Using video to trace the embodied and material in a study of health practice

Nick Hopwood
Faculty of Arts and Social Sciences, University of Technology, Sydney
Sydney, Australia

Abstract
Purpose – To explore the methodological implications of sociomaterial theory for qualitative research about practice. The aim was to assess the potential and limitations of video stimulus to discussion about practice as embodied and material, and to theorise this in terms of epistemic objects.
Approach – A video based on a residential child and family service in Sydney was used as a stimulus in six focus group discussions with researchers and professionals in child and family health. Three focus groups were held in Sweden, and three in the British Isles, settings where a similar approach to supporting families with young children is established. A sociomaterial perspective, drawing on Schatzki's practice theory and Knorr Cetina's notion of epistemic objects informed the design and methodologically focused analysis.
Findings – The use of video is shown to be successful in facilitating and prompting participants to reflect and comment on practice as embodied and material. However the analysis also accounts for more problematic nature of this approach, exploring the affective connections and illusion of totality that can be associated with video screenings. An alternative, based on line drawings, is suggested, and the paper concludes by raising further questions about data reduction and stimulus artefacts.
Value – The turn to sociomaterial theory has huge potential, but its methodological implications remain unexplored. This paper contributes original perspectives relating to the use of video in a qualitative study, offering innovative theorisation and discussion of stimulus material as epistemic objects, which offers fresh insights into significant methodological prospects and problems.
Keywords Video stimulus; sociomaterial theory; epistemic objects; embodiment; practice theory; drawings; health; partnership
Paper type Research paper

Introduction

The theoretical basis for research about practice is changing, as scholars recognise limitations in individual cognitive or social participatory theories, and turn instead towards sociomaterial approaches. These represent a growing basis for studies of practice in a range of settings, including health, education, business, and policing (Fenwick *et al.*, 2011). However, the methodological implications of adopting a sociomaterial approach have not been fully explored. Contemporary theorisations of practice urge us to account for embodiment and materiality, but doing so is not straightforward. This challenge is particularly acute when qualitative researchers rely on focus groups and interviews, because recognising, articulating and reflecting on bodies and things can be a strange and awkward experience for participants interviewed about their daily work. They may perceive issues as blindingly obvious (of course I couldn't do my job if I didn't have a body), or theoretically cryptic (why would you think that a pen is important?). This paper explores the prospects and pitfalls of using video as an epistemic object (Knorr Cetina, 2001) used to structure and facilitate focus groups. Questions about how to provoke body- and thing-focused talk by participants discussing their work practices are explored, theorising stimulus material in a sociomaterial way, as an epistemic object.

The paper begins by outlining key features of sociomaterial approaches, and then provides methodological details of the approach taken. Contextual details relating to partnership in child and family health practices are then presented, before prospects of using video as a stimulus in focus groups are identified with respect to body geometries and materiality. The subsequent discussion considers challenges and problems in terms of affective connections and the illusion of totality. The paper concludes with presentation and discussion of line drawings as an alternative, more reduced, form of stimulus, and final reflections on methodological implications.

A sociomaterial turn in researching practice
Sociomaterial conceptions of practice are diverse (see Fenwick, 2010, 2012; Fenwick *et al.*, 2011, 2012). They include but are not limited to approaches that focus on objects of practice (Knorr Cetina, 2001); knowing in practice (Gherardi, 2008); cultural-historical activity theory (Edwards *et al.*, 2009); actor-network theory or ANT (eg. Fenwick and Edwards, 2010, 2012); complexity theory (Lancaster, 2012); and Schatzki's practice theory (Schatzki, 1996, 2002, 2003, 2010).

These approaches are not identical, but share recognition of the 'need to understand professional practice beyond individuals' discretionary decision-making, beyond stable communities, and beyond given knowledge' (Fenwick *et al.*, 2012, p. 3). They account for dynamic interplays between practice, materiality, bodies and knowledge. In doing so, they deflect researchers away from approaches that focus on the individual practitioner, particularly her or his mind, as the hero of the story (Fenwick *et al.*, 2012). Sociomaterial approaches move beyond metaphors of participation (such as communities of practice, Wenger, 1998) and an emphasis on social dimensions that have been prominent in recent decades, instead referring to metaphors of emergence (see Mulcahy 2012b) or indeterminacy (see Hager, 2011; Schatzki, 2010).

Schatzki (2002, 2003) proposes a site ontology, in which something's site is that realm or set of phenomena of which it is intrinsically a part. A site is a mesh or bundle of practices (organised human activities) and material arrangements of human bodies, organisms, artifacts and things (Schatzki, 2003). Schatzki defines practices as 'embodied, materially mediated arrays of human activity centrally organised around shared practical understanding' (2001, p. 2). This eschews a focus on individuals or wider structures, focusing on practices and actions, performed by bodies, amid material arrangements.

In Schatzki and ANT the term 'material' denotes human bodies and non-human objects, however Schatzki tends to give the body somewhat separate attention, retaining a sense of its material presence without reducing it to such. The separate naming of bodies and materiality does not imply bodies are immaterial. Schatzki does not accept the symmetry of ontological status (and by extension what is often understood as 'agency') between human and non-human 'actors' that is characteristic of ANT. He proposes a strong, connected, but different role for materiality and human activity. Human bodies perform actions wherein materiality constitutes a setting for activity, actions are attuned to material objects, performed with, or because of them (Schatzki, 2002).

The sociomaterial turn requires us to investigate what people say and do, with their bodies, amid things. While there has been considerable theoretical attention paid to embodiment and materiality in the literature, there has been much less discussion of what this means methodologically. Exceptions to this include the ANT method of following actors, whether human or non-human (Fenwick and Edwards, 2010). Other studies have used the 'interview to the double' method, whereby participants are asked to describe what someone would need to know if they were to perform a particular job in their place (eg. Nicolini, 2009). Nicolini's account foregrounds its utility in elucidating moral and normative dimensions of practice, so materiality and bodies again slip

away. There remain important questions as to how to follow through on these theoretical commitments, and render visible bodies and things in our understandings of practice.

A methodological study
Qualitative methods that stay true to a sociomaterial approach must evoke dialogue between what happens in practice and the materials (and bodies) involved (Michael, 2012). An obvious means to align qualitative methods with a sociomaterial framework is to undertake ethnographic research (Fenwick *et al.*, 2011; Schatzki, 2012). Ethnography predates the current emphasis on bodies and things, having a long history of engaging with questions of material culture. Indeed the broader empirical context for the video exercise reported here is a 9-month observational study, in which the author's ethnographic sensibility has been explicitly oriented towards bodies and things (see Hopwood, 2013a, b; Hopwood and Clerke, 2012). Ethnographic methods are not always appropriate, and are increasingly difficult to resource in contemporary research economies (Mills and Ratcliffe, 2012). To avoid over-dependence on observation to capture practices in their embodied and material complexity, a broader suite of methodologies is needed.

Interview and focus group methods are common in qualitative research, but the idea of describing their work with reference to bodies and things is often strange and challenging for participants. Many existing interview-based studies with health professionals reveal only fleeting reference to materiality or bodies (eg. Rossiter *et al.*, 2011; Fowler *et al.*, 2012). However, one study explored how nurse home visitors used a video recording of mother-child interactions to help guide a mother to noticing bodily cues and responses in her child, and the relationship between these, her own actions, and objects such as books or toys (Lee *et al.*, 2012). The video focused the discussion on bodies and things.

This led me to question whether video might similarly be used as a stimulus to focus groups with health professionals discussing their practice. The use of video in stimulating recall about and reflection on practice is not new and has been used in a range of contexts (see Clarke, 2006; Iedema *et al.*, 2006; Reid *et al.*, 1996). Indeed it has been used as a a stimulus in sociomaterial studies (eg. Mulcahy, 2012a, b). However, existing literature does not highlight the issues raised in this paper, and does not theorise the use of video in the same way. This use of video can be theorised along sociomaterial lines, following Knorr Cetina's (2001) notion of *epistemic objects*. A dissociation is created between self and work as the object inserts moments of interruption and reflection. Epistemic objects are open-ended, incomplete or unfinished, inviting or generating questions; they are partial objects in relation to the whole. Videos can be theorised as epistemic objects, in that they create a distance between participants and the practices or work they are being asked to discuss verbally, opening up issues for discussion.

Can video as an epistemic object provide a basis for interview methods aligned with our theoretical commitments to understanding practice? Can it facilitate discussion that builds understanding of the bodily and material enactment of practice? These questions are explored with reference to partnership as a key focus of change in health practices in which relationships between professionals and service users are reframed (see below).

The purpose was to investigate contexts in which participants (child and family health researchers, educators and practitioners) could identify actions performed by bodies, amid and with things, thus generating data that would enable a rich sociomaterial and site ontological analysis. Over the course of one week, a series of video recordings was made at the Residential Unit (RU) at Karitane in Carramar, Sydney. The RU provides a multi-professional service for families experiencing challenges relating to parenting of children aged 0-4 years. Parents may face problems with their

children's sleep, feeding, behaviour, or a combination of these. Up to 10 families are admitted each week for a five-day stay. The video focused on three families.

Video clips were edited into a 20-minute documentary style film. The author and a research assistant edited the video, choosing segments that captured key moments and activities relating to each of the three families, arranging them to parallel stories of each family chronologically. The selections incorporated settling, meal times, and play (three major areas of focus on the Unit), as well as clinical handover and a case conference of medical, nursing and social work professionals. A combination of voice-over by the author and subtitles provided an overarching narrative and cued viewers (for example, giving indicators of temporal progression such as 'Wednesday morning', reminders of names etc.).

The video was screened as a prelude to focus groups in the British Isles and Sweden, selected as settings where working in partnership had become a key focus of practice reform (see below). The Family Partnership Model or FPM (Davis and Day, 2010) was developed in the British Isles, has been implemented in the research site and in the services in which British Isles focus group participants worked. This provided an explicit common frame of reference for discussing partnership. The FPM has not been implemented in Sweden, but similar principles of partnership are well-established and pre-date emergence of FPM. Engaging Swedish participants enabled exploration of partnership as a more general concept, thus potentially revealing aspects that go beyond the scope or forms of articulation associated with FPM.

Of the groups in the British Isles, one involved professionals from a service for families with children with severe health challenges, and two were with professionals (including nurses, speech and language specialists, home visitors) from a general child and family health service. The discussions groups in Sweden comprised hospital-based child and family health practitioners, health professional educators, and researchers. Groups comprised between four and six participants (30 in total, mainly female), and were convened through purposive sampling approaches (Creswell, 2002), which targeted professionals who self-identified as having experience of working in partnership with families. The service contexts from which the groups were drawn were deliberately different from the residential context shown in the video, in order to explore partnership as a wider set of practices, rather than only as enacted in a particular kind of service.

Participants were shown the video and asked to consider what they saw in terms of partnership between professionals and service users, and an interest in bodily and material aspects of practice was stated. A paper-based template for making notes was provided, encouraging participants to write their comments in relation to specific scenes shown on the video. This sought to steer subsequent discussion, which lasted between 60 and 90 minutes, away from generalised and abstract notions and maintain reference to particular actions and things. The discussion in this paper draws on transcripts (spoken words only) of these focus groups; the wider ethnography draws on a broader range of data forms that reflect the sociomaterial approach.

The author has a background in educational research and no formal qualifications or experience in health practice. This was seen as underpinning a capacity in the wider ethnography to notice aspects that may have been taken for granted by those more familiar with the setting, and aligned with a primarily research role in which participation was limited to non-clinical roles (such as being involved in group activities, play etc.). The video and focus group exercises were conducted in the late stages of the study, by which time the researcher had a fuller understanding of partnership as it pertains to child and family health practices.

Partnership in health professional practice

Partnership is one term reflecting a more general trend within health practices that herald particular kinds of relationships between professionals and service users; patient involvement (Fudge *et al.*, 2008) and co-production (Dunston *et al.*, 2009) point to similar aspirations towards more participatory and dialogic approaches to service delivery. Partnership is now promoted in many countries (Arney and Scott, 2010; Bidmead and Davis, 2008; Keatinge *et al.*, 2008). An underlying principle informing partnership in child and family health holds that many complex problems can only be solved by treating families as partners in services rather than passive recipients of care (Scott, 2010). Partnership is accomplished through working together, power sharing, common aims, complementary expertise, mutual respect, open communication and negotiation. The Residential Unit had embraced the idea of partnership through adoption of the Family Partnership Model (FPM), in which health professionals are encouraged to develop particular qualities (respect, genuineness, humility, empathy, quiet enthusiasm, personal integrity) and communication skills (attending through gaze, expression, posture, movement, and active listening) (Davis and Day, 2010). The focus is on the nature of relationships with families, although the Model and its uptake on the Unit clearly also point to the need for consistent and coordinated approaches across professions (eg. nursing, social work, psychiatry) (see Hopwood, 2013b; Hopwood and Clerke, 2012).

Prospects for using video to trace the embodied and material in practice

The video functioned successfully as an epistemic object in many ways. Transcripts were replete with comments that made explicit mention of bodies and things: participants discussed partnership not as an abstract ideal, but as an embodied and material practice. They were able to notice what is normally taken for granted by virtue of the distance created by video, and responded to the stimulus by asking questions and imagining alternatives. Themes of body geometries and materiality illustrate how it is possible to follow Schatzki's theorisations through in interpreting participants' comments. Many participants were critical of the practices they saw on the video. The quotes presented below should not be read as indicative of the quality of partnership practices at Karitane; they reflect only the incidents captured on film, selected for inclusion in the video, and then participants' responses to them. The first of these themes will now be discussed.

Body geometries

A Schatzkian approach, and a sociomaterial approach more generally, require close attention to be paid to bodies. Within Schatzki (2003)'s site ontology, what bodies do together becomes crucial. Here the analysis focuses on body geometries: physical relationships of distance and angle (see Hopwood, 2013a). Participants noticed relationships between bodies in the video, conveying their sense of how such relationships enact partnership. These first quotes relate to a scene in which a nurse was close by a mother throughout a prolonged period trying to settle a baby:

> I noticed some good experiences from partnership, a nurse comforting a mother who had withdrawn herself from the room. She is actually standing just right next to her and comforting her in the decision. (Group 2)

> I felt there that there was a lot of empathy there… I really liked the way the nurse was with the mother, when she was trying to settle her child, and she just used some touch… She did say you've done very well… (Group 6)

Body geometries are apparent here in proximity 'right next to her' and through the use of touch. The following quotes from all but one of the focus groups relate to a scene showing the conclusion to an admission interview, conducted in a family's bedroom, with a mother sat on a bed, the nurse opposite her on a sofa, discussing goals for the week.

> You have to think about how you sit in a room to be at least the same comfort level. I didn't see that, there was no equal kind of sitting, [they were on a] different level. (Group 1)

> When they are planning the goals, I think the mother and nurse should sit beside each other and have a table and the best will be that the mother will write things. (Group 2)

> I noticed her position, the nurse on the couch and the mother on the bed, is looking more uncomfortable, because she couldn't lean back and she had light on her neck. So I have a difficult rapport with people when I can't see their face. You don't really get connected. (Group 3)

> At first I didn't like the way those goals were negotiated, but then I did like it: at first it looked very didactic, and then she moved [to sit next to the mother]. (Group 4)

> One of the things I noticed in the first clip was it was very much the nurse sat right opposite and I felt the mum looked quite vulnerable in that position. It would have felt to me much warmer if they'd been sitting side by side and actually were looking at the goals together and writing it down… She's really high up and the nurse is quite low down. (Group 6)

A strong sense is evident of how important body geometries are to participants across the groups. The comment from Group 1 refers not only to comfort levels but also to egality of comfort as enacted, bodily, through the relative positions, distance and postures of the nurse and mother. This invokes partnership as a kind of shared bodily enactment and experience. Several comments suggest partnership would better be enacted through re-arranging the bodies alongside each other rather than opposite each other. The oppositional arrangement was seen to reinforce relations of expert (nurse) and non-expert recipient of care (mother), and created a sense that a combination of material arrangements and bodily practices pathologise the family situation. The participant from Group 3 noted the arrangement of bodies in relation to light sources cast a shadow on the mother's face. Being able to see a face clearly is then specified as key in developing a rapport or connection with the mother. A similar point was made with specific reference to the relative heights of the bodies, and the way in which the geometric relation created a sense of vulnerability, a lack of warmth. In the comments above, we see how the accomplishment of relationship building depends on bodily doings and their (changing) geometric relations: the simple act of moving to sit next to the mother completely changed one viewer's (Group 4) sense of partnership being enacted. These comments illustrate clearly how the video was effective in provoking participants to identify, articulate and discuss bodily aspects of partnership practice. While bodies are in themselves material entities, discussions also made explicit reference to other forms of materiality.

Materiality
Materiality is given firm prominence in a Schatzkian approach, and in response to the video, participants made numerous comments that highlight bundles of practices and material arrangements in relation to partnership practice. The following quotes relate to the material environment of the RU more generally.

> They dress in uniform, they have a hallway that looks exactly like a hospital hallway but has some pictures on the walls. Then you would get the message that this is pathology and we are sick as a family. (Group 2)

> Well hospitals and medics cure people don't they? So maybe there's a level where the people have been, well, we're going to these experts and they are going to cure us. Actually the environment kind of reinforces that. (Group 4)

The material environment is seen to work against partnership. Partnership is evoked in opposition to experts curing the sick, while the hospital-like environment is seen to reinforce this. Aspects of the

material setting that do this work are specifically named, including uniforms and the hallway. Another participant mentioned a painting of a happy family hanging on the wall, feeling it reinforced a division between normal, happy families, and the pathologised families who come to Karitane. It is not obvious to me that a construction of service users as sick or in need of help (as enacted through bodily doings, sayings, and things) necessarily goes against principles of respect, empathy, negotiation around joint expertise. What is significant here is that the video provoked such explicit discussion of material features as actors in partnership practices.

Further comments were made in specific reference to the admission scene discussed above.

> There's nothing on the wall. It's very white… It's important to have a surrounding that is relaxing when you talk, especially about emotional things. (Group 1)

> When people are getting interviewed they have nothing to look at. If you are talking to someone it's not that you can divert their attention and look at something else. I just felt if you are in a really stressful situation and all you have got is white walls around you, it's just a bit.. it doesn't help. (Group 5).

Here we see the connection between materiality and doings and sayings within a particular point in the care process: the admission interview. Materiality in the form of white walls, or the absence of colour and interesting features, are seen as working against conditions amid which an effective interaction (meaning one in which partnership is established and families feel at ease) might take place. Partnership is invoked in terms of helping clients feel relaxed, assisting with managing stressful situations. On Schatzki's (2003) terms, materiality forms a setting for activity, performances of actions are amid and attuned to material entities, people react to material states of affairs. Thus the hallways and uniforms constitute a 'hospital' as the setting for doings and sayings on the RU, the bed and sofa comprise an arrangement amid which the admission takes place, and to which it is attuned (e.g. by enacting a bed as a place to sit). Other comments focused specifically on the bodily-material act of writing:

> I think it's difficult to see a partnership between the nurse and the mother. The nurse is the one making the notes. She writes the notes instead of the mother. If she wrote them, she would own them as well. (Group 3)

> It's the power isn't it? What did you say and then I'm writing it down. It makes you feel a bit on edge really. (Group 6)

Here, the writing of notes by the nurse is seen as retaining traditional professional power, expertise and control. Again the purpose here is not to suggest that these comments have somehow touched upon an incontrovertible material requirement of partnership (that professionals must never write if service users might do so). Rather this presents yet another instance of viewers responding to the practices depicted on the video, taking up bodies and things as significant features of partnership, and enacting the video as an epistemic object in the process. The video worked as an epistemic object because bodies and things were in plain view: when prompted, participants could latch on to these features. The comments made about what could have been different suggest the enactment of the video as incomplete or unfinished, along the lines of Knorr Cetina's (2001) original concept.

Problems and challenges in using video as stimulus
Despite the success of the video exercise in stimulating discussion that attended to partnership practice as embodied and material, the transcripts also highlight a number of problematic features in this process. Video requires viewing and response literacies that may be difficult to secure, or perhaps only established as slippery moments. The previous section discussed comments that were

focused on partnership and made specific reference to what was shown in particular moments of the video. However, the transcripts also comprised many comments that deviated significantly from this quality. These difficulties stemmed from passionate attachments made to the video and its content, and the illusion of totality it produced. The video did not always function as an epistemic object in the intended way of creating distance and as unfinished or partial; each of these issues will now be discussed further.

Passionate attachments
Participants in each group spent considerable time discussing general issues that reflected participants' emotional responses and professional agendas. For some the idea of letting a baby cry during settling was uncomfortable, prompting responses pertaining to parenting approaches in general. Practices of child-rearing are not value-free and proved to be a highly charged personal and cultural touchstone. Many participants felt the need to air their values, either as parents or as professionals. Some said that they were actively trying to remain focused on the task that was set up; others found this difficult or chose not to do so. The strength of passionate attachment to issues of parenting was palpable in all of the groups. On reflection, expecting a viewing literacy that requires participants to bracket these kinds of affective response is problematic. Indeed this a priori intention seems, on reflection, in tension with the sociomaterial view of emergence although it reflected a desire to follow sociomaterial thinking in terms of stimulating discussion of materiality. Further issues emerged in relation to responses based on assumed completeness of the video stimulus.

The illusion of totality
Other difficulties emerged in relation to the way participants responded to the specifics of what was shown on the video. It seems that the way in which the video was put together may have encouraged problematic engagements. The documentary genre had the unfortunate consequence of setting up a seamless story rather than highlighting what is shown as a set of discrete enactments. 'Gaps' such as breaks in time, or 'holes' such as interactions that did not make the final cut, seemed to be hidden. Comments made on numerous occasions assumed what was not shown did not happen. No interactions between a psychiatrist and a mother were shown, but concerns were made in relation to a scene in which the psychiatrist discussed the mother with colleagues: how could he do that without having met her? Most participants seemed to find it hard to accommodate breaks in presentation of continuous reality on the video. Here there is an interaction between the way the video was produced and the challenging viewing literacies that this then required. A smooth presentation of a story does not encourage a viewing that recognises gaps and holes that were erased in the mode of representation. The seduction of totality suggested to participants a complete rather than partial representation in the stimulus material. In this way the video was not functioning as an epistemic object in the full sense: a sense of completion and finality overtook the partiality of the representation was lost, and the distance or dissociation enabling interruption and reflection was perhaps not great enough, as participants were sometimes quickly enwrapped into the moments and affects of the video and their responses to it.

A way forward?
The empirical part of the methodological study ended with this analysis of prospects and problems with using video, theorised as epistemic object. However, identifying the qualities of intensity and illusory completeness led me to consider approaches to representation that are much more pared down or reduced, deliberately removing content, yet foregrounding bodies and things so as to retain the facilitative function that worked in the video. Photographs might help manage issues relating to temporal continuity, and there is an established tradition of photo elicitation (eg. Collier, 1967), which is now being explored in relation to sociomaterial research (Scoles, 2013). However, theorising the stimulus as an epistemic object led me to seek something even more reduced, more

obvious in its reduction. To this end I have begun producing line drawings, traced from photographs or video screen shots. Four such drawings are presented in Figures 1-3.
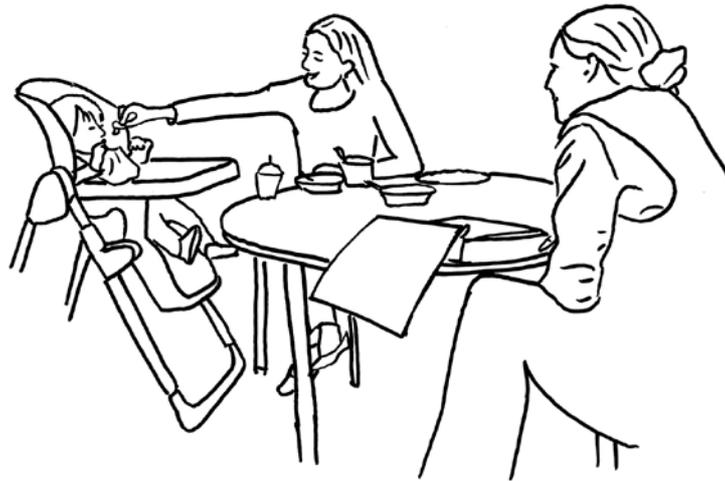

Figure 1: A nurse (right) with a mother and child around a dining table

Figure 2: A mother (left) and nurse (right) refer to a child behaviour chart

Figure 3: A nurse left) sits on a bed with a mother and child

Michael (2012, 2013) describes the use of similar drawings in the context of researching artistic practice. She shows how they can capture a moment of activity, helping viewers to visualise practice in the objects and activities evoked in the image. Michael theorises this 'visual methodology for the study of practice' not in terms of existing canons of representation or qualitative technique, but in terms of the sociomaterial theory that underpins her inquiry. I follow her approach, drawing on Knor Cetina's (2001) work to theorise the line drawings in the context of qualitative interview methods. The line drawings may have potential to escape the difficulties associated with video and the sense of completeness or totality, encouraging readings that embrace the open-ended, incomplete and unfinished qualities that aid the dissociation that is required for stimuli to function as epistemic objects. This dissociation is particularly important when the aim is to explore bodily and material aspects that are so taken for granted. On what grounds can line drawings be thought to have this potential? Michael (2012) writes of her drawing:

> Deliberately drawn with thin black lines, the drawing depicts relationships among artefacts and practice. The unbounded composition allows white space to seep and lines to leak. Relationships to what cannot be seen are implied. The missing corners of the drawn coffee table do not mean that they do not exist. (pp. 4-5).

Although Michael (2012, 2013) does not discuss embodiment in depth, her drawing includes the body of the artist, and relationships between this and (other) material objects are highlighted clearly in her discussion. Figures 1-3 take a similar approach, using strong black lines to depict bodies, things, and relationships between them. The use of thick lines pushed us forward in the deliberate strategy to evacuate some content while foregrounding particular, chosen things. The drawings are notably not 'busy', taking Michael's unbounded composition and use of leaky white space further. The construction of these drawings reflects a sociomaterially informed analytic process.

Engaging with the drawings as epistemic objets
I now offer more detailed commentary on Figures 1-3 in order to illustrate what it would mean to engage with them as epistemic objects. This goes beyond the original empirical scope of the study, but seems appropriate as a means to address the difficulties encountered in the use of video. The more speculative discussion also enriches and extends the sociomaterial theorisation of such

stimuli, highlighting what is included, how they leak, evacuate information, and invite further questions. The intention is to give a flavour of how these images might stimulate and invite discussion among research participants about bodily and material features of practice. Myriad choices underpin the reduction of detail, the evacuation of content, and selections of what to foreground. The discussion of each image below elucidates these choices, following sociomaterial theories to highlight bodies and things in practice.

Figure 1 shows a nurse seated at a dining table with a mother and child. The relational geometries of the three bodies are highlighted, with the mother and child close together, the nurse at a greater distance, but still part of a wider triadic social space. Bodily postures are shown (the nurse leans forward, resting her arm on her thigh), and actions are evoked (the mother reaching out to the child). The image also depicts material forms of the table, child's high chair, cups and bowls, and a clip-chart, opened out and in front of the nurse. There is no background, and both bodies and objects 'leak' into white space (the nurse to the lower right, the high chair to the left). What is being said and written? How did the bodies come to be arranged this way, with these things?

Figure 2 shows two bodies: a nurse (right) and a mother (left). Both are standing, while the mother's gesture towards a clip-chart, held by the nurse, is indicated. This brings viewers into a moment between mother and nurse, where the materiality of the clip-chart becomes a joint focus of attention. The content of the discussion is evacuated, as is the information contained on the clip-chart, and the background setting. These omissions are not to suggest such aspects are unimportant, but rather to starkly remind viewer participants of the partialness of the picture, and thus to prompt questions, inferences, about what is not shown. Facial features are reduced, sufficient to evoke calm temperaments, but partial enough to invite questions as to smiles, mood, and gaze.

The clip-charts reappear in Figure 3. A nurse leans towards a mother who is seated with her infant on her lap, on the corner of a bed. The bed evokes a bedroom, and through this communicates something of the setting and 'feel' of interactions between nurses and mothers. Again facial features are teasingly represented, implying perhaps a gentleness on the part of the nurse, a ready attention on the part of the mother, and the shared gaze of the infant. What is written on the other side of the clip chart? What is being pointed to? What draws the attention of the mother and child?

Conclusion

These drawings are anchored within a sociomaterial conception of the entire research process. The line drawings are not offered as a panacea or a preferential replacement for other stimulus material. It seems likely that their value may be limited in terms of their lack of colour, texture, and vibrancy: they may be less effective in provoking engagement, and their stark reductionism may prevent viewers from noticing things (particularly in the background) that may have been significant, but which have been erased by the researcher. However, the idea of stimulus artefacts such as video or images as epistemic objects does cast notions of data reduction in distinctive and productive ways. Rather than focusing on representation, fidelity or completeness, this approach brings the process of reduction to centre stage, and casts the reduction as key in stimulating responses that enable viewers to step outside the everyday and taken for granted. Questions are raised of what is residual and erased, and how this happens. Michael's (2012, 2013) drawings were developed within the context of artistic work, and it will be important to explore questions of their use in other contexts, where aesthetic responses may figure differently and alongside a range of other contact points (such as professional background).

There is a great deal of literature discussing how sociomaterial theorisations provide an ontological base for research, and a conceptual framework to draw upon. In this paper, I have extended this to show how sociomaterial theorisations may be connected with qualitative interview methods,

connecting the notion of stimulus material as an epistemic object with the need to generate dialogue between what happens in practice and the bodies and materials involved. By exploring the problems and prospects of using video as a stimulus for focus groups, I identified the qualities of epistemic objects that support participants to discuss practice in embodied and material terms, and those that get in the way of this process. I suggest that line drawings, with their leaky white space, bold lines, and evacuation of detail, can facilitate engagement with representations of practice as partial, open-ended, and invitational stimuli. In this way, the ontological, theoretical, methodological and representational dimensions of sociomaterial research may be aligned.

About the author
Nick Hopwood is a Senior Research Fellow at the University of Technology, Sydney, an Honorary Research Fellow of Oxford University Department of Education, and an Associate of ProPEL, the Professional Practice, Education and Learning network hosted by the University of Stirling. His research interests focus on learning, within and beyond schools and universities, adopting qualitative methodologies, and drawing on sociomaterial and sociocultural theory.

References
Arney, F. and Scott, F. (Eds.) (2010), *Working with vulnerable families: a partnership approach*, Cambridge University Press, Melbourne.
Bidmead, C. and Davis, H. (2008), "Partnership working: the key to public health", in Cowley, S. (Ed.) *Community public health in policy and practice*, Elsevier, Edinburgh, pp. 28-48.
Clarke, D. (2006), "The LPS research design", in Clarke, D., Keitel, C. and Shimizu, Y. (Eds.), *Mathematics classrooms in twelve countries: the insider's perspective*, Sense Publishers, Rotterdam, pp. 51-37.
Collier, J. (1967), *Visual anthropology: photography as a research method*, Holt, Rinehart & Winston, London.
Creswell, J.W. (2002), *Educational research: planning, conducting and evaluating quantitative and qualitative research*, Merrill Prentice Hall, Upper Saddle River, NJ.
Davis, H. and Day, C. (2010), *Working in partnership: the Family Partnership Model*, Pearson, London.
Dunston, R., Lee, A., Boud, D., Brodie, P. and Chiarella, M. (2009), "Co-production and health system reform - from re-imagining to re-making", *The Australian Journal of Public Administration*, Vol. 68, No. 1, pp. 1-14.
Edwards, A., Daniels, H., Gallagher, T., Leadbetter, J. and Warmington, P. (2009), *Improving inter-professional collaborations: multi-agency working for children's wellbeing*, Routledge, London.
Fenwick, T. (2010), "Rethinking the thing: sociomaterial approaches to understanding and researching learning in work", *Journal of Workplace Learning*, Vol. 22, No. 1, pp. 104-116.
Fenwick, T. (2012), "Matter-ings of knowing and doing: sociomaterial approaches to understanding practice", in Hager, P., Lee, A. and Reich, A. (Eds.), *Practice, learning and change: practice-theory perspectives on professional learning*, Springer, Dordrecht, pp. 67-83.

Fenwick, T. and Edwards, R. (2010), *Actor-network theory in education*, Routledge, London.

Fenwick, T. and Edwards, R. (Eds.) (2012), *Researching education through actor-network theory*, Wiley-Blackwell, Oxford.

Fenwick, T., Edwards, R. and Sawchuk, P. (2011), *Emerging approaches to educational research: tracing the sociomaterial*, Routledge, London.

Fenwick, T., Nerland, M. and Jensen, K. (2012), "Sociomaterial approaches to conceptualising professional learning and practice", *Journal of Education and Work*, Vol. 25, No. 1, pp. 1-13.

Fowler, C., Rossiter, C., Bigsby, M., Hopwood, N., Lee, A. and Dunston, R. (2012), "Working in partnership with parents: the experience and challenge of practice innovation in child and family health nursing", *Journal of Clinical Nursing*, Vol. 21, No. 21-22, pp. 3306-3314.

Fudge, N., Wolfe, C.D.A. and McKevitt, C. (2008), "Assessing the promise of user involvement in health service development: ethnographic study", *British Medical Journal*, Vol. 336, No. pp. 313-317.

Gherardi, S. (2008), "Situated knowledge and situated action: what do practice-based studies promise?", in Barry, D. and Hansen, H. (Eds.), *The SAGE handbook of new approaches in management and organization*, Sage, London, pp. 516-525.

Hager, P. (2011), "Theories of workplace learning", Malloch, M., Cairns, L., Evans, K. and O'Connor, B.N. (Eds.), *The SAGE handbook of workplace learning*, Sage, London, pp. 17-31.

Hopwood, N. (2013a), "Ethnographic fieldwork as embodied material practice: reflections from theory and the field", in Denzin, N.K. (Ed.) *40th anniversary of studies in symbolic interaction (Studies in symbolic interaction, volume 40)*, Emerald Group Publishing Limited, Bingley, pp. 227-245.

Hopwood, N. (2013b), "The rhythms of pedagogy: An ethnographic study of parenting education practices", *Studies in Continuing Education*, Online Preview, available from http://www.tandfonline.com/doi/abs/10.1080/0158037X.2013.787983#.Uh1KNWQmnH0 (accessed 28 August 2013).

Hopwood, N. and Clerke, T. (2012), *Partnership and pedagogy in child and family health practice: a resource for professionals, educators and students*, Lambert Academic Publishing, Hertsellung

Iedema, R., Long, D. and Forsyth, R. (2006), "Visibilising clinical work: video ethnography in the contemporary hospital", *Health Sociology Review*, Vol. 15, No. 2, pp. 156-168.

Keatinge, D., Fowler, C. and Briggs, C. (2008), "Evaluating the Family Partnership Model (FPM) program and implementation in practice in New South Wales, Australia", *Australian Journal of Advanced Nursing*, Vol. 25, No. 2, pp. 28-35.

Knorr Cetina, K. (2001), "Objectual practice", in Schatzki, T.R., Knorr Cetina, K. and von Savigny, E. (Eds.), *The practice turn in contemporary theory*, Routledge, London, pp. 175-188.

Lancaster, J. (2012), "The complex systems of practice", in Hager, P., Lee, A. and Reich, A. (Eds.), *Practice, learning and change: practice-theory perspectives on professional learning*, Springer, Dordrecht, pp. 119-131.

Lee, A., Dunston, R. and Fowler, C. (2012), "Seeing is believing: an embodied pedagogy of 'doing partnership' in child and family health", in Hager, P., Lee, A. and Reich, A. (Eds.), *Practice, learning and change: practice-theory perspectives on professional learning*, Springer, Dordrecht, pp. 267-276.

Michael, M. (2012), "The things of her practice: exploring visual methods for the study of artist's work", paper presented at ProPEL International Conference - Professions and professional learning in troubling times: emerging practices and transgressive knowledges, 9-11 May, Stirling.

Michael, M. (2013), "Visual methodology for the study of practice", paper presented at 8th International Conference on Researching Work and Learning, 19-21 June, Stirling.

Mills, D. and Ratcliffe, R. (2012), "After method? Ethnography in the knowledge economy", *Qualitative Research*, Vol. 12, No. 2, pp. 147-164.

Mulcahy, D. (2012), "Affective assemblages: body matters in the pedagogic practices of contemporary school classrooms", *Pedagogy, Culture & Society*, Vol. 20, No. 1, pp. 9-27.

Mulcahy, D. (2012), "Assembling the 'accomplished' teacher: the performativity and politics of professional teaching standards", in Fenwick, T. and Edwards, R. (Eds.), *Researching education through actor-network theory*, Wiley-Blackwell, Oxford, pp. 78-96.

Nicolini, D. (2009), "Articulating practice through the interview to the double", *Management Learning*, Vol. 40, No. 2, pp. 195-212.

Reid, J.-A., Kamler, B., Simpson, A. and Maclean, R. (1996), "'Do you see what I see?' Reading a different classroom scene", *International Journal of Qualitative Studies in Education*, Vol. 9, No. 1, pp. 87-108.

Rossiter, C., Fowler, C., Hopwood, N., Lee, A. and Dunston, R. (2011), "Working in partnership with vulnerable families: the experience of child and family health practitioners", *Australian Journal of Primary Health*, Vol. 17, No. 4, pp. 378-383.

Schatzki, T.R. (1996), *Social practices: a Wittgensteinian approach to human activity and the social*, Cambridge University Press, Cambridge.

Schatzki, T.R. (2000), "The social bearing of nature", *Inquiry*, Vol. 43, No. 1, pp. 21-38.

Schatzki, T.R. (2001), "Introduction: practice theory", in Schatzki, T.R., Knorr Cetina, K. and von Savigny, E. (Eds.), *The practice turn in contemporary theory*, Routledge, London, pp. 1-14.

Schatzki, T.R. (2002), *The site of the social: a philosophical account of the constitution of social life and change*, Pennsylvania State University Press, University Park, PA.

Schatzki, T.R. (2003), "A new societist social ontology", *Philosophy of the Social Sciences*, Vol. 33, No. 2, pp. 174-202.

Schatzki, T.R. (2010), *The timespace of human activity: on performance, society, and history as indeterminate teleological events*, Lexington, Lanham, MD.

Schatzki, T.R. (2012), "A primer on practices", in Higgs, J., Barnett, R., Billett, S., Hutchings, M. and Trede, F. (Eds.), *Practice-based education: perspectives and strategies*, Sense, Rotterdam, pp. 13-26.

Scoles, J. (2013), "Professional knowing in an emerging sector: understanding the practices of engineers in the renewable energy industry", paper presented at 8th International Conference on Researching Work and Learning, 19-21 June, Stirling.

Scott, D. (2010), "Working within and between organisations", in Arney, F. and Scott, D. (Eds.), *Working with vulnerable families: a partnership approach*, Cambridge University Press, Melbourne, pp. 71-90.

Wenger, E. (1998), *Communities of practice*, Cambridge University Press, Cambridge.