on Human Factors in Computing Systems*. ACM, 2013, pp. 1815–1820. URL: <http://dl.acm.org/citation.cfm?id=2468682> (visited on 05/04/2014).
- [74] Luigi Guiso, Paola Sapienza, and Luigi Zingales. *Civic capital as the missing link*. National Bureau of Economic Research, 2010.
- [75] Qing Guo. “The practical use of crowd funding - Two cases illustration.” In: *Management* 28 (2008), pp. 194–202. URL: <http://lup.lub.lu.se/student-papers/record/2153097/file/2436286.pdf> (visited on 12/09/2013).
- [76] Jacob S Hacker. *The great risk shift: the assault on American jobs, families, health care, and retirement and how you can fight back*. Oxford; New York: Oxford University Press, 2006.
- [77] Eszter Hargittai. “The digital reproduction of inequality.” In: *Social stratification*. Boulder, CO: Westview Press, 2008, pp. 936–944. URL: http://communications.northwestern.edu/programs/phd_media_technology_society/publications/Hargittai.pdf (visited on 09/16/2013).
- [78] Julie S. Hui, Michael D. Greenberg, and Elizabeth M. Gerber. “Understanding the Role of Community in Crowdfunding Work.” In: *CSCW 14*. CSCW. 2014. URL: http://www.juliehui.org/wp-content/uploads/2013/09/Hui_Gerber_UnderstandingtheRoleofCommunity-inCrowdfundingWork-CSCW2014_not_for_distribution.pdf (visited on 09/30/2013).

- [79] Lee Hutchinson. *PayPal scrambles for fix after freezing two more crowdfunded games*. Ars Technica. Sept. 13, 2013. URL: <http://arstechnica.com/business/2013/09/paypal-scrambles-for-fix-after-freezing-two-more-crowdfunded-games/> (visited on 11/28/2013).
- [80] IndieGoGo. *Windy City Hoops*. IndieGoGo. Feb. 19, 2013. URL: <http://www.indiegogo.com/projects/windy-city-hoops> (visited on 12/08/2013).
- [81] IOBY. *2014 YH Arts Education Scholarship and Professional Stipend*. Dec. 2013. URL: <https://ioby.org/project/2014-yh-arts-education-scholarship-and-professional-stipend> (visited on 12/09/2013).
- [82] IOBY. *About ioby - By the numbers*. IOBY. Nov. 2013. URL: <http://ioby.org/about> (visited on 12/03/2013).
- [83] IOBY. *Do you have an idea for positive change in your neighborhood? Need money to get it started?* IOBY. 2013. URL: <http://ioby.org/idea> (visited on 12/01/2013).
- [84] IOBY. *Philadelphia's Mill Creek Urban Farm*. IOBY. Mar. 13, 2012. URL: <https://ioby.org/project/philadelphias-mill-creek-urban-farm>.
- [85] IOBY. *Pollos del Pueblo*. IOBY. July 15, 2012. URL: <https://ioby.org/project/pollos-del-pueblo-0> (visited on 04/27/2014).
- [86] Jane Jacobs. *The death and life of great American cities*. New York: Vintage Books, 1992.
- [87] Adrienne Jeffries. *Indie no-go: only one in ten projects gets fully funded on Kickstarter's biggest rival*. The Verge. Aug. 7, 2013. URL: <http://www.theverge.com/2013/8/7/4594824/less-than-10-percent-of-projects-on-indiegogo-get-fully-funded> (visited on 12/03/2013).

- [88] Henry Jenkins. “Interactive audiences? The collective intelligence of media fans.” In: *The new media book* (2002), pp. 157–170. URL: <http://labweb.education.wisc.edu/steinkuehler/curric606/readings/Jenkins2002.pdf> (visited on 12/01/2013).
- [89] Harriet Jordan. “Public Parks, 1885-1914.” In: *Garden History* 22.1 (1994), pages. URL: <http://www.jstor.org/stable/1587004>.
- [90] George Juergens. *Joseph Pulitzer and the New York World*. First Edition edition. Princeton University Press, Mar. 1967.
- [91] Tim Kappel. “Ex ante crowdfunding and the recording industry: A model for the US.” In: *Loy. LA Ent. L. Rev.* 29 (2008), p. 375. URL: http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/laent29§ion=18 (visited on 12/02/2013).
- [92] David Karpf. *The MoveOn effect: the unexpected transformation of American political advocacy*. New York: Oxford University Press, 2012.
- [93] Daniel Katz, Floyd Henry Allport, and Margaret Babcock Jenness. *Students’ Attitudes: A Report of the Syracuse University Reaction Study*. Craftsman Press, Incorporated, 1931. 448 pp.
- [94] Donald Kettl. *The Next Government of the United States: Why Our Institutions Fail Us and How to Fix Them*. 1 edition. W. W. Norton & Company, Dec. 1, 2008.
- [95] KickstartedMovie. *Zach Braff talks Kickstarter & Responds to Critics*. May 8, 2013. URL: <http://www.youtube.com/watch?v=j1LY3C0Rbr8> (visited on 04/26/2014).
- [96] Kickstarter. *Amanda Palmer: The new RECORD, ART BOOK, and TOUR by Amanda Palmer*. Kickstarter. May 31, 2012. URL: <http://www.kickstarter>.

- com/projects/amandapalmer/amanda-palmer-the-new-record-art-book-and-tour?ref=live (visited on 11/30/2013).
- [97] Kickstarter. *Elevation Dock: The Best Dock For iPhone by Casey Hopkins + ElevationLab*. Kickstarter. Feb. 11, 2012. URL: <http://www.kickstarter.com/projects/hop/elevation-dock-the-best-dock-for-iphone/posts> (visited on 11/30/2013).
- [98] Kickstarter. *Kickstarter School*. Kickstarter. 2012. URL: <http://www.kickstarter.com/help/school> (visited on 11/27/2013).
- [99] Kickstarter. *Kickstarter Stats*. Kickstarter.com. Nov. 2013. URL: <http://www.kickstarter.com/help/stats>.
- [100] Kickstarter. *What is Kickstarter*. Kickstarter. Mar. 29, 2013. URL: <http://www.kickstarter.com/hello> (visited on 11/30/2013).
- [101] Keongtae Kim and Il-Horn Hann. "Does Crowdfunding Democratize Access to Capital? A Geographical Analysis." In: *INFORMS 2013*. INFORMS Conference on Information Systems and Technology (CIST). Arlington, Virginia, 2013. URL: http://innovisops.com/papers/cist2013_submission_46.pdf (visited on 09/30/2013).
- [102] Keongtae Kim and Siva Viswanathan. "The Signals in the Noise: The Role of Reputable Investors in a Crowdfunding Market." In: *Available at SSRN 2258243* (2013). URL: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2258243 (visited on 12/02/2013).
- [103] Helen G. Klaebe and Rebecca Laycock. *Motivations and barriers to crowd-funding*. Sydney: Australia Council for the Arts (Artsupport Australia), 2012. URL: <http://eprints.qut.edu.au/57675/> (visited on 12/02/2013).

- [104] Leslie Knope. *The City of Pawnee's budget crisis*. E-mail. Mar. 6, 2013. URL: <https://mail.google.com/mail/u/0/#search/pawnee/13d4031ab22d3a36> (visited on 12/08/2013).
- [105] Daniel Kreiss. *Taking our country back: the crafting of networked politics from Howard Dean to Barack Obama*. New York: Oxford University Press, 2012.
- [106] Venkat Kuppuswamy and Barry L. Bayus. *Crowdfunding Creative Ideas: The Dynamics of Project Backers in Kickstarter*. SSRN Scholarly Paper ID 2234765. Rochester, NY: Social Science Research Network, Mar. 17, 2013. URL: <http://papers.ssrn.com/abstract=2234765> (visited on 10/07/2013).
- [107] Vinay Lal. *Shyam Benegal*. Manas. 1998. URL: <http://www.sscnet.ucla.edu/southasia/Culture/Cinema/Benegal.html> (visited on 11/27/2013).
- [108] Alexandra Lange. *Against Kickstarter Urbanism*. The Design Observer. May 2, 2012. URL: <http://observatory.designobserver.com/feature/against-kickstarter-urbanism/34008>.
- [109] David M. Larson. "Benevolent Persuasion: The Art of Benjamin Franklin's Philanthropic Papers." In: *The Pennsylvania Magazine of History and Biography* 110.2 (1986), pp. 195–217. URL: <http://www.jstor.org/stable/10.2307/20091995> (visited on 12/09/2013).
- [110] Pierre Levy and Robert Bonomo. *Collective intelligence: Mankind's emerging world in cyberspace*. Perseus Publishing, 1999. URL: <http://dl.acm.org/citation.cfm?id=555232> (visited on 12/01/2013).
- [111] Lipper and Pausch. *Letter to the Editor*. Letter. Apr. 14, 1885. JSTOR: Box7. (Visited on 03/15/2013).
- [112] Jeff Manza. "Social Capital." In: *The Cambridge Dictionary of Sociology*. New York: Cambridge University Press, 2006, pp. 557–559.

- [113] Dan Marom, Alicia Robb, and Orly Sade. “Gender Dynamics in Crowdfunding: Evidence on Entrepreneurs, Investors, and Deals from Kickstarter.” In: Academic Symposium on Crowdfunding. UC Berkeley, Oct. 2013.
- [114] Massolution. *2013 CF. The Crowdfunding Industry Report. Massolution and Crowdsourcing.org*. 2013.
- [115] Ben Matthews and Paul Taylor. “Head to head: is crowdfunding the way forward for councils?” In: *The Guardian* (May 29, 2013). URL: <http://www.theguardian.com/local-government-network/2013/may/29/crowdfunding-way-forward-for-councils> (visited on 04/02/2014).
- [116] Irene Maver. “Glasgow’s public parks and the community, 1850-1914: a case study in Scottish civic interventionism.” In: *Urban History* 25.3 (1998), pp. 323–347.
- [117] Doug McAdam. “The biographical consequences of activism.” In: *American sociological review* (1989), pp. 744–760. URL: <http://www.jstor.org/stable/10.2307/2117751> (visited on 12/02/2013).
- [118] Elizabeth McNichol, Phil Oliff, and Nicholas Johnson. *States continue to feel recession’s impact*. Washington, DC: Center on Budget and Policy Priorities, 2011. URL: http://media.khi.org/news/documents/2012/03/20/9-8-08sfp_1.pdf (visited on 12/08/2013).
- [119] Tanushree Mitra and Eric Gilbert. “The Language that Gets People to Give: Phrases that Predict Success on Kickstarter.” In: CSCW, 2014. URL: <http://diyhp1.us/~bryan/papers2/paperbot/537c4cb93e3047f7a1c9884bf68df195.pdf> (visited on 04/20/2014).
- [120] Ethan R. Mollick. *The Dynamics of Crowdfunding: An Exploratory Study*. SSRN Scholarly Paper ID 2088298. Rochester, NY: Social Science Research

- Network, June 26, 2013. URL: <http://papers.ssrn.com/abstract=2088298> (visited on 10/07/2013).
- [121] Helene Mulholland. *Mr easyCouncil defends his local government model*. the Guardian. Feb. 3, 2010. URL: <http://www.theguardian.com/society/2010/feb/03/mike-freer-easycouncil-interview> (visited on 12/08/2013).
- [122] Michael Muller et al. "Crowdfunding inside the enterprise: employee-initiatives for innovation and collaboration." In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, 2013, pp. 503–512. URL: <http://dl.acm.org/citation.cfm?id=2470727> (visited on 05/05/2014).
- [123] Mundano. *Custos - Pimp My Carroca 2012*. 2012. URL: https://docs.google.com/spreadsheet/ccc?key=0Ao8hmRpvVO_PdGdwZG1WVmVBZmR0Sm90TVo4WjJDc0E#gid=0.
- [124] Mundano. *Mundano: Pimp My Carroca: A street artist celebrates trash collectors*. TEDTalentSearch. June 29, 2012. URL: <http://www.youtube.com/watch?v=X0AydRnNn1M> (visited on 02/24/2014).
- [125] Gina Neff. *Venture labor: work and the burden of risk in innovative industries*. Cambridge, Mass.: MIT Press, 2012.
- [126] Neighbor.ly. *How it works - Neighbor.ly*. Neighbor.ly. 2013. URL: <http://neighbor.ly/how-it-works> (visited on 12/01/2013).
- [127] Neighbor.ly. *IdeaGarden @ The LAB Miami*. Neighbor.ly. Nov. 2013. URL: <http://neighbor.ly/projects/ideagarden> (visited on 12/09/2013).
- [128] Neighbor.ly. *Neighbor.ly home page*. Neighbor.ly. Dec. 2013. URL: <http://neighbor.ly/> (visited on 12/08/2013).
- [129] Neighbor.ly. *Paint the Town Green*. Neighbor.ly. Sept. 2012. URL: <http://neighbor.ly/projects/paintthetowngreen> (visited on 12/09/2013).

- [130] Dalitso Njolinjo. *Residents take charge and adopt their street*. Barnet Council. Nov. 11, 2013. URL: http://www.barnet.gov.uk/news/article/398/residents_take_charge_and_%C3%A2%C2%80%C2%98adopt%C3%A2%C2%80%C2%99_their_street (visited on 12/08/2013).
- [131] Andrew Odlyzko. "The Railway Mania - Fraud, Disappointed Expectations and the Modern Economy." In: *Journal of the Railway and Canal Historical Society* 215 (2012), p. 2.
- [132] Dietmar Offenhuber. *Tracking Trash with Waste Pickers in Brazil, MIT CoLab Radio*. <http://colabradio.mit.edu/tracking-trash-with-waste-pickers-in-brazil/>. Aug. 27, 2012. URL: <http://colabradio.mit.edu/tracking-trash-with-waste-pickers-in-brazil/> (visited on 02/26/2014).
- [133] Andrea Ordanini et al. "Crowd-funding: transforming customers into investors through innovative service platforms." In: *Journal of Service Management* 22.4 (Aug. 9, 2011), pp. 443–470. DOI: 10.1108/09564231111155079. URL: <http://www.emeraldinsight.com/journals.htm?articleid=1944376> (visited on 09/16/2013).
- [134] Elinor Ostrom. *Covenants, Collective Action, and Common-pool Resources*. Workshop in Political Theory and Policy Analysis, Indiana University, 1994. 25 pp.
- [135] Elinor Ostrom. *Unlocking public entrepreneurship and public economies*. 2005/01. WIDER, 2005. URL: <http://www.econstor.eu/handle/10419/52899> (visited on 03/30/2014).
- [136] Phillips Park The. *Philips Park - Past & Recent History*. 2013. URL: <http://www.philipspark.org.uk/MedlockValley/> (visited on 11/29/2013).

- [137] Zach Patton. *Colorado Springs Do-It-Yourself Government*. Sept. 2010. URL: <http://www.governing.com/topics/mgmt/Colorado-Springs-DIY-government.html> (visited on 12/08/2013).
- [138] Stephanie Pereira. "An Introduction to Kickstarter." MIT, Oct. 24, 2012.
- [139] Gabriel Petek. *Municipal Bankruptcy: Standard & Poor's Approach And Viewpoint*. Standard and Poors, Oct. 4, 2012, p. 6. URL: http://www.standardandpoors.com/spf/upload/Ratings_US/Municipal_Bankruptcy.pdf (visited on 12/07/2013).
- [140] PlusPool. *+ POOL, Tile by Tile*. Kickstarter. June 12, 2013. URL: <http://www.kickstarter.com/projects/694835844/pool-tile-by-tile> (visited on 11/30/2013).
- [141] Walter W. Powell. "The capitalist firm in the 21st century: emerging patterns." In: *The 21st Century Firm: Changing Economic Organization in International Perspective* (2001). URL: http://www.stanford.edu/~woodyp/papers/capitalist_firm.pdf (visited on 09/24/2013).
- [142] Jordan Raynor. *Jordan Raynor of Citizinvestor on creating a civic crowdfunding platform - video*. Dec. 6, 2013. URL: <http://www.theguardian.com/media-network/media-network-blog/video/2013/dec/06/jordan-raynor-citizinvestor-civic-crowdfunding> (visited on 12/07/2013).
- [143] Matt Richtel. "Internet Offering Soars, Just Like Old Times." In: *New York Times* (Feb. 16, 2002). URL: <http://www.nytimes.com/2002/02/16/technology/16NET.html?pagewanted=all> (visited on 11/28/2013).
- [144] Daniel M. Satorius and Stu Polland. "Crowd Funding-What Independent Producers Should Know about the Legal Pitfalls." In: *Ent. & Sports Law*. 28 (2010), p. 15. URL: http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/entspl28§ion=19 (visited on 12/09/2013).

- [145] SEC. *SEC Proposed Rule 33-9470*. Oct. 23, 2013. URL: <http://www.sec.gov/rules/proposed/2013/33-9470.pdf> (visited on 11/25/2013).
- [146] Clay Shirky. *Here comes everybody: the power of organizing without organizations*. New York: Penguin Press, 2008.
- [147] Sky News. *Mansfield crowdfunds free public WiFi network*. YouTube - Spacehive. 2013. URL: http://www.youtube.com/watch?v=r7DmoU8J8tw&feature=youtube_gdata_player (visited on 12/07/2013).
- [148] Don Slater. "From calculation to alienation: disentangling economic abstractions." In: *Economy and Society* 31.2 (2002), pp. 234–249. URL: <http://www.tandfonline.com/doi/abs/10.1080/03085140220123144> (visited on 12/03/2013).
- [149] Boaventura de Sousa Santos. "Participatory budgeting in Porto Alegre: toward a redistributive democracy." In: *Politics and Society* 26 (1998), pp. 461–510. URL: <http://www.archonfung.net/docs/pal218/SantosPortoAlegre.pdf> (visited on 12/01/2013).
- [150] Spacehive. *FAQs - Who are Project Delivery Managers?* Spacehive. 2012. URL: <https://spacehive.com/Home/Faqs9> (visited on 12/01/2013).
- [151] Spacehive. *Global Garden, Global Kitchen*. Spacehive. Dec. 12, 2012. URL: <http://spacehive.com/selbytrustglobalgarden> (visited on 11/30/2013).
- [152] Spacehive. *Light-up Stalybridge this Christmas*. Spacehive. Oct. 2013. URL: <http://spacehive.com/light-upstalybridgethischristmas> (visited on 12/09/2013).
- [153] Spacehive. *Loop de Loop*. <http://spacehive.com/loopde loop>. Apr. 2013. URL: <http://spacehive.com/loopde loop> (visited on 12/09/2013).
- [154] Spacehive. *Make Mansfield YOUR hotspot!* Spacehive. Sept. 2012. URL: <https://spacehive.com/mansfieldhotspot> (visited on 04/27/2014).

- [155] Spacehive. *Meet the UK's crowdfunding superstars (Inside Out, BBC 1)*. YouTube. 2013. URL: http://www.youtube.com/watch?v=aQY-CgR6-KQ&feature=youtube_gdata_player (visited on 12/07/2013).
- [156] Spacehive. *Roseland Community Windfarm*. Spacehive. Dec. 2013. URL: <http://spacehive.com/roselandcommunitywindfarm> (visited on 12/09/2013).
- [157] Spacehive. *Spacehive - pre-launch homepage*. Spacehive. July 16, 2011. URL: <https://web.archive.org/web/20110716001737/http://spacehive.com/> (visited on 12/01/2013).
- [158] Colorado Springs. *City of Colorado Springs - Volunteer Opportunities*. City of Colorado Springs. 2013. URL: <http://www.springsgov.com/page.aspx?NavID=1216> (visited on 12/08/2013).
- [159] Susan Leigh Star. "The Ethnography of Infrastructure." In: *American Behavioral Scientist* 43.3 (Nov. 1, 1999), pp. 377–391. DOI: 10.1177/00027649921955326. URL: <http://abs.sagepub.com/content/43/3/377> (visited on 09/16/2013).
- [160] Yancey Strickler. *Shortening the Maximum Project Length - The Kickstarter Blog*. Kickstarter. June 17, 2011. URL: <http://www.kickstarter.com/blog/shortening-the-maximum-project-length> (visited on 11/25/2013).
- [161] Michael Sullivan. *Crowdfunding*. fundavlog. Aug. 12, 2006. URL: <http://crowdfunding.com/community/index.php?op=ViewArticle&articleId=9&blogId=1> (visited on 12/10/2013).
- [162] James Surowiecki. *The wisdom of crowds*. New York: Anchor Books, 2005.
- [163] New York Times. "Wiman's Remarkable Career." In: *The New York Times* (Feb. 22, 1894).

- [164] Andrew Travers. *The One Barnet Transformation Programme Presentation 29 Nov 11*. Scribd. Nov. 29, 2011. URL: <http://www.scribd.com/doc/77279963/The-One-Barnet-Transformation-Programme-Presentation-29-Nov-11> (visited on 12/04/2013).
- [165] Zeynep Tufekci. *Is the Internet good or bad? Yes*. Medium. Feb. 17, 2014. URL: <https://medium.com/matter/76d9913c6011> (visited on 04/27/2014).
- [166] Fred Turner. "Where the counterculture met the new economy: The WELL and the origins of virtual community." In: *Technology and Culture* 46.3 (2005), pp. 485–512. URL: <http://muse.jhu.edu/journals/tech/summary/v046/46.3turner.html> (visited on 12/01/2013).
- [167] Giving USA. *The Annual Report on Philanthropy for the Year 2013*. Philadelphia.: Giving USA Foundation Press., June 2013.
- [168] Paulo V2. *Graffiti Brazil: Mundano*. Abduzeedo. Oct. 28, 2009. URL: <http://abduzeedo.com/street-art-mundano>.
- [169] Neil Vega Murrieta. *Comidas típicas, fiestas y costumbres de Peru*. Suite101 (Spain). July 3, 2013. URL: <http://suite101.net/article/sutil-expresion-del-subdesarrollo-peruano-a863> (visited on 04/27/2014).
- [170] Parede Viva. *PIMP MY CARROCA, Catarse*. Catarse. Mar. 27, 2012. URL: <http://catarse.me/en/pimpmycarroca> (visited on 02/26/2014).
- [171] Brian Wampler and Janette Hartz-Karp. "Participatory Budgeting: Diffusion and Outcomes Across the World." In: *Journal of Public Deliberation* (2012). URL: http://scholarworks.boisestate.edu/polsci_facpubs/131/ (visited on 12/01/2013).
- [172] Tricia Wang. *Big Data Needs Thick Data*. <http://ethnographymatters.net/2013/05/13/big-data-needs-thick-data/>. Ethnography Matters. May 13, 2013. URL: <http://>

- ethnographymatters.net/2013/05/13/big-data-needs-thick-data/
(visited on 04/01/2014).
- [173] Chris Ward and Vandana Ramachandran. “Crowdfunding the next hit: Microfunding online experience goods.” In: *Workshop on Computational Social Science and the Wisdom of Crowds at NIPS2010*. 2010.
 - [174] Ellen L Weintraub and Jason K Levine. “Campaign finance and the 2008 elections: How small change (s) can really add up.” In: *Journal of Civil Rights and Economic Development* 24.2 (2012), p. 10.
 - [175] Rachel Williams. *A challenging introduction in post-riots Tottenham*. The Guardian. July 10, 2012. URL: <http://www.theguardian.com/society/2012/jul/10/challenging-introduction-post-riots-tottenham> (visited on 11/30/2013).
 - [176] Rhys H. Williams. “Constructing the Public Good: Social Movements and Cultural Resources.” In: *Social Problems* 42.1 (Feb. 1, 1995), pp. 124–144. DOI: 10.2307/3097008. URL: <http://www.jstor.org/stable/3097008> (visited on 11/29/2013).
 - [177] Jase Wilson. *Helping Communities to Be Neighborly*. Knight Foundation. 2013. URL: <http://www.knightfoundation.org/blogs/knightblog/2013/6/18/helping-communities-be-%20neighborly/>. (visited on 04/01/2014).
 - [178] Jase Wilson. *Keynote by Jase Wilson*. 2013. URL: http://www.youtube.com/watch?v=PUYJy-rLY7g&feature=youtube_gdata_player (visited on 12/07/2013).
 - [179] Erasmus Wiman. *Letter from Wiman to Cockerill*. Letter. June 25, 1885. JS-TOR: Box7. (Visited on 03/15/2013).
 - [180] The New York World. “The New York World.” In: *The New York World* (1885). (Visited on 03/15/2013).

- [181] Stefano Zamagni, Luigino Bruni, and Antonella Ferrucci. *Handbook on the economics of reciprocity and social enterprise*. Edward Elgar Publishing, 2013.
- [182] Ethan Zuckerman. *Beyond "The Crisis in Civics" - Notes from my 2013 DML talk*. My Heart's In Accra. Mar. 26, 2013. URL: <http://www.ethanzuckerman.com/blog/2013/03/26/beyond-the-crisis-in-civics-notes-from-my-2013-dml-talk/>.
- [183] Sharon Zukin. *The cultures of cities*. Cambridge, MA: Blackwell, 1995.