A Visual Methods Approach for Researching Children's Perspectives: Capturing the dialectic and visual reflexivity in a cross-national study of father-child interactions.

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ABSTRACT

The paper presents a visual methods approach from a cross national methodological project that used digital visual technologies to examine the young child's perspective in father-child interactions. The approach combines capturing the dialectic with visual reflexivity. The notion of 'capturing the dialectic' specifically by analysing conflict to gather the child's intention as their perspective, is underpinned by finding the contradictions in a situation of which children are a part. Visual technologies and in particular digital film does this, because it can identify difference, as it observes and captures the dialectic process. Researchers collected between 5-10 hours of film footage and twenty-four film elicitation interviews from young children and their fathers in twelve families within England, Hong Kong, Norway and India. In the study, participants took footage of routine father-child interactions chosen by the children; and researchers sampled the footage for situations of conflict and emotionally charged moments in order to capture the dialectic. Researchers then conducted film elicitation interviews with the children and fathers, which were recorded for the purpose of visual reflexivity. This visual methods approach can support social science researchers to address differences in representation and truth, for a better understanding of a young child's perspective in cross-national projects.

Key words: Visual Methods, Children's Perspectives, Reflexivity, Child-Development, Father-Child Interaction.

INTRODUCTION

Social research methods that examine how young children perceive the world around them through technologies such as digital video and photography, highlight how such approaches are participatory in the sense that they invite children to exercise a level of control in the research process (Thompson 2008; Clarke 2005, 2007; Clark and Moss 2011). However, digital video or photography alone does not provide instant access to a child's perspective (Clarke 2005). Researchers require methodological processes to establish the position from which young children 'speak' (Buckingham 2009), in order to address the challenges of interpretation upon which they make claims to 'truth'. Our response to such limitations raised in the social research methods literature, was to develop a visual methods approach that uses digital visual technologies to support social science researchers in gaining a better understanding of the child's perspective. By digital visual technologies, we mean equipment used to produce and represent images; in particular, digital visual devices and computers that produce and display ethnographic film footage. In our study we were interested in learning and development from the child perspective, as it occurred through interactions with their fathers. We collected data from footage of young children and their fathers in twelve families located in Norway, England, Hong Kong and Mumbai, India (three in each country). Our theoretical view of learning and development is rooted in a cultural historical perspective, and in particular the work of Vygotsky, in which development is associated with change occurring through the dialectic; and here dialectic is understood in the Hegelian sense, as both elucidating contradictions and concretely resolving them (Fleer 2014a). In our study we refer to the concept of 'conflicts' (Hedegaard 2008), as a way of using the idea of difference to capture the dialectic. Accordingly, we analyse video-film footage of young children in conflict with their fathers, to shed light on the child's perspective. To ensure the rigour of our claims, we built visual reflexivity (as an ontological position for the visual, see for example, Pink 2007, 2013; Pole 2004) into the film elicitation interviews with the children by video recording the interviews. We refer to this as child visual reflexivity, because it contrasts to research which uses reflexivity to examine researcher's positionality. In our study the child's or children's visual reflexivity is a way of researching the ways in which young children establish their position, particularly in cross national contexts, from which they produce their perspectives. Our methodological question was:

How can we use visual technologies to explicate how fathers engage in child development within home environments, from the child's perspective, across four national contexts?

In the paper, we demonstrate our visual methods approach. It combines capturing the dialectic with visual reflexivity, in order to gain a better understanding of the child's perspective. Our visual methods approach takes forward the field of using digital visual methods to research children's perspectives, by drawing on the notion of intention as a way of looking at a children's perspectives, and using child reflexivity as a way to establish different positions from which children produce their perspectives in cross national contexts.

The paper divides into three parts. Part one presents the problem, theory and method for the study. Whilst we provide a brief overview of the substantive background, we foreground our digital visual methods approach. Accordingly, we outline the research problem, the ontological and epistemological positions of the visual methods that frame our study, and the research design; that is, how we planned to use visual technologies to study learning and development from the child's perspective, and then access the different positions from which young children's perspectives emerged, across a range of national contexts. Part 2 presents exemplary cases to demonstrate our visual methods approach. In the final part of the paper, we highlight how our research takes the field of visual research methods forward but also the implications of our approach for social science researchers. We maintain that our visual methods approach can support social science researchers to address differences in the problems of interpretation, representation and truth, for a better understanding of a young child's perspective in crossnational projects; and serve as a practical tool for child reflexivity more generally.

THE STUDY - PROBLEM, THEORY AND METHOD

The problem of researching young children's perspectives in studies of fathers and child development

Over the past two decades, both policy and research have shown an increasing interest, nationally and globally, in father-child relationships (see for example, Adler and Lenz 2017; Chawla-Duggan and Milner 2016; Daly 2010; DfE 2015; Hook and Wolfe 2012; Kwok and Li 2015; Rajalakshmi and Navalkar 2012; UNESCO 2011; Williams 2008; Williams 2010). In the area of fathers and child development, longitudinal data from Millennium Cohort surveys in England support correlation studies that identify a relationship between father involvement and child development, even when controlling for mother involvement (Flouri 2005; Flouri and Buchanan 2004). In the US, longitudinal studies reveal positive effects of father involvement on children's cognitive and personality development (Sarkadi et al, 2008), even after taking account of socioeconomic status (Lamb and Lewis 2013). Having said that, nothing in the developmental literature actually suggests that children need something vastly different from fathers than from mothers; but it may be that 'how they get it' could be different (Roggmann et al 2013). At the same time there are leading 'father' researchers who caution against overemphasising differences between mothers' and fathers' interactions with children (Lamb 2010), emphasising the importance of family context instead.

In this project, we were interested in how learning and development occurs in the father-child relationship in family contexts from the child's perspective. Specifically, we wanted to know 'how' the opportunities for learning are created through the father-child relationship in families, and the implications of this for a child's development. This substantive problem was the impetus for our methodological study.

We believed that part of the problem for the limited understanding of the father-child relationship in families and its connections to child development, was because it is methodologically demanding to capture processes of child development, particularly from the child's perspective. Although the child's perspective is now widely acknowledged in social science literature (Christensen, 2004; De Block and Buckingham 2007) as part of recognising children's rights as human beings to be positioned with a voice, it is actually relatively rare in studies of father-child interactions (Milner and Chawla-Duggan 2018); and rarer still in cross-national research. Researching these interactions and their relation to child development, therefore requires contextually and dynamically sensitive methods that allow possibilities for capturing processes of development, the child's perspective in father-child relationships and family situations. Our view of development moves away from a maturational view, which positions the child so that they evolve by age and stage. Instead, we adopt a cultural-historical conception, associated with Vygotsky (1998) where the view of development is not linear, but holistic. From this perspective, the source of development is a dialectical process between what the child demands from their environment and the demands of the social and material environment (Fleer 2014a p.19). Visual technologies hold possibilities to examine this phenomenon, because the technologies themselves present an opportunity to look at the social and material conditions through which the child's perspective emerges. The collection of papers by Fleer and Ridgeway (2014) outlines emerging research into learning and development from this perspective. Their papers demonstrate how digital visual methods allow researchers to observe the dynamics and conditions that inform a child's intention, as an indication of their perspective in studies of learning and development. In our study, we took this further by acknowledging Buckingham's warning that:

...The use ofany method – needs to display a degree of reflexivity: we need to understand how research itself establishes positions from which it becomes possible for participants to "speak" (Buckingham, 2009, p. 635).

Pink (2013) had also advised social science researchers that there is a need to understand technologies that form part of our methods, for the quality of research knowledge produced and the claims we subsequently make. Accordingly, we built on the use of visual technology in emerging studies of child development within our visual methods approach, by combining capturing the dialectic with the child's visual reflexivity, in order to gain a better understanding of the child's perspective.

Capturing the dialectic and reflexive visual representation to explicate the child's perspective

Our research design combined theoretical and methodological concepts using visual technologies. Those concepts were the dialectic taken from cultural-historical psychology (Vygotsky 1998; Hedegaard, 2008, Fleer 2014a), and reflexivity in visual representations taken from the sociological visual methods literature (Pink 2013, Buckingham 2009).

We used the context of activity settings as a unit of analysis for being able to identify situations in everyday family life that involved interactions between father and child:

An activity setting can be compared to a scene in a theatre where both the materiality and the way of interaction reflect tradition in an institutional practice (Hedegaard, 2012, p. 131).

The dialectic in development and explicating the child's perspective

The dialectic is essentially a conceptual process for capturing the understanding of change from a socio-cultural historical perspective of learning and development (Fleer 2014a). It is also fundamental to our understanding of a child's perspective as, methodologically, it is a process that makes explicit a child's intention as it occurs through their interactions with others. For Vygotsky (1993) development (occurring through the dialectic) involves periodd of crisis, or

critical periods, as the learner encounters contradictions between their own psychological development and the demands of the situation. When there is a clash between the personal and social (the crisis point), the child through interaction with others, can begin to envisage things a new way (Thompson and Tawell 2017). Our dialectic approach therefore demonstrates how we are interested in identifying contradictory or conflicting experiences that occur in the child's social situation of development; that is, researching differences between the social and material conditions of a situation and the young child's intention in relation to it; and how the contradictions or 'conflicts' within that situation, propel change, in order to become resolved. Looking at the conditions dialectically, makes it possible to explicate the child's intention. Cole (2003) warns researchers to note that the child's social situation of development from the sociocultural historical perspective is not to be confused with dualistic perspectives, which maintain that the external environment influences a child's development. Instead:

...the social situation of development is a relational construct in which characteristics of the child combine with the structure of social interactions to create the starting point for a new cycle of developmental changes... (Cole 2003: 1).

Digital video observation and computer editing make it possible to examine how opportunities for learning and child development occur from this perspective (Fleer 2014b), because visual technologies can capture the complexity of the dynamics that surround material conditions and social expectations that make up the social situation of a child's development. In this respect, using visual technologies is a way of capturing change without being dependent on time, given that it can observe and capture the dialectic process. This position draws from a body of literature associated with a socio-cultural historical perspective in psychology (see Fleer, 2014; Ridgway et al., 2016). However, sociological visual methods literature (see Pink 2013, Buckingham 2009) also raise the importance of reflexivity when using visual methods with participants; and consequently we believe that reflexivity adds methodological rigour to claims made about the perspectives of participants.

Reflexivity in visual representations

Epistemologically, two positions, the scientific realist and the reflexive (Pink 2013) underpin understandings of visual representations. For those that take a scientific realist position (Wagner 2001), the visual is ontologically speaking, an objective means of representation. Proponents of the alternative position (Pink 2013) argue that using photography and video recording solely to "collect data" overlooks the value of visual ambiguity, and this is realised in a more "reflexive" use of the visual. The position moves away from traditional ideas of knowledge production

associated with scientific realism. From the reflexive position, visual representations are always constructed, and in this respect involves engaging with the participants' perspectives and the ways in which they work with the visual and the data it might yield. From this epistemological position, visual images require understanding the image/footage as a process of construction. Consequently, it is not simply the final film or footage that is important, but the collaborative process by which it is produced (Pink, 2013, p.112); and it is through these processes that possibilities open up for participants (for example, young children or other 'marginalised' groups) to achieve new levels of engagement in the production of knowledge.

Accordingly, we built a reflexive dimension into our research design; where children's visual reflexivity provided an insight into how they were positioned (and possibly re-positioned) as young participants in the project, as they interacted with the subject of the footage, the technologies used and the research situation. The research situation included the presence of the country translator, father (sometimes mother), sibling, UK researcher and country collaborator (in most cases). In this respect, we were able to ask questions about children's responses to the footage as they watched it in relation to the demands of the research situation; and in doing so, identify processes influencing their responses in a cross-national project; and in turn, how that positioning influenced our understanding about their social situation and associated perspective.

Research Design

The visual case studies in this project are of fathers interacting with children in twelve families within England, Hong Kong, Norway and India (three in each country). The families are heterosexual and middle class, living in the same household with at least two children, one of whom at the time of the study was of pre-school age (up to 6); the other, an elder sibling of early years' school age (6-8). We selected middle class fathers as literature maintained that middle class employment allows for more flexibility to accommodate father's parenting roles (Williams 2010), because they are given more control over their hours of work (Kossek et al. 2005). Each country level investigator identified families as middle class in orientation through the criteria of private housing, employment and/or degree level education. Our sample specified age related sibling structures because we were of the view that the elder sibling is closer to the younger sibling's world, but at the same time was a school-aged child, so was familiar with articulating explanations to adults (Fine and Sandstrom, 1988). They might therefore help us to understand the younger child's social situation.

To understand the conditions for the young child's perspective (associated with the dialectic), we asked the following questions:

- 1. What activity settings between father and child dominate practices in each family?
- 2. What does the father expect from his child in these practices?
- 3. How does the child act in the activity settings between father and child?
- 4. What kinds of conflicts occur between different demands of father and child?

(Adapted from Hedegaard, 2008, p.17)

Data collection and analysis

There were five data sets collected for the study:

- Participant film footage/photographs. Participants themselves (children or with their parents) chose and recorded up to ten regular activities of father-child interactions over two weeks.¹
- 2. Telephone interviews with fathers.
- 3. Film elicitation interviews with children/fathers.
- 4. Recordings of the film elicitation interviews (we refer to this as researcher footage).
- 5. Semi-structured interviews with fathers.

The study began with an initial meeting with families to explain the purposes of the project. At the meeting, we discussed the kinds of situations in which children interacted with their fathers, in order to identify the kinds of regular activities children might choose to film. As the project progressed, the initial meetings with the final three families involved researchers helping children to list regular activities they might choose to film; so that there was more thought put into choices they regarded as 'regular'. In elicitation interviews with children, there were instances of footage that some children did not want to choose as 'data' for the project. This is why we make a distinction between footage and data². Overall, we collected between 5-10 hours of combined participant and researcher generated film footage for each family.

Our methodological framework and associated concepts of the dialectic and children's visual reflexivity, alongside our research questions guided our visual analysis. Our starting point was developing a set of themes to interpret the participants' footage. The themes represented activity settings and included, for example, eating together and playing games. We then edited the footage

¹ To introduce the filming task we conducted a children's filmmaking training session with the children in each family and provided them with a set of filmmaking equipment.

² We make a distinction between footage and data; i.e. through our collaborative film elicitation interviews with children, we are able to identify data from footage (c.f. Erikson, 2011).

of activity settings that the participants had chosen and recorded, so that we could capture the dialectic (through the child's social situation) and in turn their perspective.

Now according to Hedegaard (2008):

The easiest way to understand a child's intention is to note when there is a conflict where the child cannot do what he or she wants to do, and cannot realise the projects in which he or she is engaged (Hedegaard, 2008, p. 19).

With this in mind, the UK researcher edited (with a filmmaker) the participant footage of activity settings, by theoretically sampling for conflict. Sampling for episodes of 'conflict' from footage of everyday interaction, gave us a way of focussing on contradictions and a way of analytically arriving at the child's intention through the dialectic; and in turn explicating their perspective. We also sampled for emotionally charged behaviour. The reasons for doing this were that we assume that children can express conflict in verbal and non-verbal ways. That is, a child may express a response to a demand through non-verbal conduct using body gestures, facial expressions and sound. In this respect:

..... The emotionality of the data can give clues and direction for how the data is to be worked and what might be noteworthy...moving beyond pre-established categories ... Emotionality captured as a system of exchanges is made possible through video observation and analysis.... (Fleer 2014a, p. 27)

Validity and the reflexive process in visual analysis

A field assistant in each country recorded the children's responses to watching the sample of footage of interactions with their father. We call the recordings 'researcher footage'. After the fieldwork stage, we matched clips of 'participant footage' to 'researcher footage'. Table 1 illustrates the kinds of questions we asked of the two kinds of footage; in order to help us to understand what was informing our interpretation of the child's social situation. This reflexive process was, importantly, a way of validating our knowledge claims in a cross-national project, about children's representations, the child's perspective in the father-child relationship, and the subsequent opportunities for learning and development, occurring through their relationship.

Table 1: Visual analysis showing the relationship between children's visual representation and children's visual reflexivity³.

³ Examples of the application of these questions are illustrated in the section on methodological issues

Participant footage Samples of conflict, emotionally charged footage of activity settings chosen and recorded by participants	Researcher footage Footage/images of children watching the recording of conflict and emotionally charged behaviour.
What is the social situation of the child? (i.e. the social/material conditions the context creates, including how the child acts and how the father responds)	When the child/children watch the footage of their representations, how do they respond (spoken and body movements) to the content of the images? How does their response influence our understanding of their social situation?
	What factors are informing the researchers' understanding of the social situation of the child?

Ethics

The lead university researcher obtained ethical approval for the project generally through her own university systems and followed the British Educational Research Association guidelines. She also sought ethical approval from overseas collaborating institutions linked to the study, who agreed in writing that ethical approval was satisfactorily obtained.

In terms of fieldwork processes, both parents and children⁴ signed consent forms in an initial meeting with the researchers, in which we addressed the purposes of the project and how we planned to collect data from footage. At the end of the elicitation interviews, children chose which topics and associated data they wanted represented in the project and we respected any requests not to use certain data. We are aware of this bias in substantive issues, but it is superseded by the fact that the purpose of the project was primarily about developing a visual methods approach. We discussed potential onerous concerns about participatory research with children in families when both parents are in full time employment. We also discussed specific ethical issues about data storage being password protected through university computer systems, and in particular, how we would secure confidentiality, anonymity and availability of visual footage. As the project continued, we managed the latter ethical issues on an ongoing basis, at a practical level with particular reference to dissemination. For example, whilst all names remain anonymous because we gave pseudonyms to all participants; the team spent considerable time discussing whether to anonymise faces⁵. To resolve our concern when compiling this article, we sent out the following email to three of the mothers and fathers whose children are represented in the illustrations:

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⁴ Children signed using child appropriate forms that we compiled, translated and discussed with them.

⁵ There was considerable discussion amongst the research team as to whether we should blur the faces of children, because on the one hand we wanted to adhere to the norms of complete anonymity; but on the other hand the issues we were illustrating (that facial expression and movement also communicate

Dear xxxxx

Following on from my last email (and after some team discussion), I am writing to you to ask if you would mind if the photos are used without blurring (see attached).he reason is this... the academic article we are submitting is about how we work with young children in overseas research, to see things though their eyes. Often young children express their emotions through their faces and gestures rather than with words. The problem is that in the blurred photos we cannot see their emotional expressions, where they are looking etc. Since as it is not sensitive data I thought I would ask you if you would allow us to use the photos without blurring. Whatever your preference is, I will respect it of course. As always I will maintain all confidentiality by ensuring no real names or contact details are released.

I look forward to hearing from you. Many thanks once again Xxxx (UK researcher)

Parents responded by giving permission to show faces, for example, one parent wrote:

Dear xxx,
Good morning!
Thanks so much for your effort on this project.
We give our consent for you to use the photos without blurring.

Thanks & have a great day! Kind regards, Xxx

One concern was the possibility of images appearing on the internet to members of the public, and those concerns were alleviated once we clarified we were using the images for an academic audience in an academic journal:

Hei xxx

Thank you for the answer. It gave us the answer we were wondering about. It is ok for us that you can publish your article without blurring. We was just sceptic if it was going in public on the internet. Will we be able to see anything of the finished project?

Best Regards xxxx

In all cases, final responsibility for the data lay with the lead researcher and her institution.

METHODOLOGICAL ISSUES

The methodological issues raised in the study were young children's confidence, young children's attention, the emotional dialogue between young children and researchers/translators, and the role of siblings and fathers in the research situation. These issues helped us to validate our claims

messages about children) needed us to show faces. In the end, as the email conversations with parents indicate, the team agreed that since the data was not sensitive, we would ask the parents if they would give us permission to show faces in this article and they agreed.

about the child's perspective and our understanding about their opportunities for learning and child development created through father child-interactions. In turn they demonstrate the key claim of this article, namely that we have developed a visual methods approach which gives social science researchers a better understanding of the young child's perspective in cross-national projects. The following extracts demonstrate the methodological issues:

Hong Kong Family Family 2 ⁶ – Mr and Mrs Ma: Activity setting playing games (board games)
There are two children in Mr and Mrs Ma's family in Hong Kong: Ben (aged 7) and Brenda (aged 5). Both children lead active lives. They attend music, art and swimming lessons. Ben also attends language lessons and is part of the Olympiad mathematics team at school.

In the following example, the participant footage is of an activity setting created through Ben, his younger sister, Brenda, and their father. They are playing a game of marbles, where different coloured marbles are allocated to players, and the players roll their marbles down a self-assembled wooden track. The winner is the player whose marble reaches the end of the track first. We showed an extract of 'conflict' during this activity setting to the children. The footage represented Brenda protesting; evident in the way she raised her voice and gestured (see image 4.2a). Image 4.2b illustrates Brenda and Ben watching the film clip of the protest whilst in the sitting room of their flat in Hong Kong. Together they stand at the sideboard with the researcher who kneels to watch the footage on the laptop with them. The translator, CC, kneels close by and both parents sit on the settee at the back of the room, just being able to view the computer screen. We record the children's responses to the footage on a digital camera that stands in the corner of the room, and this will be the 'researcher footage'.



Image 4.2a Conflict and Brenda's activity setting: Playing games



Image 4.2b Brenda asserting volition: Researcher footage

We watch the film clip of the 'protest'. We reach the point in the footage where we can see Brenda is vexed and we can hear it in her voice and see it in her body language. In the following three

⁶ Family numbers were given to the data at the time of the study

clips from the researcher footage, the elder sibling explains why he thinks his younger sister protested (Clip 1); the younger sister expresses why she protested (Clip 2); and the father tells us what he thinks causes the protest and how he resolves it (Clip 3).

Image/ Clip time	Verbal transcript
Clip 1 12.13- 14.02	R.: Oh so Brenda's a bit cross about something. What's she cross about?' Ch. Elder brother (via translator): Haha oh! Because it should be her turn but then Daddy rolled the marble first R.: So then how is the problem solved? Ch. Elder brother (via translator): Daddy is the loser R.: Oh no! Ch. Elder brother (via translator): He lost the game
Non-verbal	conduct – observation transcript
Ben replies	to my questions and points to the screen.
Brenda is w	atching the film. She is silent in her response to my questions.

(Researcher generated footage: Hong Kong Family 2 (Mr and Mrs Ma), Clip 1: Playing board games)

Image/Clip	Verbal transcript	
time		
C1: 2	R.:What is Daddy doing? What does Daddy want?	
Clip 2	Ch. Younger sibling (via translator): Daddy is telling Ben to share the red marble,Ben	
14.02 - 17.12	always takes the red marble	
1.102 17112	R.: Aaah! So is Daddy helping you to be fair?	
	Ch. Younger sibling (via translator): Yeah	
	R.: Ah! Weren't you being fair before? Wasn't it fair before?	
	Ch. Younger sibling (via translator): So brother always took her red marble	
	R.: Sorry?	
	Translator: No it wasn't fair because her brother always took the red marble	
Non-verbal conduct – observation transcript		
Ben does not reply to the question. Brenda now replies, speaking for the first time, whilst watching the footage.		

(Researcher generated footage: Hong Kong Family 2 – (Mr and Mrs Ma), Clip 2: Playing board games)

Image/Clip	Verbal transcript
time	
Clip 3	R. Is that right?
	Father: yes because there are only six marbles and only one is red in colour; and some are
14.02 - 17.12	two, blue and
11102 17112	Ch. Elder brother (via translator): There's yellow one, green,can't remember the colour
	of the last one (gesturing counting on fingers)
	R. So Daddy made it fair?
	Ch. Younger sister: Yeah
	R.: Ah! How did Daddy make it fair?
	Father: (speaks to the children in Cantonese)

Ch. Younger sister (via translator): daddy says 'that now they take turns'
Father: ...now they should take turns, this time you take the red and next time it should be Ben'

Non-verbal conduct – observation transcript

Ben holds out his hands counting the numbers of colours of each marble aloud Brenda asserts herself physically and verbally – standing straight, facing the translator directly and speaking loudly.

(Researcher generated footage: Hong Kong Family 2 (Mr and Mrs Ma), Clip 3: Playing board games)

Analysis of the participant footage suggested the need to examine the role of the elder sibling in father–child interactions in the family, and how the sibling relationship might influence the young child's perspective and opportunities for learning and development. At the same time, analysis of the researcher footage indicated the supportive presence of the father when the elder brother was present in the research situation. Brenda's responses suggested that that she had a clear understanding of fairness, precisely because she recognised it in the activity setting. Her verbal and non-verbal conduct seemed to demonstrate a sense of volition created in the research situation, which arose when the researcher's question focused on the 'father's expectations' in clip 2. Brenda spoke up and became assertive when her father explained his expectations. It is possible that the father's supportive presence and his responses actually acted as a stimulus to Brenda's later response in the researcher footage, in which she expressed her objection in no uncertain terms to her elder brother's behaviour, which she saw as unfair in the participant footage that she observed.

Hong Kong Family 1(Mr and Mrs Lam): Activity setting - playing games (tennis):

Mr and Mrs Lam in Hong Kong have two children, Anna (aged 7) and Alex (aged 5). Alex is an active child, who likes to move about rather than sit still. In the following illustration an activity setting is created through a game of tennis between Alex and his father. His father is a qualified tennis coach who plays regularly, sometimes coaching his son. The extract sets the scene in which Alex is watching the footage as part of the film elicitation interview:

Alex is sitting with his elder sister Anna, watching the activity setting 'Playing Tennis'. We are in one of his father's teashops. The children are sitting at a table in front of the laptop computer. The researcher from England and a Cantonese speaking Hong Kong translator (CC), sit beside them. We watch and stop the footage at certain points, to ask questions to find out what is going on in the footage, in order to understand Alex's social situation. We record the responses and interactions on a digital camera, which is set up in the corner of the shop on a tripod (Visual notes:

Researcher footage of elicitation interview: HK Family 1 (Mr and Mrs Lam), Playing Tennis).

The problem of developing attention, the role of the translator and emotional dialogue

At the outset, it seemed that Alex did not want to give the footage his attention; in fact, the researcher footage indicated that he was more interested in working with the equipment as the following image and extract illustrates:

Image/clip time	Non-verbal –observation transcript
Image 4.1a Alex's	In the foreground, Anna (the elder sibling) watches the participant
attention	footage and talks about what she sees. Anna speaks in English for
	much of the time, and is therefore able to speak directly to the
Clip 1:00:00 - 1:31	researcher from England.
	In the background - Alex is trying to set up equipment and look at us through a camera with tripod; his father tries to stop him from fiddling with the equipment and Alex starts to shout; at which point his father lets go and mother steps in In the background a protest arises once again over the equipment

(Researcher footage: Hong Kong Family 1 (Mr and Mrs Lam), Clip 1)

The time recordings of the researcher footage demonstrated that only after a period of watching the participant footage did Alex actually begin to give attention to it and expand on his explanations. The researcher footage indicated that his attention to the research situation seemed to begin through an emotional dialogue between the translator and the child, and with this came more attention to the footage and detail about the conditions surrounding the activity. In building up this 'emotional dialogue', illustrated through the non-verbal conduct, Alex's attention seemed to become more sustained and qualitatively different; he also demonstrated this by expressing himself in two languages, as the following clip illustrates:

Image/ Clip time Alex, the translator and emotional dialogue Clip 6-7:	Verbal transcript
04.46- 10.30	



R.: So tell me Alex, what's going on?

Ch. Alex (via translator) ...Oooh! I hit the ball so it's going er er diagonally and so Daddy almost couldn't catch the ball.

R.: Again..... Child-Alex: Haha

R.: so are you trying to catch Daddy out? ...beat Daddy? Is that what

you're trying to do? Child Alex: Yees

R.: What's happening there?

Child Alex: RESPONDS IN ENGLISH

Child Alex: Green!

R.: Green. So you use different coloured balls ... And how do you decide which ones to use?

Ch. Alex (via translator) Oh...daddy and I decide together

Non-verbal conduct – observation transcript

Alex watches the footage, talks and using his hands to express

Alex speaks very loudly and quickly as he watches this footage informing us about what was going, as we all watch

He whispers in CC's ear and then in the researcher's ear, so that dad does not hear him say that he was trying to catch him out in the game.

(Researcher generated footage: Hong Kong Family 1(Mr and Mrs Lam), Clip 7: Playing tennis)

Not only does Alex express himself with verbal language, but through gesture. For example, he provides a physical demonstration of how he often shuts his eyes whilst holding up his arms to hit the ball because 'he's a bit afraid...'

Image/ Clip time	
Image 4.1f Alex, the translator	
and emotional dialogue (iv)	

Verbal transcript

Clip 7: 10: 25 -10:30



Ch. Alex (via translator)

Oh....I close my eyes and I hit the ball and then I open my eyes again and look back

R.: Oh is that what he did just now?

Ch. Alex (via translator): Yes; I always do this

R.: Why is that?

Ch. Alex (via translator): Oh!....because the ball almost

hit me....I was a bit afraid.......

Non-verbal conduct – observation transcript

Demonstrates visually with hands clasped above his head as he shows how he hits the ball with his eyes closed

And then whispers what he did into the translator's ear.

Demonstrates how the ball was coming in his direction

(Researcher generated footage: Hong Kong Family 1 (Mr and Mrs Lam), Clip 7: Playing tennis)

As Alex starts to give the participant footage his attention, he tells the researcher about the conditions of the activity setting they have created; for example, how father and son make decisions together; how he tries to catch his dad out, and talks about what he is watching beyond the literal now, referring to the past. The father interview also suggests that working on enjoying the game, alongside calibrating skill to maintain his son's attention were opportunities for learning and development.

Methodologically however, a key issue occurring in the process of understanding the child's social situation was the emotional dialogue created between the translator and young child. We maintain that the translator played a key role in developing an emotional dialogue required for the younger child to give attention to the footage. Both Alex's verbal and non-verbal conduct embodied his final responses. This enabled the overseas researcher to access a deeper understanding of the conditions informing the child's social situation, and in turn, his perspective.

The final example is taken from a family in Norway.

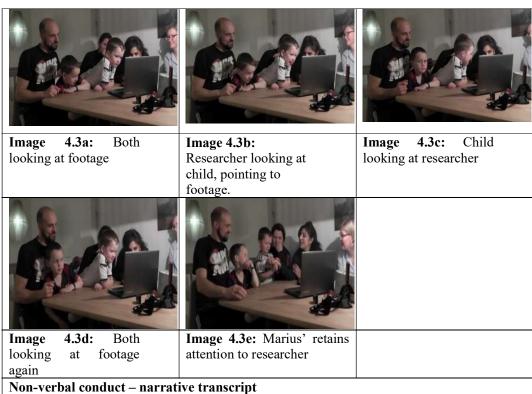
Norway Family 2: The problem of sustaining attention – building attunement and a focus of attention

The two boys in Family 2 in Norway, Henrik (aged 6) and Marius (aged 4), live an active family life, with parents who both work full time. The activity settings in their 'participant- footage' with their father were often of physical activities, with many of them outside the home. They included for example: playing football, going for walks on the ice, bringing in logs from outside and lighting the log burner, playing physical games indoors and eating together as a family.

One of the challenges the researcher from England faced when watching their footage with them was 'sustaining' their attention. In order to understand how this was occurring, both the

researchers from Norway and England examined the researcher footage carefully for differences in moments of attention and non-attention, asking the question, 'what is influencing the child's sustained attention?'

In the following example, the elicitation interview begins with both children watching the footage of their activity settings intensely with attention, whilst we sit at the dining table. The researcher from England sits next to the younger brother, Marius, both sitting at the same level; the translator sits opposite the children, and mother and father sit beside Henrik. The researcher footage draws attention to the idea of 'shared attention' and a 'triangle of communication':



As we continue to watch the footage together, Marius the younger brother responds to the participant footage by watching it. He does not speak. His elder sibling interprets the footage for me verbally as we all watch it (Marianna the translator translates). Marius and I both look at the footage as Henrik talks. I look at Marius, pointing to footage, smiling; he looks at me and we both return our gaze to what we are watching. I look away to ask questions to Henrik (elder brother), and Marius plays with my bangles on my wrist.

(Researcher generated footage: Norway Family 2, Images: Attention and non-attention)

The non-verbal narrative transcript of the researcher footage revealed that in this illustration, Marius' response to the footage occurs within 'a triangle of communication'. However, the researcher breaks the triangle at the point when she asks questions to Henrik, his elder brother. Marius tries to reinstate the research-child relationship (playing with the researcher's bangles

on her wrist), but the attunement that Marius showed he felt earlier is no longer aligned to the researcher and footage; his attention to the footage is lost. We would argue that in order for a child to sustain attention and continue to respond to the footage, it is necessary to meet the attention of the child; akin to forming a contract. The notion of 'building a focus of attention' was also an issue that occurred in Family 3 in Norway, and in Family 2 in India; where the sibling structures were particularly young (2.5 and 5 years respectively in each family). In family 3 in Norway, there were a number of occasions in which the little boy (Magnus aged 5), liked to show the researcher his possessions; and this functioned as an indication of his focus of attention. In Family 2 in India, Priya (5) would not speak, but when the researcher asked her to use her toy props to demonstrate playing archery with her father, she began to respond verbally and gesturally to the researcher and the footage, we were watching together. In this way we were building a focus of attention, in order to access information about the different demands of the situation and in turn the child's social situation in the footage.

DISCUSSION

The findings of our study contribute to developing a methodological process for using visual technologies to capture the young child's perspective in their interactions within family contexts, in cross-national projects. In this cross-national project, our edited film from participant footage of father-child interactions identified situations of conflict in children's activity settings, allowing us to explicate the young child's intention in their visual representations of father-child interactions in different national contexts. Watching the conflicts acted as a stimulus in elicitation interviews (Tobin et al., 2009) with young children and their families for them to verbalise their explanations. We recorded young children's responses to the stimulus, which we call, researcher footage, and the footage provided us with a reflexive visual research design, because it enabled the international research team to ask questions about the interaction between the young child, the subject of the footage, the technologies used and the research situation in a cross national project. Such questions demonstrate a rigorous research process validating how we arrive at our claims about the child's social situation of development, and in turn the child's perspective in the father-child relationship.

In the paper, we have presented exemplary cases to demonstrate certain methodological issues. First, we found that gaining and sustaining the attention of young children was limited. Second, that the emotional dialogue between the researcher/or translator and the young child, was a platform for building and sustaining attention to respond to footage. Finally that the presence of other family members in the research situation, such as an elder sibling or the father acted as a

way of helping the young child to understand the demands of the research situation, and in turn to respond to the film footage. In conducting the critical process that arrives at these methodological issues, we recognise that in all cases, children were responding to a second stimulus in the research situation, rather than the first stimulus, the footage. The idea of a second stimulus is drawn from the Vygotskian theory of 'double stimulation' in which experiments were conducted by Vygotsky (1929/1979), and Leont'ev (1932/1994), where children demonstrated how they converted external assistance into means that led to task success. Our visual methods approach which uses children's visual reflexivity demonstrated the presence of a second stimulus, for example, the emotional dialogue with the translator /researcher and/or the presence of the elder sibling/father in the research situation. These are all examples of external assistance helping the young children to respond to the footage. Our researcher footage helped to make those examples visible, and in turn our understanding of the factors influencing how we were arriving at our claims about the child's perspective.

Within the psychological literature about young children's ability to be attentive (Vygotsky 1929/1979, Leont'ev 1932/1994), there is a perspective which maintains that the ability to be attentive is learnt socially. That is, attention only emerges because of people surrounding the child, who use means (such as speaking) to direct the child's attention. However, in doing so, they are showing the children how to 'do' attention. So attention can be understood as an act of agency, amongst other people. There are two ways in which the notion of young children using 'means' as assistance in the research situation to master attention applies to our methodological reflections. First, when watching the researcher footage for patterns of responses, we found that the initial response of young children to participant footage (first stimulus), was limited verbally. We did however find that the young children invariably always responded (verbally and nonverbally) to the elder sibling's linguistic response. In this respect, we maintain that the elder sibling's responses acted as a 'second stimulus', to direct the younger sibling's attention, from which the younger children could master how to respond verbally to the research situation. Whilst this was sometimes a situation of conflict, the process also demonstrated a familiar/known relationship, where the competence from the elder sibling is demonstrated to the younger child, and in turn presents an opportunity for them to contribute to the dialogue around the footage; because they have seen how it is done or because they disagree with their sibling. In this respect, the elder sibling's response effectively functions as a second stimulus that explicates the younger child's perspective.

Similarly, when there was an emotional (non-verbal) response/dialogue between the researcher or translator and the child, when watching participant footage; the young child responded to the

emotional dialogue and this in turn generated and sustained attention. In this respect, we maintain that the emotional dialogues also acted as a second stimulus.

Stern's (1985)⁷ micro analysis of film and video (of mother-child interactions) refers to the idea of emotional dialogue, using the idea of attunement where:

....attunement shifts the focus to the quality of feeling that is "behind" the behaviour. It treats the feeling quality as the referent, and the overt behaviour as one of several possible expressions of the referent... (Stern, 1985, p. 161 cited in Beebe et al., 2003)

This implies that for researchers it is imperative that we consider how we make the young child 'feel' in the researcher/ translator—child relationship because this will determine the behaviour of the child. Attunement as part of creating that feeling is emotional dialogue; it is non-verbal and we maintain that it is vital in generating and sustaining attention; in order to arrive at the child's perspective.

CONCLUSION

Non-verbal aspects of communication are important when working with young children and in developing a cross-national methodology. If as researchers, we do not have the same national language as the young child, then visual interactions through for example, the emotional dialogue - shown in attunement and shared attention - become even more important in the quest for understanding the child's social situation and their perspective. We are aware that we could delve deeper into the visual side of interactions for example, by examining the significance of human and artefacts in how interactions occurs. Nonetheless, our examples demonstrate a visual methods approach that achieves better understanding of young children's perspectives, and it does so by working on research designs that combine capturing the dialectic with children's visual reflexivity. Children's visual reflexivity allowed us to demonstrate that there were second stimuli at work informing how we were interpreting children's perspectives. We conclude that the examples we give as 'second stimulus' are not exhaustive and that researchers may well find other examples, which function as a second stimulus, that trigger child's response to film footage. However, we do maintain that what the responses to limited verbal explanation and limited attention indicate is that there is always a second stimulus at work. The second stimulus is not always explicit in a naturalistic research design, but can be located through a visually reflexive analysis of the footage with children. Locating and understanding the second stimulus provides a

⁷ Daniel Stern is a key figure in the tradition of microanalysis of film and videotape of non-verbal mother-child interactions in home environments.

critical position for researchers, upon which they might make subsequent claims to knowledge about the child's perspective; and in our study about the child's perspective in terms of their intention as captured through the dialectically informed footage of their interactions. It is a critical position in the sense that it enables the researcher to ask questions about what is influencing our understanding of the child's perspective in their interactions with others. It also helps researchers to consider the extent to which a second stimulus might be enabling the young child to participate more fully in the research process, because it helps them to draw upon the higher mental functions of attention, language and volition. For social science research conducted in a global context that uses images to represent research findings, a critical appreciation of how we use film footage in our research with young children to arrive at their representations of phenomena, can better enable an understanding of the status of the knowledge that collaborative, cross-national research produces. Differences in verbal language can too often get in the way, but we maintain that using visual technology can get across those differences in cross-national projects. This paper demonstrates a visual methods approach that does just that. By using visual technology to combine capturing the dialectic and children's visual reflexivity, it is possible to research and establish the different positions from which young children 'speak'. This is a visual methods approach that can support social science researchers to gain a better understanding of young children's perspectives, through the notion of intention, and serve as a tool for children's visual reflexivity more generally.

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