The fanta-sy of global products: fizzy-drinks, differentiated ubiquity and the placing of globalization

Jesse Heley (Email: eyh@aber.ac.uk; Orcid: 0000-0001-7876-2337), Marc Welsh (Email: maw@aber.ac.uk; Orcid: 0000-0002-9482-9164), Samantha Saville (Email: sms10@aber.ac.uk; Orcid: 0000-0001-6307-0573, Twitter: @Samsaville)

Pre-print copy. Please cite as:

Heley, J., Welsh, M., & Saville, S. (2019). The fanta-sy of global products: Fizzy-drinks, differentiated ubiquity and the placing of globalization. *Globalizations*, https://doi.org/10.1080/14747731.2019.1686821

All authors are affiliated with: Department of Geography and Earth Sciences, Aberystwyth University, UK

Project Twitter handle: @globalrural

Corresponding author: Jesse Heley eyh@aber.ac.uk Llandinam Building, Penglais Campus, Aberystwyth University, Aberystwyth, SY23 3DB

The fanta-sy of global products: fizzy-drinks, differentiated ubiquity and the placing of globalization

If globalization is conceived as an outcome of negotiations between places and relational processes, how do researchers capture such amorphous complexity? Drawing upon the framework of assemblage theory this paper unpicks the plethora of processes and practices encompassed within the problematic term 'globalization'. Focusing on the 'banal' object of a can of Fanta, we demonstrate how this exists in an assemblage which maintains coherence across space (i.e. is universally recognizable) yet is spatially differentiated in its components. Shedding light on how these processes coalesce in *place* we argue for the acknowledgement of the 'ubiquitous' in making place and the importance of difference in underpinning the 'global'.

Keywords: everyday globalization, place, assemblage, soft drinks, sugar, transnational corporations

Introduction

Midday, August 15 2016. Two lost British geographers wander the redeveloped East Bay waterfront of Toronto, Canada. They are taking a break from the International Rural Sociology Association conference, where they have just presented a paper about a small town in mid-wales and its place in the world, drawing upon assemblage theory. The presence, absence and distribution of various sugary soft drinks in Newtown (Wales) was used as a marker for thinking about the banal everyday embeddedness of such places in global networks. Beginning (and ending) with a can of fizzy pop, they had explored how this small and seemingly insignificant material object is located within various translocal networks, and the role it plays in constituting a town's sense of place and its situatedness in the world.

Our explorers continue west where - directly opposite a local landmark called 'Sugar Beach' - they are confronted by a docked ship. A large banner with the words "Natural Cane Sugar" hangs at one end of a huge crane methodically scooping this cargo from the hulk at a rate of some 600 tons per hour and depositing it in to the factory behind. According to a handy 'ShipFinder' app they discover the vessel departed Brazil 32 days earlier, before travelling down the St Lawrence Seaway to deposit its contents in Toronto. It is then scheduled to proceed down Lake Ontario, through the Welland Canal, eventually making its way to Chicago. We discuss the logistics of growing, transporting, extracting, processing, shipping and refining this batch of raw cane sugar; as well as the role of the ship in connecting farmers and multinational combines in Brazil with Canada's largest city. This is before considering its many consumers, as raw product and ingredient in an array of other food stuffs. The work being done to hold together these manifold actors is staggering, as are the complex negotiated power relations involved in maintaining the assemblage over time. Combine the commodity (sugar) with other things, and you have a product, like a fizzy drink, that is everywhere at once; truly global in reach.

Noticing a stream of trucks passing through a set of factory gates, the huge site adjacent to the dock is identified as home of the Redpath Sugar Refinery. Curiosity piqued, they skirt the factory walls and come across a small sign leading the way to an exquisite little museum devoted to the history and production of sugar, as told from the perspective of Redpath Sugar. The museum charts the corporation's beginnings in 1854, the influence of the Redpath family and their business and philanthropic activities upon the material development of Canada (particularly Montreal and Toronto). The history of this company alone reveals much about multiple processes of globalization over time and their influence on place; not least in terms of changeable global

commodity markets and the critical role that international trade agreements can have in making and breaking local economies, shaping the lives of those who live in their midst.

Several hours later they emerge blinking from the museum back into baking summer heat and make a beeline for the local supermarket to purchase a drink.

Prompted by presentation, ship, museum and thirst they could not help but notice the Canadian cans of Fanta were little different to those on sale in Newtown. There is a distinct badging of Canadian 'versions' of global soft drink brands as containing 'real sugar' - otherwise known as cane sugar - contrasted with equivalent drinks on sale south of the Canada/ USA border. U.S. versions predominantly use High Fructose Corn Syrup (HFCS) for their sweetness, and there was no doubt that the absence of HFCS in our Canadian cans was marketed as a 'good thing'.

This recognition of those global/local tensions at the heart of contemporary globalization, and an attentiveness to what we refer to as 'differentiated ubiquity', is at the crux of our argument. Our collective experiences undertaking a commodity survey in the food outlets of a small mid-Wales town, coupled with a day spent on the Toronto harbour front, sparked an array of questions about the apparent homogeneity of global brands, the variable outcomes of international commodity markets, and the ways these are materially embedded in local places, differently, around the world. Neither Newtown nor Toronto are exceptional cases, rather, we argue, there are few places where 'globalization' does not touch down in its various and myriad forms, so such stories are ubiquitous.

In keeping with that body of literature which challenges commonly-held notions and heavily mediated discourses of globalization as an homogenizing and totalizing

force (cf. Low & Barnett, 2000; Pieterse, 1994; Swyngedouw, 2004) what, then, can we learn from peeling back the layers of a seemingly ubiquitous global product? How are such products assembled and emplaced? What can thinking through the logics and logistics of ubiquitous items tell us about the history and current forms of globalization? And what role does the presence and absence of such ubiquitous but differentiated products play in the making of place? We approach these questions through focusing on the original subject matter of our conference paper – Fanta, a brand owned by the Coca-Cola Company – drawing upon the framework of assemblage theory to try to unpick the plethora of processes and practices encompassed within the problematic term of 'globalization'. Our goal is to shed light on how these processes coalesce in *place*, the very moment we pick up that can of Fanta from a shelf in a rural market town in Mid-Wales. The manner in which production, distribution and consumption come together in particular localities – or rather, a particular locality - is what is under consideration.

Our line of argument proceeds in four stages. First, we set out our approach to assemblage thinking theoretically and methodologically, and also in terms of how we present our research here. Second, we situate this research in relation to wider work on the geographies of food and critiques of corporate practices, paying particular attention to the implications for place-making. This necessarily includes a brief account of the historical beginnings of Fanta and its contemporary position as a Coca-Cola brand, inclusive of its system of ownership, production and marketing. Using this discussion as a point of departure, we take one (crucial) ingredient and component of the Fanta-Newtown assemblage - sugar – and consider the capacities for difference it enables within the overarching Fanta product. This is not to suggest that sugar is the defining component within Fanta; rather, sugar is a distinctly traceable component and one

which allows us a platform upon which to cut through and assay the complex constellation of interactions that make up Fanta as a differentiated yet seemingly ubiquitous product.

This leads on to our fourth and final objective, where we connect our global journeys with sugar back into our empirical work in mid Wales. Here we explore the role that 'global' brands and everyday objects such as Fanta have in reproducing place and anchoring communities in wider relations, but in a way that reflects and responds to these communities. Inspired by Cindi Katz's counter-topography (2001a; 2001b), we suggest a move towards counter-ubiquity to continue the work of querying hegemonic views of globalization. We argue that such a view usefully challenges assumptions of ubiquity and difference, both in relation to objects and places. The diversity, difference and unique qualities of place are often valorized as markers of distinction and resistance against a totalising global homogenization. Yet places are marked as much by the ubiquitous as they are by the unique. Here we argue for the acknowledgement of the ubiquitous in making place and the importance of difference underpinning the 'global' product such as Fanta.

Thinking and working with assemblage

Thinking through globalization as relational (where local places are thoroughly entangled, produced and effect the global processes that are embedded within them) has been a feature of geographical debates since Doreen Massey's A global sense of place? was published (1991). Subsequent analyses of migration flows, cosmopolitanism and the workings of global cities have consistently employed the language of relationality explicitly or implicitly. Work on global production networks, global value chains

(GVC) and commodity networks which have tended to drive accounts of globalization, have become more attentive to the notion of relationality. However, and as Braun notes in their consideration of the politics of global environmental issues, 'not all commodity chain analyses are the same' (2006, p. 645). Contrasting; 'commodity chains' with their emphasis on the transmission of value, 'commodity circuit' approaches with their attention to circulation and consumption, and 'commodity network' analyses with their focus on the 'topological' nature of these geographies, they all increasingly drawn upon network approaches and a language that emphasizes the 'heterogeneity of practices, spaces and times within these socioecological assemblages' (Ibid, p. 646).

Whilst there might be similarities in the methodologies and object of analysis between GVC and assemblage approaches we would contend that the latter has a different focus and frame of reference – that of place, its material composition and its relation to other places (and their components) elsewhere. It foregrounds the work entailed in maintaining those relations over time and processes of change. Places are made, the ongoing outcome of sets of social, material and political processes.

Conceived as networks (Castells, 1999) or assemblages, places are constituted by their internal dynamics (i.e. the ordering of material objects in sites) and relations with other place assemblages (i.e. they exist in relation to other place assemblages). As such, places are not static. Finding a method to gain a purchase on such a moving target and to capture both the dynamism and the processes that maintain stasis or cohesion is inherently problematic. As relations between places, between social actors and material sites have extensified (which we might describe as 'globalization'), so the challenge of unpacking those relations has been made more complex.

It is here that we argue an assemblage approach is of methodological value to researchers of globalization as it is experienced in place, without getting overly boggeddown in an increasingly complex array of philosophical debates. Certainly, for those looking to employ assemblage to the research process, there is an evident tendency to dwell on the futility of categorizing places given the complexity of these constellations and the almost limitless number of component relations. As several authors have observed (Burrell, 2016; Dittmer, 2014; Greenhough, 2012) the problem of deciding what the assemblage of study should be, and where and when to stop tracing its components, capacities and processes, is foremost among a number of difficulties and warnings that accompany assemblage-orientated approaches. This is an inherently subjective query in which the role of the researcher and the research itself becomes an integral part of the assemblage under consideration (Greenhough, 2012). Following Anderson and McFarlane (2011), we advocate being honest and open to partiality (and the role of the active role of the researcher in determining what assemblages are rendered visible for critique) and take the view that assemblage can operate as an orientation.

Specifically, McFarlane and Anderson argue that assemblage 'functions not simply as a concept, but as an ethos of engagement attuned to the possibilities of sociospatial formations to be otherwise within various constraints and historical trajectories' (2011, p. 165). With the understanding that assemblage can capture 'uncertainty, nonlinearity and contingency of change' (Ibid), it becomes a suitable lens through which to examine place in a global context (and visa-versa) and the role of particular components in these mutually constitutive spheres. More overtly, Baker and McGuirk (2017) argue for the utility of assemblage as an analytical tool in its own right for the

study of policy. It also shifts our considerations towards feedback loops, unexpected consequences, instabilities and renegotiations of power (Grossmann & Haase, 2016). Whilst a widely held (and to some extent legitimate) critique of assemblage approaches is its power-lessness, a body of work has emerged which demonstrates that issues of power and agency can be well catered for by an assemblage approach (Allen and Cochrane, 2010; Greenhough, 2012; Müller, 2015).

Despite this theoretical engagement with place and globalization as relational, there have been few studies that specifically take a place-based approach to examining how relations come together in place, how processes of place-remaking in the context of globalization, occurs. Assemblage thinking, as we argue elsewhere (Woods et al. 2017), offers an approach that can help to fill this gap. This means moving our empirical focus from tracing the interdependencies between places to analysing how connections come into being, and how places are transformed through these relationships.

Given this emphasis on the way people, capacities and things are brought together, it is not surprising that assemblage thinking has started to be employed to examine what Martin Müller describes as the 'relentless juggernaut of globalization [...] which is made right there, where we live' (2015, p. 35). Coupled with a growing attentiveness to messiness, contradiction and unpredictability, globalization has become recast 'not as a singular, circulating, encompassing hegemonic force, but as a contingent set of translating logics that have to be enacted in practice' (McFarlane, 2011, p. 379). Assemblage thinking can also complement other relational globalization conceptualisations, such as complexity theory (Dittmer, 2014) and hybridization (Pieterse, 1994; Woods, 2007), further expanding our relational conceptual tool box and

embracing theoretical plurality (Heley and Jones, 2012). Yet, similar to the general dearth of examples that engage relational approaches 'on the ground', there have been few empirical studies that use assemblage thinking to analyse globalization in place.

In the preceding section we have talked about using assemblage as methodology to explore globalization as an outcome of place-based relations. We now emphasize the materiality of the ubiquitous object in place, before foregrounding the object/s of this study – Fanta and its differentiation in places. This allows us in the final section to consider that same-but-different object as a component in place relations.

Ubiquity and Place

The significance of objects and the material world is routinely acknowledged by those who explore society and space (Rinkinen et al. 2015), while the literature on place-making tends to foreground uniqueness and those components of a landscape that demarcate it as different from other places (Kavaratzis & Kalandides, 2015). Bringing these debates together, the differentiation of 'global' brands and products is not a novel insight (Jackson, 2004; Pike, 2009). As a strategy, differentiation is a classic marketing technique. Concerned with establishing a market specific identity in different jurisdictional and cultural spaces, this differentiation is not fully reducible to a calculated tactic of global business. It is also a reflection of the unevenness of geographically entangled brands (Pike, 2009, p. 620). These include the component parts of products, which are often adapted to suit areal socio-technical regimes, such as food safety standards. Distribution is shaped in part by transport infrastructure and the capacity of different communities to purchase the product. Branding and marketing strategies invariably take on cultural mores and linguistic differences. For example,

Coca-Cola rendered phonetically into pinyin Chinese can sound like 'female horse stuffed with wax', whereas the name chosen by the corporation, kekou kele, sounds like 'tasty fun'.

Such products or 'transactable objects', then, are always and ongoingly entangled with the spatialities of economy, culture, society and politics. As Pike argues, the 'spatialities of brands and branding suggest their geographical entanglements may be relational *and* territorial, bounded *and* unbounded, fluid *and* fixed, territorializing *and* deterritorializing' (Pike, 2009, p. 633). In assemblage terms these spatialities are emergent and dynamic relations, made material as and in place/s. Taking this forward, we argue for a shift in attention from the strategies of corporations, to the interaction and intersection of such objects with individuals in place. Here we suggest that - as well as tracing the complex and moving target of translocal assemblage involved in bringing together components in the form of an aluminium can of fizzy soda placed upon a shelf in a small market town in rural Wales – we also consider the place making nature of that assemblage in everyday landscapes.

We contend that these forms of everyday globalization, of globalization made manifest *in place* rather than acting upon it, play a key role in contemporary social attempts to make sense of place and academic attempts to make sense of 'the global'. Food and drink are an important part of this equation. Although a basic human need, their role in society cannot be reduced to calorific requirements. Food and drink are intensely social, cultural and political. This corresponds with the current emphasis on value chains in studies of food and drink, which position production and consumption in much broader socio-economic contexts

The global networks of food and drink

The production and consumption of food and drink continues to be a major thread of debate within the academy. Covering a vast critical ground, Samir Dani notes that food is a topic which is pertinent to such a range of disciplines that it is highly difficult to comprehend and distil the volume of literature that surrounds it (2015, p. xvii). It is precisely because food is embedded in our everyday lives in so many ways that the study of food has been deemed cumulatively capable of illuminating all manner of things insofar as it is 'simultaneously molecular, bodily, social, economic, cultural, global, political, environmental, physical and human geography' (Cook et al. 2006, p. 656).

One important strand of food research in the social sciences post-war has focused on the rise of industrialized and internationalized food production, with a particular emphasis on vertical and horizontal integration and the increasing consolidation of agri-food governance within private corporate structures (Kalfagianni & Fuchs, 2015), or 'big food' (Clapp & Scrinis, 2017). Within this framework the soft drinks industry provides an excellent example of a corporate structure that operates at an industrial and international scale, being the subject of heavy critique in respect to its organization (Gill, 2009; Nestle, 2015; Taylor, 2000), environmental impacts (Hills & Welford, 2005), and associated social injustices (Elmore, 2015; Wasley & Ferrara, 2016). There is also growing academic scrutiny of health risks attached to the consumption of sugar-based soft drinks, and particularly in regard to their role as part of a global obesity epidemic (Cheng et al. 2009; Gertner & Rifkin, 2018; Nestle, 2015; Woodward-Lopez et al. 2011).

Whilst acknowledging these lines of critique, we remain struck by the success of Coca-Cola in turning combinations of water, sugar and acid, into one of the most

profitable and widely distributed goods on the global market. In this way, the company can be critically positioned as a complex assemblage, which mobilizes and moves various material and discursive elements across space and time, and situates them in landscapes of consumption. However, it is beyond the scope of this paper to detail the assemblages of each ingredient, let alone the manufacturing, refrigeration, vending, distribution or packaging regimes involved in producing just one can or bottle of fizzy drink. We argue instead that by focusing on one particular company (Coca-Cola), one brand of soft drink (Fanta) and one key ingredient (sugar), we can illustrate how an assemblage-inspired approach might allow us to differently dissect the bundled processes of neo-liberal capitalism. In turn, this provides a window into mapping the complex processes of contemporary globalization operating across space and, significantly, instantiated in place.

Fantastiche Coca-Cola

The Coca-Cola Company is one the most well-known global corporations. It sells its products in virtually every country in the world, owns more than 500 brands and boasts revenues in the vicinity of \$40 billion per year (Nestle, 2015). Moreover, it remains the single largest procurer of sugar, consumer of processed caffeine, and commercial buyer of aluminium cans and plastic bottles. And yet, Coca-Cola does not physically manufacture a great deal. Indeed, the genius of their working model lies in its capacity to deliver its drinks to the consumer through enrolling a range of businesses, state organizations, and ecologies to do the productive work of assembling the product and placing it on the shelf. Both costs and risk are outsourced and distributed amongst a varied array of commercial interests, economic, political and social landscapes (Elmore 2015).

Coca-Cola was founded in 1886, selling a thick black syrup to be added to fizzy water by soda fountain operators in stores in the American city of Atlanta. From the very outset this business model was based on distributing a caffeinated concentrate, and not selling a finished product (Elmore, 2015). This was not so much a calculated strategy, but rather a pragmatic approach adopted by the inventor of Coca-Cola (John Pemberton) due to his limited financial resources. Under the auspices of its first CEO, Asa Chandler, and his focus on marketing and distribution mechanisms, the Coca-Cola Company had expanded sales to cover every state of the Union by 1895 (Ibid). Independent soda fountain operators began to bottle the product, extending the longevity and spatial reach of the product beyond the city and the confines of established soda fountain vendors. And so began the franchising model of Coca-Cola capitalism.

In the early 1900s Coca-Cola began internationalising its operations, shipping syrup to bottlers in Canada, Jamaica, Cuba and Germany. By 1930 its 'Foreign Department' had negotiated bottling contracts in twenty-eight different countries, as far afield as Burma, Philippines, South Africa (Elmore, 2015). At the start of World War Two the Coca-Cola Company had 50 plants in Germany with sales of 4.5 million crates a year. With supplies of syrup rapidly diminishing and ceasing altogether by 1941, the head of German operations, Max Keith, looked for an alternative way of driving production and making use of his bottling lines. Limited to ingredients available under conditions of rationing, Keith devised a soft drink based on the by-products of industrial cheese and cider production. Called Fanta, derived from the word fantastisch (fantastic), this recipe proved successful, with over 3 million cases produced in 1943. The success of this venture ensured the survival of the Coca-Cola infrastructure through the war. As legend has it the apocryphal first private telegram from Germany to the US after the

liberation of Berlin was composed by Keith, which read: 'Coca-Cola Gmbh still functioning. Send auditors' (Willett, 1989, p. 103).

When hostilities had come to an end Coca-Cola Gmbh once again began bottling Coke, with Fanta being dropped. Brand managers did not see a good fit with the brand values of the Coca-Cola corporate assemblage as envisaged by executives; perhaps because of Fanta's association with the vanquished Nazi regime and the role of Coke as part of that broader American, anti-communist rhetoric emerging in the postwar era. After a decade had passed since the and the dust had settled, Fanta re-emerged, albeit within a much-transformed set of relations. Fanta was now produced in Naples, Italy, and instead of using the cast-off of cheese and cider production, the flavour profile was derived from local citrus fruits. It proved a highly successful diversification for Coca-Cola. Introduced in the US in 1960, it is now the second largest soft-drink brand in the world.

What's in a can?

In contrast to the more rigidly controlled Coca-Cola global brand, Fanta is much more obviously 'glocal' – being both intensely global and intensely local. Paraphrasing Swyngedouw, Fanta embodies a highly internationalized, globally networked commodity that is organized around - and embedded in - regionalized and localized production complexes (Swyngedouw, 2004, p. 38). This is in line with those features of contemporary capitalism. As Livesey (2017) observes, consumer trends are beginning to sway away from mass produced goods and towards custom-made items (a transition facilitated, in part, by technologies such as 3D printing and mass customization production lines).

Fanta has, for example, rolled out market campaigns tailored for specific target audiences, particularly teenagers. This includes Web 2.0 campaigns encompassing;

'consumer-generated limited-edition flavours', 'flavour elections', interactive graphic novels, YouTube and Snap Chat video uploads, and Instagram competitions and campaigns (#FANTAxYou). Such campaigns are evidence of a wider shift that sees consumers become more active in the production of the goods they buy as 'prosumers' and 'value co-creators' (Ritzer & Jurgenson, 2010). Hence Fanta can be seen as a brand that is evolving to cope with shifts in globalization and capitalism. Unlike sales in most other major soft drink brands (which are losing ground as customers shift to sparkling and flavoured waters), in 2016, sales of Fanta worldwide grew by 6.4% in 2016 (Schultz, 2017).

Surveying Fanta operations at a global level, a picture develops - not of a homogenous, global brand experience - but a brand globally recognized and that connects distant places to a global identity. This is most obvious in relation to flavour. There are a staggering array of flavours on sale; currently over 90 worldwide (not including discontinued varieties) with more unusual flavours including Peach Mangosteen (Albania), Ice Kiwi Lime (Australia) and Green Tea (Thailand). Belgium and the USA have the largest number of flavours domestically available (circa 10 each), with varieties on sale varying greatly between national contexts. This undoubtedly reflects regional tastes, but there are other important forces at play. These include the availability of ingredients and manufacturing facilities, as well as the presence of competing brands. Strawberry, for example, is a popular flavour internationally, but not within Africa - even in countries that grow a lot of strawberries (such as Egypt). The availability of Fanta 'zero', non-sugar varieties has increased greatly, but only in certain markets; concentrated in Europe and largely absent in Asia.

Comparing apples and oranges

Crucially for our argument, heterogeneity is also apparent on closer inspection of just one variety; the 'standard' orange flavour Fanta. Available in every market selling the Fanta brand, on closer inspection even this operates as multiple different versions of the Fanta assemblage, enveloping a range of recipes and target audiences. There are even distinct differences in the logos employed. In the USA and New Zealand, a soft, rounded version is used, whereas a more angular and punchy emblem features in Europe and Latin American countries. Perhaps the main variation concerns the type and amount of sweeteners and flavourings in use. In the UK, for example, Fanta Orange contains 3.7% orange juice and 1.7% citrus fruit juice, both of which come from concentrates. The US version, by comparison, contains no fruit juice. The sugar content also varies widely; as does the type of sugars and sweeteners used. In the UK, a 330ml can of Fanta contains 15.18g of sugars, derived from 'traditional' sugar, sweeteners and orange juice. This is the lowest sugar version of 'standard' Fanta on sale internationally. In the US, the 'home of Coke', an equivalent serving has 41g of sugars, the source of which is High Fructose Corn Syrup. Whereas, the highest sugar content for Fanta Orange is to be found in India, Vietnam and Ecuador with 43g (Action on Sugar, 2015).

If a can of 'classic orange Fanta' purchased in mid-Wales is not sweetened by the same ingredients as a can of orange Fanta in the American mid-West, or Toronto, Canada, then we might reasonably ask why? They taste broadly the same to the casual imbiber, and tests have indicated as such (although it should be noted that a lively debate has emerged around this point among Fanta aficionados, who enjoy making comparisons between markets). Rather, these differences reflect the pursuit of economic profit. They are also a function of governance and divergent regulatory regimes, and are expressive of the relations between the component parts of the soft drinks industry and

the global sugar assemblage. In this way both these regimes are responsive to, and reflective of, each other.

Sweetening the deal

As a traded commodity, the circulation of sugar has long been a feature of global geopolitical discourse. It sat at the heart of colonial projects, driving the triangular slave trade and environmental degradation of the new world. The British naval blockade of mainland Europe during the Napoleonic wars led to state sponsorship of innovation and subsidy to develop a European alternative (sugar beet) to imperial cane sugar. Massive expansion of production capacity in Europe and the colonies led to declining world sugar prices and the emergence of the first modern multilateral trade institution. The 1902 Brussels Sugar Convention effectively provided the legal, institutional and political template for transnational trade bodies that followed (Fakhri, 2014; Pigman, 1997). The production, state support for and mobility of sugar continues to be the source of considerable debate, particularly under the auspices of the World Trade Organization. More recently Grant (2015) and Hopewell (2013) have highlighted the historic prevalence of government subsidies and import tariffs across the industry, and how these regimes favour, for example, sugar beet growers (notably the European Union) or High Fructose Corn Syrup (the US). This in turn impacts upon the presence and practices of sugar refineries and distributors such as Redpath in Toronto, and upon the methods of sweetening employed by soft drink producers in different locations.

Historically soft drinks the world over were sweetened with sucrose derived from cane or sugar beet. This began to change from the 1970s onwards, when chemists in the US developed a process to extract glucose and fructose from corn using enzymes. The resultant High Fructose Corn Syrup (HFCS) provided a new market opportunity for

corn refiners: the food and drinks industry. Further impetus for this transformation came in 1981, when US legislation introduced increased levies on foreign sugar imports. Intended to support domestic sugar producers, it had the (unintended) consequence of pushing prices up above international levels and – coupled with ongoing subsides for corn growers in the US – rendered HFCS an even more attractive alternative for soda makers. In 1985, for example, Coca-Cola authorized its bottlers to use corn sweeteners in approximately three quarters of its drinks. Pepsi took similar action, allowing the use of HFCS in half of its canned and bottled products (Nestle, 2015, p. 15). Taken together, technological innovation and a shifting policy landscape were assimilated into the soft drinks industry, and the Fanta assemblage adapted and transformed accordingly.

The corollaries of this transformation were felt by North American sugar refiners like Redpath and in 'sugar towns' like Toronto, which had to adapt to the challenges wrought by the changeable conditions of international trade and shifting technological regimes. This is evident in the 'official' history of Redpath:

Redpath Sugars itself was suffering the effects of rising world sugar prices which increased the attractiveness of H.F.C.S. as an alternative sweetener to some of Redpath's traditional customers. In the raw sugar trading department, the unpredictable fluctuations of the market reduced the profits from the facet below its previous levels. Despite this, however, the continued full-capacity usage of the refinery helped to maintain the financial viability of the company in the face of increased import competition. (Feltoe, 1993, p. 225)

As this passage demonstrates, the emergence of HFCS had a profound impact on 'traditional' sugar mills and those localities where refineries were situated. The response for Redpath was to up-production, selling more at a cheaper rate. For plant workers, this entailed more shifts and longer hours. Along the harbourfront, lorries rumbled in and out of the Redpath gates with even greater frequency, and the air grew

slightly thicker with diesel fumes. These efficiency gains ensured that Redpath's manufacturing base at Sugar Beach would remain, but were not necessarily enough in their own right.

In 1959 Redpath Sugar was acquired by Tate & Lyle, a British firm who had refineries across the world. This global footprint allowed the company to mitigate some of the risks brought about by price fluctuations and shifts in regional demand, but not all. With refineries in Europe they could take advantage of a subsidy regime which actively supported sugar beet production and where manufacturers (including soft drinks producers) remained more dependent on sucrose. Nevertheless, Tate and Lyle were still driven to restructure their Canadian operations, shutting Redpath's Montreal refinery in 1980. This fate was echoed elsewhere in the world (Chalmin, 1990; Hollander, 2010).

Sugarization

The transition from cane sugar to HFCS within soft drinks production generally, and Fanta specifically, was very much evident from the 1980s onwards but, as discussed, this process has been highly variable, geographically. It is almost certain that this basis for difference within the Fanta assemblage will continue to reciprocate and reshape itself according to economic, political and social forces; some known, some not. Health narratives are set to be expressly important, and the connection between sugar consumption, soft drinks, industrializing economies and global (ill) health has been made repeatedly (see for example Fraser, 2016; Richardson, 2015; Smith, 2015). Collectively these texts address what Smith refers to as the 'sugarization' of all aspects of our diet, with sugars 'hiding' in processed foods 'under a variety of names, including sucrose, glucose, dextrose, maltose, lactose, galactose, malt syrup, maltodextrin, corn

syrup, high fructose corn syrup, molasses and corn sweetener, to name a few' (Smith, 2015, p. 108). Elsewhere, Lang and Heasman (2015) emphasize the symbiotic relationship between food production, marketing and dietary transformation at a global scale. Rehearsing those accepted connections between sugar and disease in a demographically ageing population, they lay considerable blame at the door of global fast food brands. Soft drinks are afforded a prime role in this ascendant dietary landscape, with Coca-Cola often being cast as the main offender by nature of brand recognition and market share.

It is at this level that the consumer comes to the fore as a (or rather the) key component of the soft drinks assemblage, although they are often (and, we would argue, inappropriately) reduced to a somewhat passive role. An important part of this relationship centres on physiology and the effect of sugars on the body. Soft drinks or 'sodas' provide a highly effective mechanism for delivering large quantities of sugar into the bloodstream. Evidence indicates that this activates reward systems in the human brain, giving us pleasure (at least in the short term) (Lustig et al. 2012). It has also been suggested that sugars are addictive and can induce dependency, especially when combined with caffeine, which is an extremely common co-constituent of soft drinks. Whether or not these foods are addictive, notes Marion Nestle, the fact remains that 'people love the taste of sweetness, and the more the better, up to what the food industry calls the 'bliss point' – the taste perceived as optimal by participants in sensory tests' (Nestle 2015, p. 50).

So, combinations of sugar, water and acid are mixed with some flavouring, colourants and fizzed up to hit that 'bliss point'. This provides the foundation for a multi-billion dollar industry constantly searching for new markets and maintaining existing ones, operating on a global plane, but always 'touching down' in place.

Placing the consumer

To return to the study site for our initial research project, Newtown, the collective market is fairly small. Here the atomised consumer sits at the heart of the global Fanta assemblage, so much so that complex and translocal production, marketing, logistical and retail assemblages organise around them for the purpose of accumulating capital. Newtown is not a 'global city', rather a small ostensibly rural market town of 12,000 residents. It is a case study site within a broader research project exploring rural change and globalization, specifically chosen as a mundane example of an 'everyday town' experiencing 'everyday globalization'. Fanta, as an object, came to our attention (as the second most readily available soft drink for purchase) via research into consumerism and global connections within the town. In this one small town we identified 243 distinct brands (i.e. varieties of Coke count as one brand) of soft drink, juice and bottled waters for sale; 48 of these were different varieties of fizzy soda. Whilst our intrigue was initially piqued by the variety, the work involved in bringing this diversity into the town, we also became aware of ubiquity, a few varieties dominating shelf space in most establishments, with a limited number of establishments trading in diversity. And that begs questions about how such monopolies emerge, how they are maintained in each place they have a presence, and what function they play in the production of place in an era of globalization.

Connecting the place to the global, the ubiquitous object to a global assemblage, is a purpose of this paper. Newtown is unique (like every other place), and yet it is assembled in relation to other places. It is embedded in processes that operate across space, connecting, transforming, sustaining, locating Newtown as a place in a global order. If you were to visit you would find a sufficient number of chainstores and products to mark it out as a regional centre, a typical, but not quite 'clone' market town

(Simms et al. 2005). For some, the arrival of high street retail and fast food chains heralds a loss of identity. For others it is a sign of success, marking the town's place in a global hierarchy.

Fanta is a small, ubiquitous but unnoticed component in the Newtown assemblage. It is available in 28 retail outlets, one of which is a specialist sweet shop that sells imported 'American sodas', including six different (HFCS sweetened) varieties of Fanta. As such Fanta, the logo, colour schemes, cans, adverts, online cross platform marketing campaigns, feature as a backdrop that shapes the sense of place of Newtown.

Part of the placing of Newtown is less about what makes it distinct from other places, and is as much about what it shares with them. If Newtown had no Fanta what sort of place would it be? This is not a question we often ask, preferring to focus on the small business selling wheel balances to Australia or the textile firm that conquered the world (Newtown was home of Laura Ashley). Yet this banal and ubiquitous object sits visibly in the social spaces of Newtown, consumed by some seeking the bliss point, piously ignored by others. Admittedly it hasn't always done so. But now that it does, and now that people know that when they visit another town, another city, or indeed another country the 'same' product is also present in their social space, what function does the ubiquitous but far from uniform play in the global sense of place of Newtown?

Conclusions

A chance encounter with the global sugar industry in Toronto, combined with thirst and an attentiveness to a particular global product provoked a line of enquiry that forms the subject of this paper. We do not suggest assemblage provides an alternative to political economy and the broad church of GVC approaches as commonly used in studies of globalization. Nor is this a paper about assemblage as a conceptual

framework (inclusive of a complex array of Delandian terminology). Rather, we suggest that assemblage has much to offer as an approach complementary to established lines of critique. Here we argue that assemblage brings perspective as opposed to innovation in its own right. It provides a methodological mechanism foregrounding the connections of global and local, combining materiality and place relations with attentiveness to processes generative of fixity and flux.

In contrast to what Appadurai (1990) labelled 'production fetishism' - centred on sites of production - this assemblage way of thinking draws our focus beyond to an array of global, local and trans-local processes that are enrolled in making and maintaining a recognizable, singular, yet simultaneously differentiated brand. We would argue that the nebulous nature of the Coca-Cola structure, of which Fanta is a part, lends itself to such an analysis particularly well. It offers illustrative capacities when its specific labours, sites and practices are traced. On the one hand, it is trans-local and trans-national, being intrinsically tied into the corporate structure and global footprint of the Coca-Cola Company and the ability of this edifice to derive a profit from the basic ingredients of sugar and water. At the same time, it is successful because it is equally embedded in other scales and localities, including the bottling plant, the regional marketing platform, and the home. It is, then, very much embedded in place/s and partly constitutive of them.

As we have already identified, the product (Fanta) exists in an assemblage that maintains a ubiquitous coherence across space yet is spatially differentiated in its components (water, sugar, flavours, colourants, containers, factories, franchisees, marketing and cultural significance) within national spaces. This global assemblage is subject to ongoing maintenance work and realignment, for example as regulatory regimes change or competitors grab market share – exemplified by the HFCS / 'real

sugar' branding observed in Toronto. Part of that maintenance is conducted via national and regional representations of the brand – vibrant marketing campaigns, tie-ins and promotions with cultural events (for example, a movie premier), sports sponsorship – and part through work to ensure the product is located in spaces of casual consumption (vending machines, public houses and restaurants, where exclusivity contracts between regional chains and beverage distributors are highly contested). The cumulative impact of these transformations is evident in the evolution and realignment of the Fanta assemblage and the manner in which it is a constituent of place; being consistently there but differentiated according to regional preferences and political discourse, at the national, local and personal level.

The anchor that holds the assemblage together is as much the atomised consumer as it is the legal and financial Fanta institutions that siphon and accumulate capital from mid Wales or downtown Toronto. Hence why the consumer is the subject of ubiquitous global branding. Those same consumers subsidize and maintain the assemblage; through waste collection and disposal, water licencing, healthcare, transportation and other infrastructures provided by the state to deal with environmental and social externalities associated with the product. Considering Fanta without its essential and placed based components – socially and materially located consumers – tends to generate accounts that reinforce aspatial, and peculiarly polar (top-down) readings of globalization, or rather idiosyncratic accounts of communities confronted by homogenizing 'global forces'. An assemblage approach goes some way to capturing globalization as an outcome of ongoing negotiations between places and processes of change in which the local co-constitutes the global and vice versa.

Geolocations: Newtown, Powys, UK: 52.5132°N 3.3141°W, Redpath Sugar, Toronto, Canada:

This work was supported by the European Research Council under Grant number 339567.

Acknowledgements: The authors would like to thank Laura Jones for her contribution to the Newtown survey data collection and Richard Feltoe of the Redpath Sugar Museum, Toronto for his guidance and enthusiasm.

Authors Biographic details

Jesse Heley is a Senior Lecturer at Aberystwyth University. His research focuses on rural and regional politics and governance, and the geographies of volunteering. He is currently a Co-Investigator on the European Research Council funded GLOBAL-RURAL project, the ESRC funded WISERD Civil Society Research Centre, and the EU Horizon 2020 ROBUST project.

Marc Welsh is a Lecturer at Aberystwyth University. He was Post-Doctoral Research Associate on the GLOBAL-RURAL project. His research focus includes technologies of social regulation, resilience and environmental governance, processes of globalization and rural change with a focus on the UK and sub-Saharan Africa.

Samantha Saville is currently an ESRC Postdoctoral Research Fellow at Aberystwyth University. Her current work returns to her doctoral research on value practices and environmental politics in the Arctic archipelago of Svalbard. She has been part of the Global-Rural research team contributing to theoretical development and data collection, analysis and communication of everyday globalization in the project's Welsh case studies.

References

Action on Sugar. (2015). International Sugar-Sweetened Soft Drink Survey 2015.

London: Action on Sugar Wolfson Institute of Preventive Medicine, Queen Mary University of London. Retrieved from http://www.actiononsugar.org/media/actiononsugar/news-centre/surveys-/2015/International-Drinks-Data.pdf

- Allen, J. and Cochrane, A. (2010). Assemblages of State Power: Topological Shifts in the Organization of Government and Politics. *Antipode*, 42 (2) 1071-1089. doi:10.1111/j.1467-8330.2010.00794.x
- Anderson, B., & McFarlane, C. (2011). Assemblage and geography. *Area*, 43(2), 124–127. https://doi.org/10.1111/j.1475-4762.2011.01004.x
- Appadurai, A. (1990). Disjuncture and Difference in the Global Cultural Economy: *Theory, Culture & Society*, 7(2–3), 295–310. https://doi.org/10.1177/026327690007002017
- Baker, T., & McGuirk, P. (2017). Assemblage thinking as methodology: commitments and practices for critical policy research. *Territory, Politics, Governance*, 5(4), 425–442. https://doi.org/10.1080/21622671.2016.1231631
- Burrell, K. (2016). Lost in the 'churn'? Locating neighbourliness in a transient neighbourhood. *Environment and Planning A*, 48(8), 1599–1616. https://doi.org/10.1177/0308518X16643727
- Braun, B. (2006). Environmental issues: global natures in the space of assemblage. *Progress in Human Geography*, 30(5), 644–654. https://doi.org/10.1177/0309132506070180
- Castells, M. (1999) Grassrooting the Space of Flows, *Urban Geography*, 20(4), 294-302, DOI: 10.2747/0272-3638.20.4.294
- Chalmin, P. (1990). *The Making of a Sugar Giant: Tate and Lyle, 1859-1989.* London: Taylor & Francis.
- Cheng, R., Yang, H., Shao, M., Hu, T., & Zhou, X. (2009). Dental erosion and severe tooth decay related to soft drinks: a case report and literature review. *Journal of Zhejiang University SCIENCE B*, 10(5), 395–399. https://doi.org/10.1631/jzus.B0820245
- Clapp, J., & Scrinis, G. (2017). Big Food, Nutritionism, and Corporate Power. *Globalizations*, 14(4), 578–595. https://doi.org/10.1080/14747731.2016.1239806
- Cook, I. et al. (2006). Geographies of food: following. *Progress in Human Geography*, 30(5), 655–666. https://doi.org/10.1177/0309132506070183
- Dani, S. (2015). Food Supply Chain Management and Logistics: From Farm to Fork (1st edition). Philadelphia: Kogan Page.

- Dittmer, J. (2014). Geopolitical assemblages and complexity. *Progress in Human Geography*, 38(3), 385–401. https://doi.org/10.1177/0309132513501405
- Elmore, B. J. (2015). *Citizen Coke The Making of Coca-Cola Capitalism*. New York: W. W. Norton & Company.
- Fakhri, M. (2014). The institutionalisation of free trade and empire: a study of the 1902 Brussels Convention, *London Review of International Law*, 2(1) 49–76, https://doi.org/10.1093/lril/lru006
- Feltoe, R. (1993). *Let Redpath Sweeten it*. Toronto: Natural Heritage/Natural History Inc.
- Fraser, A. (2016). *Global Foodscapes: Oppression and resistance in the life of food* (1st edition). New York: Routledge.
- Gertner, D., & Rifkin, L. (2018). Coca-Cola and the Fight against the Global Obesity Epidemic. *Thunderbird International Business Review*, 60(2), 161–173. https://doi.org/10.1002/tie.21888
- Gill, L. (2009). The limits of solidarity: Labor and transnational organizing against Coca-Cola. *American Ethnologist*, 36(4), 667–680. https://doi.org/10.1111/j.1548-1425.2009.01202.x
- Grant, W. (2015). Agricultural Trade. In G. M. Robinson & D. A. Carson (Eds.), Handbook on the Globalization of Agriculture (pp. 143–156). Cheltenham: Edward Elgar Publishing.
- Greenhough, B. (2012). On the agencement of the academic geographer. *Dialogues in Human Geography*, 2(2), 202–206. https://doi.org/10.1177/2043820612449296
- Grossmann, K., & Haase, A. (2016). Neighborhood change beyond clear storylines: what can assemblage and complexity theories contribute to understandings of seemingly paradoxical neighborhood development? *Urban Geography*, 37(5), 727–747. https://doi.org/10.1080/02723638.2015.1113807
- Hills, J., & Welford, R. (2005). Coca-Cola and water in India. *Corporate Social Responsibility and Environmental Management*, 12(3), 168–177. https://doi.org/10.1002/csr.97
- Hollander, G. (2010). Power is sweet: sugarcane in the global ethanol assemblage. *The Journal of Peasant Studies*, 37(4), 699–721. https://doi.org/10.1080/03066150.2010.512455

- Hopewell, K. (2013). New Protagonists in Global Economic Governance: Brazilian Agribusiness at the WTO. *New Political Economy*, 18(4), 603–623. https://doi.org/10.1080/13563467.2013.736957
- Jackson, P. (2004). Local consumption cultures in a globalizing world. *Transactions of the Institute of British Geographers*, 29(2), 165–178. https://doi.org/10.1111/j.0020-2754.2004.00123.x
- Heley, J., & Jones, L. (2012). Relational rurals: Some thoughts on relating things and theory in rural studies. *Journal of Rural Studies*, 28(3), 208–217. https://doi.org/10.1016/j.jrurstud.2012.01.011
- Kalfagianni, A., & Fuchs, D. (2015). The effectiveness of private food governance in fostering sustainable development. In T. Havinga, F. van Waarden, & D. Casey (Eds.), *The Changing Landscape of Food Governance* (pp. 134–152).
 Cheltenham: Edward Elgar Publishing.
- Katz, C. (2001a). On the Grounds of Globalization: A Topography for Feminist Political Engagement. *Signs*, 26(4), 1213–1234.
- Katz, C. (2001b). Vagabond Capitalism and the Necessity of Social Reproduction. *Antipode*, 33(4), 709–728. https://doi.org/10.1111/1467-8330.00207
- Kavaratzis, M., & Kalandides, A. (2015). Rethinking the place brand: the interactive formation of place brands and the role of participatory place branding. *Environment and Planning A: Economy and Space*, 47(6), 1368–1382. https://doi.org/10.1177/0308518X15594918
- Lang, T., & Heasman, M. (2015). Food Wars: The Global Battle for Mouths, Minds and Markets (2nd edition). New York: Routledge.
- Livesey, F. (2017). From Global To Local: The making of things and the end of globalisation. London: Profile Books.
- Low, M., & Barnett, C. (2000). After Globalisation. *Environment and Planning D: Society and Space*, 18(1), 53–61. https://doi.org/10.1068/d8s
- Lustig, R. H., Schmidt, L. A., & Brindis, C. D. (2012). Public health: The toxic truth about sugar. *Nature*, 482, 27–29. https://doi.org/10.1038/482027a
- Massey, D. (1991). A global sense of place? Marxism Today, 38(1), 24-29.
- McFarlane, C. (2011). On context. *City*, 15(3–4), 375–388. https://doi.org/10.1080/13604813.2011.595111

- McFarlane, C., & Anderson, B. (2011). Thinking with assemblage. *Area*, 43(2), 162–164. https://doi.org/10.1111/j.1475-4762.2011.01012.x
- Müller, M. (2015). Assemblages and Actor-networks: Rethinking Socio-material Power, Politics and Space. *Geography Compass*, 9(1), 27–41. https://doi.org/10.1111/gec3.12192
- Nestle, M. (2015). *Soda Politics: Taking on Big Soda (and winning)*. New York: Oxford University Press.
- Pigman, G. (1997). Hegemony and trade liberalization policy: Britain and the Brussels Sugar Convention of 1902. *Review of International Studies*, 23(2), 185-210. doi:10.1017/S026021059700185X
- Pieterse, J. N. (1994). Globalisation as Hybridisation. *International Sociology*, 9(2), 161–184. https://doi.org/10.1177/026858094009002003
- Pike, A. (2009). Geographies of brands and branding. *Progress in Human Geography*, 33(5), 619–645. https://doi.org/10.1177/0309132508101601
- Richardson, B. (2015). Sugar. Cambridge: Polity.
- Rinkinen, J., Jalas, M., & Shove, E. (2015). Object Relations in Accounts of Everyday Life. *Sociology*, 49(5), 870–885. https://doi.org/10.1177/0038038515577910
- Ritzer, G., & Jurgenson, N. (2010). Production, Consumption, Prosumption: The nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture*, 10(1), 13–36. https://doi.org/10.1177/1469540509354673
- Schultz, E. . (2017, July 27). Fanta Brings Back the 'The Fantanas,' Now with 25% More Dude. Retrieved 12 September 2018, from http://adage.com/article/cmo-strategy/fanta-brings-back-fantanas-a-male-member/309931/
- Simms, A., Kjell, P., & Potts, R. (2005). *Clone Town Britain*. New Economics Foundation. Retrieved from https://neweconomics.org/2007/06/clone-town-britain/
- Smith, A. F. (2015). Sugar: A Global History. London: Reaktion Books.
- Swyngedouw, E. (2004). Globalisation or 'glocalisation'? Networks, territories and rescaling. *Cambridge Review of International Affairs*, 17(1), 25–48. https://doi.org/10.1080/0955757042000203632
- Taylor, M. (2000). Cultural variance as a challenge to global public relations: A case study of the Coca-Cola scare in Europe. *Public Relations Review*, 26(3), 277–293. https://doi.org/10.1016/S0363-8111(00)00048-5

- Wasley, A., & Ferrara, C. (2016, February 18). How Italy's oranges are linked to a modern day story of exploitation. *The Guardian*. Retrieved from https://www.theguardian.com/sustainable-business/2016/feb/18/italy-oranges-slavery-coca-cola-exploitation
- Willett, R. (1989). The Americanization of Germany, 1945-1949. London: Routledge.
- Woods, M. (2007). Engaging the global countryside: globalization, hybridity and the reconstitution of rural place. *Progress in Human Geography*, 31(4), 485–507. https://doi.org/10.1177/0309132507079503
- Woods, M., Heley, J,' Fois, F., Jones, L., Onyeahialam, A., Saville, S. & Welsh, M. (2017). Assemblage, Place and Globalization, International Symposium on Assemblage Thinking, Mytilene, June 2017. Retrieved from: https://globalruralproject.files.wordpress.com/2014/11/assemblage-place-and-globalization.pptx
- Woodward-Lopez, G., Kao, J., & Ritchie, L. (2011). To what extent have sweetened beverages contributed to the obesity epidemic? *Public Health Nutrition*, *14*(3), 499–509. https://doi.org/10.1017/S1368980010002375