The 'Hungry Gap': Twitter, local press reporting and urban agriculture activism

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Accepted 19 July 2017; First published online 2 October 2017

Themed Content: Critical Foodscapes

Abstract

This paper is concerned with how urban food activists related to the media during 2015, when Bristol was the European Green Capital (EGC), how they represented themselves and how others represented their agenda. Our intention is to inform the debates on urban agriculture (UA) and, more specifically, to contribute to discussions about 'scaling up' UA. To achieve this, we adopt a form of analysis that rests on Castells' insights about contemporary protest movements, the media and the role of communication technologies in constituting social power. By using Bristol, a city with a welldeveloped and studied urban agriculture movement, we suggest new areas for consideration that focus on the importance of communication in the development of the movement. Our study relied only on publicly available data; newspaper reports about the EGC and a sample of the social media used by the urban food networks in the city. We found that the mass media was mainly concerned with reporting topics other than food and that urban food was not a salient issue in their coverage. The Twitter network we analyzed was a loose constellation of different communities, which shared materials that were mostly concerned with creating a shared, normative picture of urban food. By considering the structure of these forms of media, we can observe the assembly of the forms of communication and their content. The paper concludes that the self-representation of urban food networks at that time reveals a narrow focus of interest. This emphasis may have contributed to the lack of connection within the city between potential allies. Our conclusion supports similar research findings in neighboring communities, which have observed the limited connections of urban food networks to the circuits of power and influence.

Key words: urban agriculture, Bristol, food activism, social networks, social media

Introduction

In 2015, the city of Bristol, in the UK, was designated as the European Green Capital (EGC). Within a month, protestors were confronting the police and bailiffs over part of the city's new 'green infrastructure'. The development of public transport required the City Council to reclaim and seal under tarmac land it had made available to a community horticulture initiative. Even the intercession of the elected Mayor (George Ferguson, a former architect and founding Director of the Academy of Urbanism), who had championed many 'green' technologies failed to end the protests without arrests (The Bristol Post, 2015). In early 2016 campaigning citizens using Freedom of Information requests, discovered how strategic grants from the EGC were spent and allocated. The new Mayor decided to open the ECG's accounts, to the delight of the local newspapers, revealing amongst other details an expenditure of £4000 on pies supplied by a local

company for a public event. In this way, Bristol's year as EGC began with controversy and it ended with a 'scandal'.

This paper is concerned with understanding how urban food activists related to the media during this period, how they represented themselves and how others represented their agenda, if at all. To achieve this, we adopt a form of analysis that rests on Castells' insights and arguments about contemporary protest movements, the media and the role of communication technologies in constituting social power. Our intention is to inform the debate about 'scaling up' in urban agriculture and more generally in alternative agriculture. By using Bristol, a city with a well-developed and studied urban agriculture movement, as an example, we suggest new areas for consideration that focus on the importance of communication in the development of the movement. Our study relies only on publicly available data of how food is represented and how the urban food movement represents itself. As this paper suggests, neither of these

characterizations capture the fullness of the discussion of local food in the city.

The paper begins with a short review of the literature that highlights the intersection of internet intermediated protest and food, and how power is constituted in contemporary society. It then outlines how the existing networks of urban food in the city of Bristol have created a program for change, including gathering resources from the EGC process. We then consider how the local press covered food during the EGC year. In adopting this method, we reflect on the procedures necessary for analyzing the hybridity of commercial mass media and mass self-communication. The paper then concludes with a discussion of how this example informs wider debates of 'scaling up' in alternative agriculture.

In this paper, we find that the mass media is mainly concerned with reporting topics other than food, and urban food is not a salient topic in their coverage. The Twitter network we analyze is a loose network of different communities, which share materials that are mostly concerned with creating a common normative picture of urban food. By considering the structure of these forms of media we can observe the structure of the forms of communication and the content. We identify important actors in the wider urban food network who are using Twitter, and the role that they play. The paper concludes that the selfrepresentation of the urban food network suggests at that time there was a narrow focus, and this may have contributed to a lack of connection within the city to potential allies. This conclusion is in alignment with similar research findings in neighboring communities, which suggests an opportunity for the movement in the future.

Literature Review—Digital Activism and Urban Food

Considerable discussion has been focused on widespread disenchantment with conventional politics while there has been a rise in new forms of personalized digital activism (Bennett, 2012). These new forms of digital political engagement have employed innovative tactics, as well as allowing novel forms of debate and action to be created (Bennett and Segerberg, 2011; Castells, 2012). This perspective is informed by scholarship that emphasizes the cultural work being done by, and within, social movements to create new values and identities that are realized in new practices, often linked to technology. We adopt Della Porta and Diani's definition of a social movement as a social process that consists of three distinct social mechanisms that: 'are involved in conflictual relations with clearly identified opponents; are linked by dense informal networks; share a distinct collective identity.' (Della Porta and Diani, 2006:20). Melucci and Avritzer argue that social movements are concerned with values,

deepening and broadening the scope of representational politics, 'Social movements introduce a complementary form of dealing with politics: they supplement the principle of representation with the principle of belonging' (Melucci and Avritzer, 2000:509). The need to belong, to present and share other values can be manifested in new ways of knowing or in new technologies, for example, organic farming or renewable energy (Hess, 2005). These are often brought together in places where future aspirations are realized in the present, endeavors that Crossley describes as 'working utopias' (Crossley, 1999). It is apparent in the history of alternative forms of agriculture, as well as in contemporary alternative food practices, that such places of experimentation are a significant resource, both practically and symbolically, to food movements (Reed, 2010; Obach, 2015). Castells uses the idea of 'utopic' places, often arranged as a network that signposts the values and ideas of a movement that wishes to implement them more widely (Castells, 2011). These places are constructed as an expression of, and a site for the re-production of, new identities are by political or social entrepreneurs (Hooghe and Marks, 2009; Fligstein, 2010).

Social movements not only communicate to those within the amorphous networks of their participants, but also to potential supporters, while also engaging in discussions or conflicts with opponents. These networks link into both institutional politics and the commercial media. Castells identifies the media as a key locus of social power, 'in the network society more so than ever before' (Castells, 2011: 301). He argues that there are two forms through which control can be exercised over others, the ability to 'program' networks, not only to constitute networks but also to assign goals to it, and 'switching' to connect and ensure cooperation between different networks (Castells, 2011). Power lies within these networks, which are heterogeneous and have a structure that suggests that they are actor-networks, a form of subject in themselves. Within these networks, people have limited degrees of autonomy, particularly once the network is programmed to follow specific goals. Drawing on the work of Bennett and Jurvis, Castells argues that internet-based networking has three different levels; strategic, normative and organizational (Castells, 2011:343).

The role of social media in politics is becoming increasingly well understood, with Twitter proving to be a useful way of understanding political messages, partisanship and voting intentions (Conover et al., 2011, 2012; DiGrazia et al., 2013). Such quantitative studies have focused on aggregating behaviors rather than on collective action, although the role of Twitter in organizing protests has been observed (Castells, 2012). Kang (2012), in a study of the use of Facebook in the 2009 boycott of the US retailer Wholefoods, noted that this format of social media linked protest to consumerism, offering a low-cost way of joining a protest:

This ethical frame nonetheless offers the public an approachable way of intervening in the reform debate and taking action without mastering the technical language of policies or becoming radical beyond the level of mainstream comfort (Kang, 2012:572).

This literature leaves a gap between organizational observations of social media mediated protests focused on a locality, and social media co-ordinated protest activities more generally. Studies that consider the strategic role of such on-line networks and their ability to generate normative elements of social movement activity have been less prevalent. This paper contributes to efforts to fill that gap.

Food is a staple of the commercial media, and there are many critical studies of the role of food commodity marketing (Burch and Lawrence, 2009). Academic studies have especially focused on the role of the media in promoting messages about organic food and agriculture, illustrating how normative struggles over food are structured and played out (Lockie et al., 2006; Cook et al., 2009). These studies have focused on how a food orientated social movement has struggled to programme its networks, and how other actors have sought to reprogram that network to reflect their ends (Cook et al., 2009). But media studies have also shown how values can be contested, for example, the questioning of gender framings around food such as the celebrity chef Jamie Oliver encouraging young men to cook or his more recent campaigning about food issues (Hollows, 2003; Hollows and Jones, 2010). Fewer studies have considered the impact of food scandals or food scares on long-term trust in the food system, or the intersection of such scares with politics (Miller, 1999). Castells argues that 'scandals' have a central role in contemporary politics and the media, that scandals have decreased the legitimacy of the system, and while the outcomes of any given scandal are unpredictable but often then are the playing out of politics by other means, avoiding debates and votes (Castells, 2011:253).

The recent emergence of urban and peri-urban agriculture (UPA) has offered new perspectives on food production and urbanity. Instead of contests about the future of agriculture being played out in remote rural areas, they are now being conducted in and around cities as well. Concerns about food security, environmental sustainability, quality of life and culinary provenance have combined to increase UPA in both scale and policy salience (Morgan, 2014; Moragues-Faus and Morgan, 2015; Opitz et al., 2015; Sonnino, 2016). The diversity of practices has meant a spread of studies considering the potential of community supported agriculture (Obach and Tobin, 2014), growing spaces on and in buildings (Specht et al., 2014), as well the role of private gardens (Taylor and Lovell, 2014) as formats and opportunities for urban food production. UPA is not without controversy, as it has also been associated with a process of gentrification and exclusion (Morgan, 2015), or a furthering of discourses of enforced self-reliance (Pudup, 2008). Fewer studies considered how the normative arguments nurtured in the networks of UPA have been communicated.

Bristol's Urban Food Networks

Urban food in Bristol has a history, and a trajectory, with its networks and a public programme that informs the media analysis below. One of the most incisive interventions has been discursive; namely, Joy Carey's report 'Who Feeds Bristol?', which made a strategic case for re-localizing food, principally directed at planners (Carey, 2011). This analysis helped catalyze the formation of the Bristol Food Policy Council in 2011 and crystallized some earlier experiments in the UK to co-ordinate food policy within municipal government (Carey, 2013; Kirwan et al., 2013; Hardman and Larkham, 2014). With members drawn from a wide range of stakeholders including representation from the local food industry, Bristol City Council, Bristol Food Network, universities and grassroots bodies, it set itself the goal of promoting 'Good Food' which it defined as being:

Vital to the quality of people's lives in Bristol. As well as being tasty, healthy and affordable the food we eat should be good for nature, good for workers, good for local businesses and good for animal welfare (BFPC website).

After substantial public consultation and participation in its development, BFPC launched the 'A Good Food Plan' for Bristol in November 2013 and in 2015 a more detailed action plan with clear commitments, outcomes and measures of success was published (Bristol City Council, 2013). The Good Food Plan framework aims to help people to participate in an integrated, sustainable food vision for the city and represents a mechanism through which actions can be coordinated. Although not formally part of Bristol City Council, the BFPC and its Good Food Plan gained the official support of the Mayor during EGC year.

The Bristol Food Network (BFN) is an important network representing a range of local food and sustainability interests in the city. Its significance for this paper lies in the role it played in recommending that food activities, which had not been explicit in the EGC bid, should be supported once EGC status was secured. The BFN argued EGC could offer a chance to increase the scale and effectiveness of the local food sector. Although EGC status came with no additional finance from the European Commission, around £2 million was allocated by the City Council for EGC projects. Of this almost £362,000 (18%) was set aside to support a range of strategic, small and neighborhood food grants. The projects that benefited from this investment were those which clearly linked to the Good Food Plan. In this respect,

BFN was influential in trying to ensure that the integrity of the publicly generated Good Food Plan was protected and executed with EGC funding.

Funded projects included the 'Beacon Farms' initiative, which seeks to secure land for urban production and train a cohort of accredited urban farmers; or the 'Food Routes' on-line tool to help match businesses with surplus food to social projects looking for food. Around £30,000 went to 17 smaller neighborhood grants, especially those supporting community greenspace and food production. Additional grants supported community cohesion projects including food production as a form of physician prescribed exercise or using food to celebrate Bristol's cultural and ethnic diversity. The projects all reflect the eight themes adopted within the Good Food Action Plan 'to enable Bristol's food system to become healthy, viable, equitable and resilient (URBACT, 2015):

- Transform Bristol's food culture
- Safeguard diversity of food retail
- Safeguard land for food
- Increase urban food production and distribution
- Redistribute, recycle and compost food waste
- Protect key infrastructure for local food supply
- Increase markets for local food producers
- Support community food enterprise models

The relationship between the Good Food Plan and the EGC highlights, first, that the process of devising, discussing and conceptualizing a vision for Bristol's food system was iterative, consultative and supported by the City Council working in collaboration with the Food Policy Council and leading food networks. Secondly, the themes represent a holistic and multi-functional vision for food which, while clearly pro-local and favoring sustainable production methods, covers the whole food chain from land use, through consumption and waste management. Stakeholders invested time and energy to produce such a concept of the city's food system. These priorities were clearly in evidence in the EGC investments in food projects. The allocation of activities outlined was carefully managed by bodies external to the City Council so that transparency and financial probity was assured in the competitive distribution of resources.

Methods and Data

This paper uses two bodies of data; the first is a collection of 93 media reports from newspapers covering Bristol's EGC status. The second is a collection of Twitter feeds in a network associated with a key peri-urban food initiative in the city. Nvivo 11 was used to conduct the analysis of both the press articles and the Twitter feeds. Nvivo is a qualitative software analysis tool that supports manual coding and includes automated features that facilitate the larger volumes of data associated with social media.

A common coding frame was developed for the corpus, but all sources could be investigated separately. The press texts were collected using the LexisNexis press media search resource so that copyright laws were respected. The authors used LexisNexis to find articles that mentioned 'food' and/or 'Green Capital' for 2015, the period of Bristol's EGC status, plus 3 months either side of the EGC year-effectively October 2014 to March 2016. Altogether, 93 separate reports were returned from the LexisNexis search. This body of texts was initially analyzed by creating codes, which emerged from the 'stories' printed in the articles. The successful EGC bid had outlined proposals to improve the environment and quality of life in Bristol within 12 themes and, as expected, some emerging Nvivo codes mirrored the bid themes (which included, for example, transport, wildlife, green spaces and climate change). In addition to thematic coding, a word frequency search and search for the phrase 'food policy council' was undertaken. This latter was intended to reveal press evidence of the Bristol Food Policy Council in the articles, given this institution's influence on strategic decision-making around food issues in the city.

Several forms of social media are used by the food activists in the city; the research team had access to a closed Facebook group related to the groups that are the subject of this study. The decision to focus on Twitter was taken on two grounds, one ethical and pragmatic, the second considering the status of the data. There were significant ethical questions raised by publishing data relating to a private Facebook group, stripped of identifying information much of the Facebook discussion was not informative and gathering retrospective ethical permissions from all participants prohibitively difficult. Secondly, Twitter is published in the public domain and is in this way more closely analogous to newspaper publishing; it is, therefore, available for analysis and a form of social media that is orientated to the public sphere.

Earlier research identified over 200 food projects in the city (Reed et al., 2013, Reed and Keech 2017), involving thousands of people. Therefore, the financial and time requirements to collect and analyze all the social media associated with the food networks in the city are prohibitive. As a result, a sampling strategy was devised where a collection of Twitter feeds was investigated in depth, to present an illustrative analysis of both the structure of online networks and the content of communication. One food initiative was chosen as an entry point into the network and its Twitter feed collected for the year 2015. This node was chosen as it had a high public profile in the city and beyond, good links to the research team to allow for dialogue and a stated commitment to the use the of social media. A social network graph was created using the software polinode.com, with the network created using the first 1000 tweets posted in 2015, between January and late May. The social network graph allowed the identification of some sub-

networks that were investigated in greater detail with the Twitter feeds of that network and linked media being collected. In this way, observations can be made about the structure of the Twitter network and the content of these, as well as the particularities of the networks that are characterized by more activity. The result was a corpus of 15 Twitter feeds, in turn revealing 58 documents that were linked to within the discussion in the subnetworks. Social networks are calculated quantitatively, which allows for large-scale and accurate measurement, but the data requirements can limit other forms of enquiry and tend to prioritize the network over the content of that structure (Scott and Carrington, 2011). Several authors have argued for, and constructed, qualitatively-based social networks as a tool for understanding localized cultural activities (Crossley, 2008; Hollstein, 2011). The limitation of this approach is that we are not able to make claims about representativeness or totality. Therefore, a transect of activity is presented for analysis.

Using the social network analysis, based on a sample of activity during the EGC year, we identified 21 sub-networks, known as Louvain Communities, when the project interacted with allies, media organisations and network members. Louvian Communities are those that are detected as a densely connected set of nodes by an algorithm. The algorithm relies on a heuristic that seeks to maximize 'modularity', which is an assessment of how much more the nodes in the community are connected compared with the average in a comparative network. Several of these sub-networks relate to the social media presence of local press actors, as well as NGOs and other local food businesses. An analysis of the content of these interactions across space and time, helps to explain the ways in which social media functions within the networks of urban food activism. Because of the variation in the number of tweets and the number of followers, sizing nodes are considered in the analysis of the sub-networks. All of the nodes in the original graph contained biographical data. Because these data are in the public realm, we have used pseudonyms. All the Twitter feeds in the subnetworks were gathered, although in some instances data availability was limited by Twitter, and the content of those interactions analyzed by including any linked media.

Results of the Analysis

Content analysis of the press coverage

The coverage of the topics was predominantly in the local newspaper. Sixty-five articles (70%) were featured in 'The Bristol Post'. Another 10 (11%) appeared in other local and regional newspapers while two articles made it into the national papers, and one into a non-local newspaper. The thematic analysis showed that although all the EGC bid themes were reflected in the press articles, it quickly became evident that some themes garnered more local press attention than others. Articles discussing aspects

of environmental performance, transport and cultural events, for example, attracted the most attention. Somewhat unexpected was the notable lack of press coverage of food matters.

In the word count of the 100 most commonly appearing words, which appear as a word cloud in Figure 1, below, 'food' appeared as the 80th most frequent word, appearing 25 times. In the thematic coding, food elicited six references in as many sources. One explanation for this distinction is that the food references in the corpus were also associated with stories that principally highlighted the environmental objective of reducing food waste or mentioned food growing as an educational activity in schools.

The most frequently appearing words (setting aside 'Bristol', 'Green', 'Capital', 'Year' and 'City') were 'People', 'First' and 'New'. Closer examination of such appearances revealed several stories in which people are exhorted to adapt behaviors, or which report numbers of participants, for example:

'No wonder people dump [rubbish] in the nearest open space...' (BP 12/8/15)

'Ultimately we want people to get on board with public transport...' (BP 13/2/15)

'...hundreds of people took to the saddle and enjoyed a brisk cycle.' (BP 17/7/15)

The frequency of 'first' was affected by the widely reported news story that First Buses, the company that runs much of the city's public transport and rail network, was to introduce a bus fuelled by human waste, the so-called 'poo bus'.

Thematic coding revealed a close overlap between health and food, as well as stories celebrating how local food redistribution networks are contributing to the city's quality of life:

'We are delighted to have been awarded the funding for Oasis Grows. The children are looking forward to cultivating their crops and have some great ideas for making them into healthy picnic food.' (BP 8/1/15)

'In December, the FoodCycle Bristol project won the Green Community Group award at Bristol's Green Capital Awards, which were held to recognise those who were working to make Bristol a more sustainable and liveable city.' (WG 26/1/15)

This relatively low frequency and overlapping thematic appearance of food contrasts markedly with the systematic and strategic importance of local food development pursued by many local networks and with council investment as a part of its targeted EGC investments. This is borne out by the coverage for cultural event stories such as art installations, wild life walks, the 'Food Connections' food festival, or a high degree of public concern about persistent traffic management challenges in the city. Environment, transport and cultural stories were most prominent in the thematic analysis, the focus of the EGC on food was not reflected in the media discussion of the year as it unfolded.

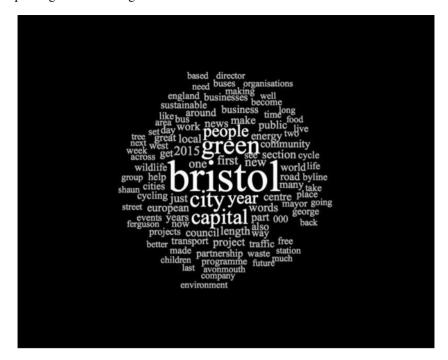


Figure 1. Word frequency 'word cloud' from print media search.

The analysis of twitter

Network structure. The network diagram relates to The Community Farm (CF), which is a community-owned commercial vegetable enterprise with social and environmental objectives located in the countryside south of Bristol. The CF Twitter feed (Fig. 2), comprises 440 nodes and 449 visible connections of edges. Each node is a Twitter account, and each edge is a mention in a

Tweet, i.e., if @TCFarm mentioned another Twitter account and the latter replied this would be a mutual connection, while if they did not respond the node would appear with no connection. The network density is low (0.00234) suggesting that overall the network around the CF is not well connected but diffuse. This finding is further reinforced by the calculation of 21 Louvain Communities (non-overlapping groups) within the



Figure 2. Social Network based on Community Farm Twitter Feed.

graph, and a group of nodes that do not fit into any group. These observations are consistent with the qualitative analysis of the Tweets that form the network below.

First, of the 1000 tweets considered, 440 mentioned another Twitter user, suggesting that the other Tweets had other, additional content (see below). The largest number of (brown) nodes in the network are those that form the outer ring of the graph, which are not a subnetwork but rather are those contacted by the CF and did not respond. These Tweets are an attempt by @TCFarm to broaden their network of followers, disseminate information they believe will be of interest to their existing followers, or to confirm their presence at events. An example of an attempt to broaden the network is evident in the practice of linking to a popular account, such as a media organization, in this case, a national public radio station;

'announced as a @BBCRadio4 Outstanding #Farmer of the Year finalist!'

Information that will be of interest to the existing network is shown through the linking to a celebrity conservationist;

RT @ChrisGPackham: Today is your last chance to sign up in one of the @lushcosmetics stores for Hen Harriers—please pop in!

Lastly, examples are evident of mentions of other Twitter users to affirm awareness of events and membership of a shared local network;

RT @TheStoryMeat: @TCfarm @tasteandseason cooking up a Demo on stage at queen sq http://t.co/HqhnRvDv4S (May 3, 2015)

In this case, one of the participants is the landlord of the project, and the weblink is to a photograph of the event. The Tweet confirms attendance at the event, membership of a network and serves to disseminate information about the project into the feeds of these other Twitter users.

The interactions in the Twitter network are based on directly mentioning another Twitter user by using their '@' address, without the use of indexing terms or hashtags represented by the symbol '#'. In the entire corpus of Twitter accounts only three hashtags are present in the 100 most common words, 'Bristol', 'Bath' and 'Organic', in Figure 2, above. Of the last term, 88% of those mentions are from two organic farms, and the remaining 12% (51 instances) are spread across five accounts that are related to food, suggesting a narrowness in the use of the term.

The use of #Bristol and #Bath as the most common hashtags is reinforced by their position as the first and second most commonly occurring words, respectively, in the Twitter corpus. This usage suggests that the Twitter users are working hard to locate their discussions in these interlocked, cities. By not using, or successfully creating, hashtags, the networks are also, perhaps

inadvertently, exclusive and lack the integration that an indexing term might provide. Without shared indexing terms, it is hard for those who do not know addresses or who are not already connected to this diffuse network to find or follow it. This absence makes sustained dialogue difficult as participants need to address each other directly rather than being able to connect around a topic (Conover et al., 2012), ensuring that it is a personal network rather a public debate.

As is apparent in Figure 3, food is discussed in various ways within the Twitter corpus, with it often being intertwined with discussions of news about events or developments. A keyword in talking about food is 'delicious.' The word is used most frequently by @LoveFoodFest promoting food events in the city, but it is evident it often appears because they are retweeting messages from the wider networks in the city.

[RT]@Whiteladiesrd: It's market time! Join us for delicious bread, coffee, fruit and veg, street food, dips, charcuterie, plants and more 5/12/2015

[RT] Come along to @LoveFoodFest in Bristol to see our delicious range of dressings, sauces and condiments #LoveFoodFest #Lu...25/10/2015

A key aspect of these tweets is not just the pleasures of taste but also anticipation:

Don't forget the clocks go back on Sunday night, that's an extra hour in bed, wahoo! See you at @paintworksevent for delicious food & drink 23/10/2015

RT @Moorish8: @LoveFoodFest @paintworksevent can't wait for Sunday! Persian spiced love bulgar, merguez lamb & rose harrisa yogurt. 21/10/2015

As well as local, ethical and sustainable in the wider discussions, the pleasures of food and the anticipation of such convivial pleasures are an important part of the way in which food is discussed in the Twitter corpus.

Analysis of linked media and sub-networks

If we consider the sub-network that involves the local currency project the Bristol Pound (@BristolPound), the intersection of locality, activists and NGOs is evident. The sub-network in Figure 4 shows how the CF is linked to a key community activist and the Bristol Pound, three local food producers and a food festival. The strongest relationships are between the CF, the Bristol Pound and Activist, with the others being mentioned in passing as part of broader networking events. The Activist is a prominent urban food activist and analysis of their Twitter feed shows that they are not only directing people towards the CF but presenting linked media, which is making a broader case for an initiative such as the CF. During 2015, out of 306 Tweets nine linked to other media that made a case for CSAs and locally produced food, two of which were generated by the CF itself, both of which were videos, and of the

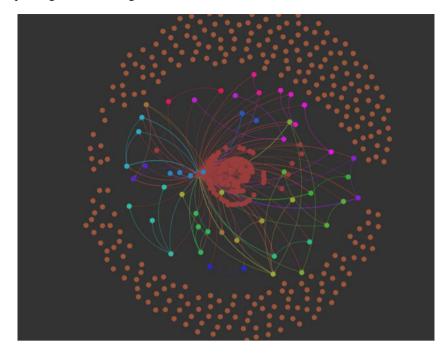


Figure 3. Word frequency 'word cloud' of social media search.

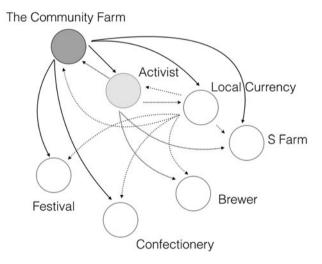


Figure 4. Sub-network of the Community Farm Twitter Network (anonymized).

remaining seven, two were also videos. A common theme of these linked media is the possibility of practical action for environmental change. In one, Guy Watson the founder of the Riverford Organic vegetable box scheme, ponders on the improvements to box schemes over the past 20 years. These include polytunnels, better rotations and planning, as well as working with other growers on the continent to fill the lack of domestically available fresh produce in the spring (also known as 'the hungry gap'). In April 2015 he was satisfied with the quality of the boxes but warned of the original vision:

Ideological sounding and emotionally appealing, the veg box vision asked too much of growers and customers; the

customers didn't get the quality or variety of vegetables they wanted, and the farmers didn't make the living they needed. It is very hard for one farmer to grow 100 crops well and even harder to do it on a small scale and produce food at an acceptable price without being ground into the dirt by the challenge (Watson 24/04/2015).

The year's final posting of linked media concerned a course of personal development and change, aimed at helping people realize not only change but the confidence to attempt it:

This is not 'theater' in the conventional sense but uses simple body postures and movements to dissolve limiting concepts, to communicate directly, to access intuition, and to make visible both where we are now and where we want to go (Lewis 29/12/2015).

With supportive coaching, ideas were developed and discussion used to move the suggestions out of the studio environment and into action:

For me, though the real benefit was by having to actually explain in a public forum—albeit briefly—what my project could actually look like and what it would do, an important next step towards practical action, from something which had just been an ethereal idea in my head for so long (Lewis 29/12/2015).

The action imagined lies firmly within the realms of the immediate, with those taking part in a prototype idea that becomes an 'experimental action'. Yet the frame of reference to TV conservationists, dining out, high-brow public talk radio and the arts as a form of exploring self-expression also highlight a gap between the concerns of many in a city marked by poor diet and problems with access to food.

Discussion

A common presumption in much of the analysis of social media usage is that users are knowledgeable and skilful in their operation of it. As is apparent in this paper, there remains a degree of exploration, learning and adaptation in the use of social media in these networks. This difference is especially evident when compared with the focused and formal language featured in the press coverage, which is centered on the genre of 'news'. The professional print media data shows a focus on particular issues, with reporting food a low priority despite the vibrancy of Bristol's food networks and its prominence with the EGC year. The investigation of the funding of the EGC as a political 'scandal' illustrated how the media brought the city's food networks into its own genre.

The analysis of the CF's Twitter feed reveals a loose online network structure, which while useful for relaying information quickly through the members of that network, also has 'structural gaps'—often the only link between nodes in the network is the project. As the network reflects an active attempt at growing in scale and scope, this appears to indicate the fragility and contingency of this social media network. Other studies point to the strength and integration of the off-line networks in the city, where personal relationships bind the food activists together (Reed and Keech, 2017). As suggested, parts of the Twitter network are an on-line reflection of the interpersonal networks that constitute the food activism in the city. There is little in our analysis to suggest that the Twitter network represents a significant resource to the movement or even meaningful parallel to the lack of media coverage in the local newspaper. Instead, in creating a shared normative network, the project acts as utopic space, in which people are experimenting with possible futures and part of that is aligning it to existing cultural symbols.

The key role of the Twitter network was normative, it was concerned with creating a feeling of mutuality and resources for shared understanding with in the loose networks around the project. This furthers the broader aims of the food movement in the city by reinforcing the identity of those taking part, showing that they share common cultural and symbolic references suggesting that this form of social media is a way of signaling partisanship and allegiances rather the debate and engagement (Papacharissi, 2002; Conover et al., 2011; DiGrazia et al., 2013). Our research demonstrates the importance of the role of political entrepreneurs in such networks in bringing people together and introducing discursive material to that network.

Conclusions

Food activists often complain of being ignored by the media, and in this analysis, we have demonstrated the validity of that observation. We have also demonstrated that their own networks of communication have done little to counter this by providing a public counter-narrative, rather they focus on shoring up the network. The movement in Bristol has been successful in programming networks around local food that are realized in some city council policies. In the year of EGC, it was not able to break the dominant media news discourse about food in the city.

Brunori and Iavcovo argue that urban agriculture can provide a 'common frame' to various projects that will provide local, high quality food at affordable prices, but it should be lifted out of the technical sphere to become part of tackling the wider challenges of sustainability (Brunori and Iavcovo Di, 2014:7). Studies in neighboring towns and cities to Bristol point to other networks becoming disconnected. Newton and colleagues, studying a local food initiative in the nearby town of Stroud, note how the emphasis placed on the importance of sustainability alienated many potential working class supporters who were more concerned with affordability and access (Newton et al., 2012). In the neighboring city of Cardiff, Franklin and Marsden note how sustainability projects became disconnected from local decision makers, who in turn found it difficult to move beyond a ponderous planning process (Franklin and Marsden, 2015).

Our study demonstrates, solely through a media analysis, a repetition of the same themes of failing to connect to local allies and to broaden the reach of the movement through the media. The themes in the Twitter network, while reinforcing the identity of those in the network is largely focused on self-expression and access to artisan foods. More difficult and challenging themes such as food poverty, the role of food banks and the prevalence of hunger in the city are supplanted by a discourse focused on environmental consumerism, although there is awareness of the problem in Bristol in the wider food network (Maslen et al., 2013). Hardman and Larkham note the importance of the food charter in giving urban agriculture greater prominence, and while in Bristol that success is observable, in our media analysis it does not feature (Hardman and Larkham, 2014). This suggests that the plan in the city is not generating any sense of salience of the need to create a wider change to food provisioning that has found expression in the local media, nor is it the subject of debate in the networks' own media.

This paper is reliant on Bristol being one of the leading cities in the UK in developing urban agriculture and food plans, witnessed by the availability and range of data to analyze. It also demonstrates that the mass media failed in 2015 to find urban food a priority topic, and that communication networks of the movement itself are not working to change that situation. The analysis we present also demonstrates that political entrepreneurs are active in the network who can create a discourse of change and have access to the resources to do so. In Castellian terms they currently lack the ability to re-programme the wider networks of food such as around the

multiple retailers or major catering businesses, although they have done so with the city council. If they can change the operation and orientation of their own networks to build wider alliances and make the topic more salient to those who communicate about food and its related issues in the city, then the future may be different from its present trajectory.

Acknowledgements. This work was supported by the European Union's Seventh Framework Programme (FP7) [grant number 312126].

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