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

The present article is a brief reflection accompanying Low and Slow: a 26 minute ethnographic video documenting the occupation of commercial floatplane pilots. The video, available online at xxxx, was independently produced, directed, and edited by the author of this article. On (date) the video was first aired on (details) in British Columbia. It was also aired on later dates on (...). 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 a forthcoming writing (identifying information) I interpret the ethnographic material evoked in the video, but here my objective is primarily to encourage others to practice video-based mobile methods, to edit their audio-visual 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.

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 2009; 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 (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). “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 together floatplane pilots and film them 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 wanting to take pictures and video during the flight and wishing to learn more about floatplanes. 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; Laurier 2010; Pink 2007, 2008, 2009; identifying reference; 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 audio-visual 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 a purely practical perspective video recording—regardless of its aesthetic 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 (Pink 2008; 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. 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 (the focus of my analysis in a future writing). 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 casting them as informed guides capable of showing and telling, and 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 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 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) 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 (Redmon 2014; Shrum and Castle 2014). Yet, few videos are recorded, and fewer of those 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 and colleagues (Brown et al. 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 often only represented by plates of still photographs and freeze frames and thus 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. While in the field of mobilities we have learned much over the last decade about the practices of driving and riding, research on piloting airplanes is extremely rare, and outright non-existent on the topic of floatplanes in particular. Moreover, as a resident of a region that deeply depends on floatplane flight due to its unique geography and transportation network, 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.

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 them 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 region. 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 main everyday challenge. The documentary video is structured along these five themes, with the weather in particular 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 judgement, 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 to 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 it is not impossible. 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.

Equipment choices are as practical and technological as they are aesthetic 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 lavaliere 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 RODE 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 24-105mm 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 50mm 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 laf 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$6,000 - $7,000. However cheaper cameras do exist (the Canon 5D Mark III runs around US$3,500) 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 perturbances 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 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 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 camera movement. 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. GoPros 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).

Furthermore, there is the perennial problem of recording good-quality sound. Floatpane 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 centres (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 low pass or a high 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 that what they hear and see on the screen is exactly what unfolded in actuality.

Post-production

Editing is a remarkably under-examined component of video method procedures (for exceptions see Bauch 2009; Laurier 2009; Garrett and Hawkins 2014). Conceptualized as a “creative-analytic process, combining the aesthetic 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. 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 dat (or clips) together, and refining is not unlike the process of copy-editing and proofing.

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 account the aesthetic 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 minutes in length—an appropriate length for a 30 minute 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 my region’s SHAW TV channel and submitted my work to his consideration. SHAW is one of Canada’s dominant providers of cable, internet, and phone communications. But in addition, SHAW also produces and broadcasts original programming of both regional and local interest and to this effect regularly considers program submissions from local film-makers and independent production companies.

After the video was accepted for broadcast 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, concluding section.

Reflecting on alternative audiences, styles, and modes of communication

Low and Slow was produced and edited to be simultaneously educational and entertaining. 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 humour, and it would have downplayed the importance of visual aesthetics. 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 minute 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 debatable at best.

Alternate cut number two could have been a more contemporary hypermedia text. So, for example, instead of a single 26 minute 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 (identifying citation). 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--these short videos have a very small audience. Few are ever watched by more than 150 or 200 people on the Internet.

So, 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 audio-visual 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.

References


