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Article

Who's Milking It? Scripted Stories of Food Labour



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Abstract

This article explores representations of food labour at different stages in the supply chain through a labour process theory perspective. Employing multi-modal critical discourse analysis it analyses visual data collected from three television programmes focused on dairy production and consumption. The research sheds light on the power relations inherent to food production and the devaluing of manual food labour in supply chains, which are shaped by the current capitalist socio-political environment. The findings expose ways in which media can reinforce dominant understandings of food supply chains, while making aspects of food labour invisible.

Keywords

food labour, labour process theory, multi-modal critical discourse analysis

Introduction

Food is central to society, it is a vehicle for cultural, social and creative expression, it is 'a commodity with a volatile exchange value, and an object of human labour' (Coplen, 2018: 1), but, most fundamentally, key for human survival. This article explores how food labour is represented in the media at different stages in the supply chain through a labour process theory (LPT) perspective. This framing acknowledges that the meaning and value of food labour have been shaped by both the historical and modern-day political economy of food and agriculture.

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Despite the necessity of food, much of the labour involved across the supply chain to bring food to the table remains hidden to the majority of the population (Hatton, 2017; Li, 2011), reinforcing the unequal power relations within the food supply chain (Gereffi et al., 2005). Insofar as supply chains underpin global production and consumption, this contributes to the devaluing of labour within monopolistic, capitalistic production systems (Braverman, 1998). This work takes a comprehensive and extended view of food labour processes from the farm to the consumer through a LPT lens. Most food labour literature focuses on the use of migrant labour, with a large body of work exploring migrant work on the land (Böhm et al., 2019; Bryceson, 2019), although a few notable exceptions exist in relation to food retail (e.g. Burch and Lawrence, 2007). This research extends the theoretical relevance of LPT beyond the traditional focus on factory workers, to include workers across the supply chain (e.g. workers who are also owners (i.e. farmers) and home workers), by exploring the labour involved in food production and consumption.

The study adopts a multi-modal critical discourse analysis (M-CDA) to unpack publicly broadcast television programmes that seek to communicate how food is produced in the supply chain. The analysis uncovers the dominant scripted stories that shape the understanding and value of food labour. Focusing on the dairy industry, three separate episodes of reality/documentary-style television programmes are analysed. The programmes are representative of three key stages of the food supply chain: primary production, manufacturing/processing and purchasing/consumption. The study considers how these constructions serve to legitimate the existing power structures inherent to capitalist notions of food production in supply chains and limits the understanding of food labour and what is considered valuable.

Conceptual framing

Food supply chains

Food supply chains are dominated by 'giant corporation[s]' and embody supply chain capitalism (Braverman, 1998; Tsing, 2009). Supply chain capitalism denotes how the global economy is structured around the activities of large firms that control the mode of production and labour through outsourcing (Eriksson and Tollefsen, 2018; Tsing, 2009). While supply chains are complex and fragmented (Gereffi et al., 2005), the centralising logic of capitalism means that a small number of large food retailers and manufacturers dominate and exert the most control over them (Braverman, 1998; Lloyd and James, 2008).

Lang (1999: 169) argues that 'food systems and supply chains are the product of policy and political choices [. . .] characterised by large scale concentration and centralisation, both politically and economically'. This control is manifested through tighter vertical coordination of supply chains for food quality, and traceability (Burch and Lawrence, 2007), which is considered responsible for delivering improvements in food availability, variety and safety (Reardon and Berdegue, 2006). Power disparities in the supply chain dictate the labour processes of raw food producers at one end of the chain, leaving them little choice but to comply with an increasing number of requirements (Lloyd and James, 2008). Figure 1 highlights a typical supply chain and the grey shaded area reflects where power lies.

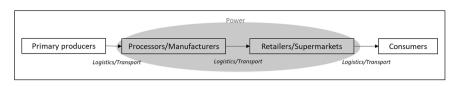


Figure 1. Traditional food supply chain.

At the other end of the supply chain, consumers primarily experience food production through large corporations (Booth and Coveney, 2015). This can be physically in supermarkets, or cognitively and emotionally via the images and narratives created, used and legitimated by the retailers and manufacturers. Consumers expect cheap, convenient food, and seasonal varieties to be available all year round, thus driving continuous global sourcing practices (Oosterveer and Sonnenfeld, 2012; Young and Hobbs, 2002). The labour processes needed to produce and transport food are often overlooked, as consumers take daily availability for granted (Moragues et al., 2013).

Food labour

Food labour is understood here as all labour processes and practices necessary to produce food, including waged and unwaged labour. Böhm et al. (2019) conceive food labour processes as practices embedded in a globally distributed system and argue that the food labour force includes domestic work: cooking, and the associated tasks with food production and consumption. Although LPT remains paradigmatically contested, it enables shedding light on 'the degradation of work under the impact of new forms of capitalist production and management' (Thompson and Smith, 2010: 12). It focuses on 'control, consent and resistance at the point of production' (Thompson and Smith, 2010: 11) and is inherently contextualised in the capitalist political economy.

A limited body of literature examines labour processes at the retail end of the food supply chain (see McKie et al., 2009; Wright and Lund, 2003) and Veen et al. (2020) discuss labour in the context of food delivery services. However, little research explores the role of labour across the food supply chain, with a particular scarcity at the primary production stage. The fact that the business owners involved in primary production are often the workers (i.e. the family who farm (Pegler et al., 2011)) is regularly overlooked. By including food labour processes across the supply chain – farming, manufacturing and consumption – this research explores 'the production and organisation processes behind food and the context that shapes them' (Böhm et al., 2019: 197) and addresses Böhm et al.'s (2019) call to explore food labour in modern food factories.

In the food system, the ways in which workers experience labour is generally conditioned by the organising logic of capitalism (Eriksson and Tollefsen, 2018). This is evidenced in the continuing need to profit from the production of food, particularly through ever more efficient processes (De Castro et al., 2019; Harvie and Milburn, 2010). In food factories, this is manifested through increased technological advances, such as roboticisation and automation (Arntz et al., 2016), which are argued to increase efficiency and productivity. However, others contend that this results in high levels of deskilling (Braverman, 1998) and the removal of human jobs. Braverman (1998) states that capitalism can divide and specialise labour within organisational structures leading to a sense of powerlessness and meaninglessness for workers. It is this system that 'has rendered parts of the workforce invisible' (Thompson and Smith, 2010: 15).

In this logic of capitalism, food labour is devalued and degraded. Devaluation refers to the 'social construction of a type of work' and of the people who perform it as of limited value (De Castro et al., 2019: 234). Devalued labour is an economic and social concept in that it is both 'poorly paid and underappreciated', resulting in the denial of workers' social value (De Castro et al., 2019: 234). Food workers can also experience degradation of their work through sociocultural mechanisms where labour 'is devalued by virtue of hegemonic cultural ideologies' (Hatton, 2017: 337) or an increase in its monotonous, yet regimented nature. This echoes the LPT literature around mechanisms for deskilling, degradation and alienation of labour processes (Braverman, 1998; Hatton, 2017; Thompson and Smith, 2010).

In an attempt to shed light on how food labour is devalued, this study considers how food supply chains are publicly talked about and represented. Analysing parts of the societal discourse on food production and consumption aligns with the perspective of 'social reality as discursively constructed and maintained' (Alvesson and Karreman, 2000: 1126). This provides ways to identify the prevailing as well as marginal(ised) stories on food labour, helping to unveil the power dynamics at play in its (de)valuing. The following research questions are explored:

RQ1. How are the labour processes of food production and consumption represented to the public through television?

RQ2. What insights can be gained from the discourse constructing food labour?

These questions are addressed in the context of the dairy food supply chain, which serves as a boundary object. Symbolic food products can be used as boundary objects to facilitate understanding across social worlds (Star and Griesemer, 1989). Given that 98.5% of United Kingdom (UK) households purchase milk and average per capita consumption is 70 litres p.a. (AHDB, 2020), milk provides a focal point for exploration. Raw milk production is a labour-intensive operation, with high fixed costs of production and transport (Glover, 2011). In 2017, on average a litre of milk retailed at 55p, while the price paid to farmers was 27.6 pence per litre (ppl) (AHDB, 2018) and costs of production were 26.1 ppl. The study is situated in the UK context, although related mechanisms for devaluing labour exist globally.

This work contributes novel insights by exploring representations of food labour processes at the different stages of milk production and consumption. This involves considering where this labour takes place, who or what is involved and how it is represented.

Research approach

Data collection and analysis

The research uses M-CDA of three reality/documentary-style television programmes to uncover the hidden aspects of food labour in the context of UK dairy supply chains. Television

is the most popular media form accessed by the public, with the British communications regulator reporting in 2017 that people spent 203 minutes a day on average watching broadcast television (Ofcom, 2019). Therefore, given the time devoted to broadcast media, it is arguably a primary source of information for the general population.

In searching the available television programmes on non-subscription services, the vast majority centred on diet, food preparation and consumption. Programming choice contributes to the public narrative that cooking is the dominant form of food labour. Despite their prevalence, studies have shown that cooking programmes, while presenting attractive and aesthetically appealing food labour, '*rate low as an influence on cooking behavior*' (Caraher et al., 2000, emphasis in original). In contrast, television programmes that were not focused on cooking were chosen for analysis to unveil different constructions of food labour.

The sample comprises television programmes that (a) were available on mainstream channels on UK broadcast television; (b) specifically focused on dairy where possible; and (c) represented distinct sections of labour processes across the food supply chain (Table 1). The chosen programmes illustrate some of the stories and imagery presented to the public domain about food supply chains. The first programme is centred on the dairy farm, the second on dairy factories and finally on the family as consumers. The findings are presented in vignettes, supported by illustrative quotes and images. The analysis teases out the construction of food labour processes and their value, and the discussion is ordered thematically (drawing upon Garland et al., 2013 and Timming, 2015).

Critical discourse analysis (CDA) is a methodology used in the social sciences to critically study language and society. CDA consists of a 'three-dimensional' framework of analyses of: language texts, discourse practice in terms of production, distribution and consumption, and 'discursive events as instances of sociocultural practice' (Fowler, 1997: 421). M-CDA extends beyond text to the audio, imagery and gestures, which allows us to explore multiple meanings (O'Halloran, 2011). Discourse shapes how we understand, experience and know the world; it has a performative nature in bounding how we can discuss and do things (Burr, 2015; Fairclough, 2005). Adopting this approach contributes to the growing interest in how discourse through text and visuals is constructed by actors and those who represent them (in this case television). In unpacking the dominant discourse, the convergence and discursive incongruences in representations are acknowledged and explored (Maguire and Hardy, 2006; Phillips et al., 2004). The analysis of these multiple modes facilitates a deeper understanding of the discourse as it shifts between different contexts and practices (Iedema, 2003: 41) in the empirical data.

Each researcher independently undertook M-CDA of visual data comprising a content, compositional and interpretative analysis (Garland et al., 2013). Each programme was coded to interrogate the dominant constructions of labour, before the team came together to collapse, discuss and refine codes (Garland et al., 2013).

The first open coding process allowed for an initial sensemaking of the stories presented. Each researcher noted the imagery, actors and construction as well as the content and language used in each programme (discourse design), which incorporates the more formal analysis of discourse use (Wood and Kroger, 2000). A coding scheme is included (online Supplemental Appendix 1), which guided the construction of the vignettes. Relationships between codes were established and key themes were developed, identifying both the

Table I. Television programmes.	ammes.		
Programme name	Broadcast details	Brief description	Programme visual
A Year on the Farm (300,000 viewers)	Channel 4, 23 August 2017 9–10 p.m. 60 minutes (including commercial breaks)	'A Year on the Farm' reveals the secret world of four UK farms fighting for their way of life (Channel Four Television, 2017). The programme visits a small Sussex dairy that sells raw milk direct from the farm. It follows the farming family business through the seasons.	
Inside the Factory: How our favourite foods are made (1.1 million viewers)	BBC Two, 2 July 2017, 8–9 p.m. 60 minutes	The programme centres on 'one of the largest fresh milk processing plants in the world' (BBC Two, 2017) where milk goes 'from cow to carton' in less than 24 hours. The programme also examines how milk is used to make cheese and ice-cream, as well as some history behind milk production.	
Eat Well for Less? (4.3 million viewers)	BBC One, 21 June 2017, 8–9 p.m. 60 minutes	'Eat Well for Less?' (BBC One, 2017) spends a week with a family who want to save money on their food bills. The programme focuses on what people shop for and provides cheaper non-branded alternatives for the family. At the close it is revealed which products were swapped and how much money they saved. The programme also features some basic cooking.	Bat Well

Primary producers	Logistics/Transport	→ Consumers
	Logistics, Hunsport	

Figure 2. Food supply chain represented in Programme 1.

represented stories and the absences. The process served to unpack the rhetoric around food labour, building upon the existing images and narratives around food production.

Vignettes

As part of the presentation of the analysis, three vignettes were created, one per programme, in an effort to convey the main themes emerging. They reflect the labour processes across the supply chain and provide some contextualisation. Each vignette includes a visual representation of the supply chain narrative in the programme, showing which actors are represented or mentioned and where the focus is placed (bold lines).

Vignettes provide a basis for storytelling as 'short, carefully constructed description[s] of a person, object, or situation, representing a systematic combination of characteristics' (Atzmüller and Steiner, 2010: 128). During their construction, the authors reflected upon concerns of positionality, power and interpretation (Denzin, 2008). The vignettes provide vivid multifaceted portrayals (Erickson, 1986) for the reader to question (Amaeshi et al., 2007). They tell a story about the (in)visible food labour processes and provide a platform to connect readers with the dominant features and narratives presented as routine practices of the food supply chain (e.g. Jarzabkowski et al., 2014).

The authors' sensemaking is based on their experience, their role as consumers and researchers in the agri-food field. One author grew up, lives and works on a dairy farm, and is experienced in engaging with other dairy farmers. Having an 'insider' position and an understanding of the realities of farming through an unfiltered lens provided an additional level of critique to the analysis and uncovered a different level of understanding to the socially constructed stories presented in television programmes. This insight contributed to the CDA in a dialogical manner (Chaudhry, 2009) as literature, research and researcher experience guided the analysis.

Vignette 1 - Primary production: 'A Year on the Farm'

This episode was set on one dairy farm, showing a specialised dairy operation producing, bottling and supplying raw milk for its own customer base as opposed to a more mainstream industry-centric farm. The programme showcases an atypical supply chain – the primary focus is on the producer, as reflected in Figure 2.

It showed some of the processes involved in dairy farming, ranging from the daily activities of delivering milk at 4.30 a.m., milking cows at 5 a.m. and daily endeavours including cleaning (e.g. shovelling cow manure), feeding and caring for the animals. The



Image I. Idyllic countryside.



Image 2. Labour of love.

main mode of production was paid and unpaid manual and animal labour, constructed as a labour of love (see Image 2).

The setting was focused in the luxuriant countryside (see Image 1). The imagery was beautifully scenic with slow-motion shots of the surroundings, people and animals.

This idyllically constructed setting was in stark contrast to the financial context. Economically, the viewers were informed of the precariousness of the farm's financial situation, a key theme, from the outset. The narrator explained that this life is 'in danger of being wiped out by industrial mass production, [that] these farms are fighting for their way of life'. Nearly half of all dairy farms have ceased operating in the last 15 years – 'one dairy farm a day' in the UK closes and 'supermarket price wars mean milk is now cheaper than water' – yet it costs £1000 p.a. to keep a dairy cow.

The key sources of family labour were Steve and his father, Phil, who is 75. It also featured farm workers, mainly a manager (Pete) and young farmer (Tayah). There were also 91 cows and the farm vet. 'Like many dairy farms, Hook & Son relies on apprentices like 19-year-old Tayah' (narrator), who had an additional job to make ends meet: 'Tayah's dream of working on a farm may have come true, but it's not enough to pay the bills' (narrator).

Labour was constructed around passion, lifestyle and heritage (e.g. Steve notes that 'My family have been farming for 250 years'), presenting an ideology masking



Images 3-5. Manual and financial labour.



Image 6. Tuberculosis testing.

the cost of farm labour. This served to devalue food labour at this stage of production. The emphasis was largely on the emotional connection between the featured humans and non-humans: 'if you're good to them, they let you into their world, and it's a wonderful world to be in' (Steve); and in ensuring the continuity of the farm: 'they [animals and people] rely on each other' (narrator). There was no 9–5, it was 24/7; work–life balance was not a meaningful concept. Here labour was life and life was labour; as Steve clearly articulated: 'You don't do farming for the money, you do it because you love it'.

The audience was told farming was a hard but 'a great way of life', but only briefly shown that the nature of farming involved repetitive, tedious and hard work: 'It's probably the dirtiest job you'll think of . . . you've got a lot of poo' (Tayah). Additional to the manual labour was the challenge of financial management to secure funds for the continuity of the farm: the 'dairy sector business [being] not as easy as other sectors' (financial broker).

A substantial part of the labour was imposed by external pressures, showing top-down control relating to policy directives. Safety appeared as a key concern for the regulators and end-users. The arduous process of tuberculosis testing (see Image 6) was highlighted, and the lengthy wait for results threatening the viability of the farm: 'Steve must now wait two months to discover the fate of the farm, but until then its business as usual' (narrator). However, during this wait they continued milking five borderline case cows for no money.

In this programme, manual labour was conveyed more through speech, while the imagery told a different story, focusing on idealised countryside scenes and limiting

Primary producers	Processors/Manufacturers]—→	Consumers
Logistics/Tr	ansport Log	istics/Transpo	ort

Figure 3. Food supply chain represented in Programme 2.



Image 7. Timed process.

visual representations of everyday manual farm labour as brief snippets (see Images 3-5). This was a farming programme about love and survival – the 'labour of love' was visible in multiple forms from each worker and articulated around the key concepts of relationships and heritage.

Vignette 2 – Manufacturing/processes: 'Inside the Factory'

This programme showed 'one of the largest fresh milk processing plants on earth' (Cherry Healey, presenter). The programme claimed that these are 'the factories that feed Britain' (Greg Wallace, presenter), constructing factories as primary food producers. The programme emphasises the centrality of processors and manufacturers in the mainstream food supply chain, as illustrated in Figure 3.

The focus was on the technological aspects of production, including robotised milking (see Image 10), logistics, machines, computerisation and artificial intelligence, as labour. The story illustrated milk going from 'cow to carton in 24 hours . . . [this] race against time' (Greg Wallace, presenter) and was reinforced by a ticking clock in the corner of the screen (see Image 7). The organisation of labour was highly structured, followed procedures and was fragmented into small repetitive tasks.

The workers were apportioned considerably less importance than technology and products. Humans featured included farmers Jane and Neil, a limited number of factory workers, most of whom are controllers (quality, safety, efficiency) in laboratory coats and factory floor workers directed by computer systems (see Image 8 and 9). Most of the labour at this stage was conducted by non-humans (robots and machines).



Images 8 and 9. Milk technician (Colin) testing for antibiotics.

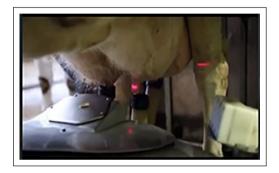


Image 10. 'This is a state-of-the-art Merlin, an automatic laser guided milking robot' (Greg Wallace, presenter).



Images II-I3. Fast-paced milk processes.

The programme reduced labour processes to numbers; for example, 'as a nation we consume over 20 million litres of milk every day in UK . . . from 2 million cows' (Greg Wallace, presenter). The story was fragmented as the milk travelled from cow to factory. The audience was briefly shown the farm and provided some insights into how cows produce milk. Labour was depicted in different ways, such as the tanker driver who repeated processes at each farm where she collected milk. The milk was then tested and off-loaded. Labour was largely represented as a standardised process facilitated through technology, even at the primary production stage (see Images 10-13): 'Robots haven't just taken control in this factory, out on the farms there is a robotic revolution going on . . . These robots are working 24 hours a day' (Greg Wallace, presenter).



Images 14-16. Paul Ansel and the robotic pickers.



Image 17. Greg Wallace taking orders from a machine.

The factory employed 200 people and operated 24/7. It processed 1.5 million litres per day within '2 hours of leaving the cow' (Greg Wallace, presenter). The language reflected the scale of the operation – 'colossal', 'massive', 'huge' and 'biggest' – as the audience was bombarded with figures supported by fast-moving images and high-tempo music.

This was reinforced through the narrative surrounding the 'dairy factory'. The milk process involved several stages, dispatching was entirely robotic, controlled by computer systems with extremely limited human interface. Milk trolleys were moved to loading bays by 75 robots who do the work of 'somewhere in the region of 300 people in this fridge alone' (Paul Ansel, Robot Expert). Labour had been sophisticatedly replaced by reliable machines (a 'robot never phones in sick, never takes a tea break' (Greg Wallace, presenter)) to reduce manual labour (see Images 14–16). Human labour was marginalised: 'I've been in this business 18 years now, so I started in a fridge, I effectively was a robot' (Paul Ansel, Robot Expert). It was even being replaced in the upper levels of management: 'It's not a human that controls these robots; they're controlled by the warehouse management system' (Paul Ansel, Robot Expert).

In other processes (e.g. specialist orders of odd quantities of milk), computers dictated human labour: 'it looks like computers are in control after all . . . as they're giving the orders' (Greg Wallace, presenter) (see Image 17).

The speech positioned itself as consumer-centric (e.g. concerns about: consumer desires, safety, quality and availability) but no consumers were shown. Viewers were told 'consumers prefer their milk without a layer of cream on the top' (Greg Wallace, presenter), hence it was homogenised through yet another industrial process. The crux of the narrative was the science of producing, processing and consuming milk. The



Figure 4. Food supply chain represented in Programme 3.

narrative was always positive, there was no concern about job losses but rather a constant marvel at the processing power of the robotics which have removed the 'hard work'. In this technology and product-centric programme on 'how cutting-edge science is used to create the perfect drop' (Greg Wallace, presenter), labour was presented as scientific. Quality control was at the heart of the labour process, with tasks reduced to standardised steps designed to be completed by robots where possible: 'when you see all of this high-tech machinery it's easy to forget it's actually coming from the cow' (Greg Wallace, presenter). Speed and efficiency supported the ideology that machines do it better, and as such human labour was constructed as inefficient and replaceable by a 'state-of-the-art, fully automated system running 24 hours a day' (Greg Wallace, presenter). The ways in which the processes were reduced to simple tasks completed by robots resulted in an apparent deskilling of the workforce, whereby humans now monitor rather than perform the labour processes.

Vignette 3 – Consumption/purchasing: 'Eat Well for Less?'

The programme focused on how families can cut spending on food. This episode centred on the Brook Family, a husband (Paul), wife (Janine) and two children, and was chosen as it featured what is considered a 'typical family'. They spent £123 a week on food shopping, '1.5 times the national average for a family of four' (narrator) and '42% was made up of snacks and convenience food' (Greg Wallace, presenter). They also spent £83 a week on 'takeaways, eating out, Paul['s] lunches and snacks' (narrator). The primary location was the family home. The viewers were also taken to the supermarket and a dietician's kitchen. The programme is consumption-centric, emphasising supermarket shopping, as illustrated by Figure 4. Here food labour refers to unpaid domestic work involved in purchasing, preparing and consuming food.

The week began with the presenters observing the parents' shopping habits in a 'covert' manner. The only food labour here was shopping, which was constructed as routine, 'when I go shopping I feel like I'm on autopilot' (Janine), and where even cashiers have been replaced by machines (see Images 18–20).

The presenters entered the participants' home, replaced their everyday food items and finally revealed the non-branded products they chose for the family. From the outset the centrality of the supermarket as the primary source of food was unquestioned. The family outsourced their food labour where possible, choosing to eat out or purchase convenience foods: 'In a week on average we'd eat out one night, we'd have takeaway one night, we'd have a microwave one night, and the other four nights we would be preparing something' (Paul) (see Images 21–22).



Images 18-20. Consumer labour and automatic cashiers.



Images 21 and 22. Food preparation.



Images 23–25. Food labour.



Images 26-28. Branded products and cheaper alternatives.

Cooking as a form of food labour was mostly absent at the beginning of the programme but was reintroduced as a practice so long as it was time efficient and easy (see Images 23–25); for example, 'today she is cooking chicken fajitas without a branded kit' (narrator)... 'it's not that much longer than using a packet' (Janine).

The 'easy' option was pre-prepared 'convenience food', which 'Janine relies on' (narrator). Food was largely constructed as processed and branded products. This was evidenced in the re-conceptualisation of 'staple foods', from traditionally basic necessities, such as

	DISCURSIVE ART Food labour must be What is visible is valued i.e. ma	DISCURSIVE ARTICULATION OF FOOD LABOUR Food labour must be standardised and visible to be valued What is visible is valued i.e. machine labour / techno-processes / consumption	tion
	Human and animal food la	Human and animal food labour are rendered invisible to the audience	4
Dominant mode of production:	u: Manual human and animal	Tech and machine	Purchasing and Food preparation
Desirable mode of production:	11:	Tech and machine	Purchasing
of PF Drevalent narrative of food labour:	"Labour of love": Food labour constructed around passion & lifestyle	"Efficient food labour": Food constructed as coming from the factory - Robotisation	"Convenient food labour": Food labour is constructed as sourcing (shopping) & preparation
Construction of manual human and animal labour:	 Dirty: hard; negative connotation; constant; emotionally draining Main element but underrepresented Not financially viable 	 Easily Replaced Non-human is efficient, reliable and constant Expensive 	 Negative connotations from a time point of view; taking over family time; waste of time; Outsourced
	Uniting Point	Uniting Point: Prevalent power structures in food supply chains	supply chains
Agency:	Agency of farmers only in niche settings, out of mainstream supply chain Illusion of choosing the lifestyle	Agency of automated production Product specification 'dictated' by consumers	Agency limited to brands choice Illusion of agency in choice
ACTC Power: (most powerful vs.	Supermarkets/Government	Factories (branded products)	Factories (branded products)/supermarkets
least powerful)	Farmers	Factory workers	Consumers Eat Well
	Primary production	Manufacturing/	Purchasing/



potatoes, milk, eggs and butter, to brown sauce and ketchup. The presenters were keen to show how the family could 'slash' their food bills. Most of the cost savings achieved came from 'swap[ping] many of their branded products for cheaper, healthier alternatives' (narrator) rather than alternatives (e.g. growing food or cooking raw ingredients (see Images 26–28)).

The programme reduced food to the context of the consumer and the supermarket. Food labour was conceptualised as *sourcing food* – in this case from supermarkets – and *food preparation* – whether that was preparing raw ingredients or simply putting pre-prepared meals into microwaves or cookers. Food preparation was not strongly featured or constructed as valuable but rather something to be limited, only the consumption of food constructed as family time was considered worthwhile: 'getting them all to sit round the table, eat their meal and quality family time, that's our A1 priority' (Greg Wallace, presenter).

The audience was continuously reminded that consumers were time and cash poor: 'other times you literally want something that you cook in 10/15 minutes' (Paul); however, this construction of time only applied to the consumer, it was never extended to the other actors in the food chain. It never questioned who or what has replaced these labour processes; for example, in fast food outlets or pre-packaged meals. People were reduced to their consumption and food purchases and were deskilled by this process. There were contradictory associations between cheap and healthy food and a win-win logic dominated: the consumer could have it all, masking the real costs of food production.

A diagrammatic representation of the overarching discursive articulation of food labour across the programmes is presented here in Figure 5.

Discussion

The findings reveal radically different insights from those likely to emerge from the narrative prevalent in cooking programmes, where human labour is extremely visible and constructed as extra-special and valuable (Caraher et al., 2000). Overall, three scripted stories emerge from the food labour discourse constructed in three programmes across the supply chain: 'labour of love', 'efficient food labour' and 'convenient food labour'.

At the raw production stage, farming is framed as a 'labour of love', a passion. It is devalued as the monetary precariousness is accepted and farming skills are disconnected from the necessity of food for human survival (Coplen, 2018). The 'labour of love' narrative, whereby food labour is assimilated into the intangible connections to the land, animals, people, heritage and tradition, is most clearly articulated in the first programme. Farming labour ensuring farm survival is highlighted but not externally re-valued. A critical interpretation of this 'labour of love' is that it reinforces the ideology that people 'love their work' and work for minimal financial rewards by constructing it as a lifestyle choice in the idyllic countryside (Shucksmith, 2000). This narrative masks the invisible problems of unpaid family labour (Hatton, 2017). This conflated construction serves to reinforce an already economically unsustainable system, devaluing food labour while creating an illusion that farmers have agency and control over the modes of production. Farmers are constructed as choosing a lifestyle, hence obscuring the inescapability of the capitalist food system and the imposition of policy requirements by Government (Vanclay and Enticott, 2011) for smaller players.

The factory production stage presents a different mechanism of human labour devaluation. Food processing is constructed as that which can be mechanised, human skill is redundant and subsequently devalued through its ability to be replicated by machine. Here, food labour is focused on speed and efficiency, exposing the 'dark side' of lean production regimes which 'actively extend labour control' (Delbridge, 1998; Elger and Smith, 1994). The unquestioned growth offered by these modes of production support the ideology that machines are desirable replacements for human labour. The 'salvation' offered by technology to replace physical labour plays a strong role (Arntz et al., 2016). This emphasis on factories feeding people decontextualises and degrades the human and natural food labour processes (Thompson and Smith, 2010). Food labour is consistently presented as a technological, scientific form of work, replaceable by roboticisation. The robots are managing the cows and workers, as well as determining whether the milk is accepted or rejected. This is constructed as desirable and chosen *progress* to serve the consumers, whose voices are unheard, but are portrayed as all-demanding. In this instance, the illusion of agency is constructed for consumers.

The consumer stage sees 'convenient food labour' conceptualised as food sourcing and food preparation. Food is constructed as coming from the supermarket (Booth and Coveney, 2015) and preparation encompasses some cooking from scratch or simply putting pre-prepared meals into microwaves or ovens. This narrative contributes to the socially constructed desire for a 'flight from work' for leisure and consumption (Warhurst et al., 2004). It centres around the importance of reducing food labour through convenience and food expenditure. Time spent on food labour needs to be re-appropriated to 'family time', as time in the kitchen is constructed as separate from family time. The home-worker is passing control over modes of production and the labour process to the capitalist organisation (i.e. the factory or the supermarket) (Braverman, 1998).

The first programme presents the story of a farm operating outside mainstream food production and supply chains. As presented in the methodology, stories and representations of the farming element of food supply chains are limited on broadcast television, hence contributing to their romanticisation and their marginalisation from the mainstream understanding of food production. This sets farm food labour apart, as it becomes apparent that it encompasses unique elements that cannot be standardised, such as human and animal relationships. This provides an alternative representation of food labour where manual human and animal labour are visible and valued. It contrasts with the narratives in the second and third programmes, which particularly reinforce deskilling. They do so through the promotion of mechanisation in the farm and factory, and the removal of the need to cook, including the reliance on branded and convenience foods (Burch and Lawrence, 2007). The human and animal subjugation to technological mastery allows scope to consider technology as both a subjugator and emancipator in that it is seen to liberate the worker, while also becoming its master (Butler, 2004). There is a constant justification of the value of having technologically enhanced labour without acknowledgement of the deskilling in the production process as the brainwork is stripped away (Braverman, 1998). The result of these constructions is the reaffirming of a capitalist and corporate-centric food system narrative as the

notions that are promoted revolve around consumption, capital and the intensification of production, and ultimately what is monetarily valued.

The intertextuality (Fairclough, 2003) and complementarities between programmes legitimate existing capitalist notions of food production, where bigger is considered better. The second and third programmes support the same corporate-centric narrative of food labour, where the discourse of standardisation prevails alongside the desire to remove idiosyncrasies. It is possible to conceive of these two programmes as belonging to the same food supply chain. The food labour that is visible and valued is standardised and technologically managed. These representations serve to devalue many of the manual human and non-human food labour processes across the supply chain, which tend to be concentrated at the farming stage.

Financial considerations are central in all programmes. The in the factory and consumer programmes placed the emphasis on reducing the economic costs of producing and consuming food (Cushen and Thompson, 2016). This appears paradoxical to the precarious economic situation (Vanclay and Enticott, 2011) experienced by the farmers and the notable absences of the full cost of farm and family labour. The paradigms of mass consumption, convenience and cheap food seem widely accepted and even reinforced, with a failure to challenge the incompatibility of these concepts with the idealised visual presentation (see Bourdieu, 2010) of farm life as well as the fundamental reality of work (Braverman, 1998). The references to the difficulties that farmers face are not constructed in relation to these paradigms, which therefore does not encourage the consumers to challenge them.

A number of absences further contribute to rendering human labour involved in producing food invisible and to its devaluing across the supply chain. This includes the masking of a large part of the manual labour that goes into producing raw food and the negative connotations associated to it (e.g. hard, dirty, constant, emotionally draining), the lack of reference to the knowledge of factory floor workers and to time spent preparing food. This resonates with Heilbroner's (1975 in Braverman, 1998) argument that the 'flesh and blood' act of work is effectively being removed from most economic conversation.

Conclusion

This study endeavoured to explore how the labour processes of production and consumption were represented to the public through television. The core insight from this public food labour discourse is that human and animal food labour is made invisible through different mechanisms at the different stages, which contributes to its devaluing (De Castro et al., 2019). The desire to remove manual labour is clear throughout. The most, albeit still limited, display of manual labour is presented in relation to farming, which also displays the least level of technology. There is limited manual work in the subsequent stages, where technology replaces human labour at every feasible opportunity.

While it is not possible to claim generalisability, this research contributes to the understanding of labour devaluation mechanisms, particularly sociocultural mechanisms by which labour is made invisible in the agri-food supply chain (Hatton, 2017). Through the consideration of prevalent power relations in food supply chains, the contribution re-joins ongoing debates regarding the degrading of food labour within the dominant capitalist system (Thompson and Smith, 2010) that has favoured large corporations. The research finds existing structural power dynamics and imbalances of food supply chains are reproduced in and by the media rather than challenged. These discursive practices support the hegemony of the corporation that exists in society (Fairclough, 2003). Powerful parties in food supply chains (i.e. supermarkets and food manufacturers) take centre stage and their dominance, as well as control, over labour processes is evident and unquestioned (see Figures 3 and 4).

Numerous promising avenues for future research emerge from this work. Research is needed to refine the conceptualisation of labour value, how it is devalued and why, particularly given the various power and political tensions at play across the food supply chain. A promising avenue exists in exploring how the degradation of work impacts upon individuals working in food supply chains. The dominant presentation of technological advancements as a panacea for challenges facing food systems necessitates an interrogation into their potential long-term implications. Finally, through the lens of LPT, future research could explore the absences of labour representations (Fairclough, 2003; Hatton, 2017) and consider why certain job tasks are highlighted and others excluded, as well as who decides what is represented and why. By not showing the full story, the system perpetuates a public imaginary of food production, which at best undervalues and at worst ignores human and animal labour processes.

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Supplementary material

The supplementary material is available online with the article.

References

- AHDB (2018) Milk price. Available at: http://dairy.ahdb.org.uk/market-information/dairy-salesconsumption/liquid-milk-market/#.WyvF9VVKjIU (accessed 22 June 2018).
- AHDB (2020) Change in UK consumer preferences show need for more cheese. Available at: https://ahdb.org.uk/news/change-in-UK-consumer-preferences-for-more-cheese (accessed 7 September 2020).
- Alvesson M and Karreman D (2000) Varieties of discourse: on the study of organizations through discourse analysis. *Human Relations* 53(9): 1125–1149.

- Amaeshi KM, Osuji OK and Nnodim P (2007) Corporate social responsibility in supply chains of global brands: a boundaryless responsibility? Clarifications, exceptions and implications. *Journal of Business Ethics* 81(1): 223–234.
- Arntz M, Gregory T and Zierahn U (2016) *The risk of automation for jobs in OECD countries*. OECD Social, Employment and Migration papers no. 189. Paris: OECD.
- Atzmüller C and Steiner PM (2010) Experimental vignette studies in survey research. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences* 6: 128–138.
- BBC One (2017) Eat Well for Less?: The Brook Family. Series 4, Episode 3, 21 June.
- BBC Two (2017) Inside the Factory: How our favourite foods are made. Series 1, Episode 3, 2 July.
- Böhm S, Spierenburg M and Lang T (2019) Fruits of our labour: work and organisation in the global food system. *Organization* 27: 195–212.
- Booth S and Coveney J (eds) (2015) 'Big food': the industrial food system. In: *Food Democracy: From Consumer to Food citizen.* SpringerBriefs in Public Health. Singapore: Springer, 3–11.
- Bourdieu P (2010) Distinction: A Social Critique of the Judgement of Taste. London: Routledge.
- Braverman H (1998) Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century. New York: NYU Press.
- Bryceson DF (2019) Gender and generational patterns of African deagrarianization: evolving labour and land allocation in smallholder peasant household farming, 1980–2015. *World Development* 113: 60–72.
- Burch D and Lawrence G (eds) (2007) *Supermarkets and Agri-Food Supply Chains*. Cheltenham: Edward Elgar.
- Burr V (2015) Social Constructionism, 3rd edition. London; New York: Routledge.
- Butler J (2004) Precarious Life: The Powers of Mourning and Violence. London; New York: Verso.
- Caraher M, Lange T and Dixon P (2000) The influence of TV and celebrity chefs on public attitudes and behavior among the English public. *Journal for the Study of Food and Society* 4(1): 27–46.
- Channel Four Television (2017) A Year on the Farm, 23 August.
- Chaudhry LN (2009) Forays into the mist: violences, voices, vignettes. In: Jackson AY and Mazzei LA (eds) Voice in Qualitative Inquiry: Challenging Conventional, Interpretive and Critical Conceptions in Qualitative Research. London: Routledge, 137–164.
- Coplen AK (2018) The labor between farm and table: cultivating an urban political ecology of agri-food for the 21st century. *Geography Compass* 12(5): e12370.
- Cushen J and Thompson P (2016) Financialization and value: why labour and the labour process still matter. *Work, Employment and Society* 30(2): 352–365.
- De Castro C, Reigada A and Gadea E (2019) The devaluation of female labour in fruit and vegetable packaging plants in Spanish Mediterranean agriculture. *Organization* 27: 232–250.
- Delbridge R (1998) *Life on the Line in Contemporary Manufacturing*. Oxford: Oxford University Press.
- Denzin NK and Lincoln YS (2008) *Collecting and Interpreting Qualitative Materials*, 3rd edition. Thousand Oaks, CA: SAGE.
- Elger T and Smith C (1994) *Global Japanization: The Transnational Transformation of the Labour Process.* London: Routledge.
- Erickson F (1986) Qualitative methods of inquiry. In: Wittrock MC (ed.) *Third Handbook of Research on Teaching*. New York: Macmillan, 23–41.
- Eriksson M and Tollefsen A (2018) The production of the rural landscape and its labour: the development of supply chain capitalism in the Swedish berry industry. *Bulletin of Geography*. *Socio-economic Series* 40(40): 69–82.
- Fairclough N (2003) Analysing Discourse: Textual Analysis for Social Research. London: Psychology Press.

- Fairclough N (2005) Critical discourse analysis in transdisciplinary research. In: Wodak R and Chilton P (eds) A New Agenda in (Critical) Discourse Analysis. Amsterdam: John Benjamins, 53–70.
- Fowler R (1997) Critical discourse analysis: the critical study of language. *Language in Society* 26(3): 421–423.
- Garland J, Huising R and Struben J (2013) 'What if technology worked in harmony with nature?': imagining climate change through Prius advertisements. *Organization* 20(5): 679–704.
- Gereffi G, Humphrey J and Sturgeon T (2005) The governance of global value chains. *Review of International Political Economy* 12(1): 78–104.
- Glover JL (2011) Where has all the cream gone: how sustainable is the English dairy supply chain? In: 85th Annual Conference of the Agricultural Economics Society, Coventry, 18–20 April.
- Harvie D and Milburn K (2010) How organizations value and how value organizes. *Organization* 17(5): 631–636.
- Hatton E (2017) Mechanisms of invisibility: rethinking the concept of invisible work. *Work, Employment and Society* 31(2): 336–351.
- Heilbroner R (1975) Men at work. In: Braverman H (ed.) *Labor and Monopoly Capital*. New York: The New York Review of Books, 6.
- Iedema R (2003) Multimodality, resemioticization: extending the analysis of discourse as a multisemiotic practice. *Visual Communication* 2(1): 29–57.
- Jarzabkowski P, Bednarek B and Lê JK (2014) Producing persuasive findings: demystifying ethnographic textwork in strategy and organization research. *Strategic Organization* 12(4): 274–287.
- Lang T (1999) The complexities of globalization: the UK as a case study of tensions within the food system and the challenge to food policy. *Agriculture and Human Values* 16: 169–185.
- Li T (2011) Centering the labor in the land grab debate. *Journal of Peasant Studies* 38(2): 281–298.
- Lloyd C and James S (2008) Too much pressure? Retailer power and occupational health and safety in the food processing industry. *Work, Employment and Society* 22(4): 713–730.
- McKie L, Hogg G, Airey L, et al. (2009) Autonomy, control and job advancement: the case of low paid women working in food retail. *Work, Employment and Society* 23(4): 787–796.
- Maguire S and Hardy C (2006) The emergence of new global institutions: a discursive perspective. *Organization Studies* 27(1): 7–29.
- Moragues A, Morgan K, Moschitz H, et al. (2013) Urban Food Strategies. The Rough Guide to Sustainable Food Systems. Wageningen: Foodlinks.
- Ofcom (2019) Communication market report. Available at: https://www.ofcom.org.uk/_data/assets/ pdf_file/0020/117065/communications-market-report-2019.pdf (accessed 15 February 2020).
- O'Halloran KL (2011) Multimodal discourse analysis. In: Hyland K and Paltridge B (eds) *The Bloomsbury Companion to Discourse Analysis*. London: A&C Black, pp.120–137.

Oosterveer P and Sonnenfeld D (2012) Food, Globalization and Sustainability. London: Earthscan.

- Pegler L, Siegmann KA and Vellema S (2011) Labour in globalized agricultural value chains. In: Helmsing AHJ and Sietze V (eds) Value Chains, Social Inclusion and Economic Development: Contrasting Theories and Realities. London: Routledge, 102–120.
- Phillips N, Lawrence TB and Hardy C (2004) Discourse and institutions. *Academy of Management Review* 29(4): 635–652.
- Reardon T and Berdegue J (2006) *The Retail-Led Transformation of Agri-Food Systems and Its Implications for Development Policies*. Santiago, Chile: Rimisp-Latin American Center for Rural Development.
- Shucksmith M (2000) *Exclusive Countrysides? Social Inclusion and Regeneration in Rural Areas.* York: Joseph Rowntree Foundation.

- Star SL and Griesemer JR (1989) Institutional ecology, translations' and boundary objects: amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39. Social Studies of Science 19(3): 387–420.
- Thompson P and Smith C (2010) *Working Life: Renewing Labour Process Analysis*. Basingstoke: Palgrave Macmillan.
- Timming AR (2015) Visible tattoos in the service sector: a new challenge to recruitment and selection. *Work, Employment and Society* 29(1): 60–78.
- Tsing A (2009) Supply chains and the human condition. Rethinking Marxism 21(2): 148–176.
- Vanclay F and Enticott G (2011) The role and functioning of cultural scripts in farming and agriculture. *Sociologia Ruralis* 51(3): 256–271.
- Veen A, Barratt T and Goods C (2020) Platform-capital's 'app-etite' for control: a labour process analysis of food-delivery work in Australia. Work, Employment and Society 34(3): 388–406.
- Warhurst C, Keep E and Grugulis I (eds) (2004) *The Skills That Matter*. London: Macmillan International Higher Education.
- Wood LA and Kroger RO (2000) *Doing Discourse Analysis: Methods for Studying Action in Talk and Text.* Thousand Oaks, CA: SAGE.
- Wright C and Lund J (2003) Supply chain rationalization: retailer dominance and labour flexibility in the Australian food and grocery industry. Work, Employment and Society 17(1): 137–157.
- Young LM and Hobbs JE (2002) Vertical linkages in agri-food supply chains: changing roles for producers, commodity groups, and government policy. *Review of Agricultural Economics* 24(2): 428–441.

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