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Version: Accepted Version

Article:

Ross, E. (2019) Gestating bodies: sensing foetal movement in first-time pregnancy. *Sociology of Health & Illness*, 41 (1). pp. 95-111. ISSN: 0141-9889

<https://doi.org/10.1111/1467-9566.12809>

This is the peer reviewed version of the following article: Ross, E. (2019), Gestating bodies: sensing foetal movement in first-time pregnancy. *Sociol Health Illn*, 41: 95-111, which has been published in final form at <https://doi.org/10.1111/1467-9566.12809>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

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Gestating bodies: sensing foetal movement in first-time pregnancy

Abstract

A large body of literature engages with personal accounts of pregnancy to illustrate the subjugation of women's embodied experience within practices of biomedicine. This article explores this issue through women's accounts of sensing initial foetal movement, drawn from qualitative interviews with 15 women resident in the UK. Participants depict this aspect of pregnant embodiment as ambiguous and indefinite, in contrast to clinical and popular representations of foetal movement. In highlighting the uncertainties characteristic of this corporeal event, the article adds to literature destabilising understandings of pregnant women's and foetal bodies as bounded and distinct. Ambiguous experiences of foetal movement arise in the context of sociocultural framings of pregnancy as 'at risk', and in turn, may be seen to contribute to these representations, with some participants reluctant to interpret these uncertain sensations as providing reassurance. In this article, perceptions of foetal movement are emphasised as valuable to women, and as inextricable from the social settings in which they emerge. This research has implications for sociological and feminist discussions of pregnancy, and work exploring the mutual shaping of corporeality and sociocultural contexts more widely.

Keywords: Embodiment, pregnancy, foetal movement

Introduction

Sociological studies have demonstrated the ways in which bodily experience may be understood as moulded by individual action and sociocultural contexts (Bendelow and Williams, 1995). In recent years, social scientists have engaged with corporeal experiences including pain (Baszanger, 1992) and disability (Williams, 1999) to demonstrate the entanglements of physical sensations, emotions, relationships and materiality constitutive of embodied events. Within sociology and gender studies, pregnancy is often drawn upon to exemplify the shaping of women's embodied experiences through techniques and technologies of medicalisation (e.g. Barker, 1998). Largely critiquing medical intervention, social scientific studies have considered the ways in which encounters with prenatal tests and care shape women's perceptions of pregnancy as 'at risk' (Lyerly et al., 2009; Lupton, 1999), impacting upon their engagement with the foetal entity within (Rothman, 1988). Less often, however, do studies take the more mundane and everyday embodied experiences of pregnancy as their focus (Han, 2013).

This article demonstrates the situatedness of pregnant embodied experience within sociocultural representations of gestation in the contemporary UK. Drawing on interviews with women experiencing a first (full-term) pregnancy, the article explores this issue through personal accounts of initial foetal movement. In so doing, it nuances representations of bodily experiences of pregnancy within existing literature by highlighting the ambiguity of these sensations, and showing their inextricability from social and temporal contexts. The research complements recent work emphasising the fluidity of the relationship(s) between gestating and foetal bodies (Hird, 2007; Martin, 2010), with implications for sociological explorations of pregnancy, and discussions of bodies more widely in social scientific literature.

Sociology and the body

Pregnancy is a significant corporeal event, encompassing distinct and at times dramatic changes to a woman's somatic experience. Within sociology, phenomenological approaches to experience have transferred analytical attention from the body as object, towards the ways in which the body is lived in practice (Howson and Inglis, 2001: 302). This stance has been influenced by Merleau-Ponty's (1962) philosophical investigations, which sought to collapse distinctions between mind/body and subject/object by emphasising the embodied nature of perception. To perceive is not to internalise an objective, pre-given world, but an active process drawing on memories, sensations and judgements. Our bodies, writes Crossley (1995: 48), are thus ways of experiencing and belonging to the world, and our "points-of-view" on the world.

Conceptualisations of bodies in terms of the 'body-subject' acknowledge the entwining of mind and body, subjectivity and materiality (Merleau-Ponty, 1962). When taken to be our 'point-of-view' on the world, bodies cannot be seen as objects to be understood in relation to social and cultural contexts, but as a methodological starting point for exploring sociocultural phenomena within the social sciences (Csordas, 1994: 4). Some authors have focused on particular bodily experiences to understand embodiment as created through and intersecting with sociocultural contexts. For example, sociological studies have demonstrated that beyond physiological processes, pain is mediated by time and cultural space (Jackson, 2011; Bendelow and Williams, 1995), and through facets of experience including gender (Kempner, 2006) and ethnicity (Trnka, 2007). Adding to these understandings of the social aspects of embodiment, recent work has drawn attention to the ways in which materiality is constitutive of somatic experiences, and shown how bodies cannot be understood as separate from elements of the worlds they inhabit, but as known, understood and experienced through their surroundings (Coleman, 2008). Attention to the very creation of bodies

and bodily experience through their “structural coupling with technologies, environments and human and non-human others” (Blackman, 2010: 1) has disrupted separations between mind/body and self/other, showing that bodies are not discrete entities but permeable, formed within and through interaction with material and social spaces.

Pregnant bodies

The permeability of bodies has been emphasised in contemporary philosophical and sociological examinations of pregnancy. Pregnancy as an embodied process entails both observable transformations to a woman’s corporeality, as well as those inaccessible to others. These changes range from subtle differences in hair and nail growth, through to the stretching and expanding of abdomens (Warren and Brewis, 2004). In addition to these embodied experiential aspects of pregnancy, gestation entails the presence of a foetal body, often depicted as a vulnerable (potential) child in public health and popular discourse (Lupton, 2012). In the UK today, pregnancy is thus widely characterised as involving two ‘bounded’ bodies, that of woman and foetus, conceptualised as pre-existing and distinct, but interacting, entities (Yoshizawa, 2016: 80). Critical examinations of this framing of pregnancy have built on the work of Emily Martin (1990; 1998), who exposes metaphors of nationhood and war invoked in immunological representations of the body, with boundaries between the body and external environments presented as “rigid and absolute” (Martin, 1990: 141). In the Euro-American regions, these understandings as related to pregnancy have been aided by visual representations of foetal bodies, which depict these entities as autonomous beings. Foetal ultrasound scanning is most frequently discussed in this regard, due to its representation of the foetal entity present during gestation as a “‘man’ in space, floating free” (Rothman, 1988: 114).

It has been contended that such depictions allow for understandings of pregnancy as entailing a conflict between female and foetal bodies. For example, central to immunological examinations of pregnancy is the question of why a woman’s body does not “reject” the foetus, as it would another foreign entity such as a transplanted organ (Martin, 2010: 35). As Aryn Martin makes clear, it is the tenacity of understandings of pregnancy as entailing two distinct subjects that enable this to remain a scientific puzzle (*ibid*: 36). Understandings of foetuses and those who carry them as bounded individuals also shape discourses surrounding women’s behaviours during pregnancy. The concept of maternal-foetal conflict is invoked in discussions of the legal protection of foetuses and in prenatal care, to describe circumstances in which the interests of a woman and of foetal entities may be perceived to be at odds, and understandings of women themselves as posing a threat to foetal

entities within (Lupton, 1999; Markens et al., 1997). This understanding impacts upon lived experiences of pregnancy, with women subject to surveillance and restrictions on behaviour during pregnancy (Copelton, 2007). This may shape women's experiences as they become exposed to public scrutiny (Longhurst, 1999), or in more extreme cases prosecution on charges of abuse of an (unborn) 'child' (Scott, 2002). Emphases on dangers to the foetus throughout gestation, and on the unpredictability of female bodies (Carter, 2010), have contributed to wider framings of pregnancy as a time of risk – a topic discussed frequently in social scientific literature (e.g. Lyster et al., 2009; Ruhl, 1999).

Seeking to challenge depictions of relationships between women and fetuses as oppositional, which is instrumental in the surveillance and monitoring of women during pregnancy (Tsing, 1990; Lupton, 1999), authors have shown how attention to the materialities of pregnancy allows for an alternative reading of the relationships between the bodies present during gestation. Maher calls for attention to the placenta as a site of connection and exchange during gestation, noting that this organ "confronts distinctions between mother and child" through the opening of bodily boundaries (Maher, 2002: 105). These exchanges are multidirectional, and leave enduring signatures on both the bodies of women and foetal entities. This is evidenced by the phenomenon of microchimerism, whereby foetal cells may be detected in women's bodies many years after gestation (Martin, 2010; Kelly, 2012). Indeed, as Yoshizawa (2016) notes, it is through the placenta and its development, and the transfers it allows for, that foetal and maternal entities come into being, with neither entity pre-existing the other. Hird (2007) argues that multidirectional exchanges between the bodies of pregnancy should be understood as 'gifting', to emphasise the interdependence of maternal and foetal entities, and counter perceptions of their relationship as antagonistic. Attending to material processes of pregnancy may therefore usefully contribute to feminist efforts to disrupt the privileging of 'foetal subjects' during gestation, and related to this, the subjection of women to the medical management of many aspects of pregnancy and birth.

In addition to these approaches, personal accounts of pregnancy have been invoked in efforts to dissolve imagined boundaries between the bodies of pregnant women and the entity within. Reflecting on the transformations prompted by pregnancy, Young's (1984) autobiographical account describes pregnancy as a 'de-centring' or 'doubling'. Throughout gestation a woman is inhabited by another being, in a changed and changing body. A pregnant woman's subjectivity is split, argues Young, as she experiences changes occurring within herself and simultaneously observes them, the boundaries between oneself and another becoming blurred (see also Tyler, 2000). The notion of

foetal independence, and the individualism of maternal and foetal bodies is unimaginable according to Young's account. As Franklin explains, "it is precisely the process of one individual becoming two which occurs through a woman's pregnancy... the exact antithesis of individuality" (Franklin, 1991: 203).

Knowing pregnancy

A particularly notable and unique aspect of pregnancy, the tangible manifestation of blurred boundaries between self and other, are sensations of foetal movement. Duden (1993) describes that prior to the mid-nineteenth century, a pregnant woman's testimony of initial movements, then termed 'quickening'¹, established pregnancy as a social fact. The phenomenon was afforded special legal status as indicative of a pregnancy, with sensed movements seen to represent the 'ensoulment' of a child (McClive, 2002: 212). A woman's disclosure of these sensations signified to physicians when a birth would occur, and the point at which an induced abortion would become unlawful (Featherstone, 2008).

Authors, many writing from a feminist perspective, have examined shifts in the status accorded to women's accounts of foetal movement and other embodied experiences as privileged signs of pregnancy, which have been gradually superseded by internal examinations, the stethoscope and later the ultrasound scan (Duden, 1993). In the contemporary era, the timing of a woman's acknowledgement of pregnancy has accelerated, with women experiencing "technological quickening" many weeks prior to feeling foetal movements within their own bodies (Mitchell and Georges, 1997: 373). It has been asserted that this once intimate experience, and its role in the confirmation of pregnancy, has been replaced by technological knowledge of gestation, with the sensation of foetal movement becoming "simply one and even a somewhat less important event along a scientifically mediated continuum" (Duden, 1992: 335). This transformation in the significance attached to embodied experiences of pregnancy is frequently drawn on in feminist critiques of the medicalisation of pregnancy, to exemplify the domination of women's embodied experiences through biomedical practices (Shaw, 2012; Rothman, 1988; Duden, 1993). Duden theorises this in terms of a sociocultural shift in emphasis within medicine from haptic experience - knowledge gained through touch, sense and feeling - to optical means of knowing, generated through visual representations (1993: 91). As a consequence, argues Duden (1992, 1993), bodily

¹ However, these sensations were not understood as initiated by a singular entity called a 'foetus'. As Duden's historical study shows "the human foetus, as conceptualised today, is not a creature of God or a natural fact, but an engineered construct of modern society" (1993: 4. See also Casper, 1998; Morgan, 2009).

knowledge of pregnancy carries less weight within contemporary prenatal care, with biomedical knowledge presented as authoritative, and interpreted as such by women themselves (Jordan, 1997; Browner and Press, 1996). It is argued that processes of medicalisation have thus contributed to a disembodied experience of pregnancy, whereby corporeal elements of gestation become erased, and women come to know their pregnancies and the entity within not through bodily and tactile means of knowing, but through clinical procedures, measurement and visualisation (Casper, 1998; Petchesky, 1987; Rothman, 1988).

As introduced above, the medical management of pregnancy has been discussed as not only shaping women's reflections and interpretations of embodied experiences of pregnancy, but also the very sensations of pregnancy. For example, Rothman argues that women undergoing prenatal diagnostic tests may experience their pregnancy as 'tentative', and suspend emotional attachments to the pregnancy until "it is deemed worthy of keeping" (1988: 114). For some women this emotional work extends to sensations of foetal movement, which several of Rothman's participants only began to sense on knowing that their pregnancy would continue. In Schmied and Lupton's (2001) study, women were found to interpret and describe bodily sensations of foetal movement with reference to ultrasound images. In this latter case, though shaping sensations of pregnancy, women featured in this research did not necessarily discuss medical means of knowing the pregnant body as dominant. Instead, Schmied and Lupton present a more nuanced picture of the relationships between medical intervention and bodily experiences of pregnancy, with these discussed not as dichotomous, but as interacting in complex and synergistic ways (Markens et al., 2010; Palmer, 2009).

In what follows, I contribute to discussions of the status accorded to bodily experiences of pregnancy within feminist and sociological literature. I present 15 women's accounts of initial foetal movement to demonstrate how these experiences may be said to shape, and be shaped by, sociocultural representations and the management of pregnancy within the UK. The article argues that attending to personal narratives of foetal movement has the potential to aid the destabilisation of imagined boundaries between maternal and foetal entities during pregnancy, through lived accounts of these sensations as context-dependent, emotional and uncertain. This also lends fresh perspective to feminist discussions of the status afforded to embodied pregnant experience in medicalised settings. By taking these mundane sensations as a point of focus, I show that attention to women's intimate accounts of ordinary pregnancies (cf. Han, 2013) provides a useful way for

sociologists to explore the interactions of sociocultural, material and emotional facets of embodied (pregnant) experience.

Methods

This article draws on qualitative interviews with 15 women, conducted for a longitudinal study exploring women's experiences of a first (full-term) pregnancy in the UK. The study initially set out to explore women's experiences of maternal-foetal bonding – a concept used to describe emotional attachments articulated by women towards the developing foetus within (Lumley, 1990). However, as interviews progressed it became clear that 'the foetus' implied by the concept was discussed as an ambiguous or absent being for those interviewed during early pregnancy. As such the research questions shaping the study broadened, and sought to explore wider experiences of pregnancy and the 'foetal entity' (an analytic term I use to accommodate fluid and shifting conceptualisations of developing foetuses), as shaped by engagement with biomedical intervention. Three interviews were conducted with each participant to capture experiences of time and change over the course of nine months. First interviews took place during or before participants' twelfth week of gestation. The second interview was conducted at between 18 and 20 weeks pregnant; this is prior to the second routine ultrasound scan, and the time at which (according to medical texts) initial sensations of foetal movement are anticipated. Third interviews took place at between 34-36 weeks pregnant, in order to capture experiences of late gestation.

After obtaining ethical approval from the relevant departmental University of Edinburgh research ethics committee, recruitment took place between November 2012 and April 2013. Due to the fact that prior to twelve weeks gestation many women decide not to share news of their pregnancy with others (Renner et al., 2000), I recruited participants online using anonymous message boards on two popular parenting websites, and the home page of a local pregnancy and parenting charity. This led to fifteen women participating in the research. All were educated to degree-level, ranged from 26 to 38 years of age, and had male partners at the time of the interviews. Though living in Scotland, ten women were born in the UK, two elsewhere in the European Union, two in the United States, and one in North Africa. Importantly for what follows, all were experiencing single pregnancies, with twin/triplet pregnancies likely to shape women's experiences in different ways.

With one exception, due to her giving birth prior to our final interview, all women took part in all three interviews. Interviews lasted for between 45 and 90 minutes, and I made reflective notes after each, before personally transcribing the audio recordings, simultaneously inserting analytic memos.

Interview encounters were shaped by the fact that I shared a similar structural location to participants (in terms of age, socioeconomic position and sexuality, though not always culturally). This meant that discussions of experiences that were (presumed to be) shared could be closed-down, including around non-pregnant female embodiment and societal expectations surrounding (future) motherhood. Having not experienced pregnancy, however, I felt more able to inquire in depth about medicalised care pathways and the intricacies of bodily experiences. The latter included discussion of physical sensations including shifts in the position of internal organs, and visible bodily transformations. A sense of uncertainty, signified by difficulty finding words or forming explanations, characterised many of these discussions, and I remained alert to this during data analysis. Following the completion of interviews, I conducted three 'readings' of each participant's set of transcripts, inspired by Mauthner and Doucet's (1998) use of the Voice Centred Relational method. Each reading concentrated on a different aspect of the participant's narrative; (i) women's accounts of the circumstances leading to and surrounding their pregnancy and conception, (ii) their conceptualisations of the entities within, and (iii) the social contexts, including relationships, shaping their pregnancies.

I wrote a long narrative summary of each participant's pregnancy, based on my readings, reflective notes, timelines developed for each interviewee, and relevant literature. Time and 'milestones' emerged as important themes during participant interviews, and it felt appropriate to compose these narrative accounts chronologically, rather than arranging them in terms of themes cutting across participant accounts, such as 'risk' or 'embodied experience', which emerged as important topics. This has influenced the presentation of findings to date, with data disseminated according to gestational milestones as articulated by participants, including reaching twelve weeks gestation (Ross, 2015). Sensations of foetal movement were portrayed as another seminal event within interviews, with this topic raised unprompted by all participants. The data presented below are largely drawn from the second set of interviews (at 18 and 20 weeks gestation), during which the majority of participants discussed (suspected) foetal movement for the first time. Some extracts are drawn from interviews at 34 to 36 weeks, when movement was discussed by all, and in some cases contrasted with sensations experienced earlier in pregnancy. Participant accounts from both waves of interviews include retrospective reflections on sensations felt in the weeks prior to our meeting, as well as sensations reported around the time of, and even during the interview. During the initial period of analysis, women's discussions of foetal movement resonated with existing work on uncertainty or ambiguity during pregnancy (e.g. Rothman, 1988; Burton-Jeangros et al., 2013), and troubled portrayals of initial foetal movement as a discrete event. A further reading was thus conducted on all interview excerpts featuring accounts of foetal movement. This reading and

analysis was developed with reference to existing theoretical and qualitative literature exploring maternal-foetal relationships, foetal movements, and sociological accounts of medical intervention in pregnancy. Findings emerging from this process are presented below.

Findings

In what follows I describe interviewees' accounts of their initial sensations of foetal movement, as well as women's retrospective reflections on these during later pregnancy. The ambiguity and uncertainties relating to these experiences sheds light on contemporary experiences of pregnancy in the UK. Women's accounts countered depictions of these sensations as produced by a distinct foetal body and ascertained by a pregnant woman, reconfiguring dominant conceptualisations of the relationships between embodied experience and medicalised care.

Foetal movement in first time pregnancy: uncertain accounts

Within the literature provided to pregnant women within the UK, descriptions of initial foetal movement convey this as a definite and ascertainable event. For example:

What are normal movements for an unborn baby in pregnancy?

Most women are first aware of their baby moving when they are 18–20 weeks pregnant... Pregnant women feel their unborn baby's movements as a kick, flutter, swish or roll (Royal College of Obstetricians and Gynaecologists, 2012: 1).

Here, foetal movement is portrayed as initiated by a "baby" within, and as ascertained by a pregnant woman for the first time at between 18-20 weeks gestation. However, this singular depiction does not accord with the experiences of many women in this research. During the second round of interviews, ten participants discussed sensations of probable foetal movement. In contrast to the advice above, participants described this as inherently uncertain, and more often in terms of *suspecting* foetal movement, whilst also reflecting on other possible explanations. For example, Felicity and Keira described:

I'd say for maybe about a week I was wondering if I was feeling flutters, but, it's always a bit ambiguous, erm, could just be wind or something like that. Felicity, 25-29, 19 weeks pregnant

I'll be 19 weeks tomorrow, and they, I think they've said for a couple of weeks that I might start feeling something. Um, and I've had a couple of things which could have been, but I'm not quite sure. Cos it's quite subtle. **Keira**, 30-34, 19 weeks pregnant

For Gail, this ambiguity was amplified by the fact that she was experiencing another common bodily change associated with pregnancy, which she thought might be contributing to these sensations:

ER: Have you felt anything that you think might be [foetal movement]?

Gail: *Not really, it's hard to tell. My stomach, because I've had quite a lot of indigestion, my stomach's quite gurgly anyway. Who knows.* **Gail**, 35-39, 19 weeks pregnant

These accounts depict participants' experiences of pregnancy not as entailing a distinct foetal subject: a body imagined as separate from their own. Instead women's accounts of foetal movement at this time imply an experiential fluidity or unboundedness of the bodies constitutive of pregnancy, with their own corporeality and that of a foetal entity shifting and uncertain. In the face of this uncertainty, some women attempted to interpret suspected foetal movements with assistance from others including midwives, or female friends or family members who had experienced pregnancy.

I've only just started to feel something that I think's movement but, even now, I'm not quite sure... my last midwife appointment I had, she said, I asked her, I said 'I'm not sure if I'm feeling the right thing', she said 'does it feel like wind?' And I was like, 'well yeah kinda', and she said 'well it's probably it' [laughs]. **Caroline**, 35-39, 19 weeks pregnant

I'd felt a couple of little, just little taps... from what I've been reading, erm, if it's your first pregnancy, you're less likely, they say it's usually nineteen, twenty weeks before you feel anything... I'd said that to my sister-in-law I said 'I think I'm feeling wee move[ments]', you know, sort of, and she goes, 'it's a bit early', she says 'I didn't feel anything until week twenty'. **Beth**, 35-39, 19 weeks pregnant

In these two quotes, we see Beth and Caroline reflecting on embodied experiences of pregnancy in light of others' accounts of foetal movement. Caroline's description of these sensations indicates an expectation that these will be experienced uniformly by women, as she expresses uncertainty that she is feeling the 'right thing'. Contributing to these accounts was the ubiquity of accepted words and phrases to describe initial sensations of foetal movement, circulating within social networks and prenatal advice. Many women gave descriptions of what they were beginning (or expected) to feel using terms commonly provided in pregnancy books, including 'flutters', 'popping' and 'bubbles'.

It is notable that Beth drew on gestational stage when reflecting on foetal movement, declaring that according to medically-situated framings of pregnancy, she anticipated feeling (discernible) movements during a specific week of gestation. Marisa and Ingrid also demonstrate this below:

*I'm not sure if I've felt it move or not... there are some sort of sensations which I think oh, is that wind, or is it, is it my bowels? [laughs]... but, I think from this week onwards, you should start to feel something, definite movements. **Marisa**, 35-39, 19 weeks pregnant*

*Now because it's not kicking yet or anything, I'm meant to feel like kicks and stuff from week twenty, so like two weeks from today... I'm meant to feel more, hands and feet movement. Now it's just starting so it's just rumble[s]. **Ingrid**, 30-34, 18 weeks pregnant*

Medical framings of the temporality of pregnancy, emphasising gestational stage, were powerful in shaping these and other women's embodied sensations, with anticipated changes mapping on to biomedical descriptions of foetal growth and development (see also Raynes-Greenow et al., 2013). In another example, Heather described interpreting the sensations she experienced with reference to images she had observed during her first ultrasound scan, which helped her to "picture" what was happening within. For three women, Beth, Keira and Andrea, the rigidity of biomedical or temporal representations of foetal movement led them to question their evaluations of embodied experience. Keira suspected that she'd felt movements, but simultaneously doubted this, declaring "I think it might be but, it's still, I think it's still quite early to be feeling things".

In some women's accounts, uncertain sensations became experienced as foetal movements retrospectively, as women reflected back on these events during interviews conducted in later pregnancy. Having described her doubts with regards at what point she started feeling foetal movement, on meeting for an interview at 35 weeks gestation, Felicity declared that she "started feeling the baby move at 19 weeks". During our final interview, Gail, who had described similar suspicions at 19 weeks pregnant, unequivocally identified these early "gentle" sensations as caused by the entity within her. Gail contrasted these initial uncertainties with the definite movements she was now experiencing. Like Gail, all participants pointed to a change in their perceptions of foetal movement over time, with both Sinead and Andrea describing this as a "gradual" process. They discussed this in terms of a "building" and "increase", and their attention to these sensations also shifted as pregnancy progressed. At 35 weeks, Felicity said that she was:

much more aware of it at the start because it's new, whereas now, it's not so much of a novelty so, sometimes I'm conscious of it, and other times I'm not. **Felicity**, 25-29, 35 weeks pregnant

Deborah explained this change in attention to the fact that during early pregnancy, these initial uncertain sensations had been “new and precious”. Sensations of foetal movement that had initially been uncertain thus took on new meaning as these began to be experienced in new ways, and more frequently, over the course of gestation.

From the experiences described by women above, it is clear that initial sensations of foetal movement may be better conceptualised in terms of a process, rather than as a singular event occurring at a definite time point. Additionally, for the participants in this research, sensing foetal movement was not a purely physiological event. As we have observed, the initial movements they sensed were created in conjunction with a complex mix of knowledge and experience. This included women's increasing familiarity with their changing bodies over time, female family members' and friends' accounts, and an awareness of medical discourses surrounding foetal movement.

Anticipating bodily boundaries

Through their descriptions of initial foetal movements, the women in this study portrayed the connections between their own bodies and those of the entities within as fluid and unbounded, countering widely accepted depictions of pregnancy as centring around a distinct ‘foetal subject’ (Lupton, 2012; Morgan, 2009). Participants did *expect*, however, that a clear distinction between sensations arising from their bodies and those of another would occur in time. Women described a distinction between the early ambiguous movements sensed at the time of our second interview, which were discussed in terms of ‘flutters’, ‘taps’ or ‘rumblings’ and those they expected to feel at a later stage of gestation – described as ‘kicks’, or ‘stronger’ movements:

I haven't felt any movements, well, I feel the flutterings that they all talk about but to me that's like, not movement... it's like hard to tell the difference for me between that and like, feeling like gas in my stomach. **Eve**, 25-29, 19 weeks pregnant

Most looked forward to when they would be able to feel definite foetal movements, which they anticipated would make the pregnancy more ‘real’.

I'm quite excited about the kicking. Just, so it's real. It's not, cos I know it is [real], I just mean, just stronger... I'm kind of excited to, for it to be stronger, and more, 'oh yeah that was the baby'. That wasn't me digesting, it was definitely the baby. Leila, 30-34, 19 weeks pregnant

Existing literature has demonstrated how early pregnancy may be experienced as a time of liminality or 'in between-ness' (Nash, 2012). During early pregnancy, women may experience a discord between being labelled as pregnant according to a home or physician administered pregnancy test, and their embodied experiences and physical appearance, which for the first several months of pregnancy may not be visible to others (Ross, 2018). Sensing *definite* foetal movements was one way Keira hoped she would be able to "feel" pregnant, as she anticipated a foetal body to emerge as separate from her own:

I feel my shape is changing, but I think, to the outside world, probably don't look that different. Sometimes I do, it seems to vary, but um, I kind of, a little bit of me is looking forward to it being a bit more, obvious, and feeling it move and stuff. Keira, 30-34, 19 weeks pregnant

Uncertain initial movements, the 'flutterings' experienced by many of the participants in this research at the time of our second interview, could be described by some as *contributing* to the uncertainties and related anxieties of (early) pregnancy. As such, several women were eager to feel more 'obvious' movements or 'kicks' because of the reassurance of foetal wellbeing that these were expected to provide. Andrea, who had experienced three miscarriages in the past, expected that she would be "much happier" when able to feel definite foetal movements. When we met for an interview mid-way through her pregnancy she was not able to distinguish foetal movement from spontaneous "twitches" she sometimes felt in her eyes or other parts of her body. Andrea described feeling anxious about her current pregnancy, and that the ambiguity of these sensations led her to doubt her bodily experiences of possible foetal movement, which she had also described earlier in the interview as at times "comforting". A few days before her second routine scan, her anxiety was particularly raised:

[The] twenty week scan was coming up and I started thinking 'this could all go wrong again'. And that was when I started questioning myself, I was like well maybe I'm not getting, you know, not picking up on this right. Andrea, 30-34, 20 weeks pregnant

Caroline also described an inability to discern foetal movement with certainty:

I'm still a bit unsure about whether I am or not... some days when I feel it I'm like 'awww', you know, 'there you are'... And other times, I feel kind of, feel it and I, I'm not so sure... I worry that I might be mistaking something else for feeling movement, and then be, I might be thinking that everything's OK, but actually it wasn't movement at all, so, it might not be OK. I worry about that. **Caroline**, 35-39, 19 weeks pregnant

Here, Caroline reflects on the potential to mistakenly interpret the sensations she'd been experiencing as foetal movement. She worries that whilst these have been providing her with reassurance, this may later emerge to have been misplaced. Implicit within Andrea and Caroline's accounts is a sense that their pregnancies are 'at risk', with the potential to end unsuccessfully, echoed in existing literature on women's experiences at this time (e.g. Lupton, 1999; Burton-Jeangros, 2011). All participants anticipated that definite foetal movement would alleviate this, providing reassurance of foetal wellbeing. As such, some described overcoming the ambiguity of uncertain sensations by actively working on or with these to enhance their perception of foetal movement. Sinead described that she would "press quite hard" on her abdomen and "breathe really shallowly" to better feel what she discerned to be foetal movements. Deborah noted that she felt these sensations more strongly when lying down, and would therefore lie in bed for a little longer in the morning to better sense this.

The power of foetal movement to reassure women of the pregnancy's success, but also to shape conceptualisations of the entity within, was again demonstrated through women's retrospective reflections on changes in foetal movement over time. The uncertainties surrounding foetal movement that had characterised women's early accounts became alleviated for many in later pregnancy, with women clearly articulating that sensations of movement were being initiated by an entity within:

Cos [now] you're just like, this isn't me, you know, this is something else in me, it's not me. So, you don't treat it as your own body's [movement] anymore. Whereas when it was flutters, you still weren't, I wasn't really sure if it was me or the baby... But now it's, yeah, now, it's um, like not just these quick little things but, like stretches **Eve**, 25-29, 35 weeks pregnant

Eve welcomed this change in sensation, which she interpreted to provide knowledge of foetal health. Nevertheless, even in later pregnancy Eve's account makes clear that the entity within cannot be understood in terms of a singular and bounded 'foetus' implicit within biomedical depictions of pregnancy, but again implies a relational entity, known and articulated in terms of Eve's corporeal experiences. It is clear that Eve's interpretations of the entity within are again inextricable from

sociocultural context, whereby pregnant women and their families are able to conceive of themselves as carrying a 'baby' prior to birth. As discussed, this has been attributed to the widespread visualisation of foetal entities within medicalised contexts, as well as the wider proliferation of foetal images (Morgan, 2011). Also key are conceptualisations of foetal entities according to a teleological view of foetal development, whereby emphasis is placed on what foetal entities will become, solidifying these relational bodies as (future) persons prior to birth (Franklin, 1991: 200).

From the extracts presented throughout this article, we have observed that uncertainties are palpable within women's accounts of foetal movements. Women's experiences were shaped by an awareness of pregnancy as 'at risk', and anticipations of foetal movement were informed by biomedical accounts of gestational time. In this context initial, uncertain, sensations could contribute to anxiety during early gestation. In contrast, definite foetal movement was anticipated to contribute towards making the pregnancy 'real' – in many cases due to the distinctions that women imagined these would produce between foetal bodies and their own. Below I discuss the implications of these accounts of foetal movement for the social sciences, but also feminist perspectives on pregnancy.

Discussion

This article has explored how 15 women experiencing a first full-term pregnancy, in the context of routinised medical intervention, described initial experiences of foetal movement. Participants discussed experiences of foetal movement as encompassing a multiplicity of sensations and interpretations, and drew on a range of resources to make sense of these. Taking women's experiences of foetal movement as a point of focus (cf. Csordas, 1994) has allowed for insight into contemporary experiences of pregnancy in the UK, widening understanding of women's reflections and connections to the foetal entity within, and entailing implications for social scientific discussions of maternal-foetal relationships and embodiment.

Complementing work interrogating materialities of pregnancy as a means to reconceptualise maternal-foetal relationships (e.g. Hird, 2007; Martin, 2010), I argue that attending to ambiguous accounts of initial foetal movement can offer theorists alternative ways of advancing feminist perspectives on pregnancy. Participants' uncertain accounts of foetal movements aid the troubling of contemporary representations of women and fetuses as antagonistic. By articulating their experiences of initial foetal movements in terms of uncertainty - as a *process*, rather than a discrete event - the women in this study discussed foetal entities in ambiguous ways. When interviewed at between 18 and 20 weeks gestation, participants' accounts depicted an entity that for some was

indistinguishable from their own embodiment, describing sensations that shifted from being attributable to a foetal presence, to their own corporeality. Rather than discussing the foetal entity as a distinct body, participants in this study instead pointed to a more fluid and unbounded being. Conceptualising gestation in this way belies understandings of pregnancy as a process of individuation, to one incorporating permeable and interdependent bodies (Kelly, 2012: 252). This understanding, argues Hird (2007), facilitates a move away from depictions of maternal-foetal relationships as characterised by conflict or antagonism, and associated understandings of women's bodies as posing a risk or threat to the developing foetus within. Theorising the connections between women and fetuses through the lens of uncertain sensations of foetal movements may enable a more fluid understanding of the foetal entity, moving beyond that of a bounded 'foetal subject', towards one that can accommodate the ambiguities voiced by pregnant women. Thus far, such experiences have largely been discussed with reference to unintended pregnancies and/or abortion (e.g. Beynon-Jones, 2015; Gerber, 2002).

The experiences discussed in this article provide novel perspectives on discussions of pregnancy and risk. Within the social sciences, pregnancy is described as characterised by risk in the context of medicalised pregnancy (Lyerly et al., 2009) with a particular emphasis on risks to the foetus within (Lupton, 2012). Related to this, women have reported experiencing pregnancy as a time of anxiety (Harpel, 2008), which, paradoxically, may be heightened through engagement with technological interventions to manage risk (Hammer and Burton-Jeangros, 2013), and render women's pregnancies as 'tentative' (Rothman, 1998). This article has demonstrated the ways in which experiences of risky or 'tentative' pregnancies may be said to be embodied. For Andrea and Caroline anxiety concerning the possibility of their pregnancy ending unsuccessfully was heightened by, but also contributed to, their inability to attribute these sensations with certainty to a foetal entity within.

Interviewees' experiences thus highlight the varied and complex realities of pregnant embodiment, which challenge representations of gestation as a linear progression, neatly divided into trimesters and standardised milestones (Nash, 2012). Indeed, sensations of foetal movement vary among individual women due to a myriad of factors, including the position of the placenta or body weight (Tuffnell et al., 1991), and as others have shown, as shaped by the social and cultural contexts they inhabit (Rothman, 1988; Schmied and Lupton, 2001). Despite this, several interviewees described their uncertainties surrounding foetal movement as related to the fact that the timing of (suspected) foetal movements did not accord with biomedical accounts of gestation, which suggest that foetal movements will initially be sensed at 18-20 weeks. The dominance of medical time in depictions of pregnancy and birth has been described in existing literature, which has critiqued medical

conceptions of birth, modelled on linear, industrialised time (Fox, 1989; Simonds, 2002). These discourses, argues Simonds, contribute to the disempowering of birthing women (2002: 559) – a view which might be taken when reflecting on how medical time has structured the experiences of foetal movement recounted above. However, as Maher (2008) has shown, a view of ‘medical time’ and women’s experiences as at odds does not always accord with experiential accounts. As demonstrated by several participants, medical time was just one of the resources drawn on by women, along with family and friends’ experiences and bodily knowledge, in making sense of foetal movements. Further, and as suggested by Beynon-Jones (2017), medical accounts of gestational time co-exist alongside temporalities of pregnancy determined by unpredictable “rhythms of socio-material relations”, including menstrual symptoms and sexual relationships (p839). Nevertheless, this research suggests that the anticipated timeframe communicated to women within prenatal advice, and depiction of sensations of first foetal movements as a definite event, has the potential to compound anxieties described by women during pregnancy. This may be alleviated by a flexible approach to the delivery of this message within prenatal care, and societal acknowledgement of ambiguity as a key element of experiences of (early) pregnancy.

Participants’ accounts have emphasised that embodied experiences of initial foetal movement are inextricably shaped by the social contexts in which they occur. In interviews taking place at 18-20 weeks gestation, the participants in this research described wider experiences of uncertainty with regards their changing bodies. All participants were experiencing their first full-term pregnancy, and articulated heightened attention to bodily sensations. Interviewees’ bodies were thus very much ‘present’ at this time, where otherwise the subtle sensations they experienced as possible foetal movements may have formed part of a “corporeal background”, absent from explicit awareness (Leder, 1990: 25). In light of experiences of pregnancy as ‘at risk’ or ‘tentative’, reassurance is often cited in qualitative literature as a motivation for engaging with prenatal tests and care, to provide women with knowledge of the health of the foetal entity within (Hammer and Burton-Jeangros, 2013; Thomas et al., 2017). For the women in this study, (definite) foetal movements were emphasised as able to provide reassurance. As such, some participants in this study described attempts to create or amplify foetal movement thorough bodily actions and/or shifts in their attention. It is important however, to note that findings from this research indicate that attention to the body during pregnancy may be experienced as in flux. Indeed, as shown by participants’ experiences, corporeal experiences of gestation have the potential to fade in to the background as pregnancy progresses, and as sensations of foetal movement shift in frequency and intensity (see also Raynes-Greenow et al., 2013).

Importantly, the rich accounts presented above do not accord with the view that foetal movements have been in some way superseded by technological intervention in pregnancy (cf. Duden, 1992; Rothman, 1988). The participants in this research were eager to experience these, anticipating and interpreting these sensations as providing highly valued knowledge of foetal wellbeing. This is not to say, however, that foetal movements were privileged over experiences of technological intervention. Instead, various forms of knowledge interacted in complex ways to co-create women's personal experiences of foetal movement and pregnancy, in modes that shifted over time, situated within a particular socio-cultural context (see also Markens et al, 2010). Within a biomedicalised setting, foetal movements assumed multiple meanings for participants, able to bring excitement and reassurance, but also the potential for ambiguity and anxiety when these did not accord with dominant temporal representations of pregnancy, or when reflected on in relation to wider discourses of their pregnancies as 'at risk'.

Though providing novel insights into women's experiences of initial foetal movements, it is important to acknowledge that the women participating in this study are not representative of all those experiencing pregnancy in the UK today. Firstly, interviewees featured in this research were experiencing gestation for the first time, but also described their pregnancies as 'planned'. As such their engagement with bodily sensations may differ from those experiencing pregnancy for a second or third time, but also from those with unintended pregnancies. Related to this, having (as far as possible) planned their pregnancies, all of the participants in this research became aware of their pregnancy before the tenth week of gestation, and thus had different degrees of contact with medical professionals and interventions to those learning of their pregnancy at a later stage. Further, all participants were highly literate, had access to a large amount of information about pregnancy from medical and popular textbooks and family and friends, and engaged with all routine antenatal appointments. It is likely that as a group, their experiences of (initial) foetal movements differed from women who would be unable to access pregnancy information and interventions. To gain further insight into the diversity and social situated-ness of experiences of pregnant embodiment, it is thus important that research continues to be undertaken with women experiencing socioeconomic deprivation, and in low-income countries (Coxon, 2014).

Conclusion

Attending to women's accounts of sensing foetal movement in early pregnancy has exposed this experience as ambiguous and uncertain, challenging depictions found in biomedical and popular accounts. Conceptualising foetal movement in this way challenges representations of pregnancy as comprising two distinct, bounded, maternal and foetal bodies. This adds to literature considering

materialities of pregnancy, prompting novel ways to think about the connections between women and foetal entities. Through reports of foetal movement, participants have demonstrated that the discourses of risk and uncertainty surrounding today's pregnancies may be said to be embodied, with ambiguous experiences having the potential to alarm women. However, women experienced this as in flux, with sensed movements also serving to reassure, and as such highly valued. Importantly, this study has shown that this tactile and bodily means of knowing pregnancy cannot be disentangled from the social, cultural and temporal contexts in which it occurs. Attending to this commonplace feature of ordinary pregnancies has contributed to sociological understandings of experiences of pregnancy and foetal entities, and literature emphasising the mutual shaping of social contexts and corporeality more widely.

Acknowledgements

Thank you to the fifteen women who participated in this research. Many thanks Nina Hallowell and Amy Chandler for commenting on earlier versions of this article. I am grateful to Joanna Latimer and two anonymous reviewers for their insightful feedback during the review process. Thank you to Sarah Cunningham-Burley, Jeni Harden and Martyn Pickersgill for their input into the doctoral work on which this article is based. This research was supported by a University of Edinburgh Principal's Career Development PhD Scholarship.

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