Doing audio-visual montage to explore time and space: The everyday rhythms of Billingsgate Fish Market

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Abstract

This article documents, shows and analyses the everyday rhythms of Billingsgate, London's wholesale fish market. It takes the form of a short film based an audiovisual montage of time-lapse photography and sound recordings, and a textual account of the dimensions of market life revealed by this montage. Inspired by Henri Lefebvre's *Rhythmanalysis*, and the embodied experience of moving through and sensing the market, the film renders the elusive quality of the market and the work that takes place within it to make it happen. The composite of audio-visual recordings immerses viewers in the space and atmosphere of the market and allows us to perceive and analyse rhythms, patterns, flows, interactions, temporalities and interconnections of market work, themes that this article discusses. The film is thereby both a means of showing market life *and* an analytic tool for making sense of it. This article critically considers the documentation, evocation and analysis of time and space in this way.

Keywords: atmosphere, embodiment, ethnography, Lefebvre, rhythmanalysis, soundscape, time-lapse photography, work

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Introduction: the fascination and challenge of fish markets

Billingsgate is London's wholesale fish market and the UK's largest inland market. Since 1982, the 'new' Billingsgate market has been located on the Isle of Dogs in East London, next to Canary Wharf, after moving out of the City of London where it operated for several hundred years. It's a tightly defined temporal and spatial frame for the exchange and physical redistribution of goods (Harvey, Quilley and Benyon 2002, 202) – in this case, fish - in 'a flow of dispersion-concentration-dispersion' (ibid., 205). So, how does the market take shape each day (from Tuesday to Saturday at least)? What temporal patterns and routines structure it? And how does the activity and movement of people and fish produce the space-time of the market?

In a conversation with a Billingsgate Fish Inspector early one morning, he tells me that the market doesn't close, it only rests. After some time, I begin to recognise what he means. There are spatial shifts in where activity is taking place - from the unloading bays, to the market floor, to the offices, each location populated by variable combinations of workers and customers at different times - but something is always happening somewhere, often at a different pace. I tend to arrive at the market by four o'clock in the morning when trade officially begins – the earliest time that fish are legally permitted to leave the market - or once it is in full flow at five or six. Inspired by Henri Lefebvre's (2004) call to attend to rhythm, I wander around letting myself get caught up in or 'grasped by' the rhythms, noises, tensions, buzz, chill and thrill of the place, hanging out with fish merchants, inspectors, porters, and traders. By the time I leave when the cafe shuts for the day - half past nine in the week, eleven o'clock on a Saturday - I have the sense of having been there accumulated through time. But when I am there, I notice that I keep looking over my shoulder. It's a bodily expression of the uncertain sense of where exactly the market is happening, of its 'perpetually forming and deforming atmosphere' (Anderson 2009, 79). It's as if the market comes to life behind your back then slips away before you had the chance to take it in. Immersion in the market it seems is an obstacle to perception of its rhythms (Lefebvre 2004, 28; Borch, Bondo Hansen, and Lange 2015, 1085).

The idea of making a film based on time-lapse photography came out of this sense of the intangibility of the market space as an attempt to capture the temporal structure of the market. Along with sound, it offers a means to evoke a 'sense of time as motion and transformation' (Crang 2001, 201). The elusive quality of the market chimes with the concerns of urban scholars on the character of the city, and the challenge of grasping the 'excesses of embodied and situated experience' (Merchant 2011, 60). Many researchers have turned to the work of Lefebvre to interrogate the spatial and temporal properties of the everyday, notably his last and posthumously published work, *Rhythmanalysis* (2004 [1992]). Rhythmanalysis, argues Edensor, is effective for revealing how places are 'seething with emergent properties, but usually stabilised by regular patterns of flow' (2010a, 3). It calls our attention to the 'patterning of a range of temporalities' and the ways in which places might be characterised by the 'ensemble of rhythms' that permeate them (Edensor 2010b, 69).

This article makes both a methodological and a substantive contribution, highlighting the links between a specific methodology - audio-visual montage as a means of doing rhythmanalysis - and the insights that can be generated – of the relationships between rhythm, atmosphere and mobility, and interconnections and interactions in market space. The construction of the montage is explicitly artificial. If we accept that all methods help to produce the reality they study (Law and Urry, 2004), this deliberate undertaking to render rhythm does not diminish the significance of the presence of rhythms in the real-time flow of the everyday. Since such rhythms are

however hard to grasp in their immediacy, montage offers an effective 'medium of anthropological [or ethnographic] inquiry' (Grimshaw 2011, 248) and 'a tool of multisensory and affective discovery' (Garrett and Hawkins 2015, 147).

The film both describes rhythm and does 'a distinctive form of analytical work' (Grimshaw 2011, 257). It reveals the rhythms that arise from what happens in the market, including the ways in which they intersect, co-exist, and clash, and how they underlie the experience and atmospheres of being in the market. Following Grimshaw, we can think of the 'synesthetic, spatial and temporal properties of film' as offering 'suggestive possibilities between the experiential and propositional, between the perceptual and conceptual' (2011, 257-258). This audio-visual form may stand alone as an ethnographic document that contains its own analytical gestures. However, if 'images and written texts not only tell us things differently, they tell us different things' (MacDougall 1998, 257 in Grimshaw 2011, 257), then there is more to say. It is therefore worth elaborating on the themes that can be further analysed through the montage and in dialogue with knowledges produced in other ways.

In addition to the contribution this article makes to thinking and working with rhythm and the audio-visual, it tells us something substantive about 'market time' (Bestor 2001, 92). In so doing, it also adds to existing knowledge of fish markets *per se* and offers different insights about markets and work more broadly. Economists have famously explored loyalty, price dispersion and economic interaction in fish markets (e.g. Kirman and Vriend 2001; Graddy and Hall 2011; Cirillo, Tedeschi and Gallegati 2012) which have also attracted interest from management scholars (e.g. Curchod, 2010). Analyses of the everyday include Bestor's (2004) well-known ethnography of the world's largest fish market, Tsukiji in Japan, its cultures and social institutions, and smaller studies focussing on gender relations (Hapke and Ayyankeril 2004) and humour (Porcu 2005). Interestingly, whilst Mayhew (2008 [1851]: 162-163) was already aware of the performative dimension of the fish trade in the nineteenth century, Billingsgate has received surprisingly scant attention given its historical and logistical importance in the UK and its reputation globally (although see Bird, 1958). This article offers new understandings of the temporal patterns of market life.

In the next two sections, I discuss doing rhythmanalysis and critically consider the methodology of this study before presenting the film. I then explore three sets of themes brought to the fore through the film. The first is the atmospheres and temporalities of market life; second, the rhythms, pathways and movement through market space; and third, working bodies and things (including the fish itself) in space and time. I conclude with a discussion of the gains and limitations of using audiovisual montage to make sense of market life.

Doing Rhythmanalysis

In recent years, there has been growing interest in Henri Lefebvre's last and posthumously published work, *Rhythmanalysis* (1992 [2004]). The publication of the

English translation in 2004 reinvigorated interest in the concept (Elden 2006) which has since been critiqued, elaborated and applied. In *Rhythmanalysis* Lefebvre – in collaboration with his wife, Catherine Régulier – rethinks the everyday and urban life – key themes of his life's work - through the notion of rhythm in an attempt to grasp space and time together (Elden 2006, 186). However, Lefebvre did not provide scholars with a systematic methodology for rhythmanalysis (Highmore 2002, 177). Instead, it is understood more as an 'orientation' (Highmore 2002, 175) for attending to the social world, 'more an investigative disposition' than a 'method for systematic enquiry' (Hall, Lashua and Coffey 2008, 1028), or 'a suggestive vein of temporal thinking' (Edensor 2013, 190).

That said, several scholars have explored ways of operationalising rhythmanalysis, in particular within geography (Edensor 2010a; Stratford 2015). The most significant body of work relates to the study of mobility, for instance, walking (Edensor 2010b), dancing (Edensor and Bowdler 2015), ferry travel (Vannini 2012a), coach travel (Edensor and Holloway 2008), cycling (Spinney e.g. 2010), and commuting (Edensor 2011). In addition, rhythmanalysis has been used to study place, in historical accounts of urban street life (Highmore 2002), everyday routines in contemporary urban spaces (Chen 2013; Hall 2010; Smith and Hall 2013; Sgibnev 2015), and street performance in public space (Simpson 2008). It has also been employed to analyse socio-economic processes, for instance in the study of financial markets (Borch, Bondo Hansen, and Lang 2015), and to explore 'natural' or socio-natural rhythms (Jones e.g. 2011, Evans and Jones 2008).

For Lefebvre, the body is the central tool to apprehend rhythm: 'to grasp a rhythm, it is necessary to have been *grasped* by it', he argues (2004, 27, emphasis in original). Yet, 'in order to grasp and analyse rhythms, it is necessary to get outside them, but not completely' (ibid.), to allow the rhythmanalyst to reflect on and disentangle as well as to feel rhythm. Lefebvre continues: 'He [the rhythmanalyst] must simultaneously catch a rhythm and perceive it within the whole, in the same way as non-analysts, people, *perceive* it' (ibid., 20, emphasis in original). There is some ambivalence here (Crang 2001, 202) but the bodily experience of rhythm remains key to appreciating an 'assemblage of different beats', 'temporality not just tempo' (ibid. 189, 194).

Lefebvre was clear in his reservations about using tools outside of the body to apprehend rhythm: 'no camera, no image or series of images can show these rhythms' (2004, 36). Yet his insistence that 'the rhythmanalyst calls on all his senses' (ibid., 21) chimes with stances adopted by researchers who seek to tune into the environment using visual and sensory techniques in immersive ethnographies today. Indeed, visual and sensory methods have emerged as part of broader move across the social sciences to 'engage the senses' (Pink, 2005), offering a way of retaining the vitality and dynamism of the social world in our accounts of it (Back 2007, Back and Puwar 2012). This includes attending to and evoking the *material* world that may

be overlooked or inaccessible through talk and text, and recognising distributed agency and practices across human and non-human entities. Pink (2007) argues that video in particular appeals to multiple senses, not least since the senses themselves are connected so that we might "read" touch, smell and taste (Merchant 2011, 66) from audio-visual images.

Several scholars have employed audio/visual methods to undertake rhythmanalysis. Pryke's (2000, 2002) creative use of audio and photomontage disrupts linear accounts of city space. Evans and Jones' (2008) enchanting aural representations of environmental data are a transdisciplinary application of rhythmanalysis across the human and non-human. Hall, Lashua and Coffey argue that making use of sounds alongside the visual offers 'clues to the rhythms of an urban everyday', through which it is possible 'to open up this polyrhythmic complexity' (2008: 1028). Brown and Spinney's (2010) use of head-cam video produces insights into the ordinary and mundane rhythms of cycling whilst Jungnickel's (2015) use of mobile time-lapse photography of cycling shows the vivid quality of 'failed images' and the sense they convey of 'being there'. Simpson's (2008, 2012) innovative use of time-lapse photography to trace everyday rhythms in his study of street performers is closest to the approach I take here. In addition, I add 'real-time' sound to the speeded-up timelapse images in an audio-visual montage. I now discuss how I conducted the research and put the film together.

Methodology

Getting a place in the conversation

The fieldwork for this research was conducted in autumn 2012 during which time I made two or three visits a week to Billingsgate, following up on contacts I had initially made in autumn 2009 (Lyon 2010). I spent several months hanging and wandering around, eavesdropping, looking, asking questions and making connections in the market explaining that I was trying to understand the work that goes on there. I chatted informally with traders and other workers, attended what formal public events were held during this period, both on site and at Fishmongers' Hall¹, explored behind-the-scenes, and participated in courses offered by Billingsgate Seafood Training School². After getting comfortable in these spaces and conversations, I approached key people for an interview. In all, I carried out twenty-five formal interviews (recorded once the market was closed) or informal but structured conversations (prolonged in situ discussions supported by note-making) with fish merchants, salespeople, inspectors and porters. I also shadowed fish inspectors and porters as they went about their ordinary work. With the permission of the City of London Corporation which owns the market, and of specific traders, I took

¹ Fishmongers' Hall is the home of the Fishmongers' Company, one of the Twelve Great Livery Companies of the City of London: http://www.fishhall.org.uk/

Billingsgate Seafood Training School website: www.seafoodtraining.org/

photographs of workers, interactions, spaces and displays. In this process, I had regular debriefing conversations with several key informants who also facilitated my interactions with others.

Billingsgate is a socially homogenous space, dominated numerically and culturally by older (over fifty), white, working-class men. Often without high levels of formal qualifications, many of the long-established traders are nevertheless affluent. Newcomers to the market include south Asian and Indian sellers of so-called 'exotic' fish. Salespeople, 'shop boys', porters and cleaners work for a wage, and the porters – now fish-handlers - have lost significant status in recent years. The cultural tone of the market, characterised by banter and playfulness, structured many of my own interactions with traders and salespeople. Having grown up in south east London, the market had a familiar and appealing ring. I genuinely got on well with the traders and inspectors in particular and developed a considerable fondness and regard for them. In short, I was enchanted by the place.

Good relations in the market were essential for obtaining formal and informal acceptance for the project and for the film. How these dynamics might have shaped what I saw and how I came to see it (Orrico, 2014: 2) is not easy to trace. It might be that traditional gender relations in which I was always treated respectfully - men refrained from or apologised for swearing in my presence, and welcomed as a guest (Gherardi, 1996) - offered a research advantage as my 'feminine' presence did not discomfort. I wonder if my educated status (perhaps read as a proxy for class) meant that I was perceived as unavailable despite my openness about living alone, and protected me from more sexualised exchanges, although I was regularly questioned about my living arrangements and family relations. That said, there was no shortage of displays of 'competitive' and 'paternalistic' masculinity (Kerfoot and Knights 1993) amongst groups of men, and performances directed at the women who work in the cafes or who come to the market as customers³. More troubling were the occasional racist remarks I overheard from traders, mostly directed at employees. I sidestepped these situations so as not to appear complicit but, given my own precarious and temporary belonging, did not challenge them as I might in other settings.

Using audio-visual methods to document the everyday life of the market

Whilst the market extends across and beyond the site, the market hall is central to the everyday life of Billingsgate, as a space of display, interaction, movement, negotiation and exchange, and it is where trade can be observed. The architecture of Billingsgate offers a particular opportunity for seeing its 'temporal unfolding' (Simpson 2012, 431) from the vantage point of a gallery at either end of the first floor overlooking the market hall. I repeatedly found myself climbing the stairs and looking down on the market hall from this gallery, taking stock of the mood and patterning of

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³ There appear to be more women in the market on a Saturday when the profile of customers is domestic as well as commercial.

the day's activities. It was here that the concrete possibility of making a film based on time-lapse photography began to take shape. My body and senses were clearly instruments of this research (Turner and Norwood 2013), especially in alerting me to the dispersed feel of the market and sparking this way of apprehending market space.

I found a collaborator - film-maker Kevin Reynolds, of veryMovingPictures - through a serendipitous encounter at a seminar he was filming and a conversation which revealed a shared way of looking at space. We chose one ordinary night - 11 December 2012 – to make it all happen. Just after midnight, we set up two digital cameras (one as a backup) in the first floor gallery location looking down the length of the market hall above the beginning of the central isle of the market hall. This position allowed us to look along as well as down on the market floor, the perspective emphasising a viewpoint into the distance and proximity in the foreground, conveying a sense of immersion. The composition suggests the continuity of the space beyond what can be seen in the foreground and so keeps the viewer located within and not wholly above it. Most of the frame is taken up with the market floor, reaching up to the level of the clock suspended from the ceiling at the centre the market hall, which also offered us the opportunity to explicitly mark time for the viewer. This is a deliberate choice which heightens the unitary sense of place and the intensity of what goes on there. But it is a particular view. Another location, up high within the market space looking down on it from a bird's eye view or at floor level would certainly have conveyed a different sense of space (Simpson 2012, 430).

We took photographs from just before one o'clock in the morning until midday, from market set-up until the market hall was (almost) still. The interval between photographs was ten seconds⁴, based on Kevin's technical judgement and my preferred aesthetic that this would not mask and excessively 'smooth' the conditions of making the film. The deep depth of field allowed everything in the frame to be kept in focus. The fire glass against which the lens was pressed (and held in place with tape) is visible, also evidencing the making of the film, and situating the camera and the viewer in place. The sound of the market hall is muted in this gallery location but every hour (at varying times within that hour), I went down to the market floor to do some 'soundwalking' (Hall, Lashua and Coffey 2008). Slipping into the flow of the crowd I made brief recordings on a hand-held digital recorder of whatever sounds were in my path.

The resultant film - or audio-visual montage - is a combination of a selection of these sounds with the sequence of images speeded up so one hour is presented in thirty seconds. This is a deliberate calibration based on judgement and experimentation that this speed would both distil patterns and flows and immerse the viewer in the experience of the space. Once the speed and thereby duration of the film were

⁴ This compares with twenty-five frames per second in film.

settled, we edited the twelve sound bites (one of which was unusable). We started at four o'clock in the morning, synchronising the sound of the bell that signals the beginning of trade with the visual that shows the clock striking four, and worked backwards and forwards from there. With the exception of one instance towards the end of the film for which I had not recorded the key sound of trolleys, we were strict about only using sound from the relevant hour. We experimented with different combinations in which sound and image would fit but also surprise and make us notice afresh. In the central section of the film when the activity was at its most intense, we layered sound, a fiction that felt more 'true' than the un-manipulated data. Finally, Kevin 'cleaned' the film, making small adjustments of light and colour to avoid calling the viewer's attention (undue in our judgement) to alternations in the camera settings as the environmental conditions changed. This was a 'creative-analytic process' (Garrett and Hawkins 2015, 146) in which we sought to evoke Billingsgate with an 'affective force' (ibid, 145) that goes beyond representation.

Billingsgate attracts significant media coverage and interest from amateur and professional filmmakers and photographers (as well as marine biologists). Workers are therefore used to requests for their labour to be observed and documented. Some relish these occasions through polished performances, others keep a low profile. Given this public face of the market, the people I spoke to were well positioned to give informed consent for my questioning. A representative of the City of London Corporation gave me formal permission to take photographs at the market and individual traders gave their verbal consent. In addition, I obtained specific permission from the Corporation to make the film and to make it available in the public domain (via YouTube). I spoke individually to any identifiable traders and secured their verbal consent in advance. On the night we made the film, numerous traders came to ask what was happening and I reminded them of our endeavour to capture the daily sequences and rhythms of market life. Once a draft of the film was complete, I made it accessible for previewing on a private YouTube channel and asked those traders and other identifiable actors to inform me of any objections to making the film public. No one came forward. Since making the film public on YouTube, it has (at the time of writing) been viewed over thirteen thousand times. At the market, reaction to the film was marked by pride in what workers saw as a positive representation of their working lives and community.



FILM at: https://www.youtube.com/watch?v=nw_kf32GfHY

Atmospheres and temporalities of market life

On the night we photograph the market, we try to get to Billingsgate ahead of anyone starting work on the market floor. Despite arriving at midnight, we're not the first there. But we do get a feel of the place when it's still and quiet which the film conveys, especially in contrast to what follows. It's chilly — minus three degrees centigrade outside, and at least as cold inside — and the first sounds of preparation for the day can be heard clearly, echoing in and marking out the space around.

Day breaks inside the market hall from the left of the screen as the bright lights get switched on for traders to set up ahead of daylight seeping in from the outside when the sun comes up. The colours become more vivid, first dominated by the yellow of the overhead structure, the green of the floor, then the white of the trader's clean coats. By three o'clock in the morning, the lids are lifted on sample boxes of fish which are carefully placed on display. The glistening combination of skin, scales and ice adds to the intensity of the morning brightness and spectrum of colour. It's a new beginning and there's a sense of anticipation in the air.

Telephones start to ring and the sound of the market hall imposes itself. Once it is set up for trade, the soundscape is intense, sometimes jarring or confusing as multiple rhythms compete for attention. It's possible to discern 'layers' (Makagon and Neumann, 2008) as we hear the close ring of a telephone, someone shouting nearby, or the pervasive squeak of the polystyrene boxes being moved around. Walking around the market – the way we made the sound recordings for the film – accentuates this.

The mood quietens by around eight o'clock in the morning as the market is 'undone' and its spatial charge dissipates. The blue, black and red of the buyers' clothes are

replaced by rubbish bins and containers in bright blue, grey and orange. The main lights are switched off at around ten o'clock and we see daylight from the roof windows reflected in the floor, wet from the washing down of the stands. It's quiet again, with just the final cleaning to finish off. Those ringing in from the outside don't seem to be aware of these rhythms...

We can see from shifts in activity and interaction how these multiple atmospheres are 'produced' (Bohme 1993, 116) through specific forms of labour and action in the market – the arrangement of the display, movements through space, the chatter and clamour of the sale. An atmosphere 'proceeds from and is created by things, persons, or their constellations' (Bohme 1993, 122), and the activities that intertwine them. These activities create and sustain the presence of atmospheres which in turn do things - they set the tone of exchange and as such they matter for how trade happens. We absorb atmospheres and feel them as a 'bodily state of being' (ibid., 118) which fits very well with Lefebvre's call to be grasped by the rhythms of a place in order to perceive it. Whenever I arrived in Billingsgate, I felt myself absorb the atmosphere as a 'spatial bearers of moods' (ibid., 119), transforming the experience of temporality – was I really this lively at four o'clock in the morning?

Whilst I asked questions about the length and organisation of the working day, the film is a more powerful statement of the 'rhythmic production of space' (Pryke 2000), and the pace and excitement of market life (Dixon and Straughan 2010, 455) than quotations from interviews. In it we can see 'different temporal itineraries that constitute social space' (Sharma 2014, 5). The presence of the clock at the top of the images emphasises variation in the intensity of work, the duration of different tasks and activities, and the tiring repetition across whole stretches of time, enhanced by the mesmeric quality of time-lapse. It also hints at 'the complexity of lived time' (ibid.; 6) and the 'micropolitics of temporal coordination' (ibid., 7) with the world outside Billingsgate such as two-shift sleeping, calculated convergence with others' lives, patterns in which some bodies recalibrate to the time of others (ibid., 20).

The 'sense of time' (Vannini, 2012a: 243) of Billingsgate in a broader set of urban and natural rhythms is also evident once the market is still for the day. It's a contained world when trade is at its peak, but once the inside lights are switched off and daylight is seen reflected in the wet floor, the viewer recognises the rhythms of the market as being at odds with the city space around it – an instance of arrhythmia. What we cannot observe however is the anticipation of rhythms that are beyond the present that make the market happen the next day, and the one after – orders placed and deals done in a process that extends well beyond the temporal frame of the film.

The sensory and affective experience of being in the market is suggested by the film, through the play of light, sound and movement. In particular, the surreal juxtaposition of the speeded up images with real-time sound connects viewers to the felt-

experiential aspects of moving through space-time. If we take seriously that the senses themselves are interconnected – some viewers comment that they feel chilly watching it - we might go further to claim that the film, albeit grounded in sound and vision also evokes the olfactory. 'Odours seem not to obey rhythms', remarks Lefebvre (2004: 41), but continually move in and around bodies and space, something borne out by recent research on smell (e.g. Riach and Warren, 2015). There's something in the air at Billingsgate – of the sea, the ice, moving bodies, and the still fish - and perhaps in the imagination of the viewer too.

Rhythms, pathways and movement

The architecture of the market hall is very clear from the vantage point of the film, especially the central aisle which produces the encounters within it as customers 'walk' the paths made for them (Harvey Quilley and Benyon 2002, 206 on Covent Garden), the 'verges' lined with fish. There are around fifty traders at shops or stands – some beyond the frame - back to back in four 'corridors' lengthways with several cross-cutting paths at intervals along them. The green of the floor indicates public space, the space belonging to the stands demarcated in dark red. These boundaries are fluid however as buyers step behind the displays to make a more private deal, and boxes and trolleys encumber the main paths.

The relative immobility of the sales staff and merchants contrasts with buyers on the move. Groups form and scatter, like an uneven pulse, stimulated by sounds or gestures or the lure of the fish in ways that the film does not allow us to appreciate at a micro-level. Indeed, there are multiple co-existing rhythms when trade is in full swing. Whilst there is some jostling at the stands, what is striking is that this destabilising of the boundaries between self and other (Dixon and Straughan 2010. 454) leads to is an accommodation of bodies in space and a fluidity of the movement of the crowd (ibid.: 455) – a synchronisation enhanced by the speed of the film. This includes the movement of porters in the market hall facilitated by cries of 'mind your legs', '... your legs!' and the rumble of trolleys (as heard in the film). They manoeuvre their loads skilfully, or cope with how their loads gain momentum - the trolleys have no brakes and cannot easily be stopped - acting as 'pacemakers' (Parkes and Thrift 1979, 360) in the market space. Customers and other workers familiar with the market are tuned in to 'sensory information about the physical and social environment' (Dixon and Straughan 2010, 449) and smoothly and spontaneously move out of the way. The visitors on tours of the market with Billingsgate Seafood Training School stand out for their lack of bodily comprehension of the space – as did I at first. But I soon absorbed the rhythms of market life, an instance of what Lefebvre calls dressage, to 'bend oneself (to be bent) to its ways' (2004, 39).

The rhythms, movement and intensity of the market change through the night. The fish merchants and salespeople move around fast but steadily when the space is clear, until they are slowed by the presence of the fish which leads to more uneven

rhythms - darting here and there, squeezing past obstacles, negotiating with things on the move. The ring of the bell at four o'clock in the morning signals the legal start of trade when there is a subtle shift in speed and activity on the part of traders and buyers familiar with this repeated daily marker of official time. Movements gather pace and the pace gathers. We feel the polyrhythmic character of the market, including those stretches marked by a repetitive monotony. There is a linear character to the market, from preparation through to the sale and closing and cleaning up when the market is over, portrayed in the film by the steady and swift movement of the hands of the clock at the top of the frame. But there is more. Alongside these lines through time, recursive loops, 'repetition, rupture and resumption' (Lefebvre, 2004: 78) in an 'always emergent interaction' of linear and cyclical (Simpson 2008, 823) interfere with one another. At different intervals, the fish inspectors punctuate market time. When watching the film, their commentary revealed their 'skilled vision' (Grasseni, 2004) and intimate knowledge of the space and its routines as they could see themselves at work through the blur of images.

There is a looseness about the end point of the market as different stall-holders close up at different speeds and schedules. We see an urgency in the movement of some traders to get off the floor – for instance those in the foreground of the film on the left hand side of the main aisle who pride themselves in a swift set-up and finish. Traders on the right of the main central aisle in the foreground seem to be making the most of the energetic efforts of the young man cleaning thoroughly (who was perhaps making the most of the chance to perform for the camera!). In contrast, others appear to relish this stretch as slow time to sort through stock – as we see at the back of the central aisle.

Interconnections and interactions: Bodies, objects and fish in time and space

Amongst other things, the market is an economic space. At Billingsgate trade takes place 'pair-wise' in a one-to-one negotiation – as opposed to an auction for instance - this institutional form producing particular work activities, interaction and sense of place. Deals are made through swift gestures and quick judgements. Speed is key in finding the right fish at the right price. The film cannot capture the nuances of these interactions but it conveys the feel of people passing through as if they have somewhere else to be.

Lefebvre's arguments that space is enacted through physical gestures and movements (Merrifield 2000, 177), and that rhythms inhabit the body can be seen very clearly at Billingsgate. Embodied and sensory workers are tuned into the environment around them, to one another, and to their working tools and materials (Hockey and Allen-Collinson 2009). There is a 'transpersonal dimension' (Anderson 2009) to how they work together, co-ordinating tasks and movements (Lyon and Back 2012, 5.12) through a non-reflective practical knowledge. And they are tuned into the fish. The stands present 'samples' which require sorting, organising, displaying, and maintaining in a *liminal* state. The fish is relentlessly iced and

checked for temperature. It is 'aestheticized and *staged* in the sphere of exchange' (Bohme 2003, 72). There is more checking, sorting and counting at the end of the time on the floor. Indeed, there are moments in the everyday rhythms of the market when human-fish assemblages become the dominating presence. Years of accrued skill and tacit knowledge practised in embodied routines make for smooth and continuous assemblages of fish and merchant, intertwined and caught up in the momentum of what they are doing. The body and the fish are 'relationally coupled with space and time' (Abrahamsson and Simpson 2011, 332). The speed and blur of the film both limits and emphasises our perceptions here.

The sound track of the film also alerts the viewer to the materiality of the market. The squeak of the polystyrene boxes is omnipresent. The boxes resist being lined up closely together, protesting loudly at times, and neither are they quietly acquiescent when picked up by porters wearing gloves or with wet hands. Their clamour makes us pay attention to the materiality of work, to the nature of the objects that occupy the working space alongside people and fish.

We can see the interconnections of jobs and bodies in time and space through the presence – at different times and in different combinations - of porters, fish merchants, sales people, buyers, inspectors, and finally cleaners. In the top left corner of the screen, a light goes on and off from around half past eight in the morning, indicating someone at work in one of the fish merchants' offices on the first floor. Coincidentally, he is the father of the two men in charge of the stand in the foreground on the left of the central corridor. His being there, apparently working at a desk, is a reminder of the paper and electronic counterpart to the sale on the market floor, and co-existing rhythms of work that are removed from the fish itself.

Conclusions

Billingsgate is a rich and sensuous world that demands multiple forms of attentiveness from those who inhabit it. It's an example of a space that it difficult to grasp – perhaps the sort of place that we can only be grasped by over time – and that makes it something of a problem to study. Rhythmanalysis 'provides a practical vocabulary' (Simpson 2008, 823) that allows us to interrogate the patterns of the everyday activities of the market which create time-space (Crang 2001, 187). This article shows how working with rhythmanalysis through the medium of film can generate new understandings of the 'rhythmic ordering' (Simpson 2012, 424) of work. What we learn from this approach is the specific way in which 'time makes space into place' (Parkes and Thrift 1979, 353) in market life. Rhythm can be seen to operate at different scales and to different beats. The institutional rhythms of clock-time may structure the working night and day but the market is not characterised by

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⁵ On the first-floor there also offices of the Clerk and Superintendent's office, the Fish Merchants Association, inspectors, maintenance, police and first aid, and the Seafood Training School.

this linearity alone. Within market time, we see and hear the cyclical repetitions of the sale and the movement of fish. We notice the differentiated rhythms of buyers and sellers and the temporalities of different types of work activity in harmony or at odds with one another.

The process of manipulating time in time-lapse photography through speeding up static and sequential images and rendering them as film is a mode of data reduction or compression. However, what is made thinner offers, I would argue following Taylor (1996, 86), a thicker description of the market space, especially once combined with sound. It offers a 'mentally prolonged space[s]' in which attention is repeatedly renewed (Lefebvre 2004, 33), 'a sort of meditation on time' (ibid., 30). By losing the richness of the detail, we sidestep the sensory overload that live presence and video entail, and begin to distinguish some threads amongst this 'temporal, material, technological and cultural tangle' (Sharma 2014, 4). As from Lefebvre's window, 'the flows separate out, rhythms respond to one another' (2004, 28). The speed of the film cannot capture the depth and richness of sensuous experience as still or 'real-time' moving images might (Merchant 2011; Lyon and Back 2012), but instead, it affords time as an 'experience of flow' (Crang 2001, 206). In particular, time-lapse delivers the 'spatio-temporal unfolding of everyday events' over a longer duration and reveals 'how various rhythms and routines interrelate and interfere' (Simpson 2012, 440).

At the same time, audio-visual montage, as presented in this article, loses some felt aspects of embodied and affective experience (Simpson 2011) both on the part of the researcher and what can be sensed of the participants. For instance, there is no room in this form to linger on the detail of embodied skills and knowledge. Furthermore, the reliance on what can be observed runs the risk of neglecting all that lies beyond the empirical. Social dynamics which underpin trade and relations in Billingsgate have enormous reach in time and space but are not easily made visible. The tight and consistent framing of the film is suggestive of a wider world however, for instance when people enter and exit the screen, and this at least may unsettle any easy sense that the viewer is getting the full picture. Similarly, the surreal effect of the juxtaposition of speeded up time-lapse photography with real-time sound conveys that this re-presentation of market life cannot be read literally.

Whilst there is a long tradition of using film in ethnography, and considerable enthusiasm in recent years about visual and sensory methods (e.g. Pink 2005), including video-making (e.g. Bates 2015), audio-visual montage offers new opportunities for interrogating and rendering social fields (Vannini 2012b). It allows researchers to be both 'inventive' (Lury and Wakeford 2012), in this case for the insights than can emerge about market life, and 'live' (Back and Puwar 2012) in an 'appeal to the senses' (Grimshaw 2011, 259, footnote 9), as a means of retaining the vitality, textures and rhythms of the social.

References

ABRAHAMSSON, S and P Simpson (2011) 'The limits of the body: boundaries, capacities, thresholds' *Social & Cultural Geography*, Vol. 12, No. 4, p. 331-338.

AMIN, A and N Thrift (2002) Cities: Reimagining the Urban, Cambridge: Polity.

ANDERSON, B (2009) 'Affective atmospheres', *Emotion, Space and Society*, Vol. 2, p.77-81.

BACK, L (2007) The Art of Listening, Oxford: Berg.

BACK, L and N Puwar (eds) (2012) *Live Methods*. Oxford: Wiley-Blackwell/The Sociological Review.

BATES, C (ed) (2015) Video Methods, Social Science Research in Motion. Abingdon: Routledge.

BESTOR, TC (2001) 'Supply-side Sushi: Commodity, market and the global city', *American Anthropologist*, Vol. 103, No. 1, p. 76-95.

BESTOR, TC (2004) *Tsukiji, The fish market at the center of the world.* Los Angeles: University of California Press.

BIRD, J (1958) Billingsgate: A Central Metropolitan Market', *The Geographical Journal*, Vol. 124, No. 4, p.464-475.

BOHME, G (1993) 'Atmosphere as the fundamental concept of a new aesthetics', *Thesis Eleven*, No. 36, p.113-126.

BOHME, G (2003) 'Contribution to the critique of the aesthetic economy', *Thesis Eleven*, No. 73, p.71-82.

BORCH, C, K Bondo Hansen and A-C Lange (2015) 'Markets, bodies, and rhythms: A rhythmanalysis of financial markets from open-outcry trading to high-frequency trading', *Environment and Planning D*, Vol. 33, No. 6, p1080-1097.

BROWN, K and J Spinney (2010) 'Catching a glimpse: The value of video in evoking, understanding, and representing the practice of cycling'. In Fincham, B, McGuinness, M, and Murray, L (eds) *Mobile Methodologies*. Basingstoke, Palgrave Macmillan.

CHEN, Y (2013) "Walking with": A Rhythmanalysis of London's East End', *Culture Unbound*, Vol. 3, p.531-549.

CIRILLO, P, G Tedeschi and M Gallegati (2012) 'The Boulogne fish market: the social structure and the role of loyalty', *Applied Economics Letters*, Vol. 19, No. 11, p.1075-1079.

CRANG, M (2001) 'Rhythms of the city, Temporalised space and motion' in J May and N Thrift (eds) *Timespace, Geographies of Temporality*, London and New York: Routledge.

CURCHOD, C (2010) 'Buyer strategizing in continuously recreated markets: Loyalty, deviance and defection', *Strategic Organization*, Vol. 8, No. 4, p. 313-346.

DELYSER, D and S Sui (2012) 'Crossing the qualitative-quantitative divide II' *Progress in Human Geography*, *OnlineFirst*

DIXON, D P and E R Straughan (2010) 'Geographies of Touch/Touched by Geography', *Geography Compass*, Vol. 4, No. 5, p.449-459.

EDENSOR, T (2010a) 'Introduction: Thinking about rhythm and space'. In Edensor, T (ed) *Geographies of Rhythm: Nature, place, mobilities and bodies.* Farnham: Ashgate.

EDENSOR, T (2010b) 'Walking in rhythms: place, regulation, style and the flow of experience' *Visual Studies*, Vol. 25. No 1, p. 69-79.

EDENSOR, T (2011) 'Commuter: Mobility, rhythm and commuting' in T Creswell and P Merriman (eds) *Geographies of Mobilities: Practices, spaces, subjects.* Farnham: Ashgate.

EDENSOR, T and C Bowdler (2015) 'Site-specific dance: revealing and contesting the ludic qualities, everyday rhythms, and embodied habits of place', *Environment and Planning A*, Vol. 47, p.709-726.

EDENSOR, T and J Holloway (2008) 'Rhythmanalysing the Coach Tour: The Ring of Kerry, Ireland', *Transactions of the Institute of British Geographers*, Vol. 33, p. 483–501.

ELDEN, S (2006) 'Some are born posthumously: The French afterlife of Henri Lefebvre', *Historical Materialism*, Vol. 14, No. 4, p.185-202.

EVANS, J and P Jones (2008) 'Towards Lefebvrian Socio-Nature? A film about rhythm, nature and science' *Geography Compass*, Vol. 2, No. 3, p. 659-670.

GARRETT, B L and H Hawkins (2015) 'Creative video ethnographies: Video methodologies of urban exploration'. In C Bates (ed) *Video Methods, Social Science Research in Motion*. Abingdon: Routledge.

GHERARDI, S (1996) 'Gendered Organizational Cultures: Narratives of Women Travellers in a Male World' *Gender, Work & Organization* 3(4): 187–201.

GRADDY, K and G Hall (2011) 'A dynamic model of price discrimination and inventory management at the Fulton Fish Market', *Journal of Economic Behaviour and Organization*, Vol. 80, p. 6-19.

GRASSENI, C (2004) 'Skilled vision. An apprenticeship in breeding aesthetics', *Social Anthropology* 12(1): 41-55.

GRIMSHAW, A. (2011) 'The Bellwether Ewe: Recent developments in ethnographic filmmaking and the aesthetics of anthropological enquiry' *Cultural Anthropology*, Vol. 26, No. 2, p. 247-262.

HALL, T (2010) 'Urban outreach and the polyrhythmic city'. In, Edensor, Tim (ed.) *Geographies of Rhythm: Nature, Place, Mobilities and Bodies.* Basingstoke: Ashgate, p. 59-71.

HALL, T, Lashua B, and Coffey A (2008) 'Sound and the everyday in qualitative research', *Qualitative Inquiry*, Vol. 14, No. 6, p. 1019-1040.

HAPKE, H M and D Ayyankeril (2004) 'Gender, the work-life course, and livelihood strategies in a South Indian fish market', *Gender, Place & Culture*, Vol. 11, No. 2, p. 229-256.

HARVEY, M, S Quilley and H Benyon (2002) *Exploring the Tomato, Transformations of Nature, Society and Economy.* Cheltenham: Edward Elgar.

HIGHMORE, B (2002) 'Street Life in London: Towards a rhythmanalysis of London in the late nineteenth century', New Formations, Vol. 47, p. 171-193.

HOCKEY, J and J Allen-Collinson (2009) 'The sensorium at work: the sensory phenomenology of the working body', *The Sociological Review* 57(2): 217-239.

JONES, O (2011) 'Lunar-solar rhythmpatterns: Towards the material cultures of tides', *Environment and Planning A*, Vol. 43, No. 10, p.2285-2303.

JUNGNICKEL, K (2015) 'Jumps, stutters, blurs and other failed images: Using timelapse video in cycling research'. In C Bates (ed) *Video Methods, Social Science Research in Motion*. Abingdon: Routledge.

KERFOOT, D and D Knights (1993) 'Management, masculinity and manipulation: from paternalism to corporate strategy in financial services in Britain', *Journal of Management Studies*, Vol. 30, No. 4, p. 659-679.

KIRMAN, A and N Vriend (2001) 'Evolving Market Structure: An ACE Model of Price Dispersion and Loyalty', *Journal of Economic Dynamics and Control*, Vol. 25, Issues 3-4, p. 459-502.

LAW, J and J Urry (2004) 'Enacting the social' *Economy and Society*, Vol. 33, no. 3, p. 39-410.

LEFEBVRE, H (2004) *Rhythmanalysis: Space, Time and Everyday Life*, London: Continuum International Publishing Group Ltd.

LURY, C and N Wakeford (2012) *Inventive Methods: The happening of the social.* Abingdon: Routledge.

LYON, D and K Reynolds (2013) *Billingsgate Fish Market* (video, 6 minutes, 27 seconds): https://www.youtube.com/watch?v=nw_kf32GfHY

LYON, D and L Back (2012) 'Fish and fishmongers in a global city: socio-economy, craft, and social relations on a London market', *Sociological Research Online* 1Vol. 17, No. 2 http://www.socresonline.org.uk/17/2/23.html>.

LYON, D (2010) 'Swinging a Cod: A day's work at Billingsgate fish market', street signs, Autumn: 38-39: http://www.gold.ac.uk/media/documents-by-section/departments/research-centres-and-units/research-centres/centre-for-urban-and-comm/2010 Autumn.pdf [accessed 14 April 2016]

MAKAGON, D and M Neumann (2008) Recording Culture: Audio Documentary and the Ethnographic Experience. London: Sage.

MAYHEW, H (2008) *London Labour and the London Poor*. Hertfordhsire: Wordswoth Editions.

MERCHANT, S (2011) 'The Body and the Senses: Visual Methods, Videography and the Submarine Sensorium', *Body & Society*, Vol. 17, No.1, p.53-71.

MERRIFIELD, A (2000) 'Henri Lefebvre: a socialist in space' in M Crang and N Thrift (eds) *Thinking Space*. London and New York: Routledge.

ORRICO, L A (2014) "Doing intimacy" in a public market: how the gendered experience of ethnography reveals situated social dynamics "Qualitative Research, OnlineFirst

Parkes, D and N Thrift (1979) 'Time spacemakers and entrainment', *Transactions of the Institute of British Geographers*, Vol. 4, No. 3, p. 353-372.

PINK, S (2005) The future of visual anthropology: engaging the senses. London: Routledge.

PINK, S (2007, 2nd edition) *Doing Visual Ethnography*. London: Sage

PORCU, L (2005) 'Fishy business: humour in a Sardinian fish market', *Humour* 18(1): 69–102.

PRYKE, M (2000) 'Tracing economic rhythms through visual and audio montage', Faculty of Social Sciences, The Open University: http://www.open.ac.uk/socialsciences/berlin/ [accessed 29 February 2016]

PRYKE, M (2002) 'The white noise of capitalism: audio and visual montage and sensing economic change' *cultural geographies* Vol. 9, p.472-477.

RIACH, K and T Warren (2015) 'Smell organization: Bodies and corporeal porosity in office work', *Human Relations*, Vol. 68, No. 5, p. 789-809.

SGIBNEV, W (2015) 'Rhythms of being together: public space in Urban Tajikistan through the lens of rhythmanalysis', *International Journal of Sociology and Social Policy*, Vol. 35, No. 7/8, 533-549.

SHARMA, S (2014) *In the Meantime, Temporality and Cultural Politics*. Durham and London: Duke University Press.

SIMPSON, P (2008) 'Chronic everyday life: rhythmanalysing street performance', *Social & Cultural Geography*, Vol. 9, No. 7, p. 807-829.

SIMPSON, P (2011) "So, as you can see . . .': some reflections on the utility of video methodologies in the study of embodied practices', *Area*, Vol. 43, No. 3, p. 343–352.

SIMPSON, P (2012) 'Apprehending everyday rhythms: rhythmanalysis, time-lapse photography, and the space-time of everyday street performance' *cultural geographies* 19(4): 423-445.

SMITH, R J, and T Hall (2013) 'No Time Out: mobility, rhythmicity and urban patrol in the twenty-four hour city', *The Sociological Review*, Vol. 61, p. 89-108.

SPINNEY, J (2010) 'Improvising rhythms: re-reading urban time and space through everyday practices of cycling'. In, Edensor, Tim (ed.) *Geographies of Rhythm: Nature, Place, Mobilities and Bodies.* Basingstoke: Ashgate, p. 113-128.

STRATFORD, E (2015) *Geographies, Mobilities, and Rhythms over the Life-Course*. Abingdon: Routledge.

TAYLOR, L (1996) 'Iconophobia', Transition, No.69, p. 64-88.

TURNER, PK and KM Norwood (2013) 'Body of Research: Impetus, Instrument, and Impediment', Qualitative Inquiry, Vol. 19, No. 9, p. 696-711.

VANNINI, P (2012a) 'In time, out of time, Rhythmanalyzing ferry mobilities', *Time & Society*, Vol. 21, No.2, p. 241-269.

VANNINI, P (2012b) 'Public ethnography and multimodality: research from the book to the web'. In P Vannini (ed) *Popularizing Research*. New York: Peter Lang.