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Official URL: <https://doi.org/10.1017/S1742170517000448>
DOI: <http://dx.doi.org/10.1017/S1742170517000448>
EPrint URI: <https://eprints.glos.ac.uk/id/eprint/4152>

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The 'Hungry Gap': Tracing the divide between policy and practice in urban agriculture (8000 max)

Abstract (200-400 words)

This paper is concerned with the development of urban agriculture in some European cities as an example of the widening scope of democratic participation. In our case of Bristol (UK), citizen-led food production initiatives have proved to be challenging to the existing forms of urban governance surrounding land use. Despite policies and rhetoric supportive of urban agriculture, conflicts have arisen over resource use, preservation of soils, use of brownfield sites and control of open spaces in the city. These tensions surround not only economic development priorities but also competing demands from 'green infrastructure'. Accounts of the role of citizenship as expressed through the internet and interlinked civic activities have placed the control of shared resources in the city into the debate. Using the example of Bristol, the European Green Capital in 2015, this paper draws on data from (i) case study interviews within the city, (ii) an analysis of shared social media networks, and (iii) news media reports. An examination reveals the trajectory of local food projects and how they illuminate the discussions about the future of urban space and food production. The internet, already well understood as a form of commons, is being used to bring into question the status of other shared resources, so testing the limits of the city's administration and broader conceptions of participation about urban living. We contend that Bristol's food networks are creating iconic, utopic places across the city to signal and develop new values around food and dining, in contrast to the instrumental values that dominate the food system. To date, urban food movement scholarship has focused on values, while our data shows that grassroots networks are having a limited impact on the agendas of public institutions in the city. (287 words)

Key words: Urban agriculture, Bristol, food activism, citizenship

Introduction

In 2015, the city of Bristol, in the UK, was designated as the European Green Capital (EGC). Within a month, Bristol's accolade was confronted with protests because part

of the city's new 'green infrastructure' to support the development of public transport required the City Council to reclaim land it had made available to a community horticulture initiative. Protestors took to the trees under the banner 'Rising Up' and locked themselves on, pointing out that the soils below them were amongst the highest quality (Grade 1) in the city, constituting a precious non-renewable resource for food production and wildlife. Even the intercession of the officially independent, elected Mayor who had championed many 'green' technologies did not succeed in ending the protests without arrests (The Bristol Post, 2015). Thus, in a single protest, tensions within the emergent sustainable city were made visible. The tree-top protestors opposed arguments that prioritised public transport over food production and felt sufficiently angered to be arrested over the outcomes of a system of governance that was apparently not able to resolve these disputes. For the protestors, the allotments signalled the multifaceted nature of food in the city, linking soil, nutrients, carbon, biodiversity, mobility, urban form and culinary pleasures with a new mode of citizenship.

The legacy of the EGC has also proved controversial within a campaign by a former local Member of Parliament, backed by citizens using Freedom of Information requests, to discover how strategic grants of £1.3 million were spent and allocated. After his defeat in the 2016 Mayoral elections, George Ferguson found himself defending the EGC experience from being mired in "petty politics"¹. The new Mayor decided to open the EGC'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)².

This paper's principal concern is with the emerging milieu around local food in UK cities and the exploration of urban food as an expression of citizenship. It will demonstrate how momentum behind the most recent developments in the urban food 'movement' in Bristol has been interwoven with communication technologies, namely the internet. This integration of food-cyberspace-city is creating new discussions,

¹ <http://www.bristolpost.co.uk/george-ferguson-bristol-got-8216-remarkably-good/story-29385538-detail/story.html>

² <http://www.itv.com/news/west/2016-06-07/european-green-capital-4000-spent-on-pies-for-one-event-in-2015/>

novel forms of organisation, and is beginning to physically reshape the city, while challenging the forms of governance that attempt to control urban space. Our intention in the paper is to consider the interactions between the grassroots food movements in Bristol and the governance of food production areas by examining food activities carried out during the period of EGC. This examination reveals the nexus of power, communication and activism that is crucial for understanding social change which involves people acting as citizens rather than as consumers.

The paper begins with a short review of the literature exploring the emerging new forms of citizenship associated with urban food. Forms of collective action in the city are differentiated where they lead to new ways of sharing and controlling public spaces. A discussion follows about the tensions around sustainable place making, its scale and scope, with supportive evidence presented that is based on an extensive corpus of materials, including interviews with key actors, a social network analysis based on social media, and content analysis of press reports. The discussion concludes that there are a series of divergent and sometimes conflicting framings around urban food that partly reflects the trajectory of the various competing institutions, several of which are beginning to fail. In doing so they are opening up a gap between the aspirations of self-organising citizens and representative organisations. In this paper this is termed 'the hungry gap' and it is suggested that new forms of governance could take root which will more accurately embody the needs of a sophisticated, cosmopolitan society facing rapid socio-ecological transformation. Scholarship on local food developments has frequently been characterised by questions of scale, of alterity and the ability to use niches as a lever for systems transition. In this paper, we argue that meso-level actors (such as the Food Policy Council and the Bristol Food Network) and social movements, organised through contemporary social media tools of mass self-communication, are changing societal values, but have not yet engaged with, or changed, existing political institutions.

Urban food and digital citizenship

Considerable discussion is linked to an apparent a period of disengagement with politics, characterised by low election turnouts and an erosion of trust in political

leaders at both national and local level (Swyngedouw, 2010, Castells, 2012). Others have countered that the personalisation of politics does not equate to a disengagement from politics but that such activities will take new forms and topics to contest (Bennett and Segerberg, 2011, Castells, 2012). This latter perspective is informed by scholarship that emphasises work being done by and within social movements to create new values that are realised in new practices and technologies. Melucci argues that social movements are concerned with pre-material, deepening and widening 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 in order to present other values can be manifested in new ways of knowing or in new technologies, for example organic farming or renewable energy (Hess, 2005), or in places where future aspirations can be realised in the present, endeavours that Crossley describes as ‘working utopias’ (Crossley, 1999). It is clear in the history of alternative forms of agriculture, as well as in contemporary alternative food practices, that spaces of experimentation are a useful resource, both practically and symbolically, to food movements (Reed, 2010, Pepper, 2005). Borrowing via Castells from Hetherington (Castells, 2011), we describe these as *utopic places*, often arranged as a network that signpost the values and ideas a movement wishes to implement more widely.

The role of social media in electoral politics is becoming increasingly well understood, with Twitter in particular proving to be useful in understanding political messages, partisanship and voting intentions (DiGrazia et al., 2013, Conover et al., 2012a, Conover et al., 2011). Such quantitative studies have largely focused on aggregating behaviours rather than on collective action, although the role of Twitter in co-ordinating 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 becoming part of 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 organisational observations of social media-mediated protests in a particular locality, and social media co-ordinated protest activities *per se*. 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.

Social movements not only communicate to those within the often amorphous networks of their participants, but also to potential supporters, while also engaging in discussions or conflicts with opponents. This is the social space in which institutional politics and the commercial media also operate. Castells identifies this as key locus of social power both in the past and “in the network society more so than ever before” (Castells 2011:301). Questions of food and agriculture are a staple of the commercial media, and many critical studies of the role of food commodity marketing have been written (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, 2006, Cook et al., 2009).

The recent emergence of urban and peri-urban agriculture (UPA) has offered new perspectives. Instead of contests about the future of agriculture being played out in remote rural areas, they are now being conducted in and around cities (Reed, 2015). Concerns about food security, environmental sustainability, quality of life and culinary provenance have combined to increase UPA in both scale and policy salience (Morgan, 2015, Sonnino, 2016, Opitz et al., 2015). 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 associated with a process of gentrification and exclusion (Elliott, 2016, Morgan, 2015), or be seen as a furthering of discourses of enforced self-reliance. Fewer studies have considered the normative arguments nurtured in the networks of UPA in detail.

Meso-level players in Bristol’s food scene

Before a description of the research method, short descriptions of two key strategic networks are required. The Bristol Food Policy Council was established in 2011 and crystallized some earlier experiments in the UK to co-ordinate food policy within municipal government (for example, the Greater London Food Policy Council in 1986, London Food in 2004, Sandwell Healthy Urban Development Unit in 2008). 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 website³).

After substantial public consultation and participation in its development, BFPC launched the *A Good Food Plan for Bristol* in November 2013 (Bristol City Council, 2013) and in 2015 a more detailed action plan with clear commitments, outcomes and measures of success was published. 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* has gained the official support of the Mayor during EGC year.

The Bristol Food Network (BFN) is an important umbrella group 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. In particular, BFN felt EGC could offer a change to increase the scale and effectiveness of the local food sector. Although EGC status came with no extra finance from the European Commission, around £2million 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 neighbourhood food grants. The projects which benefited from this investment were those which clearly linked to the Good Food Plan. In this respect, BFN was influential

³ <http://bristolfoodpolicycouncil.org/about/> Last accessed 17th October 2016.

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

Methods and Materials

This paper combines two primary bodies of data, which are further supported by supplementary sources. The first primary data source is a collection of 93 commercial 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. Supplementary sources include interviews with key food activists in the city which were conducted between 2011 and 2014, and an earlier corpus of internet materials collected in 2013. Primary data were generated specifically for the research presented here. Supplementary data were drawn from a European Commission funded FP7 research project called SUPURBfood⁴, which explored short food chains, multifunctional land use and food waste cycles in seven city-regions in Europe, including Bristol.

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 press articles that mentioned 'food' and/or 'Green Capital' for 2015, the period of Bristol's EGC status, plus three 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 analysed 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 twelve themes and, as expected, some emerging Nvivo codes mirrored the bid

⁴ (agreement number 312126)

themes (which included for example, transport, wild life, green spaces and climate change⁵).

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.

Research identified over 200 food projects in the city (Reed et al., 2013), involving thousands of people, therefore the financial and time requirements to collect and analyse all of 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. 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 a number of sub-networks that were investigated in greater detail with the twitter feeds 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 characterised 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 generally 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, Granovetter, 1973). Several authors have argued for, and constructed, qualitatively based social networks as a tool for understand localised cultural activities (Hollstein, 2011, Crossley, 2008). 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.

⁵ The list of bid components is available at: <http://ec.europa.eu/environment/europeangreencapital/winning-cities/2015-bristol/bristol-application/index.html> Last accessed 17th October 2016.

Using the social network analysis, based on sample of activity during the EGC year, we identified 21 sub-networks (Louvain Communities) when the project interacted with allies, media organisations and network members and once cluster of contacts that did not comprise a community. Several of these sub-networks relate to the social media presence of local press actors, as well as NGOs and other local food businesses. Through an analysis of the content of these interactions, the differences between the participants, spatial and temporal factors we suggest the ways in which social media functions within the networks of urban food. Because of the variation in size of the number of tweets and the number of followers sizing nodes on that basis was not used, but is considered in the analysis of the sub-networks. All of the nodes in the original graph could be identified, although this data is in the public realm we have used pseudonyms. Using the graph, the team identified 6 sub-networks that were illustrative of the broader patterns identified in the content analysis of the feed and the media analysis. All of the Twitter feeds in the sub-networks were gathered, although in some instances data availability was limited by Twitter, and the content of those interactions analysed including any linked media.

Results

A) Press Coverage

Certain aspects of the press media analysis proved unsurprising. For example, although the LexisNexis search covered both national and local newsprint formats, 65 articles (70%) were featured in the city's newspaper, '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.

Similarly, although the all the EGC bid themes were reflected in the press articles, it quickly became evident that some themes demanded more local press attention than others. Articles discussing aspects of environmental performance, transport, and cultural events, for example, attracted 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 behaviours, 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'), and had featured the EGC logo on its express trains.

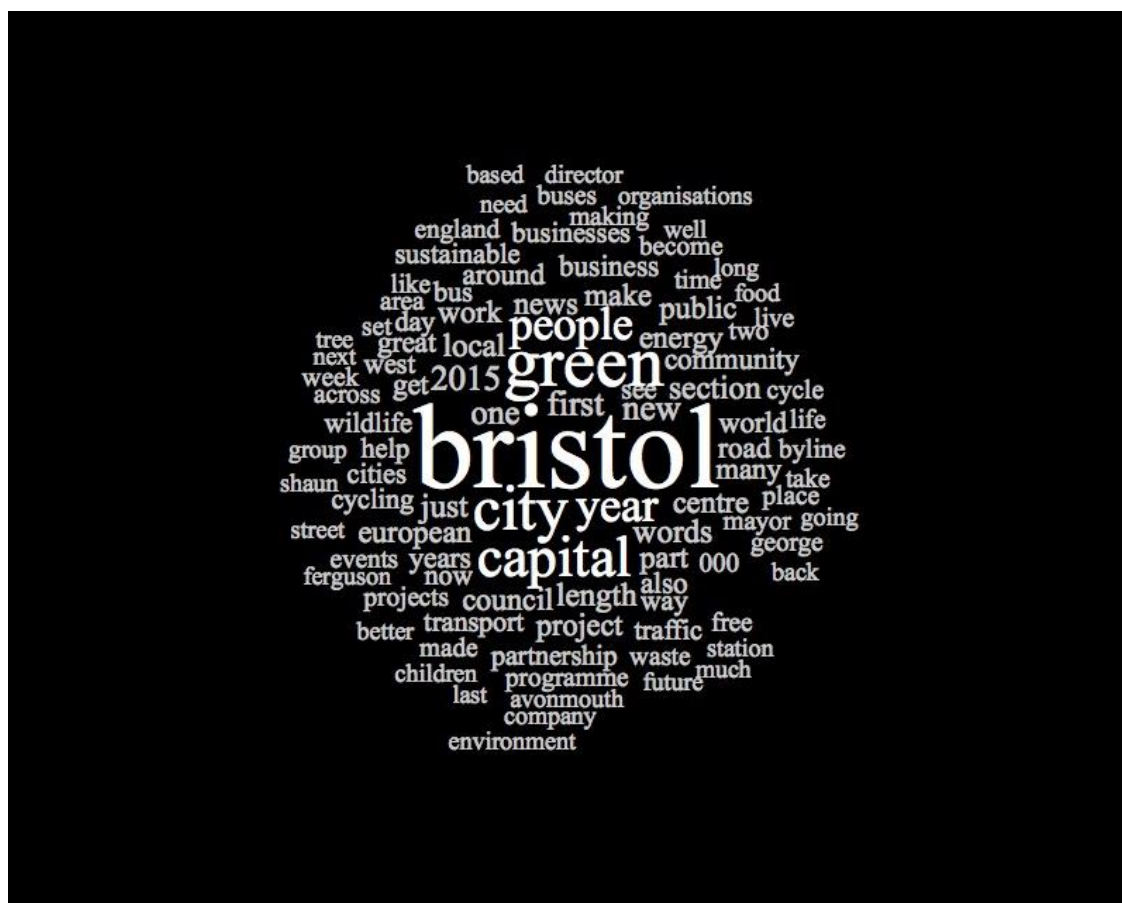


Figure 1: Word frequency 'word cloud' from print media search.

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. About £1.3million was awarded to 28 larger strategic projects with budget proposals of between £25,000 and £50,000 which held potential to support substantial improvements in the effectiveness of local food projects, such as 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. Of the £1.3million around £30,000 went to 17 smaller neighbourhood grants, especially those supporting neighbourhood greenspace and food production. An additional small number of grants supported community cohesion projects including food production as a form of 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 Local Action Plan 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, firstly, that the process of devising, discussing and conceptualising 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 favouring sustainable production methods, covers the whole food chain from land use, through consumption and waste management. Time and efforts was invested by stakeholders to produce such a concept the city's food system. These priorities were clearly in evidence in the EGC investments in food projects. The allocation of activities outlined in the figure was carefully managed by bodies external to the City Council in order that transparency and financial probity was assured in the competitive allocation of resources. Pragmatic explanations, offered by two Bristol food activist, about why so much investment, both in food activity and in allocation processes was not matched by media coverage were that:

‘...there is a gap between what has been completed, what is still happening on the ground and what is reported in the media. Some community food stories are long-term or incremental or not very exciting from a news perspective, so the low profile may be a lot more to do with the way the media works than what is happening ‘out there’ on grassroots food initiatives. Projects such as the ‘Wicker Whale’ were more tangible and visible, for example, compared to ‘long-term up-scaling of urban agriculture through collective measures’ which are ‘slow, complex and don’t reveal immediate benefits for a lay audience’. (Interview 17/6/16)

‘...of course not, no-one reads print media anymore.’ (Personal correspondence 4/10/16)

The second quotation underlines the authors’ interest in contrasting how different types of media perceive of and reflect food activism in the city. The first quotation above suggests that local media stories may struggle to relate long-term and incremental developments in complex multi-faceted, multi-actor, multi-functional urban food projects (Mettepenningen et al., forthcoming). 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 themed analysis.

B) Social Media

i) 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 (Figure 2), comprises of 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, whilst if they did not reply the node would appear with no connection. The network density is low (0.00234) suggesting that overall the network around the Community Farm is not well connected or integrated but diffuse. This is further reinforced by the calculation of 21 Louvain Communities, non-overlapping groups within the 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.

Firstly, 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 sub-network but rather are those contacted by the Community Farm 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 broadening the network is evident in the practice of linking to a widely followed account, such as a media organisation, in this case a national public radio station;

‘announced as a @BBCRadio4 Outstanding #Farmer of the Year finalist!’ [\[weblink_{\[K1\]}\]](#)
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> (3rd May 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 onto 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, below. Of the last term, 88% of those mentions are from two organic farms and the remaining 12% (51 instances) are spread across 5 accounts that are related to food, suggesting a narrowness in the use of the term.



Figure 2 – Word frequency ‘word cloud’ of social media search

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 suggests that the Twitter users are working hard to locate their discussions in these particular, 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 difficult for those who do not know addresses or who are not already connected to this diffuse network to find or follow it. This makes sustained dialogue difficult as participants need to address each other directly rather than being able to connect around a topic (Conover et al., 2012a), ensuring that it is a personal network rather a public debate.

II) Linked Media

The Community Farm

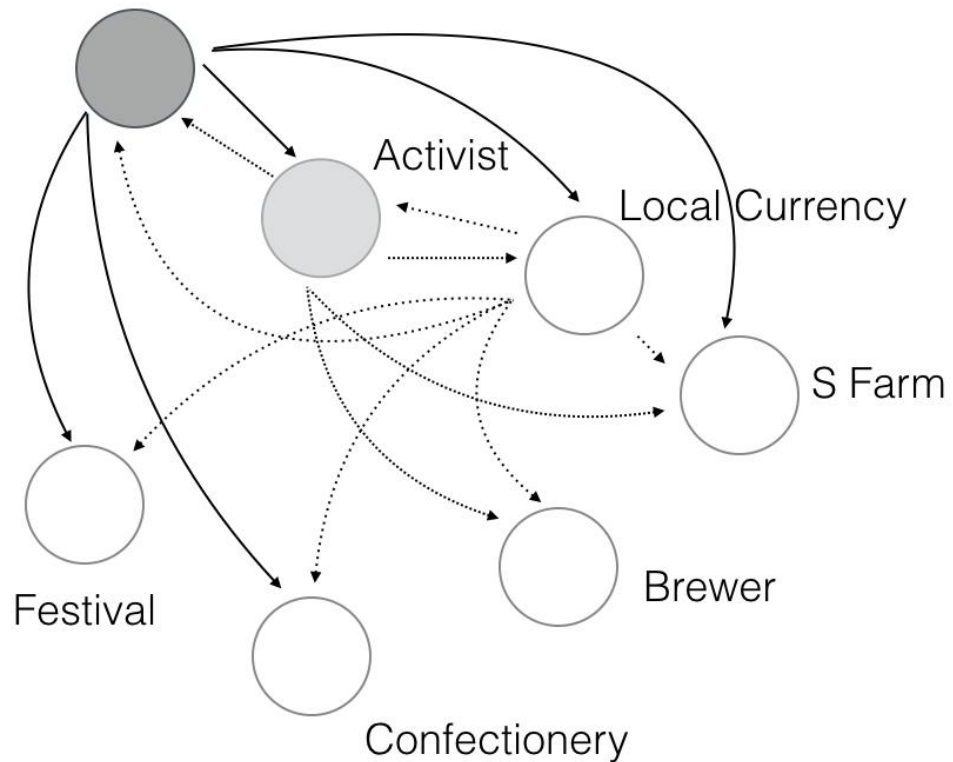


Figure 3 - Sub-network of the Community Farm Twitter Network (anonymised)

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 3 shows how the Community Farm is linked to a key community activist and the Bristol Pound (Local Currency), three local food producers and a food festival. The strongest links are between the CF, the BP and Activist, with the others being mentioned in passing as part of broader networking events. The Activist is an active member of the board of the CF 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 initiative such as the CF. During 2015, out of 306 Tweets 9 linked to other media that made the case for CSAs and locally produced food, 2 of which were produced by the CF itself, both of which were videos, and of the remaining 7 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 twenty years, as a result of polytunnels, better rotations and planning, as well as working with other growers in France, Spain and Italy to fill the lack of domestically available fresh produce in the spring (also known as 'the hungry gap'), which is supplemented by imported food. In April of 2015 he was satisfied of 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 realise 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, that those taking part prototype an idea that becomes an 'experimental action'.

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 is particularly apparent when compared to the focused and formal language featured in the press coverage, which is centred on a different genre of 'news'. The professional print media data shows a focus on particular issues, with a notable low-profile of food reportage despite the fact that Bristol has a well-known and vibrant food culture, is a pioneer of FPC structures and has pursued a systematic and participatory process of devising a food action plan with sustainability and health objectives. The norms of news values trumped the wider social work of attempting to create a city wide, inclusive culture.

The analysis of the CF's Twitter feed reveals a loose on-line network structure, which whilst 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, where personal relationships bind the food activists together. 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 constitutes a significant resource to the movement or even meaningful parallel to the lack of media coverage in the local newspaper. The blogging about food in the city tends also to be conducted by professional journalists but is creating, slowly, a counter narrative about the challenge the network presents.

Anger and outrage were unusual appearances within the corpus, but Twitter was the medium that most frequently reveals such emotions. Sustained debate and discussion were absent, and instead Twitter was used to reinforce and reflect on positions often developed 'off-line', suggesting that this form of social media is a way of signalling partisanship and allegiances rather the debate and engagement (Conover et al., 2012b, Papacharissi, 2002, DiGrazia et al., 2013).

It is this issue that takes us towards the core of the limits that the food network is reaching. For many in the network there is an implicit plan that the medium is the message, that the alternatives that they are building or operating will stand as a symbol for other possible ways of organising food production and distribution. These counter-examples will display what is wrong about the current food system, and be broadly self-explanatory. Following other literatures about these networks in the same geographic area in the past we might describe these as 'iconic' interventions (McKay, 1998, Purdue et al., 1997, Wall, 1999). The linked media in this sample did make the case for these alternatives but as is evident, was broadly seen only by those who were already sympathetic. Our analysis suggests that few people outside the personal networks of participants or not already following liked minded people on social media would get to hear either the critique or of the alternatives.

Conclusions

'...a societal focus on food (especially within Western Societies) is no more than an elite obsession, a luxury for the over-indulged and over-resourced offering a "comfortably domesticated high" (Poole (2012:3) cited in Parham 2015:9).

This paper has been concerned with food activists in Bristol and how, within supportive political structures and vibrant city food cultures, added to the accolade of European Green Capital 2015, it is possible to discern food activism as a participatory form of citizenship. While others have observed the civic intentions of food activists (notably (Seyfang, 2006), two distinctive Bristolian contexts have emerged. The first is that the normative (utopic), localist perceptions of food activists are being played out communicated through the social media of Twitter as a version of digitised citizenship. The second, evidenced through traditional print media, is the strain in the otherwise close relationship between food activists and the municipal state - exemplified by collaborating and integrated meso-level institutions - when demands for land for food production clash with plans for improvements in sustainable public transport.

The importance of lifting local food out of the technical sphere has been emphasised by Brunori and Di Iacovo, 2014:7. However, Franklin and colleagues, in their work in towns near Bristol, observe that strategic food interventions can quickly become disconnected from local decision makers and be managed by a narrow social group

(Franklin et al., 2011, Franklin and Marsden, 2015). Others such as Poole, cited above, see the focus on food as self-indulgent, and carried forward by a self-selecting group. Our analysis does not suggest such a self-indulgent set of motivations, rather it brings into question the broader strategies being deployed by networks of food activists in the face to a tendency towards being self-referential.

One of the most influential interventions in Bristol has been discursive, namely Carey's report 'Who Feeds Bristol?' which made a strategic case for re-localising food, principally directed at planners (Carey, 2011, Carey, 2013). Our social media analysis illustrates vivid examples of horizontal networking, and the creation of peer-to-peer bonds in public fora within a distinct locality. In many ways, cyberspace is playing a key role in the formation of a sustained community in place (Reed and Keech, 2016). While several commentators are concerned that such efforts should not become, unwittingly, part of a process of gentrification (Morgan, 2015), it is less common to critique the efficacy of the social media strategies being adopted for creating systemic change.

The fortunes of other activist networks, for example the well-studied organic food and farming movement, illustrate that for a challenging idea to become successful, more is required than iconic interventions. While many of the technical problems linked to organic production, food chain management and distribution have been surmounted, the organic movement has struggled to persuade people to change their consumption habits and the basis of engagement from one of passive to active consumption (Padel and Foster, 2005). Similarly, the messages created so far by the networks of food activists in Bristol seem to have had only limited impact. As suggested above, in part this is because there have been limited discursive interventions compared to efforts focused on creating and sustaining iconic interventions. It is clear from the publications, communications and actions of many Bristolian food networks that they have resources to draw on, not least groups of activists who see how the personal and quotidian have become sites of political engagement and purposeful change. Such people wish to be more than an elite 'selectorate' associated with urban foody-ism. Their ambitions to act take the local food networks in Bristol a step beyond the social democratic vision the local state embracing food sourcing into schools, care homes and other public kitchens.

Finally, we suggest a change is needed in the way in which the contestation of the food system is conducted. Working across a network of cities should be embraced in order to focus on the strategic weak points of food chain actors who are characterised as opponents. This requires not a 'scaling up' but a continuation of the horizontal networking that activist networks have specialised in to date. Major environmental challenges associated with the dominant food system and which are key areas of concern for food activists include urban road congestion and pollution linked to distribution logistics, production subsidies that favour those supplying multiple retailers, and the marketing of unsustainable or unhealthy foods. A first step in systemic change toward sustainable urban food provision is to turn away from communicating to only a narrow group of like-minded allies and to attempt to appeal to a wider group of fellow citizens and co-residents.

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