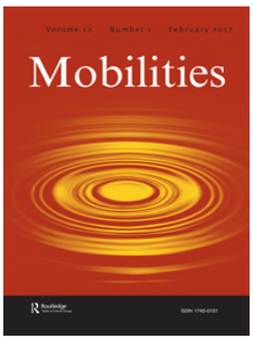

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Low and Slow: notes on the production and distribution of a mobile video ethnography

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ABSTRACT

The present article is a brief reflection accompanying *Low and Slow*: a 26 min ethnographic video documenting the occupation of commercial floatplane pilots, with a particular focus on their skills, technologies, sense of place and knowledge of weather. The video was independently produced, directed and edited by the author of this article. To date the video is slated to air in the fall of 2016 on the Canadian TV channel Knowledge Network. The paper offers a reflection on the video's objectives, its production and distribution in order to encourage others to practice video-based mobile methods, to edit their audiovisual work, and to disseminate it more widely than video-based research has been disseminated so far. To this effect, the article offers reflections on the fruitful intersection between mobile methods and ethnographic video, on precisely how *Low and Slow* was produced and distributed, and on why mobility students and scholars should view the use of video documentation as an important methodological research tool.

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The present article is a brief reflection accompanying *Low and Slow*: a 26 min ethnographic video documenting the occupation of commercial floatplane pilots. The video, available online at http://dx.doi.org/10.1080/17450101.2017.1278969 (password: deHav1lland), was independently produced, directed, and edited by the author of this article. To date the video has been acquired for broadcast in the fall of 2016 on the Canadian TV channel Knowledge Network. Because it is uncommon for mobile research to be disseminated through television and also because this represents the first time that *Mobilities* has published a documentary video as part of one its issues, it seems appropriate to offer a reflection on this video's objectives, its production, and distribution.

My intent in writing this brief reflection is methodological and practical rather than theoretical. In two parallel writings I interpret in analytical depth the ethnographic material evoked in the video with empirical foci on the intensity of the flying experience and on its material and sensory dimensions. However, here my objective is primarily to encourage others to practice video-based mobile methods, to edit their audiovisual work, and to disseminate it more widely than video-based research has been disseminated so far. To this effect, in the next few pages I reflect on the fruitful intersection between mobile methods and ethnographic video, on precisely how *Low and Slow* was produced and distributed, and on why mobility students and scholars should view the use of video documentation as an important methodological research tool.

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The underutilized potential of 'go along' videos

The last decade has been witness to an impressive growth in the development and uptake of mobile methodologies (e.g. see Büscher and Urry 2009; Büscher, Urry, and Witchger 2010; Fincham, McGuinness, and Murray 2010; *Mobilities* 2011). Designed to compensate for the sedentarist bias of much social scientific research, mobile methods have not so much re-invented (see Merriman 2014) but rather refined and adapted existing methodological traditions in an attempt to better understand and enliven the flow of people, goods and ideas typical of our contemporary mobile societies (Büscher and Urry 2009; Urry 2007).

Among a broad array of innovative approaches to the study of mobile subjects is the 'go along' method, with its various manifestations such as the 'ride-along', the 'follow along', and the 'walk-along' (see Bærenholdt et al. 2004; Carpiano 2009; Evans and Jones 2011; Kusenbach 2003; Laurier 2004; Laurier et al. 2008; Spinney 2015). 'Go along' methods consist of systematic procedures of accompanying and following research participants as they go about their ordinary mobile routines while simultaneously observing how they engage with, and reflect on, their practices, experiences, relations, and surroundings.

In 2015, inspired by the principles underpinning the 'go along' method, I began to ride floatplanes and film pilots as they flew on their scheduled routes throughout the coastal region of British Columbia. On floatplanes any regular fare-paying passenger can sit in the cockpit right next to the pilot. Because many passengers often carry cameras on their floatplane journeys most floatplane pilots are accustomed to interacting with people who want to take pictures and video during the flight and wish to learn more about floatplanes and the places where they fly. In this sense my and my camera's presence in the cockpit was not intrusive or distracting, and was an ideal way to learn about floatplane flight right as it unfolded.

Over the last few years a handful of 'go along' researchers have begun to make use of digital recording technologies such as voice recorders, still photography cameras, and video cameras (e.g. Brown and Spinney 2010; Brown and Banks 2015; Jungnickel 2015; Laurier 2010; Pink 2007, 2008a, 2009; Spinney 2015; Yi'En 2014). Video, in particular, has been a favored technology. In this and related situations video, as Garrett (2011, 523) has effectively summarized, can typically be utilized in one of the following manners:

(1) As a cinematic medium for documenting people, places and actions for the benefit of distant audiences;
(2) As a tool for gathering audiovisual data for the benefit of the researcher, who then may also utilize recordings to elicit research participants' reflections in subsequent interviews;
(3) As a journal-like record of experiences in the field for the sake of gathering descriptions, interactions and discourse;
(4) As a participatory and collaborative approach to data gathering and problem-solving.

Regardless of its makers (researchers or research participants) and its intended viewers (researchers, research participants, peers and students, broader publics), there are key benefits to the use of video in mobile research.

From an epistemological perspective video 'is one device with which to extend and enliven both the sociological and the geographical imagination' (Bates 2015a, 4). Utilized in a non-realist and more-than-representational manner video can help researchers in evoking and 'witnessing' (Dewsbury 2003) – rather than 'capturing' (see Lorimer 2010; Patchett 2015; Simpson 2015). From a purely practical perspective video recording – regardless of its esthetic quality for a viewer – allows researchers to apprehend the field multi-modally and multi-sensorially and works well as an aide to memory recall, thick description, contextualization and analysis (Harris 2016; Pink 2008a; Simpson 2011). Video cameras can also allow a researcher to 'be there' without actually being there, as Laurier (2009) managed to do with his study of automobile drivers and Spinney (2011) did, at times, with his work on cyclists. Video recording can also win over hesitant research participants, as Brown and Spinney (2010) learned

when their research participants – highly-skilled cyclists – found that they could keep and enjoy for themselves footage of their rides (also see Kullman 2015). In sum, as Garrett (2011, 522) articulates:

> video is a useful geographic research tool because it captures movement; video tracks the multisensual fluidity and rhythms of everyday life […]. Video is capable of recording an experiential stream of time in the field as a researcher, in the world as a participant, in the flux and flow of passage and encounter on a sliding range of scale, time and space. Raw fieldwork footage serves as an excellent record keeper and a well-considered, well-shot, well-edited video becomes a multifaceted web of thought, memory, materiality and movement […].

In the case of *Low and Slow* video recording enabled me to focus on the sensuousness of floatplane flight in a way that would have been impossible to achieve through note-taking alone. To non-pilots a cockpit is a foreign environment teeming with gauges, buttons, levers, displays and controls that are at least at first sight downright intimidating. Recording the tactility of pilots' engagement with their plane, their responsiveness to various mobility goals demanded by ordinary plane travel (taking off, cruising, landing, taxiing, etc.) and by variable circumstances (e.g. changing weather and air traffic conditions) physically showed me how *intensely* floatplane pilots are actually *involved* in flying. Moreover the camera evoked material objects, technologies and a vivid sense of place and time that any thick description – even the most sensuous – would have found extremely challenging to convey. Finally, the presence of the camera (rather than freeze research participants as it is sometimes feared; see Shrum and Castle 2014) made pilots open up by making them feel responsible for showing and telling, and thus by serving as an ego-re-affirming device (since pilots take great pride in showing off their skills).

In spite of all these advantages, video is not utilized by mobile researchers nearly as often as it could be. Some of the common excuses and justifications pertain to the high cost of equipment, the skills necessary to operate a camera, the assumption that video methods require the time-consuming involvement of collaborators and crews (see Garrett 2011), the necessity to convince conservative human-subject ethical review boards that filming research participants will result in no harm, and the difficulty with making video projects count toward career advancement. Yet, as time goes by, our society and institutions seem to become more and more open to the usefulness of video documentation and the pervasive presence of cameras in many ordinary environments – largely thanks to the broader mediatization of everyday life (Hepp and Krotz 2014). DSLRs, GoPro's, and mobile phone cameras have also demystified video production, and nowadays one no longer requires expensive film, professional skills, or massive crews to take decent footage. Furthermore, non-linear editing software ranging from the simpler (e.g. Apple's iMovie and Windows Movie Maker) to the more advanced and professional (Final Cut and Adobe Premiere Pro) as well as popular video-sharing platforms (YouTube, Vimeo, Instagram, etc.) have made video editing and distribution more feasible than ever.

As Garrett (2011, 521) argues, 'the process of making video as part of our research process is […] both of scholarly value and useful for expanding interest in geographic research to wider audiences'. Other researchers outside of geography agree: video documentation is instrumental to expanding the audiences of scholarly work (Mitchell 2011; Redmon 2014; Shrum and Castle 2014; Spinney 2015). Yet, *few videos are recorded and edited, and even fewer videos are actually shown*. This is an interesting conundrum. 'Part of the problem with video gaining prominence as a recognized method for research and presentation can be attributed to the reluctance of journal editors to "go digital" with peer reviewed publications' observed Garrett in 2011 (524). Half a decade later, however, this is no longer the case. More and more journal publishers now welcome (and some even actively encourage) video submissions as supplementary material to written articles. Dedicated events such as the London-based Passenger Films series have even begun to screen mobility-relevant films to general audiences. And while not all journals or books are in the position to showcase videos on their companion websites, in my experience sharing a video with a peer audience takes as little as independently uploading it on Vimeo or YouTube and then citing the URL in the pages of an article or chapter.

In agreement with Brown, Dilley, and Marshall (2008, 1.4) and Garrett (2011) I find it disconcerting to just *read about* video footage, as I would rather see it with my eyes and hear it with my ears. It seems that instead of being edited (even moderately) and independently distributed, video is mostly only

represented by plates of still photographs and freeze frames and regularly relegated 'to the role of a data mine for interview quotes in a paper' (Garrett 2011, 525). There is a profound irony in utilizing a research method and technology because of their outstanding value in evoking movement and its power to allow research participants to speak in their own voice, only to then freeze such movement through static pictures and transmute human voices and soundscapes into disembodied written traces. In producing, editing and distributing *Low and Slow* my main objective was to go against these trends and make the video widely available.

Producing and distributing *Low and Slow*

Pre-production and production

My objective in designing the research study behind *Low and Slow* was to shed light on the little-known and poorly-understood occupation of floatplane pilots and in particular to focus on the intensity of the experience. Research on aeromobilities has been growing steadily over the last decade (e.g. see Adey 2010; Budd 2011; Cwerner, Kesselring, and Urry 2009) but whereas in the field of mobilities we have learned much about the practices of driving cars or riding bikes, research on piloting planes is extremely rare, and outright non-existent on the topic of floatplane piloting in particular. Moreover, I wanted to generate public knowledge about pilots that was not linked to any tragic accident – seemingly the local news media's exclusive concern with their profession. The coastal region of British Columbia deeply depends on floatplane flight due to its unique archipelagic geography and dense marine transportation network. Several locations throughout the coast cannot be reached at all by road, or can only be reached through time-consuming ferry and private boat journeys. In addition, coastal waters on the Canadian West Coast do not freeze and therefore seaplane travel can take place year round, unlike in other regions of Canada.

To recruit participants I went to the nearest floatplane terminal and approached the two pilots and the floatplane terminal manager. Since I knew them personally from flying with their company over the years they were immediately receptive to my informal request. Luckily, not only did they grant me time for an interview, but were also open to me filming normal day-to-day operations. Moreover, they promptly introduced me to colleagues who work for other companies. I supplemented that initial list of contacts with additional pilots I recruited through 'cold' emails sent to local companies and floatplane business organizations. My data collection reached saturation after 18 interviews. My sample is inclusive of pilots who work for smaller and larger companies scattered throughout the coastal region, have varying degrees of experience and seniority, and operate the main aircraft models operating in the area. Though I would have liked to interview female pilots none were working in the region at the time.

The data collection consisted of interviews and ride-alongs. At times pilots were happy to conduct an interview during their down time between flights, and then later on take me along for a ride. When their schedule made it difficult to find time between flights, instead, they suggested we conduct the interview in the air while I sat next to them in the cockpit. The interview protocol consisted of a semi-structured interview which focused on all aspects of their profession, but gradually zeroed in on five themes: their motives and passion, skills, experiences, occupational concerns, and the way they deal with the weather – their foremost everyday challenge. The documentary video is structured along these five themes, with the weather playing a dominant narrative role. All pilots saw and gave approval of the video before I showed it to anyone else. In order to maintain my independence of judgment, and out of respect for their time and labor, I paid regular fares for all my flights.

I filmed all interviews myself, however this became possible after an initial phase of collaboration with colleagues – during which I gradually learned how to simultaneously interview and film. In fact for the first three interviews a second, back-up, camera and shooter were present, and for the fourth interview a colleague led the interview questioning while I preoccupied myself mainly with filming. Filming can be an overwhelming experience (see Garrett and Hawkins 2014) and it is only through practice that one learns to form habits and mental shortcuts useful to quickly address the numerous

demands of the medium. After these four interviews I felt confident enough, foolish enough, or cheap enough (depending on one's perspective) to interview and film on my own simultaneously.

Filming and interviewing on one's own is straining but not impossible. Beside practice, the task is made easier by a good tripod, a broadcast-quality lavalier microphone that records directly onto the camera, and by remembering throughout the interview to make constant checks that camera and sound recorder(s) are recording with the desired results. Extra batteries and extra memory cards are priceless. It is also of extremely critical importance to be thoroughly familiar with the basics of exposure, manual focus, and composition, as well as the functions of one's gear – something that takes time and practice. On this count Garrett and Hawkins (2014, 152) correctly observe:

> The visual literacy associated with image-making folds together the technical with the aesthetic, knowing, for example, how to compose a shot, sensing what might best relay the feel of the moment. It also involves a sensing of site too, an entrainment of bodily capacities as senses become attuned to light levels, and an envisioning of framing through the lens before the shutter is even pressed.

Evoking 'the feel of the moment' or a sense of place is in part an individual creative act and in part a matter of following filmic grammar and documentary genre conventions. For example all interviews were filmed at a shallow depth of field in order to direct the viewer's eye on the speaking subject and avoid distracting backgrounds. Panoramic scenes were often filmed during ideal lighting conditions where (regardless of weather) contrasts are vibrant. As well, the editing of sequences followed the convention of mixing wide angles, mid shots and close-ups in a rather balanced manner. Filming and editing, much like paper writing, is largely about following established rules.

Equipment choices are as practical and technological as they are esthetic and political (Garrett and Hawkins 2014). I filmed all interviews for *Low and Slow* with a Canon 5D Mark III. Even the best and most expensive DSLRs in the world can only record, at best, dismal-quality sound so all sound for sit-down interviews was instead recorded with a ZOOM h5 recorder connected to a lavalier microphone which recorded directly onto the camera. As a back-up I also used a second ZOOM h5 connected to a shotgun microphone, which I hand-held during all the interviews conducted off the plane. A third microphone, a shotgun mounted on the camera, was used any time I had to quickly move and walk around (so called 'run and gun') without being able to utilize my sound recorders.

I utilized a f/4.0 L 24–105 mm USM zoom lens for all sit-down interviews and for most of the 'action' footage and B-roll. In the cockpit I occasionally utilized a much smaller f/1.8 50 mm STM prime lens because it was easier to handle in the small space, and because I was then able to mount a GoPro camera on top of my Canon without accidentally capturing the bigger zoom lens protruding into the GoPro's extra-wide frame. Additional GoPro footage coming from a camera mounted on the fuselage and wings of the plane was kindly provided to me by a floatplane pilot.

In order to record interviews in the cockpit – an extremely loud space that makes headphone-free conversation impossible – I tucked the camera-connected lav microphone between my left ear and my headset and recorded our conversations through the intercom. It is worth noting that all this equipment, inclusive of spare batteries, memory cards, a portable hard drive, and other accessories can cost around US$6000–$7000. However cheaper cameras do exist (the Canon 5D Mark III runs around US$3500) and equipment can also be rented, or even loaned for free from well-stocked university A/V departments.

As mentioned, video recording is invariably recognized for its capacity to effectively 'capture' and render embodied movement (e.g. see Garrett 2011; Pink 2007; Simpson 2011). Pressing the 'record' button and filming movement, however, is far from being a solution to the problem of observing and representing physical movement. Unless the video recordist is only interested in keeping recorded material for oneself – without a care in the world about showing recorded clips to others – effectively filming subjects on the move can be very challenging. Though the process of recording movement would seem to require little more than a sense of anticipating action and a steady tripod, in actuality the task can get very challenging and it does not take much to record unusable motion-sickness-inducing footage (especially when filming in moving vehicles). In the case of this project there were a few movement-related problems in particular that made filming challenging.

The key problem for me pertained to filming inside floatplanes. Floatplane cockpits are small: it is impossible to use monopods (let alone tripods) and in addition these aircrafts are much more easily subject to atmospheric turbulence than jets (since they cannot fly 'above' the weather). Beside the simple act of shooting as much as possible – knowing that many clips would simply have to be discarded due to excessive shakiness – I adopted the following solutions. First, I relied as much as possible on a high-quality lens equipped with a stabilizing function. Though these kinds of lenses are expensive, their Ultra-Sonic Motors allow for the necessary image stabilization. Second, while editing, I applied a warp-stabilizing function on all shaky but saveable images. This procedure causes a very small amount of resolution loss, but it is otherwise very effective in smoothing out undesirable shakiness. Third, I made use of a viewfinder mounted on the outside of my DSLR camera, which allowed me not only to record better-focused images, but also to hold the camera tight against my face, thus giving me a very important stabilizing point of contact beside my hands. Fourth, I utilized (whenever appropriate) GoPro footage. GoPro's are incredibly stable (and very affordable) and their potential employment in mobile methods is still vastly under-exploited. The GoPro's ultra-wide angle does warp straight lines, but editors keen on seeing those bent lines straightened back up can do so by using a simple plug-in during post-production (something I opted not to do because I value distortion – more on this later).

Furthermore, there is the perennial problem of recording good-quality sound. Floatplane terminals can be extremely loud. A few practical solutions to prevent recording excessive noise are available. To begin with, it is important to anticipate disruptive sound and choose interview locations that are not too loud and times of the day when traffic is limited. However, many of the transport centers (airports, train stations, bus terminals, etc.) where mobility researchers congregate are perilously loud and therefore choosing quiet sites might be easier said than done. Other practical solutions might include tucking lav microphones under interviewees' clothing (which also helps with preventing wind noise), and ensuring that the wind blows behind – not in front or from the side – an interviewee's back. It is also important to remember that shotgun microphones – because they pick up sound uni-directionally – are superior to lav microphones in noisy environments. Furry windshields (or 'dead cats') are also absolutely necessary investments for any shotgun microphone. If all these attempts fail, windy recordings and other sound clips affected by constant low or high-pitched noises (e.g. traffic, wind, etc.) can be cleaned by applying a high pass or a low pass. Sound recordings can also be de-noised, de-crackled, etc., but only to a degree. All of these 'tricks' are quite revealing, incidentally, of how illusory video is as a mode of communication. Far from being a faithful 'capture' of movement, filming and editing are amongst the most intense more-than-representational activities in which one can engage – with their apparent ability to record and mimic 'faithfully' being so powerful precisely because viewers inexperienced with the editing process believe that what they hear and see on the screen is an exact representation of what actually unfolded. More on this in a later section.

Post-production

Editing is a remarkably under-examined component of video method procedures (for exceptions see Bauch 2010; Garrett and Hawkins 2014; Laurier 2009). Conceptualized as a 'creative-analytic process, combining the esthetic and informational in a suite of digital-material processes that are as much about research and analysis as they are oriented toward the production of outputs' (Garrett and Hawkins 2014, 146) editing, in practice, can be broken down into three distinct but interrelated activities: logging, assembling and refining images. These three activities share much in common with related phases of the writing process. Logging is about organizing and analyzing data (or footage). Assembling is about storytelling by stitching data (or clips) together, and refining is not unlike the process of copyediting and proofing writing.

The editing process in my case began with logging all the footage, transcribing all the spoken words, and coding interviews into themes and subthemes – not unlike one would do as part of inductive data analysis for paper-writing. I then created a 'paper edit' that contained selected quotes from the five main themes and all their sub-themes – all on paper. Extremely similar to the process of writing papers such

selection of quotes is a delicate balancing act that needs to take into account the esthetic and narrative value of the chosen excerpts, as well as the need to represent different voices, issues and perspectives.

I used Adobe Premiere Pro CC to edit the video and sound clips which I outlined in the paper edit, and gradually tweaked this rough assembly into a fine cut that was 26 min in length – an appropriate length for a 30 min TV slot. After completing color-grading I enlisted the professional help of a sound editor and graphic designer, who 'sweetened' the sound and created the titles for the video. Another friend, a musician, recorded original music (which can be a much more practical solution than the alternative of finding the right music and seeking out the necessary permissions to re-disseminate it).

After screening the video for a few friends in order to gather feedback, and after making the subsequent final tweaks, I contacted one of the producers of Knowledge Network and submitted my work to her consideration. Knowledge Network is a public channel that produces and broadcasts documentary and educational programming of regional, national and international interest and to this effect regularly considers program submissions from local filmmakers and independent production companies. Knowledge Network broadcasts in British Columbia through cable and across Canada on satellite, averaging 1.5 million viewers monthly.

After the video was accepted for broadcasting I contacted the editors of *Mobilities* to inquire about the possibility of a video submission and learned that Taylor & Francis, the publisher of this journal, nowadays actively solicits multimedia material and offers to post such content on a dedicated website, assigns it a DOI, and gives it a stable URL. To my knowledge, other journal publishers have begun to offer similar services and now even encourage article authors to generate video material (such as video abstracts) to accompany their writings. Indeed it no longer makes sense to lament that journal editors are not open to considering alternative and innovative multimedia material. The truly interesting subject to discuss at this point is no longer *whether* scholarly journals might consider publishing multi-media material, but rather *how* such material should be gainfully utilized in relation to more conventional modes of academic discourse. Such is the subject of the next section.

Reflecting on genre, style, mode and audiences of video

Though traditionally many scholars have viewed film and video with some skepticism because of their presumed inability to reach the same level of abstract depth as writing, as of late more academics have come to agree on film and video's remarkable potential to evoke ethnological matters otherwise difficult or downright impossible to convey (see Bates 2015b; Pink 2007). In fact, following the crisis of representation of the 1980s, the social sciences have experimented with a multitude of research traditions destined to evoke, animate, expose, impress, unsettle and rupture reality, rather than represent it or 'capture' it in older realist, objective, or supposedly authentic ways.

Non-representational or more-than-representational video methods (Lorimer 2005) are potentially useful tools for a scientist/artist keen on allowing 'the world to appear differently' (Simpson 2015, 45), but they have not been employed widely as of yet. Using video in a more-than-representational manner would help us 'see [and hear] the world differently from our habitual ways of looking and feeling' (Simpson 2015, 45). The video camera is indeed highly capable of intensifying affect and in a more-than-representational fashion we can view its role in the ethnographic context not as a reproductive one, but as a poietic one that is 'partly aligned and partly estranged' (Gallagher 2014, 183) with the subject at hand. It is precisely in such slippage between the event-as-unfolded and the event-as-filmed that the more-than-representational excess comes to life in all its enchanting power. Film 'makes knowledge' through the production of an audiovisual *artefact* that evokes a social 'reality' that can 'facilitate an appreciation of the practical, sensual and affective dimensions' (Brown and Banks 2015, 98) of the lifeworld. Experimentation with video can play a key role in transcending the limits of representation. Patchett (2015) for example argues that 'in order for academic researchers to embody and enact more-than-human modes of working, they must develop and follow an explicitly experimental methodological imperative' (2015, 74). This will supplement 'the familiar repertoire of humanist methods (which generate text and talk) with experimental practices that amplify other sensory, bodily

and affective registers and extend the company and modality of what constitutes a research subject' (Whatmore 2006, 606, 607).

An experimental sensitivity is also instrumental in intensifying the affective potential of research-based knowledge. Videos that attempt to *amplify* (Kullman 2015) rather than merely *reproduce* the embodied intensities that pulse through our daily lives, can mobilize old and new audiences alike with the explicit 'potential to bring bodies, images and worlds into new relationships' (Kullman 2015, 54). The multimodality of video methods is therefore best equipped 'in animating the vitality, movement, energies and fluidities of more-than-human becoming […] that take us beyond cognition and beyond the verbal into realms where bodily and multisensory grammars prevail' (Brown and Banks 2015, 98). Given all this, video methods are absolutely essential tools in the research toolkit of ethnographers. Video methods' more-than-representational multimodality can allow us to cultivate the meaningfulness of our visual and aural engagement with the world and hone the esthetic evocativeness of our strategies of knowledge generation.

Though there are similarities between editing video documentaries and writing papers based on qualitative data there are important differences too. In my opinion video is a way of sensing the lifeworld differently from its typical mode of academic apprehension. Writing demands a logocentric way of knowing based on the search for *words*. Words are semiotic resources that allow one to learn about the lifeworld in a way that can be subject to abstraction and analysis. Filming on the other hand demands a different sensuous way of knowing. Filming forces one to become attuned to bodily and material surfaces that can only be *seen* or *heard*. Filming pulls one into a lifeworld that can only *move* in myriad ways and *speak* in a cacophony of sounds and languages. Cameras and microphones are therefore potentially able to teach us to feel something intensely vivid about a place, a person or people, an experience, and a practice. Writing, one might say, is a freer act confined only but the thousands of words existing in a dictionary. Editing, on the other hand, can only take place with the visual and aural material one has recorded and if it has not been recorded, it is as if it never happened.

Pink (2007, 243) observes with regard to the act of walking with a video camera that 'video is not merely a method of audiovisually recording people and physical settings. Rather … walking with video provides ways of … sensing place, placing senses, sensorially making place and making sense of place'. Reinforcing this point, elsewhere, Pink (2008b, 2) writes:

> the method of video recording research participants while 'walking with' them creates place on different levels: in a phenomenological sense during the research encounter; in the form of the video representation of that encounter; and again through the subjectivity of the viewer of that video.

Pink's arguments pertain to walking but they can be easily extended to flying. As floatplane pilots remarked throughout the research process flying without the instruments typical of a modern jet is an intensely visual experience of place and the camera – whether filming alongside their eyes in the cockpit or mounted on a wing – can give us a glimpse into the way pilots see place and navigate aerial space. Flying, like filming, is a way of seeing. 'We cannot see things unless we first can see' Ingold (2005, 99) reminds us, 'and we cannot see unless we are immersed, from the start, in what Merleau-Ponty calls "the soil of the sensible"–that is, in a ground of being in which self and world are initially commingled'. Therefore we cannot film things without being immersed in a ground of being, moving, and becoming in which self, other, and world are commingled. This ground is comprised of the spaces and places where we (i.e. cameras and the researcher) and pilots fly. The filmed fly-alongs presented in the video are therefore nothing more and nothing less than an act of commingling: a mutual encounter between bodies and technologies for seeing and for hearing that are re-told through multiple fragments of digital and bodily memory.

I should remark on the fact that beside a DSLR a unique visual technology was utilized in this documentary: a GoPro camera. One GoPro was utilized inside the cockpit whereas another was used at times on one of the airplane's wings. As I have outlined in greater depth elsewhere body-mounted point-of-view (POV) cameras like the GoPro are making new visual material suddenly available from an astounding variety of people and places, as well as different and unique embodied perspectives

(such as airplanes). As Chalfen (2014, 299) outlines, by allowing for high-quality POV action recording, GoPro cameras enable users:

> (1) to record 'exciting,' even unexpected, scenes of action and locations seldom, if ever, seen, and to offer new, fresh, original and memorable perspectives; (2) to record what the camera user sees while undertaking a particular unusual, difficult and dangerous activity; and (3) to record what the camera user actually looks like or how the camera user appears while actually participating in such a particularly unusual, difficult and dangerous activity, in short, often 'extreme' sports.

GoPro's problematize more than any camera before has ever done the notion of presence and being there, 'allowing a viewer to believe she/he is/was there' generating 'scenes that could not be seen any other way'. (Chalfen 2014, 300) It should also be noted that the GoPro's uniquely wide fish-eye lens also tends to distort embodied experiences, for example by conveying a feeling of speed that is different from what is experienced in reality and also by rendering small spaces (like a cockpit) as roomier than they are. So in this sense, once again, video is particularly well-positioned to show how filmic practice is less of a faithful capture and more of a non-representational act.

Along the lines discussed thus far *Low and Slow* was produced and edited not with the intent of producing a realist and traditionally academic documentary, but rather with the intent to be simultaneously educational and playfully entertaining – a deceivingly simple objective. In editing the film I ensured that I would not only shed light on the main themes emerging from my research, but I also strategically selected pleasing landscape imagery, added enjoyable music and employed humor. These entertainment-derived 'aesthetic' considerations would have little or no place in a traditional scholarly article, yet they are essential in attracting and retaining a TV audience with much programming to choose from. In other words, in editing this documentary I had no hesitation in making stylistic choices that belonged to the traditions and genres of popular documentary film culture. This of course opens the question of how and why does *Low and Slow* fit in the 'pages' of a scholarly periodical? To answer this question I want to hypothesize two alternate cuts of the video that I could have made and show how neither would have achieved the same results.

Alternate cut number one could have been a more traditional and 'serious' ethnographic film on the same subject. It could have featured much longer 'observational' takes of pilots at work and/or it could have featured a voiceover: a commentary track that I could have used to interpret the pilots' words and actions. It could have featured no music or humor, and it would have downplayed the importance of visual esthetics. This cut might have been longer, perhaps running well over one hour in length. Now, because the likelihood of such a long and slow-moving cut ever playing on TV is extremely low, because documentary film festivals face mighty challenges in programming such long films within their busy schedule, and because internet audiences find it difficult enough to watch a 26 min film – let alone something three times longer – this cut would have only been ideal for DVD distribution. Whether an inexperienced film-maker such as myself could have found a distribution company keen on investing in selling DVDs on my behalf is dubious at best.

Alternate cut number two could have been a more contemporary hypermedia text. So, for example, instead of a single 26 min narrative the production could have been broken down into six or more short video clips. These short videos could have then served to augment the corresponding data sections of a paper in lieu of additional quotes, perhaps illustrating themes expanded upon through descriptive and contextual writing as I myself have done in the past. For such short videos simpler editing would have been sufficient and there might have been no need to develop a narrative, employ music, or add titles. Not intended for television or film festivals, in addition to being published together with the paper, these short video clips might have been useful to supplement conference presentations. As appealing as this option might be – given its simplicity – we must keep in mind that these short videos have a very small audience. Few are ever watched by more than 150 or 200 people on the Internet.

As it has become obvious from exploring competing options, style deeply shapes content and profoundly affects the likelihood that our productions will reach broader audiences. Because my intent as a public scholar was to reach a broad general audience (a fuzzy notion, admittedly), it arguably made much sense to produce, edit and distribute *Low and Slow* the way I did. But this conclusion still does

not answer how this documentary fits in the issue of a scholarly journal when – the argument might run – the film was not intended primarily as an academic product. To address this critique, I believe, it is inevitable to ask ourselves what exactly is an academic product.

If we understand academic knowledge solely as literature that is intended to explicitly advance conceptual and theoretical arguments, then a documentary video in the style of *Low and Slow* is most certainly an alien presence between the covers of a journal issue. Video is less adequate than writing as a tool for abstract and theoretical reasoning. But if we understand academic knowledge as the systematic examination of empirical phenomena with the objective of gaining and accumulating understanding of substantive topical issues and originally contributing to scholarly debate, then research-based videos such as *Low and Slow* are valuable additions to the 'literature' – additions which simply take a different form and mode of communication. In light of what they communicate and how they communicate it videos are simply as adequate as writing – if not even more so – to evoke lifeworlds and animate experiences and practices. Videos can also be used as classroom teaching material and, perhaps more importantly, they can earn important visibility for our field and profession and as such constitute an important manifestation of public scholarship (Shrum and Castle 2014).

The last true remaining question at this point is about the relation between theory and video-based empirical knowledge. A typical theoretically-informed paper presents data and then employs theories and concepts to analyze the empirical material at hand. Similarly, a typical methodological paper reflects on data collection, analysis and presentation to advance an argument about methodological procedures, practical techniques, and their epistemological underpinnings. Even though it would be tempting to say that theoretical and methodological lessons are somehow 'implicit' in the words spoken and actions displayed in a documentary video, and it would be relatively easy to argue that the process of editing is tantamount to that of data analysis and writing, I do not believe that video *alone* can ever advance a sophisticated theoretical, conceptual, or methodological argument.

When published within an academic journal video does not necessarily require, in my opinion, an accompanying written reflection (for a discussion of this issue see Cubero 2009, 2015; Garrett 2011; Pink 2007; Rose 2007). Yet, the availability of a written reflection does most certainly enhance the value of a video for audiences that are not accustomed to distilling scholarly information out of video documentaries and for audiences who want to know more about the context of production. In the particular case of *Low and Slow* the present reflection has focused on the methodological value of my work and has outlined the lessons we can all derive from producing video documentaries. In future publications of similar video ethnographies it is my opinion that readers/viewers will continue to benefit from written reflections accompanying audiovisual documentations, whether such reflections are intended to contribute to the accumulation of methodological, substantive, or theoretical knowledge.

However, *how* precisely such 'accompaniment' should work is the nexus of much needed debate. Should video documentation serve to augment writing? To illustrate it? To animate it? To contradict it and rupture it? To set a mood? To emotionally affect viewers? To popularize an article? Should the relation between writing and video documentation be based on correspondence and representation, or on principles of expectation violation and non-representation? Different projects with differing intentions will likely require different approaches. What is certain is that even though it is arduous at first, shooting, editing and distributing mobile video ethnographies require neither years of professional training nor large crews, and neither prohibitively expensive technologies nor insider-only personal networks for distribution. Given these conditions, it is my belief that questions about the usefulness of video-based research and how scholars and broader publics can learn from it will be debated and answered in the pages of this and other journals for a long time to come.

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