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GARDENING CYBERSPACE - HYBRID SPACES AND SOCIAL MEDIA IN THE CREATION OF FOOD CITIZENSHIP IN THE BRISTOL CITY-REGION, UK.

ABSTRACT

Recent research by Castells has highlighted the important role of the Internet in creating the movements that have taken control of symbolic spaces in the city creating hybrid spaces through linking the internet to the landscape (Castells 2012:11). Simultaneously there is renewed interest in the urban as a food producing area, and the re-imagining of the cityscape, with suggestions ranging from vertical farms to nutrient recycling, through to community-based brownfield sites. In this paper we consider how social media is used to engage in this contest: those networks creating and eating from, short food chains in the Bristol city-region. The debate has focused on the transformative potential of the citizen as consumers or protestors as portrayed in the media, but to date, these studies have tended to focus on journalism rather than quotidian networks of social media and the creation of social change these contexts.

KEYWORDS: Cityscape, food, social media, networks, urban.

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I. INTRODUCTION

The evening of April 21st 2011 was unusually warm, and the extended weekend of the Easter holidays beckoned. What triggered the unrest is a matter of dispute between the various parties to the riot. The Police reported that they were acting on information that petrol bombs were being prepared in a local squat with the aim of burning down the new Tesco Express store in the Stokes Croft area of Bristol. Those at the protests argued that the aggression of the Police did much to contribute to the violence and disorder. Violence broke out again, on the 29th of April, after a peaceful protest against the store was followed by the arrival of a small group of masked protestors who attacked the Police, resulting in 30 arrests. Although it was damaged during the rioting, the Tesco store re-opened on the 24th of May (Rice et al., 2011). The events of those evenings are the subject of continued debate and controversy.

The drama and violence of that episode of rioting provides an illustration of the most extreme backdrop against which contemporary citizenship in Bristol is being performed and continually remade. Food, as a focal point in both the discussion of daily life and a reworking of the *polis* of contemporary society, has often been characterized by contention but its conjunction with violence, however exceptional and localized in Bristol, put the discussion there into a new phase. Characterized by a vibrant community involvement in food projects ranging from a Council-backed 'Food Policy Council', through community composting schemes, gastronomic urban regeneration, to projects that aim to reclaim both industrial land and lives scarred by drug addiction, the City is heavily invested in a new culture of food (Carey, 2013). Whilst much of the discussion of the shaping of urban and peri-urban areas has focused on the re-shaping of physical space (Steel, 2008), less attention has been paid to the way in which this is increasingly interwoven with the use of cyberspace to create hybrid spaces. These new spaces are linked to the way in which citizenship is performed, connecting civic activity with aspirations for social change (Brunori and Iavcovo Di,

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2014).

Our paper suggests that as part of developing sustainable places, urban planning needs to engage with the hybrid spaces being created to produce new urban foodscapes. Increasingly, the focus is on community food places, such as brownfield sites or shared gardens (Kingsley and Townsend, 2006), as well as the gendered and overlooked role of private gardens (Kortright and Wakefield, 2010), and on the new *agritectural* space of zero-acre gardening on and in buildings (Specht et al., 2014). The future of cities, within which considerable quantities of food are being produced, could result in a very different visual appearance of green spaces, not just planted open spaces, but aquaculture and apiculture. Buildings could be covered not just with solar panels or bioreactors but with curtains of planting, whilst transport options would need to adjust to access such growing spaces (Carey, 2013). In many climates, the gains that can be realised from protected cropping would mean that alongside residential or commercial activities would be the aesthetic and environmental challenges of such facilities (Lee et al., 2014). This renegotiation of citizenship will change the spaces of the city in an intense dialogue that will be conducted partly in the cyberspace that connects the city, not only to its rural hinterland, but to other such initiatives globally. The emerging cityscape will be simultaneously hyper-local with specific design challenges, yet globalised in its frame of reference.

In order to investigate the inter-linkages between citizenship, social media and the shaping of the cityscape of Bristol, this paper starts by discussing the disparate strands of the literature on food activism, personalized politics and the role of urban institutions. It then presents an analysis of a corpus of social media around food and food-related topics posted from 1st January – 31st December 2013, before moving to discuss the implications for the cityscape. This body of social media evidence reveals a social movement concerned with five particular key themes: gardening, celebration, volunteering, locality and recycling. The corpus is then contrasted with documents

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published by Bristol City Council in relation to the development of a sustainable and inclusive food system for the city and its rural hinterland. Despite such official municipal interest in food and sustainability, we suggest that the vibrancy of the social movements revealed by their cyber-communication is not a result of the policy landscape of the city-region, but exists in parallel to it.

II. LITERATURE REVIEW

The dichotomy in public policy between urban and rural spheres has created shortcomings in agri-food research (Sonnino, 2009), exemplified by the view that food policy is a non-urban issue, despite clear evidence of food system innovation emerging from cities (Morgan, 2015). City actors are increasingly recognizing both the role that they can play in changing the dominant food system, but also their vulnerability to weaknesses within the status quo, such as the tensions between the affordability of food and the environmental impacts of its production (Morgan, 2015). As a result, municipal health authorities, city councils and new urban social movements are all increasingly influential in the food policy arena (see also Derkzen and Morgan, 2012). An important, related trend is the development of urban and peri-urban agriculture, particularly when analysing urban agriculture and city development in terms of mutually beneficial social and commercial relationships (Viljoen and Wiskerke, 2012, Paül and McKenzie, 2013). Crucially, growing interest in food and rural issues within urban policy and planning is leading to a resurgence of interest in the 'region', including an emerging literature on *city-regions* (Kneafsey, 2010).

Food activist, food-based social movements and local authorities, including the Transition Town movement, London's 'Capital Growth' partnership and the Soil Association-led 'Sustainable Food Cities' collaboration, have begun to see the urban context as one in which change can be created around food (Steel, 2008, Carey, 2011, Carey, 2013). In part, this is because rural areas are no longer the advantageous places that they once were for fostering experiments in food production

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or as sites of protest, because of more effective policing and the fading of the challenge from organic farming (Reed, 2009). In parallel to these developments, there has been an increase in personal participation in food production, in combination with patterns of ethical consumption (Taylor and Lovell, 2013, Kortright and Wakefield, 2010, Gray, 2009). Activist identities are constructed as being based in cities and associated with efforts to green them, rather than living a green life in a rural location, an inversion of earlier discourse of the environmental movement (Pepper, 1984). Scholarship has increasingly focused on the importance of food projects as a means to creating new communities and strengthening those already present, a way of advancing a new 'civics' (Seyfang, 2006, Renting et al., 2012).

It is tempting to view these developments as solely the 'de-politicized' politics that surrounds some forms of contemporary environmentalism, or the commercialization of activities that were previously associated with the counterculture: consumerist 'cool' (Heath and Potter, 2006). Discussions of contemporary protest, particularly those mediated and enabled by social media platforms, suggest that these forms of participation are part of a wider societal trend. Bennett, in his examination of the use of social media and political identity points to the 'personalization of politics':

> Social fragmentation and the decline of group loyalties have given rise to an era of personalised politics in which individual expression displaces collective action frames in the embrace of political causes (Bennett, 2012:37)

He echoes Beck in arguing that there has been a growing prevalence and attraction of 'sub-politics' orientated around lifestyle causes or consumerist concerns (Beck, 1995). Hooghe and Marks point to the emergence of pre-material values in the form of identity politics, in part as a response to the increasing tensions around European integration (Hooghe and Marks, 2009). Castells argues that contemporary political activity is best understood as occurring within layered and fine-grained

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networks (Castells et al., 2012, Castells, 2012), rather than via the traditional hierarchies of political organizations. The focus of such activity is on culture, or challenging the societal codes of meaning.

Castells suggests that the relationship between protest, or political, activities and the use of the Internet produces new spaces of transformation that are overwhelmingly urban:

> In our society, the public space of the social movement is constructed as a hybrid space between the Internet social networks and the occupied urban space: connecting cyberspace and urban space in relentless interaction, constituting, technologically and culturally, instant communities of transformative practice. (Castells 2012:11)

Although Bennett is principally concerned with discourse, and Castells frequently focuses on social movements in urban areas, both writers conclude that the impact of activist groups is to open the political imaginary, 'to rekindle hope that another life is possible' (Castells 2012:197).

Marwell and McQuarrie provide another route to considering the role of place and space in the city, through their analysis of organizations in urban social theory. They suggest that the core role of organizations has been in creating integration, by which they mean 'building society across lines of difference' (Marwell and McQuarrie, 2013:127). The challenge for researchers is, firstly, to observe processes of integration/exploitation rather than deciding *a priori* that any particular organization engages in one of these processes, and secondly, to resist the temptation to essentialize categories of organizations.

An increasing focus of discussion about the provision of food in urban environments indicates the importance of purchasing organic, vegetarian or ethical products. This centres on the concept of a citizenship that expands to embrace responsibilities and engagements beyond the traditional role of the citizen with the state. Citizenship in this model has expanded temporally to encompass future generations and people, and spatially to include those others outside of or beyond

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the national state, directly and materially connecting the citizen with concern for the physical consequences of actions (Trentman, 2007). Citizenship spills over into consumption practices that become a new form of collective action; through mechanisms that Micheletti has dubbed 'individualised collective action' typified by the boycott (selectively avoiding certain products) and the 'buycott' (deliberately purchasing products), whereby aggregated consumption is used to chastise or encourage producers (Micheletti and Stolle, 2007). The focus on such products and tactics has also been met with criticism that this plays into the hands of those gentrifying urban spaces (Morgan, 2014).

The focus on consumption choices has tended to assume that consumers are not able to co-ordinate their actions, but studies of recent boycotts that have made use of social media, such as the use of Facebook in the boycott against *Wholefoods* in the US, indicate the opposite (Kang 2012). These heterarchic connections are emergent and volatile but Kang suggests that they form a way of attempting to influence a corporation, as well as create a space for discussion and debate:

> '…the network holds potential for transforming politics, as a space in which competing views probe each other, collectively generate critical reflections on the ethics of a corporation and of public policy, and so rejuvenate the community.' (Kang, 2012:574)

The combination of sustainable citizenship and the new forms of media may offer a way of performing citizenship which reaches beyond the signals produced through the aggregation of patterns of collective boycott/buycott. As Castells suggests, although the Internet is globalised in form, in practice its communication arena is often highly localised. This suggests that the study of social media across a city, especially social media that are open to public enquiry (mostly twitter feeds and blogs), can offer insights into how food, citizenship, the urban landscape and the internet combine to create social change.

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III. Methods

Cyber-material (data) collection

The material for this study was collected using the NCapture facility in Nvivo 10 that allows webpages to be collected as PDF files, with formatting and graphics held in position. Twitter feeds and Facebook pages were collected as data tables, with Internet links, hashtags and messages presented to aid source identification in analysis. Data sources covered the period between 1st January and 31st December 2013 and data collection took place in two phases, namely during September 2013 and, again, in May 2014. The online-material comprises a corpus of over 230 web-pages (predominantly blogs) and 16,000 tweets from 24 twitter accounts, with an average of 666 tweets per account. The material was systematically coded using Nvivo 10.

To guide the initial coding a table of the 100 words that appeared most frequently in the corpus was drawn up (see figure 1 for a representation as a 'wordcloud'). Some partial words (such as 'e' as in electronic or email; or the indefinite article 'a') and web addresses were removed, leaving the remaining list of 75 words.

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Figure 1 – Word Cloud from Social Media Corpus

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Using the word frequency as a key, the corpus was then coded using automated functions for coding word patterns and the results were then reviewed. A range of themes were apparent from this round of analysis, such as the importance of positive engagement (best, love) the importance of the city (Bristol), and of parts of the city often associated with the prefix Saint (St). The importance of 'chorizo' and 'business' required more investigation, as did the detail of the other codes. The team then embarked on manual coding to refine the initial automated searches and this resulted in the development of 84 thematic codes to categorise and delineate the communications posted. These included geographical codes which indicated neighbourhoods in the city-region; establishments where food is consumed; activity-based codes such as 'work',

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'recycling' or 'providing'; farming-linked codes, such as 'organic', 'livestock', 'land'; and codes which were based on the organisations making, or mentioned in, the communications.

A review of coded data allowed the authors to re-constitute the thematic codes into five key groups of cyber-discourse, namely 'locality', 'recycling', 'celebration', 'gardening', and 'volunteering'. Our methodology followed in the footsteps of other food orientated studies of media usage (Lockie, 2006, Cook et al., 2009), although both these examples rely more on commercial media that the self-generated content of social media.

In summary, the data analysis consisted of three rounds of scrutiny of food-related cyber-discourse, which had been posted by grassroots and local networks and individuals in the Bristol city-region within the year 2013. The first round collated data in relation to word frequencies through automated searches; the second round involved the development of 84 themed codes via manual coding. The third round of analysis of the material led to the isolation of five key meta-themes from the larger set of codes. After a short, general overview of findings, we suggest in the next section that our cyber-discourses in the Bristol city-region broadly conform to two discourses described by Dryzek (1997) as 'Civic Environmentalism' and 'Green Urbanism'.

IV FINDINGS

In form and content the material was diverse, ranging from the methodical journalistic blogging of a food writer to the frequent tweets of student groups with a changing membership. Intersections were also evident, as some people combined platforms linking their tweets to their blog posts. It was apparent in the corpus that the different platforms play contrasting roles within a menu of media. Twitter was used to 'signpost' readers to local meetings or to resources available on the Internet. Blog posts were invariably more descriptive, reporting on events or engaging in discussions of topics of interest, with a conspicuous presence of those who write for a living in

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some way. Facebook was the most informal and intimate, both in tone and, as will be discussed later, also in content. In practice, the various media became linked to form a complex intertextuality reaching across modes of expression that created allied but not uniform sets of discourses.

As suggested above, five meta-themes were chosen to characterise the cyber-material collected. The tone and content of the communications, which will be explored thematically in this section, is significant, because it reflects predominantly, although not exclusively, grassroots social activity, rather than market dynamism or municipal policy.

a) Locality

Clearly many postings contain locations of activities but much of the qualitative narrative is city-wide, rather than locally-specific. A notable cyber-communicator in reproducing the sense of Bristol's grassroots food dynamism is the Bristol Food Network (BFN), a community interest company which aims for a sustainable transformation of the city's food system. Its regular digital newsletter, *Local Food Update,* reflects the range of food topics

:

> '…all the inspirational work going on in community centres around Bristol…' (BFN 14th May)
>
> 'Trading Tales and Shopping Stories - A competition to find Bristol's favourite independent stores. …foodie events are blooming throughout Bristol.' (BFN 1st May)
>
> 'This is a very important time for working out how Bristol can feed itself into the future. Come and take part in these free workshops…' (BFN 1st Oct)

Even so, geographically-oriented posts also point towards city neighbourhoods associated with particular arenas of public engagement with food, particularly St Werbergh's (the location of

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Bristol's first city farm), Stoke's Croft (an inner-city area peppered with cafes and independent shops), and Knowle West (which contains a community kitchen/cooking school):

> 'Breaking Bad? No Breaking Bread. Great little film on bread making in Knowle West.' (RT@LiquoriceHazel)

> 'Lynmouth Road allotments St Werbergh's Bristol up for auction –against wishes of allotmenteers'. (Winkler 25th Aug, 20.25)

> 'PocoBristol was created by […]. The "festival city" vibe of Bristol and in particular Stoke's Croft made them feel right at home'. (Bristol Pound 21st Feb)

Between them, these communications reinforce the sense that Bristol has a reflective and vibrant interest in a broad range of food-related issues, including land use, cooking, retailing and food security. What also begins to emerge is the generally positive and celebratory nature of cyber-communication, which forms the second meta-theme.

b) Celebration

Aside from the frequent appearance of words such as 'food', 'local' or 'Bristol', others such as 'good', 'great', 'thanks' and 'please' are also common, demonstrating what appears to be a strategy of encouragement and positivity, with criticisms of ideas, or of other people, very rare.

The positive tone may be associated with the satisfaction gained from eating:

> '…we retired to the kitchen for some well-earned food. The kitchen was really busy with loads of people enjoying the scrummy menu of Italian potatoes & salad, Saag Aloo and Apple Surprise. Thanks cooking team.' (FCB 13th Oct)

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Further supportive statements are made in relation to the positive potentials of being connected with land, or with community spaces:

> 'We try and engage as many people with the land as we can through workshops, educational visits and volunteering. We believe that connecting with the land in this way is inherently good for you…' (CF April).

> 'It was fabulous to be reminded (again) of how much people love and value this place.' (Windmill Hill City Farm 16th December)

Other forms of celebratory communication help generate a sense of social gathering, festivity and social creativity, as the first of the following excerpt shows, as well as occasional references to folklore and rural traditions, as marked in the second:

> 'Participants drew elaborate patterns with burst bags of custard. Conversation and thought flowed about the stories of the food… Candles were lit, beauty admired, songs were sung and thanks were given for what was going to become a delicious feast.' (FCB 15th April).

> 'It's going to be a serious business blessing the orchard. …Upholding a fine pagan tradition, the future apple crop is in our hands. There will be toast in the trees for Scamp the robin… cider will be poured on the roots… Mummers will enact their play in a circle of fire.' (Ethicurian 2nd January).

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., 2012, Papacharissi, 2002, DiGrazia et al., 2013).

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In attempting to change planning policy to protect high value agricultural land, a campaign, 'The Bluefinger Alliance' has been initiated. One supporter captures, in an ironic manner, the way in which they think many public organisations operate:

> 'The working of great institutions is mainly the result of a vast mass of routine, petty malice, self-interest, carelessness, & sheer mistake' (GS –Tweet)

Rather than emphasising ideas of public service, this tweet highlights the power of routine and self-regard. This is also evident in the ambiguity of the word 'business', relating to commercial activity but also to important issues that need to be executed:

> 'Our first food waste and recycling facility in Avonmouth, #Bristol is open for business today
>
> with @DavidHeathMP and other special guests!'

In this way public service shades into profit without contradiction. May Guerney, a business supplying recycling services, saw no irony in placing the two items next to one another on their website:

> 'May Gurney is now collecting food waste from homes in Bath and North East Somerset, to be turned into nutrient-rich, agricultural grade compost.
>
> £693.5 million, revenues up by 22% on 2011'.

A different narrative attempts to turn a structural problem, the issue of food waste in agriculture, into a positive environmental act, through gleaning:

> 'We need your help to grow gleaning into a strong national movement, saving literally tonnes of fresh fruit and vegetables from going to waste on UK farms' (BFN 6th August)

Waste and resource use in relation to both efficiency and social justice form a third major theme within the corpus.

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c) Recycling

In contrast to the perception of waste associated with mainstream agriculture, Community Supported Agriculture (CSA) farming is presented as efficient:

> 'Pigs are an integral part of the farming operation here at The Community Farm. They play a vital role in preparing ground, eating weeds and clearing old crops. Perhaps their most important role is converting vegetable waste into pork.' (CF blog 2013)

A regular contributor is FareShare Southwest, a charity which diverts food that might otherwise be returned to the suppliers, or be disposed of, saving the retailer administrative time and waste disposal levies. It uses these funds, and donations to underpin its operations to maximise the social benefits from potential waste. FareShare also offers a commercial catering service using surplus food, as this post from the Bristol Food Policy Council reveals:

> 'Lunch will be provided by Fare Share South West [sic] using food that would otherwise have gone to landfill and attendees will also see the launch of a two-minute animation about Bristol Good Food.' (BFPC 26th Nov)

Fareshare is the better-known and larger of several organisations that use surplus food. FoodCycle has outposts in Bristol and Bath, using surplus food from a wide range of food companies to cook nutritious hot meals for vulnerable people, with the motto 'where communities unite to make sure no good food is wasted'. FoodCycle, also runs a community garden, contributes prolifically to our dataset, for example:

> 'A delicious three course vegetarian meal will be provided, having been lovingly and creatively transformed from surplus food, collected from supermarkets and local shops. Kicking off the count-down to Christmas, our event will have great live music, cool art work and inspirational speakers.' (FCB 1st December)

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In both cases, FareShare and FoodCycle link the reduction of food waste with the reduction of food poverty, or hunger, thereby aligning environmental and social objectives through their activities.

A number of postings, frequently those from community gardening schemes, report on the money-saving and resource efficiency benefits of construction using pre-used materials:

> 'Everything has been done with donated or recycled goods, useful or otherwise… A recycled shed now gives shelter from rain squalls and it houses tools etc.' (Bathampton CSA 10th March).

Tool Shed, a project by the national environmental charity the Conservation Foundation involves the appropriation of unused or unwanted garden equipment for use in community projects, engaging local prisoners to refurbish donated items. In Bristol, this scheme has been embraced:

> 'One of the Conservation Foundation's most popular projects is Tool Sheds, which recycles old, broken and unwanted garden hand tools with the help of prisoners. …tools will be restored and painted in prison workshops before being distributed free of charge to local Bristol schools and community centres.' (BFN 14th June).

Alongside cooking and recycling in one form or another, the most common activity to facilitate inclusive, convivial and educational opportunities for local residents is gardening.

d) Gardening

While BFN blog postings offer a forum for diverse information, including the availability of bean poles from community gardens (BFN 1st & 15th April) and local calls to participate in national campaigns, other blogs, such as one covering an EU project trip to Oslo, underscore the functions of, and perceived ideals connected with, city allotment spaces:

> '…an absolute utopian dream and all of us kept rubbing our eyes. Children ran and played, chickens clucked, adults gossiped and exchanged tips and old people rested in the shade of

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> the communal buildings or under the many varieties of apple and pear trees that covered the plot. The focus was more on the social side than food production with flowers mixed with veg.' (BFPC 3rd November).

Engagement in gardening is also a key method for picking up horticultural skills development. This posting reveals how people are offered a chance for people to learn from the Community Farm's professional grower:

> 'Have you recently taken on an allotment…? Our very own Grower here at The Community Farm will be running an Introduction to Organic Growing course on Sat 16th March. This is an ideal workshop for those wanting a well-rounded understanding of techniques used in growing organically; from fertility management to pest and disease management. This day course will equip you with the skills and confidence to make a great go of growing your own!' (CF March).

By developing better gardening knowledge a range of opportunities emerge, such as being able to cook and eat more fresh vegetables and sharing skills and networking with other groups in the area. Gardening is also a political and spiritual act, as well as a satisfying activity, as the second quotation shows, especially after a period of winter dormancy:

> 'To celebrate food and growth in all stages, from seed to fruit, from grain to bread helps to develop understanding of our relationships with ever[y]thing and the Earth.' (FCB 15th April)
>
> '…my not-very-green fingers are itching to get sowing, [but] the soil and my digits are too cold.' (BFN 1st March)

The Facebook social media process of publicising community gardens, in particular, offers a rapid way to elicit support:

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> 'Let me know what you want and how much, and I will send the money over for it.' (Pill Community Garden Centre 28th May).

Many local groups in Bristol are concerned with bigger-picture issues linked to the negative environmental and health implications of the mainstream food system, and express interest in political and structural change to deliver fairer and more sustainable food. The social media data reveals that gardening, and especially work in gardens, is a principal route people feel drawn to in order to create change.

e) Volunteering

The importance of community participation emerges strongly from the data set. In particular, volunteering – in community gardens and kitchens, to help clear and reclaim derelict spaces, and to help organise community events – as a visible contribution to the vibrancy and dynamism of Bristolian food activism. A key strategy for groups using volunteers seems to be to offer them clear goals, training and regular breaks and refreshment. A major role for volunteers, of course, is to provide labour. In this quotation, Bathampton CSA has attracted volunteers in the form of councillors and officers from the local council as part of a corporate outreach day:

> 'The team of five did an absolutely sterling job of planting out courgettes and scything our turkey field under the expert tutelage of our resident scything guru, Keith.' Bathampton CSA 12th June)

Some jobs seem more desirable than others – a BFN posting of the 16th July urgently called for writers for its newsletter, fearing that '[o]ften we don't hear from community growing groups in the city, because they're too busy doing what they do best – growing!!' In some cases labouring is a badge of honour (and in this case deserving capitals):

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> 'At 7pm hungry DO-ers starting walking in and the food was distributed out. Success! Everyone was fed, but the DO-ers being great people that they are, there was a huge movement of people to do the clearing up'. (FCB 15th April)

Reliance on volunteering, for all is positive associations, can also be a weakness to under-resourced projects, sometimes creating frustrations:

> 'Let's do this! Now is the time, this is your call to arms – your community garden needs you.' (GHCG 31st August)

V DISCUSSION

In the last few years, in part because of the burgeoning food networks in the City, many of which precede a ubiquitous internet, Bristol has featured in several academic papers, as has the nearby town of Stroud (Jowers et al., 1999, Purdue et al., 1997, Barnett et al., 2005). In his reflections on the emergence of urban food systems in the global North, Kevin Morgan (formerly chair of the Bristol Food Policy Council) notes that the civil society groups have stopped being in opposition to the local councils and have become involved in 'co-governance', yet as he notes:

> '…the politics of co-governance can very easily degenerate into the politics of co-optation, where NGOs sacrifice their radical voice for the semblance of political influence.' (Morgan, 2015:1389).

Our detailed analysis identified a number of meta-themes that run through the discussions, and the data reveal two parallel discourses. We have adapted Dryzek's modular conception of environmental discourse to break the discourses into 4 parts (see Table 1 (Dryzek, 1997)). These discourses share enough features to form an alliance between the largely civic visions of the City Councils as 'Civic Environmentalism' and many of the NGOs either express clearly, or demonstrate tendencies towards, 'Green Urbanism'.

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Table 1 – Discourses and their modular components

Name	**Civic Environmentalism**	**Green Urbanism**
Basic Entities Recognized	Ecosystems, regulations and resources Businesses, households and the State	Ecosystems and resources People Cities Mutual enterprises
Assumptions about natural relationships	Regulated competition	Exploitation Co-operation
Agents and their motives	Consumers Corporations Enlightened self-interest	Popular mobilization – volunteers, professionals and shoppers Environmental Citizenship Contingency of natural Systems
Key metaphors & rhetorical devices	Cycles – natural and of mutual benefit Service provision Technological/logistical solutions Efficiency	Transition and collapse Power of positive choices Local action

A key area of difference and, potentially, conflict is that Civic Environmentalism offers few roles for the active citizen, rather corporate bodies – either public or private – will act on their behalf. This is the difference between the highly effective recycling that takes place in the city, operated by a corporation in response to a City council contract, and the divergent range of food NGOs in the city using the discourse of Green Urbanism. These came into public and direct conflict in the winter of 2015, when prime agricultural land was built on in order to facilitate a new low carbon mass transit scheme in the city (The Bristol Post, 2015). As well as a failure of the planning system, it also represents a clash within the alliance within the city between the civic and the urban discourses.

The discussions analysed here represent a vivid example of horizontal networking, the

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creation of peer-to-peer bonds in public fora and in a distinct locality. In many ways cyberspace is taking a key part in the formation of a sustainable community in place. As Franklin and Marsden (2015) note there are many ways in which communities can become dis-connected and this can be particularly the case when working with local councils. This is unfortunate, according to Morgan, because British urban food initiatives seem to be 'ahead of the game' in avoiding food development being used as "the unwitting agents of green gentrification" (Morgan 2015:1388). In Bristol there has been considerable difficulty in getting the plans of the Bristol Food Policy Council recognised and enacted as City Council policy. Despite an elected executive Mayor who is sympathetic, and Bristol's European Green Capital status, it is not always possible for the city to react to the agenda of the food networks. This leaves food activities largely funded by EU sources and reliant on the time/energies of volunteers in the NGOs.

This failure partly reflects what Franklin and Marsden note is a tendency towards 'linear' urban planning policy, despite national policies toward localism and the 'Big Society':

> '…there remains a general absence within the UK, of any accompanying or equivalent set of government initiatives which are designed to be responsive to, rather than directive of, community-led sustainability initiatives.' (Franklin and Marsden 2015: 943).

It also reflects what those authors observe in their case studies, namely that vertical links of these networks are not well developed, and by this they mean links to officers in the local council. However, we could also point to the lack of links in the networks in this paper to other actors in national or EU government (Woolcock, 2010). Whilst relatively well connected horizontally and internationally, this lack of national or supra-national vertical connection leaves the network without the options to effect change by drawing in resources outside of its immediate area and as such reliant on a constrained local state. Morgan hopes that cities acting collectively, a hope echoed by Barber, will be able to be more influential on the configuration of the food system

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(Morgan, 2014, Barber, 2014). Yet, with such disconnection in a city such as Bristol this would appear to be an aspiration, rather than imminent prospect. Rather we would point to the importance of more effective local connections as a prelude to scaling up or as Franklin and Marsden argue:

> 'If sustainable place-making is ever to be effectively scaled-up to a city-wide level or beyond, it first needs to be much more effectively scaled-down and (vertically) rooted so as to incorporate the value of community-level practice, with more effective links being made between the community actors and local government officers.' (Franklin and Marsden 2015:953)

Research in other European cities signals this to be a considerable difference in relation to the UK: the lack of responsiveness by local council officials and a linear rather than consultative approach to urban planning (Reed et al., 2013). Our evidence also reinforces Brunori and Di Iavocco's observation about symbolic and epistemic re-localisation as a prelude to a sustainable food system:

> 'The critical point is that symbolic re-localisation breaks the monopoly of knowledge about food by the agri-food industry, and redistributes it among consumers, producers, and local administrations.' (Brunori and Iavcovo Di, 2014:7)

Bennett's focus on a personalised politics questions the role of social media in further individualisation and asks where collective action frames might appear in a contemporary democracy. The evidence of this paper indicates that horizontal networks are appearing and sustained collectivities are being created. Castells suggests that in many contemporary protests it is the connection between hope and outrage that have led to mobilisation. In the Bristol city region the outrage is missing but the hope and optimism are very apparent. Social movement scholars have tended to focus on protest activities that are public and conflictual rather than those that are negotiated and debated. As Crossley has argued, most movements have projects or spaces that act

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as a wider resource, a 'working utopia' that allows experimentation to take place and act as a refuge for activists (Crossley, 1999), whilst others have argued for the importance of cultural movements as a sub-type of social movements (Reed, 2010). Rao and Hess separately note how technologies can be both created and promoted by social movement activities quite separate to protests (Rao, 2009, Hess, 2005); see also (King and Pearce, 2010). These networks are redolent with radical possibilities that yet may be mobilised if their role in co-governance appears to be marginalised or continues to be thwarted.

VI. CONCLUSION

This paper has conducted a detailed empirical analysis of two intertwined emergent phenomena - urban food and online networks based in place - through which we have been able to examine the tensions and potentials for a new urban foodscape. It points to the continued *multifunctionality* of food in re-thinking the city, but in place of the dominant focus on nutrients, calories and physical resource, we have positioned the social and symbolic as an equal component within the convening power of food (Reed et al., 2015). To date the role of cyberspace has been neglected in urban food research (Specht et al., 2014), although this is a space as well-tended and structured as the physical spaces it augments. Urban institutions are looking to cyberspace as a facet of their broader role of responding to, reacting with, and fostering a contemporary citizenship.

The design challenges of the emerging landscape of the city are considerable, as are the transformative capacities of the citizens, if they can be fully engaged. If food is a forum which can bring people together physically in its production, through localised systems of distribution, and potentially in new forms of consumption, there are opportunities to use it in a process of community building. Urban food production to date has mostly made a virtue of its low- or no-budget status, and the improvised and vernacular building forms it has relied on that both reflect and enable

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flexibility. Forms of governance will need to take into account a new rhythm of engagement, where changes are realised quickly to secure the confidence of citizens, and to realise the pace of change required to achieve sustainability gains. Such agritecture may echo approaches taken in mainstream agriculture where buildings and facilities, while utilitarian, are short-lived. The new 'green' city may be typified by plastics, re-purposed containers, recycled wood and soil, and transient growing spaces - materials and spatial concepts that stand in contrast to the historic or permanently planned buildings they may interwoven within.

Such an enhanced pace of design, development and implementation could also lever the resources of cyberspace. Capturing lessons learnt from planning and approval processes in one city could be widely circulated through forums, repositories or publications allowing the development of a faster response to these pressing societal needs. Inevitably this is challenging to the concept of jurisdiction, but a more rapid pace of decision making may help redress the democratic deficit that mires urban development projects which may take longer than the mandate of those elected to oversee them. Implicit in this is a challenge to the identity those who work in city councils and administrations, requiring that city hall becomes more permeable and legible to the electorate. Our analysis suggests that council officers and change-makers working for the state should digitally engage with networks of citizens.

Urban agriculture has focused on being participatory to overcome the perceived commodification of the urban landscape. Cyberspace has helped to lodge urban agriculture within a lexicon of citizenship by encouraging both personal responsibility and participation that is based on inclusion. The Bristol dataset clearly offers a counterpoint to the logics of accumulation and status that have, for some social movements, come to negatively characterise aspects of contemporary urbanity.

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REFERENCES

BARBER, B. R. 2014. *If Mayors Ruled the World. Dysfunctional Nations, Rising Cities,* London, Yale University Press

BARNETT, C., CLOKE, P., CLARKE, N. & MALPASS, A. 2005. Consuming Ethics: Articulating the Subjects and Spaces of Ethical Consumption. *Antipode,* 37**,** 23-45.

BECK, U. 1995. *Ecological Enlightenment,* New York, Humanities Press International.

BENNETT, W. L. 2012. The Personalisation of Politics: Political Identity, Social Media, and Changing Patterns of Participation. *The Annals of the American Academy of Political and Social Science,* 644**,** 20 - 39.

BRUNORI, G. & IAVCOVO DI, F. 2014. Urban Food Security and Landscape Change: A Demand-side Approach. *Landscape Research*.

CAREY, J. 2011. Who Feeds Bristol?Towards a resilient food plan. Bristol Partnership.

CAREY, J. 2013. Urban and Community Food Strategies. The Case of Bristol. *International Planning Studies,* 18**,** 111-128.

CASTELLS, M. 2012. *Networks of Outrage and Hope: Social Movements in the Internet Age,* London, Polity Press.

CASTELLS, M., CARACA, J. & CARDOSO, G. (eds.) 2012. *Aftermath.The Culture of the Economic Crisis,* London: Oxford University Press.

CONOVER, M., GONCALVES, B., FLAMMINI, A. & MENCZER, F. 2012. Partisan asymmetries in online political activity. *EPJ Data Science,* 1**,** 6.

COOK, G., REED, M. & TWINER, A. 2009. "But it's all true!" Commercialism and commitment in the discourse of organic food promotion. *Text and Talk,* 29**,** 151-173.

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CROSSLEY, N. 1999. Working Utopias and socail movements: an investigation using case study materials from radical mental health movements in Britain. *Sociology,* 33**,** 809-830.

DERKZEN, P. & MORGAN, K. 2012. Food and the City: the challenge of urban food governance. *In:* VILJOEN, A. & WISKERKE, J. (eds.) *Sustainable Food Planning: Evolving Theory and Practice.* Wageningen: Wageningen Academic Publishers.

DIGRAZIA, J., MCKELVEY, K., BOLLEN, J. & ROJAS, F. 2013. More Tweets, More Votes: Social Media as a Quantitative Indicator of Political Behavior. *PLoS ONE,* 8**,** e79449.

DRYZEK, J. 1997. *The Politics of the Earth,* Oxford, Oxford University Press.

FRANKLIN, A. & MARSDEN, T. 2015. (Dis)connected communities and sustainable place-making. *Local Environment: The International Journal of Justice and Sustainability,* 20**,** 940-956.

GRAY, L. 2009. Grow your own craze leading to shortages. *The Telegraph,* 28/03/2009.

HEATH, J. & POTTER, A. 2006. *Rebel Sell: How Counterculture became consumer culture,* West Sussex, Capstone.

HESS, D. J. 2005. Technology- and Product-Oriented Movements: Approximating Social Movement Studies and Science and Technology Studies. *Science, Technology & Human Values,* 30**,** 515-535.

HOOGHE, L. & MARKS, G. 2009. A Postfunctionalist Theory of European Integration: From Permissive Consensus to Constraining Dissensus. *British Journal of Political Science,* 39**,** 1-23.

JOWERS, P., DURRSCHMIDT, J., O'DOCHERTY, R. & PURDUE, D. 1999. Affective and Aesthetic Dimensions of Contemporary Social Movements in the South West of England. *Innovations,* 12**,** 99-111.

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KANG, J. 2012. A Volatile Public: The 2009 Whole Foods Boycott on Facebook. *Journal of Broadcasting & Electronic Media,* 56**,** 562-577.

KING, B. G. & PEARCE, N., A 2010. The Contentiousness of Markets: Politics, Social Movements, and Institutional Change in Markets. *Annual Review of Sociology,* 36**,** 249-67.

KINGSLEY, J. Y. & TOWNSEND, M. 2006. 'Dig In' to Social Capital: Community Gardens as Mechanisms for Growing Urban Social Connectedness. *Urban Policy and Research,* 24**,** 525-537.

KNEAFSEY, M. 2010. The region in food--important or irrelevant? *Cambridge Journal of Regions, Economy and Society,* 3**,** 177-190.

KORTRIGHT, R. & WAKEFIELD, S. 2010. Edible backyards: a qualitative study of household food growing and its contributions to food security. *Agriculture and Human Values,* 28**,** 39-53.

LEE, H., JORDAN, S. & COLEMAN, V. 2014. The devil is in the detail. *In:* VILJOEN, A. & BOHN, K. (eds.) *Second Nature Urban Agriculture. Designing Productive Cities.* London: Routledge.

LOCKIE, S. 2006. Caputuring the sustainability agenda: Organic foods and media discourses on food scares, environment, genetic engineering and health. *Agriculture and Human Values,* 23**,** 313-323.

MARWELL, N. P. & MCQUARRIE, M. 2013. People, Place, and System:Organisations and the Renewal of Urban Social Theory. *The Annals of the American Academy of Political and Social Science,* 647**,** 126-143.

MICHELETTI, M. & STOLLE, D. 2007. Mobilizing Consumers to Take Responsibility for Global Social Justice. *The Annals of the American Academic of Political and Social Science***,** 157-173.

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MORGAN, K. 2014. The new urban foodscape: Planning, politics and power. *In:* VILJOEN, A. & BOHN, K. (eds.) *Second Nature Urban Agricutlure. Designing Productive Cities. Ten year on from the Continuous Productive Urban Landscape Concept.* . London: Routledge.

MORGAN, K. 2015. Nourishing the city: The rise of the urban food question in the Global North. *Urban Studies,* 52**,** 1379-1394.

PAPACHARISSI, Z. 2002. The virtual sphere: The internet as a public sphere. *new media and society,* 4**,** 9-27.

PAÜL, V. & MCKENZIE, F. H. 2013. Peri-urban farmland conservation and development of alternative food networks: Insights from a case-study area in metropolitan Barcelona (Catalonia, Spain). *Land Use Policy,* 30**,** 94-105.

PEPPER, D. 1984. *The roots of Modern environmentalism,* London, Routledge.

PURDUE, D., DURRSCHMIDT, J., JOWERS, P. & O'DOCHERTY, R. 1997. DIY culture and extended milieux: LETS, veggie boxes and festivals. *Sociological Review,* 4**,** 645-667.

RAO, H. 2009. *Market Rebels - How Activists Make or Break Radical Innovations,* Princeton, Princeton University Press.

REED, M. 2009. For Whom?: The Governance of the British Organic Movement. *Food Policy,* 34**,** in press.

REED, M. 2010. *Rebels for the Soil. The Rise of the Global Organic Food and Farming Movement,* London, Earthscan.

REED, M., CURRY, N., EVY, MIKELIS & OTTO 2015. MULTIFUNCTIONALITY AND URBAN FOOD: RE-INTERPRETING MULTIFUNCTIONAL

AGRICULTURE THE EXAMPLE OF THREE EUROPEAN CITIES. *Land Use Policy.*

REED, M., CURRY, N., KEECH, D., KIRWAN, J. & MAYE, D. 2013. City-region report synthesis (SUPURBFOOD). Gloucester: Countryside and Community Research Institute.

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Manuscript accepted for publication in Landscape Research April 2017
Doi: 10.1080/01426397.2017.1336517

RENTING, H., SCHERMER, M. & ROSSI, A. 2012. Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. *International Journal of Society of Agriculture and Food,* 19**,** 289-307.

RICE, L., DAVIES, J. & CAIRNS, M. 2011. *Bristol Riots,* Bristol, Tangent Books.

SEYFANG, G. 2006. Ecological Citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies,* 22**,** 383-395.

SONNINO, R. 2009. Feeding the City: Towards a New Research and Planning Agenda. *International Planning Studies,* 14**,** 425–435.

SPECHT, K., SIEBERT, R., HARTMANN, I., FREISINGER, U., SAWICKA, M., WERNER, A., THOMAIER, S., HENCKEL, D., WALK, H. & DIERICH, A. 2014. Urban agriculture of the future: an overview of sustainability aspects of food production in and on buildings. *Agriculture and Human Values,* 31**,** 33-51.

STEEL, J. 2008. *Hungry City: How Food Shapes Our Lives,* London, Vintage.

TAYLOR, J. R. & LOVELL, S. T. 2013. Urban home food gardens in the Global North: research traditions and future directions. *Agriculture and Human Values,* 31**,** 285-305.

THE BRISTOL POST. 2015. LIVE UPDATES: Bailiffs move in to evict Stapleton Allotment tree-top protesters. *Bristol Post,* , 12 March 2015.

TRENTMAN 2007. Citizenship and Consumption. *Journal of Consumer Culture,* 7**,** 147-158.

VILJOEN, A. & WISKERKE, J. S. C. 2012. *Sustainable Food Planning: Evolving Theory and Practice,* Wageningen, Wageningen Academic Publishers.

WOOLCOCK, M. 2010. The Rise and Routinization of Social Capital, 1988-2008. *Annual Review of Political Science,* 13**,** 469-487.