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## **Head mounted, chest mounted, tripod or roaming? Ontological possibilities for doing visual research with children and GoPro cameras.**

**Lucy Caton and Abigail Hackett, Manchester Metropolitan University**

### **Abstract**

In a context in which possibilities for video based research with children are proliferating, this chapter shares insights from experimentation and analysis of research with children employing the different configurations of a GoPro camera; head-mounted, chest-mounted, on a tripod and 'roaming' around the classroom in children's hands. In addition to describing some of the methodological considerations involved in these different GoPro configurations, we argue for a need to further theorise the visual ontologies that underpin the choices and production involved in video based research with children.

Situating our thinking within the ontological turn, particularly the scholarship of Deleuze and Guattari (1987), we consider empirical examples of GoPro data collected during an after school computer club. Viewing the action through unexpected angles provided by the GoPro serves to 'push' against traditional visual ontologies, as the entwining of hands with flows and materials seem to be foregrounded. In our analysis, we emphasise the unfolding nature of the interactions between children, camera and space. These unfolding, fleeting moments are often-overlooked aspects of classroom interactions and jamming or breaking in the action offer lines of flight that depart from well-established molar lines, repositioning both child and spectator of the video within the action. These re-theorisations of video based research with children offer an opening up of potential for different understandings of how learning emerges out of the movements and rhythms of bodies, formlessness and chaos.

### **Author bios**

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Dr Abigail Hackett is a Research Fellow at Education and Social Research Institute, Manchester Metropolitan University. Her research is focussed on young children's literacy practices, with a particular interest in the role of place, materiality and the body in young

children's lives. Abi's ethnographic work is mostly located in community and non-formal learning spaces. She has published extensively in international academic journals, as well as co-editing a book, *Children's Spatialities. Embodiment, Emotion and Agency*. Abi is currently a British Academy Postdoctoral Fellow (2017-2020) investigating the emergence of literacies in very young children.

## Preamble

This chapter shares experimentation and analysis of the different configurations of a GoPro camera, the sorts of intra actions and videos produced through these configurations, and how the videos can take on a life of their own in research with children and digital media. We argue that in a context in which the choices researchers have about how to use video and the quantities of video produced are both increasing, there is a need to further theorise the visual ontologies that underpin these choices and this production. Drawing on the scholarship of the ontological turn, which critiques the separation between being and knowing, we highlight the importance for visual researchers to think through these ideas and resist the lure of 'naive empiricism' (Elwick, 2015). In particular, we put to work notions of life lived along lines (Deleuze and Guattari 1987, Ingold 2007) to re-think visual methods that render both 'data' and 'researcher' in particular ways. Instead of offering a recipe, our analysis prompts researchers to question how the camera and video also have agential power and to interrogate child and researcher positions that do not necessarily produce predictable or similar results for others.

In a context in which researchers are experimenting with the fast-developing potentials of ever smaller and more sophisticated video cameras, that can be worn, mounted or incorporated into the action in a number of ways, this chapter has two aims. Firstly, we will share experiences from the first author's fieldwork, in which GoPro cameras were used in an after school computer club and in a number of different ways, over the course of a year; head mounted, chest mounted, on a tripod and 'roaming'. This gives a starting point for considering the unique affordances and constraints of each of these options. Further, we consider what an ontological conceptual framework can contribute to understandings of exactly what is taking place when cameras, children and researchers come together in this kind of scenario.

Methodological possibilities have never been more wide ranging for researchers wanting to provide an account of children's engagement and improvisation with creative digital media. The increasing availability of small, affordable video cameras for educational research has dramatically changed the field over the course of the last twenty years (Flewitt, 2006; Rose, 2010; Wilson, 2017) in a number of different directions. For example, participatory approaches have embraced video as a way for children to tell their own stories or communicate their own perspectives (Lomax et al, 2011; Pahl and Pool, 2011; Mills et al, 2014), including across different contexts or whilst 'on the move' (Christensen and Cortés-Morales, 2015; Kullman, 2012; Powell, 2017). More naturalistic or ethnographic video data

has undergone fine grained analysis to understand the role of the body in children's communication (Flewitt, 2006; Hackett, 2014) and wearable cameras enabling an 'automatic' capturing of still or moving images over longer periods of time have generated large datasets (Wilson, 2017). All of these changes in research methodologies have taken place in a context in which the visual mode seems to have an increasing significance in children's lives (Rose, 2016; Stirling and Yamada-Rice, 2015) and digital technologies have become an everyday and ordinary aspect of daily life (Riviere, 2005; White, 2009).

Key debates within the methodological literature on use of video in educational research tend to focus on the impact of video recording, the extent to which video data can be considered naturalistic, and the partiality of video as an account of the field (see Jewitt, 2012 for a summary). In terms of research with children, debates centre on levels of children's participation and agency within this kind of research, along with the ethical issues implicated (Robson, 2011). However, also important are considerations about the visual ontologies that lie behind the making and viewing of video data in educational research. As video footage becomes increasingly common place, and easily obtained during fieldwork, researchers need to be cautious about "the risk of naïve empiricism" (Elwick, 2015:325); it is all too tempting to consider video footage as either comprehensive record of the field, or as-comprehensive-as-possible (hence debates around partiality of video data). As de Freitas points out, this is reflected in dominant approaches to dealing with video in educational research, which tends to focus on "viewing the video attentively, describing the data, identifying critical events, transcribing, coding, constructing a storyline, and composing the narrative" (2016:413). Elwick (2015) recommends a focus on the intersection between participants, images and audiences in order to avoid video as empiricism. As Harwood and Collier (this volume) also point out, there is a need to consider both the agency of the video camera and the resultant video data itself. Video data is not just reality captured in a more efficient and convenient format. Video data itself takes on a life of its own; it can evoke the emotions of the field (Pink, 2009), or grab the researcher with an intensity and affect (Millei and Rautio, 2016). Describing a research team viewing video data from a school-based ethnography, MacLure (2010:282) writes

[S]ome detail – a fieldnote fragment or video image – starts to glimmer, gathering our attention. Things both slow down and speed up at this point. On the one hand, the detail arrests the listless traverse of our attention across the surface of the screen or page that holds the data, intensifying our gaze and making us pause to burrow inside it, mining it for meaning. On the other hand, connections start

to fire up: the conversation gets faster and more animated as we begin to recall other incidents and details in the project classrooms, our own childhood experiences, films or artwork that we have seen, articles that we have read.

### **Visual Ontologies in an after school computer club**

These issues of visual ontology, the need for theorising video as an encounter between participants, technology and researchers, seem to be becoming ever more pressing in current contexts of educational research. For example, researchers have more choices to make from a greater range of possibilities for how cameras could or should be used during fieldwork. Quantities of video data produced during educational research are increasing, and these quantities need to be dealt with in a rationalised and practical way. Additionally, in a context in which research is increasingly likely to be inter-disciplinary, researchers may not share ontologies with regards to video data (Leder-Mackley and Pink, 2013).

We draw on data from the first author's forthcoming PhD thesis, located in a primary school digital skills club based in the North West of England, where the action was filmed using distinct GoPro camera perspectives (head harness, chest mounted, roaming camera and static)<sup>1</sup>. The cameras used during the fieldwork were GoPro Hero HD®, designed mainly for the extreme sports market on account of their curved aperture and wide field of view, but selected here due to their small size, rugged design, rubber waterproof casing, variable mountable configurations and high definition output. We challenge the dominant realisms that continue to regulate educational video research and to theorise video that is co-curated through child and camera entanglements. Video data was collected during eleven months of participant observation in an after school digital skills club. The children played with Little Bits Technology, which is a simple, battery operated electronic circuit, consisting of brightly coloured blocks that clip together in order to operate various bells, lights, counters and switches as part of the circuit. The pilot study preceded the main study and took place over a four-month period at the same location. The table below summarises when the field work took place, and which of those months the GoPro camera was used in a particular way (head harness, chest harness, static, and roaming device). Highlighting the patterns, routine and changing use of the camera is important to provide a sense of the developing nature of the research design, influenced entirely by the children's changing needs and desires.

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<sup>1</sup> Throughout the discussion of fieldwork, methodological decisions and analysis in the chapter, 'I' refers to first author Lucy Caton.

Field Work (Dates)	Head Harness	Static (tripod)	Chest Harness	Roaming Camera
<u>Pilot Study</u> April 2016 – July 2016		X		
<u>Main Study</u> Sept 2016 – Oct 2016	X	X		
Oct 2016 – March 2017		X	X	
April 2017 – June 2017		X		X
June 2017 – July 2017				X

### **Living life along lines: ontological theory and video-based research**

By the ontological turn, we refer to a diverse and burgeoning body of scholarship rejecting a Cartesian division between being and knowing, that pushes the limits of how to understand ‘humanness’ and more specifically the ideas of subjectification. For example, is it possible to think about the world beyond normativity by exceeding established practices, patterns and ways of thinking about the human. In this chapter we draw on the philosophies of Deleuze and Guattari (1987), in which the notion of the human as a singular, independent and bounded entity is contested. Additionally, we draw on posthuman theoretical work which understands a ‘flat ontology’ in which discourse does not sit above matter; rather the two are mutually implicated (Barad, 2007; MacLure, 2013). Methodological implications of the ontological turn are wide ranging, and include a critique of the researcher as capable of standing outside of data / method, in order to collect, survey and answer an autonomous research question (Lather and St Pierre, 2013; Springaay and Truman, 2017) and a critique of data as static, readable, or in any way separate from the world (Holmes and Jones, 2013).

De Freitas (2016:555) argues that one of the greatest tensions in video based educational research is its interest in temporal chunking, in halting time in order to make “‘an instant’ visible and analysable”. She traces this “tension between his aim to capture the continuous flow of movement and his desire for a legible record of the event” (2016:558) from the origins of cinematic practices in the 19<sup>th</sup> century. Responding to these tensions, we turn to Deleuze

and Guattari's (1987) and Tim Ingold's (2007, 2008) theorisations life as lived along lines. This notion of lines, which are ongoing, in constant movement, and entangled, sits in opposition to conceptualisations of life as a series of fixed temporal or spatial points, and thus helps us interrogate visual ontologies during video based educational research.

Ingold (2007) conceptualises life as lived along a series of lines, setting out his thesis for an anthropology of the line thus;

As walking, talking and gesticulating creatures, human being generate lines wherever they go. It is not just that line-making is as ubiquitous as the use of the voice, hand and feet – respectively in speaking, gesturing and moving around – but rather than it subsumes all these aspects of everyday human activity and, in doing so, brings them together into a single field of inquiry.”

Ingold, 2007:1.

Lines are also an important conceptual tool for Deleuze and Guattari in their book *A Thousand Plateaus*. “Individual or group’, they write, (1987:223) ‘we are composed of lines ... or rather, bundles of lines”. There are lines of life, lines of writing, lines productive of variation in lines of life or writing, lines of luck and misfortune, and so on (1987:215). Deleuze and Guattari (1987) explain the ‘molar line’ is a line that holds in place the status quo. We might understand the ‘molar line’ as a physical structure of some kind that is recognisable through its associated signs, regimes and symbols. For example, an institutional structure, such as a university, is characterised by student timetables, assessment schedules and professional academic hierarchy. Molar lines might also form internalised discourses (for example, what it means to carry out good/bad research practices in certain academic fields). Ways of ‘doing’ visual research with child participants are often constrained by ‘molar lines’ which tend to inhibit ways of ‘seeing’ and thinking outside of the status quo. Some of these ‘molar lines’ are at the level of the academic institutions, where there might be a lack of resources restricting the work of specific research pursuits. Other ‘molar lines’ are those that visual researchers internalise, such as deep set beliefs regarding ideas of object and subject. These internal beliefs are often grounded in human-centric notions that render visual ‘data’ as something that transmits information (the object), often used as evidence for the researcher (the subject). Navigating these internal/external constraints means that much visual research consists of these day to day practices, and thereby supports the status quo or the ‘molar line’. This in turn creates visual research that is



characterised solely by the researcher's interpretations and conceptual understandings, often driven by external research aims and desires.

### **Lines of flight**

Deleuze and Guattari (1987) also describe, interchangeably, 'lines of flight' and 'lines of becoming', viewing these interwoven lines as a 'rhizome' where boundaries are never absolute and nothing is ever contained or modular. There are unpredictable 'lines of flight' that serve to disturb or 'deterritorialize' (Deleuze and Guattari, 1987) those 'molar lines'. As we will outline in this chapter, the chest mounted camera and the roaming camera both served at times to initiate break out points from the 'molar line'. 'Lines of flight' are incited, within those child-led moments of improvisation with the camera. For example, the film produced by the chest mounted and roaming camera, are both characterised through a series of different types of non-linear shots, serving to disrupt the hierarchical visual researcher gaze. This intimate perspective onto the action joins in conversation with Lenz Taguchi and Hultman, (2010) and Millei and Rautio (2017), who highlight the importance of thinking about the agency of the material object within our visual practices.

Ingold's (2007) theory of life lived along lines, complements Deleuze-Guattarian notions as discussed above. From the point of view of video research with children, two aspects of Ingold's conceptualisation seem particularly significant. Firstly, lines of walking, talking, gesticulating always occur in place, and further, play a part in the making of place. For Ingold (2007), place is conceptualised not as dots or circles on a map, but as points where many lines of movement come together and are concentrated. Ingold (2007) proposes the notion of a 'meshwork' consisting of lines, quite often referred to as threads or paths that are interwoven.

A world that is occupied, I argue, is furnished with already-existing things. But one that is inhabited is woven from the strands of their continual coming-into-being (Ingold, 2008:1797)

Thus, understandings of life as lived along lines, and a use of video within educational research as a component of this meshwork, offer a conceptual way forward for thinking about our practices of collecting, watching and interpreting video data. de Freitas (2016) suggests that video data is now the dominant form of data in classroom research, in archiving the body of both the teacher and the student. She argues that we know very little about our own practices and often proceed to use such data without examining the ways that

video structures the research we do. Understanding her research in mathematics classrooms, within the genre of 'scientific cinema', de Freitas highlights how early sets of conventions 'used in the capitalist over coding of the human body' (2016:554) during the industrial age, still dominate our understanding of the human body. The philosophy of lines we outline here complements De Freitas's argument in thinking about dominant understandings of the human body as mechanically represented. De Freitas argues for new visual methodologies that move beyond the inherited ways that serve particular kinds of learning theories and perceptions of the human body.

### **Head, chest, roaming, static: the different configurations of the GoPro camera during this research**

In this next section, we describe the use of the GoPro camera in different configurations across the course of the fieldwork, as well as the process whereby the GoPro camera moved from head to chest to hands. In the pilot, children sometimes wore the camera attached to a head harness with the intention of bringing the camera close to the participant's field of view. This was an alternative procedure also achieved by others using cameras fitted to infants headwear (Sumsion et al 2008, Elwick, 2011), but proved unfeasible due to the children's complaints about the harness causing discomfort. The head harness was also discarded due to its clumsy intrusion, and because when the children ran around, the resulting film made for unpleasant viewing. Once the main study had commenced, the chest harness was the preferred approach for collecting video footage. This provided a much more stable film to watch. The chest harness allowed the children to wear the GoPro camera on the upper torso using a system of interconnected, elasticated, straps that adjusted to fit the children's shapes and sizes. The children who attended the primary school, were mixed sex and aged between seven and eleven.

### **School Computer Club: An Introduction**

It must be a somewhat peculiar sight for the children to see me clunking and clattering my way into the school computer club, my arms filled with camera equipment, boxes and a rucksack hanging off each shoulder. I have done this many times now, and for a few of the children, my arrival signals something special. I'm the camerawoman, the researcher, the one who brings fun technology to play with. I busily go about setting up the GoPro cameras; one fixed to a tripod on the central table and the other fixed in a chest harness,

which ultimately makes its way around various child participants, during the course of the session. My role involves helping the children to adjust the harness strap depending on which child wishes to film with it.

Fieldnotes, Caton, (October, 2016)

### Chest Mounted Camera

In the next section, we draw on the first author's field notes in order to offer a glimpse into the types of behaviours the children began to demonstrate, whilst taking part in filming activities. The children were happy to participate in the filming process, demonstrated through their willingness to wear and exchange the chest mounted camera, albeit for around 10 minutes each, before making it quite clear they were 'tired' or 'bored'. Filming with the chest mounted camera, lasted for approximately six months, however, I was confident that the children and I had formed a relationship where they were able to draw attention to any discomfort whilst wearing the device, or highlight any anxiety towards their ongoing participatory role. I remained attentive to those ongoing nuances in the children's behaviour, firstly in relation to a pragmatic and ongoing ethical awareness and secondly to remain mindful of my researcher position within this experimental yet speculative methodology. Filming with the children in computer club in this manner of experimentation required an ethics that took place through a politics of listening, experimentation and potentiality, with an ongoing care for belonging.

### Roaming Camera

After approximately six months, it became apparent that the children's interest in wearing the chest mounted camera began to wane and they stopped using it, as discussed above. Thereafter, the camera transformed into a device that could be freely passed around in an improvisatory manner. Together, the children and I coined the device 'roaming cam' to help differentiate use between the chest mounted and the static devices. The approach to using the camera as a roaming device had not been planned and came about as a 'happy accident' in a moment of improvisation. The research shifted to acknowledge a new type of child and camera entanglement; one that did not involve my researcher physical presence to manipulate its operation. I later discuss the implications for this change.

### Static Camera

The static camera served as a permanent piece of apparatus throughout the project. In the early weeks of the study, I spent time finding the best possible vantage point in the

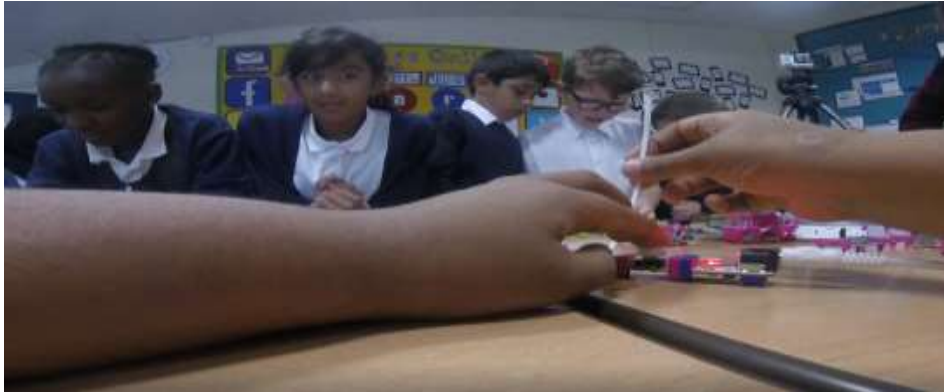
classroom, in order to set up the static, 3<sup>rd</sup> eye camera. At this point, I became more involved with the filming process than originally intended as I moved the device around according to the livelier sequences of action that were aligned with my adult centric viewpoints. I suggest this rendered the children both physically and ontologically according to my adult pre-fixed ways of knowing, which I initially aimed to trouble. This was a stark move away from the original plan to use the static device as an objective, 3<sup>rd</sup> eye view over the action that filmed from one set position. I wondered if a handheld, mobile camera would have been more suitable to follow the action around the room. However, I conceded that the process of filming with a handheld device was too physically intrusive, due to the practicalities of weaving my adult body around the children's personal space.

The children seemed comfortable with the camera's presence, yet their inquiries about the device were extremely rare; little did they tamper with the device or attempt to manipulate it in any way. I had made explicit attempts to verbally inform the children about the aims, purpose and intentions for the study, and I also disseminated child-friendly reading material to take home. However, it was only in the concluding weeks of the study that the children began to show a real interest in relation to what the films were actually for and how their involvement aided this process. One child, asked if his images were going to be 'put in a book', to which I replied yes, 'if that is still ok with you'?. The children deemed the physical camera device mine and not theirs, in so far as they knew that the Manchester Metropolitan University owned the device, as I had explained this to them at the start. Yet, ownership of the digital 'data' created by the children themselves and that included their images, was an ambiguous ethical area. The research helped to trouble ideas of ownership and what this actually meant within a speculative ontology, where entities (children, camera, digital image, researcher) worked in co-existence, and agency was distributed through the flows and materials that moved in relation to one another.

### **Troubling underpinning visual ontologies: Chest Mounted Camera**

The image (below) forces us to suspend our 'gaze' for that second longer, drawing our attention to an intimate and dynamic perspective of the child and their material world. We are presented with a view of the child's hands as he manipulates a long, white plastic light that forms part of the electronic circuit. The image captures the boy's attempts at manipulating the light, in order for it to successfully operate. We see a red light (bottom right of image) indicating that the battery within the circuit is working. The circuit is therefore complete yet, the light does not work. We are invited to observe the boy as he uses his hands to

improvise, problem solve in co-existence with the materials. Together the child and camera move in a manner, creating a space that foregrounds the material objects in shot. We are coerced into focusing on the finer details that include the textures, materials, size and shapes of the various objects and how they work with and against the child's body, from an alternative perspective. The human figure pales into the background, as we are invited to take a closer look. (Caton Notes, Dec, 2016)



Theorising life as lived along lines, serves to 'push' against traditional visual ontologies that persist in ascribing greater agency and therefore value to human movement. The image presented creates 'lines of flight' troubling how we have traditionally come to 'see' children within participatory educational video, as the object. The chest-mounted images open a conduit to help deconstruct the notion of the human being as a discrete, bounded entity that is set in an environment (Ingold, 2008). Instead we can think about the human hands within the image as entwined within the flows and materials that share the space, breaking down subject and object dichotomies and troubling ideas of agency within the action.



The 'molar line' often renders the image as something that transmits information, perpetuating such object and subject dichotomies. Theorising life lived along lines, invites us to view the world from an alternative angle, where we too have to adjust mentally and physically in order to appreciate and experience a new reality. The image (above) which is also filmed on the chest mounted camera, incites 'lines of flight' as the spectator is drawn to noticing the size, shape, colours, textures of the material components that scatter across the table, bringing the material into the foreground. This perspective opens up the opportunity to experience life according to a child's individual height perspective, which immediately dislodges the spectator from their adult-centric view point of the world. A 'line of flight' takes shape within the 'meshwork' of relations. The spectator is forced from their position within the status quo and from their fixed adult-centric view point. Therefore, those 'molar lines' are disturbed as the spectator is forced to 'see' the world from a new height perspective that may be unfamiliar to them. New 'lines of flight' are incited as the spectator is forced to attune differently to the world in digital skills club in relation with the child, the image and the camera.

Engaging with the world from a new height perspective, it becomes clear that tables, chairs, equipment and adult bodies in shot may serve as obstructions as well as aids and supports. We are not entirely sure what the child is looking at or physically doing with their limbs as they film the action. The image offers a challenge to the dominant human-centric gaze, with which researchers tend to approach visual data (Harwood and Collier, this volume; Hultman and Lenz Taguchi, 2010). This new entanglement forces an active rather than a passive encounter, as the spectator is coerced into suspending their gaze for that second longer in order to make sense of a new aesthetic on screen. The aesthetic affect is created within the frame of shot, as the child manoeuvres, adjusts and navigates the space in co-existence with the digital device. This framework helps to think about how the human figure works as part of the 'mesh work' (Ingold, 2008) of child, environment and researcher, troubling dominant understandings of the human body as mechanically represented within educational visual research.



### **From chest camera to roaming camera**

As discussed above, the chest camera was discontinued after approximately six months, due to the children's lack of interest. The harness was restrictive and uncomfortable, according to the children. Often the children would avoid contact with me for fear of being asked to wear it and I felt this began to hinder our relationship. Ethically, I did not want to manipulate or cajole the children into wearing it and so the process of filming in this particular manner came to a natural end. The camera thereafter was used as a 'roaming device' that was freely passed around by the children in an improvisatory manner. At this point in the filming, I had very limited control over the content of the film as the children took complete charge of the curation process. I allowed my initial researcher anxieties to wane and instead took comfort in thinking about what potentialities lay ahead.

The children playfully, navigate their way around the space of club whilst manipulating the 'roaming camera' with great dexterity. They seem fairly proficient and familiar with the task of filming. I provide minimal instruction other than to go ahead and improvise with the camera. I watch as the device is passed around, the children act with an equal measure of gusto and carefulness, talking excitedly about the possibility of creating their own 'vlogs'. I opt to sit to one side, feeling a sense of redundancy as the children take the lead in the camera's operation. I begin to lose track of the camera's location as it is passed around the room. I attempt to limit my researcher anxieties as I wait with apprehension and excitement for the resulting film.

(Field notes, Caton, April, 2017)



The above images capture a range of emotions and behaviours (joy, surprise, intrigue, cheekiness. When the camera became a 'roaming camera', the size of the GoPro meant that the children were physically able to hold and manipulate the small device in the palm of their hand with relative ease. This is an example of the material device working in co-existence with the child. This ease of use afforded some of the more obscure camera angles, and therefore the playful behaviour that the children exhibited whilst filming. The children often decided to place the camera on the table top or at the back of the computer monitor, still filming as they busied themselves with other activities, for example, talking to a friend or playing on a computer game. We can see the filming process became entirely child led, as the device grew more independent of researcher involvement to operate it. The children quickly became familiar with the process of filming with the roaming camera. The camera operated as an extension to the body, as I noticed many children forgetting they had hold of the camera, evident in some of the floor and ceiling shots that thread through the video.

### **Creating Vlogs with the 'roaming camera': rethinking agency within participatory research with children**

In stark contrast to the chest harness camera, the camera used as a roaming camera was enthusiastically received by the children. Filming in this manner slowly opened up the opportunity for the children to create individual 'vlogs'<sup>2</sup>. Some children explained they had their own vlogs, which generally involved filming themselves, in their home environment, talking about, in most cases, their love of computer games. As filming with the roaming camera continued, the children began to appropriate the camera as a device to create their own vlogs in computer club. The below vignette navigates through a short sequence of film made by one of the children, in attempt to make their own computer club vlog.

The boy playfully carries the camera around. He turns the camera around to greet his virtual audience and then proceeds to point it at various objects, bodies, materials that catch his eye. The sequence catches those fleeting, momentary

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<sup>2</sup> A vlog is a blog that contains video content and the children explained that some online vloggers had millions of followers worldwide, which they were familiar with.



interactions that invite the spectator to join and explore the lively ecologies of computer club. We are coerced into noticing the textures, the materials, the bodies, the sounds and shapes that leave us curious of those hidden places that are not always in frame. The camera moves so swiftly, teasing, as we quickly glimpse one form to the next, the interludes too brief to offer any sense of stability. The film is dizzying and the collapse of the physical surrounding space is jolted in favour of irregular, blurred shots that incite a sense of claustrophobia. (Caton Field notes, June 2017)



In the images (above) the boy points the camera towards his face, seemingly confident as he addresses the spectator. The spectator and the boy are connected through the camera, so we already have an interaction between human being and a material object. Expressive qualities are incited through the nuanced movements of the child and camera which serve to highlight the fleeting nature of the whole experience, Ingold (2013) stresses the unfolding nature of these interactions; rather than a designed and intentionally created product. Even videos such as this one, which feel quite curated, necessarily emerge in the moment, and are realised in unpredictable ways.

We can also note that the roaming camera film differs from early footage recorded with the chest harness, due to the child having complete physical control over the device. The roaming camera offers a new kind of mobility due to its small size, square shape and rubber textured coating, each of the physical qualities improved the child's dexterity whilst handling the camera. The sequence of film moves at such a pace that the spectator is unable to rest their gaze on any one object for a prolonged period of time in stark contrast to the fixed position chest mounted camera, which offers a more intimate perspective of the action, often at a much slower pace.

A couple of the children mentioned that they had created their own personal vlogs at home, in which they uploaded videos of themselves onto various social networking sites,

discussing the merits of computer games to other online users. I began to consider and link the idea of vlogging to the young boy in the images (above), who competently navigates his surroundings, whilst providing a narration into the camera. This I suggest, emulates a popular mode of address on many social networking videos and however mundane the film commentary may seem to an adult-centric view, the boy offers us a rare glimpse of his thoughts and feelings as he competently commands the small class room space. The boy invites the audience to meet his peers as he excitedly shouts 'introduce yourself to the people' and then simultaneously draws us into conversations asking his peers 'what are you doing in club today'?

Those fleeting moments between the boy and his friends can be worked through a theorisation of lines that force us to attune to those behaviours, conversations and nuances in movements that often get over looked in classroom narratives. I am therefore, attuned to 'slowing down' (Horton and Kraftl, 2006, Millei and Rautio 2017) my observations. In 'slowing down' research observation and taking time to consider the 'mundane' and 'irrelevant', I am able to consider a range of competencies that include communication, questioning, and listening and negotiation, that could be over looked as 'educationally irrelevant' exchanges between the boy and his friends. Instead, new insights can be brought to such exchanges.

### **Roaming Camera and Researcher: viewing, jamming and breaking**

At home I unpacked the cameras, charged the batteries, downloaded the video onto hard drives and selected time-sampled sequences from the footage in order to 'mull' over. As I watched the footage at home in my office temporally separated from the event, by one week and spatially separated by fifteen miles, I begin to wonder about ideas of 'agency', particularly in relation to my participant researcher role. Was I (researcher) the agent, having decided to bring the cameras into the children's environment whilst also taking charge of the editing process? Or more controversially, was the camera the agent? Equally, is there an argument to suggest there was a dispersal of agency across all entities, through the relations of researcher, child, camera and spectator. Were we all part of the mangle?

(Caton, research notes, July 2017)

In her discussion of viewing data through two different cameras (fixed and head mounted), Elwick (2015) argues that engaging in viewing different kinds of video data helps the viewer to acknowledge the embodied nature of viewing video footage, and the role of the video camera in mediating this. This is evident in the next moment, as we witness a 'jam or break' to the action-oriented schemata. Deleuze argues a different kind of image appears – a non-metaphorical image of the 'thing in itself' in its intolerable 'excess of horror or beauty' (Deleuze 1987: 20). The disruption to the action is momentarily disturbed, due to the presence of a teacher who enters the room. The child immediately hides the camera out of view. Consciously or unconsciously the child continues to film the ongoing conversation with the teacher (image below).



This 'jam or break' in the action incites a new set of relations between the child, camera, spectator as the child plunges the camera towards the floor, this movement renders the spectator voyeur within the action that takes place above. Those corresponding 'molar lines' and 'lines of flight' (Deleuze and Guattari, 1987) within the event, help to create new meaning. The spectator is immediately forced to consider their position within the action, as the child continues to film his private student and teacher conversations. I argue, by using a post-structural theoretical framework to deconstruct these seemingly irrelevant, 'out take' shots that are often overlooked as disruptions, the images actually open up potentials within mundane events. Maclure (2013) argues that classroom video such as this is often considered as 'junk' or 'off task', and such nonsense is seen as 'educationally worthless'. However, Maclure argues that these seemingly mundane classroom episodes are worthy of attention, in order to understand how language and learning emerge out of the movements and rhythms of bodies, formlessness and chaos.

I suggest, persisting in the mess of an ontological struggle, yet consciously engaged in the process gives such post-human research both ethical rigour and validity in the face of other more scientific enquiries. As such, concerns about ownership, data, bodies, knowledge,

permissions, are each imperative within the ongoing ontological research encounter. However, notions of 'reflexivity' are problematic in an ontological paradigm because they assume bounded individuals with agency making autonomous and informed choices about what transpires.

### **Reflection: visual ontologies, GoPro cameras and life along lines**

The chapter draws on Gilles Deleuze, Felix Guattari and Tim Ingold and their theoretical synergies of life lived along lines. We attempt to do this in the context of child participatory visual research in order to theorise the video data that is created through two distinct camera perspectives (chest mounted and roaming camera). A common thread through the chapter is the need for visual researchers to question their own visual ontologies, rendering normative ideas about children within participatory educational video. What we have emphasised in our experiments is the usefulness of philosophies as conceptual tools that enable us to say something more about children's lives and in doing so, giving young people a somewhat 'better' position within an educational context.

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