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Piglets and Perspectives:
Exploring Sustainability Communication
Through Participatory Filmmaking

By

Dyanna Innes Smith, MS

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

Environmental Studies

at

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Abstract

The goal of this research was to conduct a qualitative study applying narrative theory to participatory video methodologies in order to better understand how the process of filmmaking can be used to create a method of sustainability communication. To do this, the study collaborated with individuals who are currently practicing different types of sustainable agriculture on small farms in southern New Hampshire. A group of five farms participated in a new method of filmmaking designed to blend specific elements of participatory video technique with principles of narrative theory. This method included camera training, filmed personal interviews, participants filming their own farming methods, a group editing session and public screenings of the group film. The filmmaking process resulted in the successful emergence of shared sustainability themes, documented through the on-camera interviews, participant narration and visual imagery. Participants reported increased confidence in communicating their sustainability practices. The use of film and visual narrative revealed the art of everyday life for the participants, creating a narrative intimacy and social connections within the group that are evident on viewing their filmed stories. The study yielded results that can be used by both participatory video and narrative inquiry practitioners, and successfully created a new method for sustainability communication. The study also resulted in the 42-minute documentary film *Piglets and Perspectives*; an emergent narrative revealing innovations in sustainability on small farms in southern New Hampshire, as told by the farmers themselves. This dissertation is accompanied by the documentary film [.mp4], the milkweed short film [.mp4], and the pilot project film [.mp4]. The electronic version of this Dissertation is at OhioLink ETD Center, www.ohiolink.edu/etd.

Table of Contents

Abstract	i
Table of Contents.....	ii
List of Figures	v
List of Supplemental Media Files.....	vi
Preface	1
One Day on Earth	1
Introduction	4
Description of Participants and Pilot Study.....	10
Methodology and Theoretical Framework	12
Participatory Video	12
Benefits.....	16
Participant/Researcher Roles.....	20
Direction	22
Project Within A Study	23
Narrative Theory and Inquiry	25
Narrative Interprets Experience.....	25
Narrative Reveals Themes.....	27
Relationship Between Participatory Video and Narrative Theory.....	29
Methods: Designing the Research Spiral	34
Spiral Elements	34
Sample	34
Initial Interview	35

Farmers Film	37
Rough Edit.....	38
Group Editing Workshop	38
Farmers Filming (second round)	39
Final Edit	39
Public Screening.....	39
Final Interview.....	39
Guiding Principles of The Research Spiral.....	40
Benefits.....	40
Participant/Researcher Roles and Story Integrity.....	42
Direction	44
Process Continuity.....	45
Results.....	46
Participants	46
Technology	47
Introductory Meeting, Camera Training and Interview	48
Editing the Rough Cut	49
Group Editing Workshop	53
Second Round of Filming and Editing.....	56
Public Screening	58
Final Interviews	59
Discussion	60
Communicating Sustainability	60

Sustainability Themes	62
The Art of Everyday Life.....	66
Innovation and Local Knowledge	74
Process Tensions	75
Applications for Sustainability	78
Suggestions for Future Research	81
Conclusions	84
Appendices	92
Appendix A: Participation Letter	92
Appendix B: Interview Topics Guide	93
First Interview	93
Second Interview	93
Appendix C: Filmmaker Packet Contents	94
Filmmaking and Camera Tips	94
Antioch University New England Individual Research Consent Form.....	95
Video Release Form	97
Filmmaking Worksheet	98
Appendix D: Chart of Emergent Sustainability Themes	99

List of Figures

Figure 1: The Research Spiral and its Elements.....	35
Figure 2: Guiding Philosophy Theme Table	66

List of Supplemental Media Files

Milkweed-DyannaSmith-SD-Oct10-2010.mp4	28.9MB	5 min 14 sec
ConvalPilot-DyannaSmith-Dec2011.mp4	93.6MB	9 min 45 sec
Piglets-and-Perspectives-Section1of5-Dyanna-Smith.mp4	99MB	5 min 45 sec
Piglets-and-Perspectives-Section2of5-Dyanna-Smith.mp4	137.3MB	7 min 54 sec
Piglets-and-Perspectives-Section3of5-Dyanna-Smith.mp4	119.2MB	6 min 52 sec
Piglets-and-Perspectives-Section4of5-Dyanna-Smith.mp4	189.7MB	10 min 55 sec
Piglets-and-Perspectives-Section5of5-Dyanna-Smith.mp4	197.7MB	11 min 23 sec

Preface

One Day on Earth

A few years ago I chose to be part of a "global participatory media event" where individuals in every country of the world were invited to film a snapshot of their life on 10/10/10. The event was open to anyone with a video camera and a link to the Internet; the results of which were eventually compiled into a feature documentary revealing *One Day on Earth*.

I didn't know anything about filmmaking, as I set up the tripod late that afternoon in the fading daylight. I participated because I was inspired by the concept and, like a small child, I did not want to be left out. I could not deny this call to add my voice to a document of the world. Plus, there seemed no way to fail. There were no boundaries on what was submitted - it was simply a call to document my place on earth during this single, specific day. So, after a little thought, I set up my camera facing a spent milkweed pod at the front gate of my house. I passed it nearly every day as I came and went, and having a love of milkweed, it filled me with joy every single time I walked past it. Pressing the big red button on my pocket sized point-and-shoot video camera; I stepped back and timed a four-minute recording. When the recording stopped, I went back into the house, uploaded the video to the project organizers, and it was done.

It was my first film! A shot of a milkweed seed caught on a rose thorn, blowing in the early evening breeze. That was all. My four minutes of the world on October 10th, 2010. In that simple act I experienced the power of film for engaging in personal storytelling and began to think about its application for supporting environmental change. Here I was, responding to a remote request from a random email, sent by a person with whom I had no relationship. Yet, in

the twenty minutes it took me to shoot and upload the film, I was surprised to feel overcome by a deep sense of pride, value and connectedness to the world. Creating the film, as simple as it was, challenged me to think, "what *is* my story?" It engaged me in a process that I felt was positive and deeply expressive, and yet didn't fully understand.

My experience contributing my voice to a global expression of One Day on Earth can be interpreted as a form of sustainability communication. In my video, I position myself as a part of my lived and natural environment. The camera is trained on a milkweed pod, something in nature that I highly value and identify with on a personal level - enough to have it represent me in my place. But there are subtle references to my larger environment present behind the top layer of peacefulness. The background begins to reveal episodic traffic on my street and the distant ping of baseball bats from our neighborhood park. There are many choices I could have made for the focus of my four-minute film. I could have filmed indoors, or filmed myself, or other people. Yet, my choices reveal that I find beauty and value in the natural world and in my suburban setting. If I pushed myself to more explicitly elaborate on sustainability, I might choose to expand my film with footage of my entire property, showing how much milkweed I encourage in my gardens to help support diminishing butterfly populations in my region. In doing so, my film would be communicating sustainability through expression of a selection of my values, priorities, and actions that orient towards my sustainability goals.

The goal of One Day on Earth was to create and communicate a global vision of a single day through the perspectives of hundreds of individuals. Their project is a form of *participatory video* and I was one of the many participants. In most participatory video projects the subjects of the film conduct the filmmaking themselves, using cameras to tell their own story in their own way. Documentary forms of filmmaking typically place control of the content of a film with the

project's director, who is the person behind the camera (Nichols 2001). Participatory video, or PV, however, turns varying levels of content control over to the subjects (Nemes et al. 2007). By doing so, participatory video becomes a style of filmmaking where "video itself plays a role in transformational social change" (Plush 2009). PV techniques have been used in a variety of different applications, where the cameras, for example, give voice to individuals and communities experiencing power injustices or communication barriers.

If I were to create this type of filmmaking experience for others, and focus it on an environmental issue, would it translate a similar experience of inner strength and connectedness to community? Which parts of the process might be responsible for these outcomes? Was it the act of shooting the film, interpreting my story, or watching it play back that lead to these outcomes? Or was it a combination of all of these aspects? In response to my experience, I began to explore the application of participatory filmmaking for communicating sustainability.

Introduction

Sustainability is an arguably complicated term with seemingly as many definitions as there are practitioners and theorists who embrace it. The World Commission on Environment and Development's Brundtland Report defined sustainability as "meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland et al. 1987). Since then, attempts at defining sustainability include both objective and subjective goals.

One objective example can be found in Goodland's (1995) review of the economics of sustainability, where sustainability is measured as "the unimpaired maintenance of human life-support systems—environmental sink and source capacities" (p. 5). Here, sustainability is the steady monetary balance of inputs and outputs of an environmental system. According to Goodland, this leaves no room for economic growth since all energy is focused on achieving equilibrium. For example, waste must be kept at a level where the environment is able to use and absorb it without being overwhelmed or creating surplus system waste. Balance means harvest is equal to production rates. Any harvesting of nonrenewable materials must be at lower levels than human creativity can replace with new alternatives. Defining sustainability through the lens of economics, natural capital becomes the limiter of growth, where "consumption of natural capital is liquidation, or disinvestment—the opposite of capital accumulation" (p. 14).

Looking at nature as a series of assets for human consumption, while potentially helpful in terms of ascribing value to resources, promotes the objective view of nature, and seems like its own idealistic definition of sustainability. This definition may provide one form of system modeling, but how would it stand up to the every day functioning on a working farm?

Renown climate scholar John Hansen (1996) synthesizes the definitions of sustainability, as it applies to agriculture, into four categories: philosophy, technical and management strategies, goal fulfillment, and longevity. In his review of the literature, attempts to define agricultural sustainability can be attributed to one of these four “issues motivating concern” (p. 118). Sustainability defined as a form of philosophy can take into account personal values and efficacy, respect for the land, equitability, stewardship of resources and spirituality. Definitions take on a strategic approach when they include certain methodology, practices and techniques that lead to sustainable outcomes. Goal-driven definitions of sustainability include environmental quality and profitability. Finally, definitions based on the longevity of the system are measured by net benefits over time and economic balance. This last category is where we could include Goodland’s definition.

Hansen’s review goes beyond objective definitions of sustainability to identify many subjective qualities as well. Definitions that prioritize its objective interpretation tend to focus on the definition’s value in applicability beyond the particulars of certain farms and specific situations. They are used as predictive tools to ascribe a model of sustainability intended to be broadly applied. But it is the very *subjectivity* of sustainability that is demonstrated when we see how the farmer both conceptualizes and operationalizes his own version of sustainable agriculture on a daily basis.

Historically, as farming turned to reliance on outside inputs to increase productivity, this reduced the farms’ ability to rebound from adversity. This loss of resilience in the farm system is what today’s small farms seek to overcome through efforts to eliminate the need for outside inputs. Reducing reliance on outside inputs is a common theme under the umbrella of

sustainability in today's farming philosophy. But it is only one part of the picture of sustainability, and the picture shifts with each farm and their abilities, assets and goals.

Pretty (1995) points to the complexity of individual farms as the reason why there is difficulty in defining sustainability in terms that can be broadly applied. Such complexity is why he warns against a one-size-fits-all definition of sustainability. The complexity of each farm system makes a single definition impossible. "It is critical, therefore, that sustainable agriculture does not prescribe a concretely defined set of technologies, practices or policies. This would only serve to restrict the future options of farmers" (p. 1248). Pretty goes on to suggest that adaptation to accepted sustainability techniques must be encouraged as a way to support new methods of sustainability that develop in response the needs and abilities of a farm at a certain place and time. This offers another more subjective definition of sustainability based on a constantly evolving snapshot of each farm in time. "As situations and conditions change, so must our constructions of sustainability also change. Sustainable agriculture is, therefore, not simply an imposed model or package. It must become a process for learning and perpetual novelty" (p. 1249).

For these reasons, Pretty prioritizes participatory methods of study as a means of gaining insight into sustainable agriculture. He advocates a variety of participatory group techniques to facilitate problem solving and generate potential solutions within an agricultural setting. "Groups can be powerful when they function well, as performance and output is likely to be greater than the sum of its individual members" (p. 1254). By bringing together a group of farmers from a specific region, who share a goal of small farm sustainability, what insights can we learn about modern sustainable agriculture? How might we advance an understanding of sustainability

through the magnification of individual action as communicated by a connected group of regional actors?

I do not seek to create a definition of sustainable agriculture that can be applied beyond the bounds of the research study. Rather, I see a value in defining sustainable agriculture as an emergent set of unifying or overlapping variables found within a group of individuals who are actively farming sustainably. How do they speak about sustainability? Where do their personal definitions overlap and where do they diverge? What can we learn from their self-described techniques and philosophies? Will it adjust the commonly held definitions of sustainable agriculture?

Within the field of environmental studies, sustainability implies a holistic approach to environmental problem solving that includes ecology, economics, sociology, psychology, philosophy and spirituality. Thus, there are multiple entry points into a study concerning sustainability and its transdisciplinary nature. To address a working definition of sustainability as evidenced in everyday life, this research study finds entry into the conversation on sustainability through what Godemann and Michelsen introduce as *sustainability communication*:

Sustainability communication is...a process of mutual understanding dealing with the future development of society at the core of which is a vision of sustainability. It is both about values and norms...and about research into the causes and awareness of problems as well as about the individual and societal possibilities to take action and influence development (2011, 6).

This mutual understanding implies a shared priority for sustainability as can be expressed in one's personal values and seated in one's social environment or community. "The task of sustainability communication is to critically evaluate and introduce an understanding of the human-environment relationship into social discourse" (2011, 1). As such, it focuses on both the needs of the environment and the needs of the individual interacting with the environment,

attempting to translate an awareness of individual priorities and choices within the context of sustainable decision-making.

This research applies participatory video as a form of sustainability communication by specifically orienting the PV process towards a discussion of sustainability by the participants. Upcoming sections will explore participatory video, breaking down the literature into three spectrums of decision-making to consider how it informs this study's research design. The discussion goes on to further frame the design as a form of narrative inquiry. Since sustainability communication is partially tasked with evaluation, narrative inquiry is used to provide this evaluative lens throughout the research process.

Sustainability issues are typically characterized by high complexity and uncertainty. In light of this, communication plays a crucial role in coping with these challenges... Sustainability communication... involves more than sender oriented communication to persuade others; it also embraces processes of dialogue and discourse (Newig et al. 2013).

My goal is to create and evaluate a form of sustainability communication that uses dialogue and discourse informed by participatory video techniques and evaluated through the lens of narrative inquiry. The research sample is composed of a group of farmers who are engaged in sustainable agriculture in southern New Hampshire. For the purposes of this study, I define all agricultural activities that benefit the environment as sustainable agriculture, regardless of the intention of the activity. I use this definition to identify the farmers invited to participate because there are a variety of farming practices that are beneficial to the environment that farmers may not necessarily label as "sustainable". For instance, an on-farm shift from mechanized tractors to horse power may be the result of a farm's effort to save money, rather than an explicit desire for environmental benefits, even though this can be considered a method

of sustainable farming. In other words, the farmers in this study do not necessarily self-identify as practicing sustainable agriculture, but their methods can be interpreted as sustainable.

Examples of this include commonly identified sustainable agricultural practices such as composting or using alternative energy on the farm. It is not necessary within the bounds of this study for its participants to identify their actions as sustainable, because a practice can be considered sustainable regardless of what motivates the action. For example, one reason low-input farming is beneficial to the environment is because it reduces reliance on the import of elements not naturally occurring in the farm habitat. However, a farmer may identify their farm as low-input based on a priority for its economic benefits, rather than the environmental benefits.

This simple definition is enough to inform the study by using it as a framework to identify and invite its participants. It is also a goal of this research to test the function of the filmmaking process created here in achieving an operational definition of sustainable agriculture (and sustainability, generally) as an emergent property of the dialogue and process of the group. In this way, it is anticipated that by adopting a very basic definition of sustainability as a foundation, the method of the study may reveal a more specific, group definition of sustainability as practiced by these farmers. This further definition can be found in the results of the research itself, as revealed in the process, framed within the content of the final film, and discussed in the body of this dissertation.

Description of Participants and Pilot Study

During the early stages of framing this study, I became aware of a group of farmers in the Contoocook Valley region of southern New Hampshire who were active and publicly vocal around sustainable farming issues. I understood that the Contoocook Valley group was specifically focused on promoting a vision of food safety and food security for their geographical region. As individual farmers, they were participating in their own forms of sustainable agriculture. As a group, they expressed a shared sustainability vision for their community and they envisioned themselves with key roles as local producers to provide that security and safety, and to encourage others in the community to do the same.

Using an existing series of audio-recorded oral history interviews in which they each discussed their role in local agriculture, I conducted a brief pilot study to test my developing methodology. As I listened to the recordings, each participant expressed sustainability in their own way, backed with examples of their own actions or priorities. When taken individually, each interview reveals their unique sustainability narrative, or story. From each participant, I then chose portions of the interviews where they expressed their views and actions most effectively. These included segments where they had the most clarity in their descriptions, expressed the strongest emotion or priority for what they were saying, and for the purposes of creating a film under ten minutes, where they were most concise and the audio had the best sound quality.

From there, I organized the sound clips into a timeline so that they flowed together with supporting photographic images, producing a short 9-minute film based on my research methodology. Although the research methods had to be slightly modified for the pilot study

(driven by available research texts and opportunity), the goal of combining individual voices into a narrative that represented the group vision remained the same.

Two months after the initial interviews were conducted, I screened the pilot study film for the Contoocook Valley farmers. All of the interviewees present at the screening responded affirmatively that they felt their voice was represented authentically in the film, and expressed interest in continuing as participants in further research that would expand the film project.

The pilot study allowed me to experience the researcher role I envisioned, in that I was able to successfully create a single narrative out of their individual narratives, and that participants felt the edited piece remained true to their vision. It provided early positive reinforcement for my research design, and connected me to a number of potential study participants.

Overall, the Contoocook Valley group served as an appropriate research sample to test the early stages of a developing model of sustainability communication because as individuals they each express a unique, personal view of sustainability that they are willing to share publicly. Taken together, their views combine to reveal an emergent societal discourse on sustainability.

Methodology and Theoretical Framework

Participatory Video

Johansson et al. describes participatory video as a process where community members "move forward in iterative cycles of shooting-reviewing... [to] create video narratives that communicate what those who participate in the process really want to communicate, in a way they think is appropriate" (Johansson et al. 2000). As such, participatory video contains both process and product, in which a group of participants (including a facilitator/researcher) use the medium of film to communicate points of view. The PV process is typically composed of a series of activities that can include camera training, shooting video of oneself, shooting video of others, watching the video back, reshooting, editing footage, and presenting footage to the public.

Within the context of participatory video, and for the purposes of this study, it is helpful to identify what appear to be three overlapping layers of participation: individual, community and audience. Individual participants are engaged in the PV process as subjects, either behind or in front of the camera, or both. In this study, the researcher is included as an individual participant whose role will be discussed later in the chapter. The PV community, or *project community*¹, refers to the group of participants engaged together in the process. The project community may be a random sample, or share common variables, such as a skill, geographic location, action agenda, message, or issue of focus. The audience, then, are those who view the film. The project community is included in the audience when participants view portions of the film or the final film product.

¹ I introduce the definition of *project community* to add clarity in discussions that also reference the community at large, or the broader community within which the PV project is seated.

In one of its first known uses, participatory video was introduced into the 1976 *Challenge For Change* documentary program intended to "give the disenfranchised and marginal communities of Canada a voice by giving them access to the media (film, and later Super-8, video and cable television)" (Marchessault 1995, 134). The program particularly focused on issues of poverty. Locals in a small, fishing village on Newfoundland's Fogo Island were interviewed on camera expressing their views on the government's plan to relocate them away from what was perceived to be the end of their fishing economy in favor of a stronger mining economy on the mainland. Participants were next allowed to review the films and ask for parts to be removed in which they felt they were not accurately portrayed. The editing process in general was minimal. These methods were unusual at the time, and the resulting film exposed a local perspective counter to the politically imposed narrative, uniting the islanders and the government in positive action beyond the participatory project to keep the islanders in place (Odutola 2003, 3; S. A. White 2003, 67–68). This new subject-as-participant style of filmmaking gained recognition and traction, known now as the Fogo process.

Here, the participating individuals consist of local Fogo Islanders. As they participate, film becomes a "reflective mirror" (Marchessault 1995, 136) through which they begin to translate their situation, express their opinion, and watch themselves doing so (observing their peers, as well). The medium of film serves as the physical catalyst for change when project organizers show the film back to the project community - the individuals involved in the filming - who on viewing themselves and hearing their combined message become empowered to take action. When an audience of regional political leaders view the film, they gain a new understanding of the villager's situation that subsequently inspires them to take action more aligned with the interests of the villagers. The project, then, serves to generate and promote the

individual point of view, unify the individual within the project community (and the community at large), and motivate future action within the audience.

Since the establishment of the Fogo process, the field of participatory video research has expanded broadly in application and discipline. However, there is a particular subset within the literature on participatory video that can be identified as having an environmental change context (for review see Chowdhury and Hauser 2010). Here, PV has been primarily employed as a technique in international development projects that feature goals in sustainable agriculture. Within the international development body of research, the term *sustainable* most commonly refers to agriculture deemed to contain environmentally beneficial elements, and practices that aid in agricultural longevity and success. The following three examples show how the PV process has been used effectively to spread innovation in sustainable agriculture through the use of certain techniques, tools, methods, and local knowledge.

In the first example, participatory video was used in a project in Ghana to share agricultural innovations between two neighboring villages (Bruce et al. 2006). Each village was asked to produce a film highlighting their use of natural mineral salt licks with their livestock. The completed films were shown to audiences that included both villages, and community discussion following the screenings was encouraged. Through observation of the other village's practices, and the following opportunity for dialogue, each village picked up new information from the others' film that they, in turn, adopted to enhance their current use of the mineral licks. For instance, when one village observed the other using a plant binder to hold together the mineral clay they adopted this practice as well, and solved their long-time issue with mineral blocks cracking apart in the sun.

In the second example, agricultural extension agents employed PV as one portion of an elaborate multi-year media project aimed at improving soil fertility in Jamaica (Protz 1998). Particularly focused on the under-recognized role of rural women as agricultural innovators, the project used demonstration videos to teach new agricultural methods to a group of women farmers. The women committed to trying out the new techniques over a period of time, after which, it appears the women then filmed themselves or each other employing the methods in their own fields. The films produced by the women showed the methods successfully in use, and additionally revealed modifications to the methods that extension agents were unaware of or had not yet thought of. In one instance, the methods included how to compost and create compost bins. In their filmed response, "the women had improved on the construction of the compost bin presented in the [training] video by using the traditional method of 'wattling' to weave the wooden components of the bins together instead of using nails" (1998, 3). The extension agents then used this newly accessed indigenous knowledge in the remaking of the training videos, and added participants into the production stages of the remake as well.

A final example shows the use of PV to investigate and promote climate change adaptation strategies between communities in rural Malawi (Baumhardt, Lasage, and Suarez 2009). The project focused on five subsistence-farming villages with high vulnerability to the effects of climate change; mainly, flash flooding events and extended periods of drought. Individuals from one village were asked to create videos showing how they have altered their farming practices in response to changing flood and drought patterns. Adaptations the farmers revealed included crop and livestock diversification (switching from chickens to ducks), simple forms of irrigation, and shifting grain storage from floodable granaries into bags that can be moved to high ground during flood events. The resulting film was shown in the other four

villages, with audiences reporting increased willingness to adopt these changes in their own farming practices after viewing the film. The participatory filmmakers reported pride in their own knowledge and skills, and at becoming educators to their neighboring peers.

These examples begin to suggest strategies and successes for participatory video in that it reveals innovation, unites individuals engaged in a common variable, and can encourage action in the broader community. Taken together, these types of projects show a precedent for the use of participatory video as a device for sustainability communication.

During this same review of PV literature, I began to notice trends in methodology related to outcome goals. To further invest my research direction, I decided to focus the broad range of goals and methods existing in the literature into three pivotal categories: benefits, roles and direction. Within the literature, decision-making within these three categories has a pivotal effect on the outcome of a project that contains participatory video. What follows, then, is a discussion of the identified benefits of PV, an exploration of participant and researcher roles within the process, and choices on direction and control of the narrative.

Benefits

The first of the three pivotal categories of participatory video decision-making concerns the benefits claimed as project outcomes. Participatory video, as the name implies, offers video cameras and film as a communication device. The combination of visual and vocal messaging opportunities provided by film create a richness and depth in both process and product. This choice of using video as a medium brings with it some "very specific benefits" (Shaw and Robertson 1997, 193):

It can respond to local oral traditions, and is a powerful communication medium...It is highly accessible, easy to transport and anyone can operate it; and its immediate feedback

capability provides the group with a new way to participate in evaluation, planning and decision-making.

PV research claims benefits to both the individuals involved in the process and also the audience experiencing the product, or even the broader community at large. The process itself produces benefits to participants by "involv[ing] people in an interactive way, making communication resources accessible to them directly, in turn, helping [participants] acquire the knowledge and skill that enables a partnership in generating messages" (S. A. White 2003, 37). For example, in many PV research projects, camera training is an important first step in the overall process. The training usually focuses on something simple, such as participants documenting their names and ages or filming nearby objects. Camera training in small groups acts as a subtle icebreaker to begin building relationships between participants and start their communications with each other. The tasks of filming each other and immediately watching the play back serves as an iterative form of technical self-training on the camera with the added benefit of teambuilding early in the process.

It should not be surprising, then, that this process of using video cameras leads to increased confidence and self-esteem in individual participants, enabling them to express and find voice through communicating a desired message. This is most often cited in the literature as empowerment outcomes when projects take place in communities with prevailing injustices and power inequalities, as evidenced in the original Fogo Island project. The act of giving participants cameras gives them permission to not only express their points of view, but also share their opinions publicly. Hearing their own voice reflected back, seated among the voices of their peers and projected outwardly into their public spheres builds confidence and support for their own point of view.

Nemes et al (2007) categorize a number of the claimed benefits of participatory video to include “active participation, individual development, communication, community building, social learning, self-advocacy, and empowerment” (10). Taken from the international development literature on PV, this particular list is seated within the context of bringing forth the voices of those who are oppressed in some way. Therefore, the focus on empowerment outcomes is evident.

Benefits listed indicate both individual and broader community benefits. The implication is that the PV project produces personal outcomes that encourage similar outcomes to follow on a community level. Through active participation, individual development, and communication participants are given both the permission and the tools to communicate their individual message. Becoming active participants in filmmaking, hearing one's own voice, receiving positive reinforcement through mirroring (seeing oneself reflected back in the film) or community feedback (other participants' responses), participants gain increased confidence and civic engagement on a broader scale beyond the PV project. The process assists individuals in forming a project community through teambuilding as they move through the project tasks together. Individuals then reach out beyond the project community as their self-advocacy and capacity to act as a group increases.

Participatory video projects can be directed towards specific outcomes, in part, by the combination of tasks within the process. For example, if an outcome goal is to encourage individuals to increase confidence in communicating their opinion, the primary tasks within the process will support this goal (filming their message out loud and replaying the footage).

In *community-based participatory video*, as defined by Mitchell and de Lange (2011), PV projects focus almost exclusively on benefits to the project community. Here, product (a final

film, for example) is secondary to the main process goals of partnership and collaboration. In other words, the process dominates - particularly the group tasks - and the resulting film products created during the process are of least value. This spectrum of priority for process and product, with its reflected benefits ranging from individual to audience outcomes, expresses a primary tension within the field of participatory video. Decision making within these tensions creates subtle modifications in a PV project that lead to multiple outcome opportunities. There appears to be as many different ways to create a PV project as there are tasks to include within the project for achieving certain benefits.

Mitchell and de Lange claim benefits of their PV method to include enhanced community function, effects on long-term social equity, and improved quality of life. While I agree that these are valuable objectives, particularly applied to projects with development goals, measuring longitudinal results like these falls beyond the scope of this project and its timeframe. Rather, my interest in PV is based on what might emerge as an individual benefit to the participants who make up the project community, and the benefits of building the project community itself, which can be measured by self-evaluation/critical reflection during different stages of the process, and within the project timeframe.

An additional PV benefit that relates to local knowledge, mentioned by Shaw and Robertson (1997), is evident in all three of the international development PV examples. These projects specifically identify (and achieve) an outcome of revealing local knowledge, particularly regional oral traditions.

During the pilot study, Roberta Nylander, a local historian, describes sustainable agriculture as a "recovery rather than a discovery" (Roberta Nylander, Interview by Tim Holt, September 11, 2011 Hancock Historical Society). Her view of sustainability as a blend of local, historic

knowledge and not just innovation is a perspective expressed by multiple participants within the Contoocook Valley group. Through their collection of interviews, they reveal knowledge of not only agriculture and traditional methods, but also local methods.

Many of the Contoocook Valley farmers refer to their current method of farming as a blend of new ideas and family tradition. With or without a personal history of farming, they place their activities in the context of more traditional techniques, some of which go back in time more than a few generations. Ruth Holmes, for example, talks about returning to the commons, an early practice in livestock agriculture where land was a shared resource, held in commons for the public good and open for public grazing. Today, she is modernizing the commons by creating a system where she herds her sheep to neighboring property so the sheep benefit from the variety and availability of pasture while the neighbors benefit from the positive effects of seasonal grazing on their land. By discussing this, Ruth captures and documents innovation based on local knowledge, in the same way that farmers in Jamaica revealed innovation based on indigenous knowledge from their heritage and location (Protz 1998).

Further examples of PV accessing local knowledge occur when participants choose to interview elders on camera as part of their footage, as seen in a youth project where children approached elders to gain a historical perspective on the effects of climate change on their region over time (Plush 2009). This same effect occurs when a study participant chooses to interview a family elder on camera to talk about the agricultural techniques passed down through a New Hampshire family.

Participant/Researcher Roles

The second pivotal category of participatory video decision-making revolves around project roles assumed during the process. Research claiming PV methodology encompasses a

spectrum of participant involvement, from a simple role in the planning stages to full editorial control. For example, one project limited participation to pre-filming stages. The overall goal of project leaders was to develop an extension video as a demonstration device that encouraged farmers to learn and adopt new techniques into their agricultural practices (Van Mele et al. 2007). Extension agents wrote the script and served as the actors in the video. Because they gathered representatives from the local farming community for feedback on the script, they called the project participatory video. While the project was, indeed, informed through participatory research methods (employed to validate that tools were used correctly in the field and to test the scripts), the label barely applies. Organizers considered the project a success of participatory video because the film it produced replaced agents in the field, demonstrating to many more farmers than they could physically meet in person.

This example shows the minimal end of the participatory spectrum in PV. The same group expanded this project in following seasons by replacing the extension agent actors in the film with local farmers demonstrating the use of the tools on camera. This increased the adoption of the featured agricultural technology, advancing the project's explicit goal of disseminating local knowledge. Still not a truly participatory project, they state that their goal was not to enter a deep community dialogue about the issue (Van Mele 2008), which one would assume they avoided by maintaining control over the majority of the project.

At the opposite end of the spectrum, some researchers prefer methods within PV where the participants take the dominant role. Mitchell's *community-based participatory video* technique has the researcher role largely complete after facilitating an initial planning session. Here, the researcher collaborates with participants to organize an agreed upon script, and then steps back as participants shoot the scenes in one take, completing the film without any editing.

In this method, the roles of filmmaker, director and editor are entirely turned over to the participants after the researcher helps them script their group message (Mitchell 2011).

Toward the middle of the participatory spectrum, examples can be found of a more balanced process. The participant-researcher relationship is viewed as a "cooperative scheme in the image-making process" with shared tasks leading to a film production (Chalfen 2011, 188). To understand how the process effects the participants' point of view, "it is likely that participant-generated images would be favored over researcher-generated images, to be coherent with the intention to understand the meaningfulness of a construct, experience, program, and so on" (Mathison 2008, 10). In this approach, the participants and the researcher are partners in the process. The researcher can be viewed as a facilitator, maintaining the priority for participants' voice, edits and direction; contributing where necessary to move the process along on the participant's behalf.

Direction

The third pivotal decision-making category within the PV process has to do with the type of facilitation, or direction, provided by the researcher. Levels of technical direction range from basic camera operation to more elaborate filmmaking techniques. Limiting training to basic camera operation and only discussing a few simple filmmaking techniques may result in a greater variety of types of filming as participants discover methods of their own visual presentation. This is partly because of the way people tend to unconsciously include things in visual imagery (Chalfen 2011), and partly from the element of surprise that often emerges in image-based research (Luttrell and Chalfen 2010).

Such an informal style of direction is intended to add other layers of information and text to the result. "In participatory video... the technology becomes a mode for directing the attention

of participants, rather than an audience" (Nemes et al. 2007, 9). Participants are asked to look through the camera lens and create their own frames for their messages. This content direction, used to frame the filmmaking agenda in PV, can range from open-ended instruction such as "shoot what you think is important during your day" to very specific direction such as "bring back three images of cows." A high level of direction to participants about this framing may result in footage that meets the goals of the researcher, but may limit the creative emergence of results the researcher could not have anticipated.

The question then arises whether or not to develop a script to guide the process. Scripted projects, often combined with reliance on professional production teams, tend to create more polished films that appear to gain interest from broader society, promoting the capacity building benefits of PV. However, these types of projects have been shown to alienate participants by denying them editorial control over their own messages, and removing them from decision making on the use of the resulting film product. This can erode participant trust and amplify concerns over a time-consuming process in general (Chowdhury, Hambly Odame, and Hauser 2010). Whereas the spontaneous nature of the scriptless style of PV tends to reveal richer content detail because it is more opportunistic and can take advantage of unfolding events during filmmaking. Participants have identified the benefit of "stimulating self-sustaining spirit" as one result of the scriptless style of direction (2010, 356), presumably because they were able to maintain control of the message and its delivery into the broader community.

Project Within A Study

Part of what I find most exciting about participatory video is its inherent flexibility as a form of visual research. With so many moving parts, each PV project is like its own machine, unique in its variables of task, identified goals, beneficial outcomes, and the subject matter that

participants share in common. This flexibility, in part, explains why the literature is so broad. In designing a study that adds to this broad body of literature, I looked for clarity and guidance in Chalfen's (2011) division of the participatory visual media production literature into "two streams of activity and contribution:" human-interest narratives ("*projects*") vs. academic-based inquiry ("*studies*") (189). These labels illuminate the complications of interpreting PV literature academically, when a good portion of it primarily focuses on documenting procedure and reporting informal participant response at the end of the process.

It is not surprising, then, that there remains a lack of theory attached to the published practical data (Petheram et al. 2011, 2735) - both in PV specifically and in the larger field of video-based research (Jewitt 2011) - raising "the question of why more concrete work has not been done to further develop the conceptual foundations for PV" (S. A. White 2003, 24):

Not only are there few definitive concepts, but there is remarkable absence of any well-formulated theories to undergird the participatory video practices. While projects have been routinely evaluated, the lessons learned and understandings that have resulted have not led to significant theoretic work on the part of academics or other development professionals.

This research study attempts to, in part, respond to White's call for academic approaches to participatory video that incorporate theoretical discussion. Although Chalfen notes that his two categories are not mutually exclusive, and indeed often inform each other, in developing a PV methodology that contains theoretical discussion these categories may be bridged. Towards that goal, research takes on a nested pattern where the PV process is contained within the larger research design. Here, the research does not have the product of filmmaking as the end-point (whether a final film is produced or the PV process stops at an earlier stage), but rather, as a mid-point leading to "knowledge production, interventions and social action" (Luttrell and Chalfen 2010, 197). Therefore, conducting the participatory video *project* becomes a major undertaking

during this research; however, the *study* lies in the evaluation of the different stages of the process, its effects on the participants, and its application to sustainability issues. It is within the context of the *study* that a theoretical framework can then be applied.

Narrative Theory and Inquiry

Narrative Interprets Experience

According to Fisher's theory of narrative paradigm, it is *story* through which we primarily operate (1984; 1987; 1989). He argues that we are not such rational thinkers, but rather, we filter experience, make decisions and take action based on stories, or narratives, that we choose and constantly recreate. Our decisions are informed by history, biography, culture and character, which are all conveyed through story. "We experience and comprehend life as a series of ongoing narratives, as conflicts, characters, beginnings, middles and ends" (Fisher 1987, 24). Because we operate out of story, we rely on narrative as an organizational framework for communicating.

I agree with Clandinin and Connelly (2000, 50) when they claim, "the answer to the question Why narrative? is Because experience." Since narrative translates experience, our narratives suggest a basis for our decisions and actions by revealing aspects of our worldview.

Clandinin and Connelly (2000) identify three foundational elements of narrative structure: the *past, present and future*; the *personal and social*; and the *place*.

This set of terms creates a metaphorical *three-dimensional narrative inquiry space*, with temporality along one dimension, the personal and the social along a second dimension, and place along a third. Using this set of terms, any particular inquiry is defined by this three-dimensional space: studies have temporal dimensions and address temporal matters; they focus on the personal and the social balance appropriate to the inquiry; and they occur in specific places or sequences of places" (Clandinin and Connelly 2000, 50).

In the first dimension, a narrative researcher considers the same narrative's moment in time, reflecting or remembering the past, demonstrating something in the present, or projecting into the future. The second dimension considers personal aspects that "look inward" at things like emotions, values, philosophies; and considers the social aspects by "looking outward" at things that are apparent in person's environment, such as their family or cultural setting. The third dimension considers the physical boundaries of the space a narrative occupies. By operating along these three dimensions simultaneously, the narrative researcher fills in a completed narrative view. The dimensions can be interpreted as an analytical frame for the narrative itself, and a guideline for design of the narrative inquiry.

For example, if I tell a story about the time I purchased my house, I could show photographs of the house before I moved in or give its address to situate my story in place. By sharing that it happened eleven years ago, I situate the story in time. To bring in the personal dimension, I could add that the real reason I ended up buying this particular house was because every time I pass down the top few stairs leading to the basement it smells like my grandmother's attic. Continuing to explain that my grandmother's attic was a very happy childhood place for my cousins and I when we were young, and they were still nearby, introduces the social dimension.

Filling in all three dimensions of the story offers a richer, more complete, complex narrative. Just as I use the three dimensions as an analytical frame to organize the narrative of my house, I can also direct them towards an inquiry identifying research activities designed to draw out each of the three dimensions. And in doing so, I ensure that the results provide for a complete narrative.

Seating the narrative in all three dimensions provides solidity to the fluid nature of storytelling. Over time, and through the retelling of stories, shifting contexts add reference points that can cause a person's expression and interpretation of an event to change, "so that a single phenomenon may produce very different stories, even from the same person" (Andrews, Squire, and Tamboukou 2008, 5). Because of this, inquiry benefits from the three dimensions' revelation of contexts, even as they shift in narration.

Narrative Reveals Themes

When creating narrative "in response to a variety of questions, participants may construct themselves as having particular philosophies and habitual ways of dealing with the world that constitute a projection of identity or that signal their preoccupations" (Phoenix 2008, 67). In doing so, narratives reveal key themes of importance to the narrator.

It is an assumption of this study that, when considered together, a group of personal narratives clustered around a common variable (such as a commonly held value or priority) will reveal thematic patterns of importance.

What the writer of a narrative inquiry research text has is a diverse collection of storied field texts. Each field text is, to a degree, an individual and isolated text with its own narrative qualities. ...Because these field texts have been collected and positioned within the three-dimensional narrative inquiry space, the set as a whole has the potential to represent a more complete sense of the narrative of the inquiry field (Clandinin and Connelly 2000, 139).

In other words, if each individual story - here, captured as a video narrative field text - is brought together into the same narrative inquiry space, they combine to fill in the larger story around which they share a connecting variable. This occurs where all of the individual contexts intersect within their shared three-dimensional inquiry space (2000, 146).

In tandem to the individual contexts revealed through narrative, story contains embedded social contexts. Narrative analysts recognize that "social-cultural issues and dilemmas are evident through talk, even if they are not explicitly oriented to" (Phoenix 2008, 66), suggesting that narrative reveals social contexts with or without directing. In review of the oral histories used in the pilot study, each person interviewed, at some point, directly stated either a general perception of the social context of the group's agricultural practices or their own reflections on their roles in society, whether they think society accepts those roles, or not.

For example, Ruth Holmes discusses the public's mixed reaction to her highly visible actions, such as herding her cows across the street and stopping traffic. Talking about her agricultural practices leads her into observation and reflection on how her activities cause ripple effects through her social environment and community. Exploring her awareness of society's response to her actions may provide valuable insights into her motivation for continuing these actions in light of potentially negative public scrutiny. This may lead to deeper understanding about how to negotiate sustainable actions in the community, and ways her narrative reveals both the successful navigation of challenges to taking sustainable action, and the positive impacts of these actions on the community.

Embedded social contexts can be reinforced through syntax, figures of speech, and other "stylistic elements [that] generate social connections and that themselves support and stimulate social change" (Squire 2012, 50–51). This ability of narrative, through embedded social contexts, to generate social understanding and encourage action helps suggest narrative as one path to creating the shared knowledge that is called for in sustainability communication. When a narrative becomes public, this further situates individuals socially. "Contextually, narrative in the form of first person testimony has become central to new forms of activism," where the

"challenges facing narrative work [are] entering a brave new world, now often spanning the intimate, interpersonal and the abstract, global" (Gready 2008, 137). Given our contemporary technology and connectedness there is a radical amplification of voice as it goes public.

While the opportunities for potential social impacts of narrative grow exponentially upon entering the global arena, (whereas social connectors like syntax may have more impact on a local scale), we are reminded of the ethical right for the integrity of an individual's self-narration and testimony to be upheld, especially when displayed publicly. Story integrity is an ethical consideration that must inform narrative inquiry, and is a critical point that lies at the intersection of the "intimate, interpersonal" narrative telling and the "abstract, global" narrative retelling. People have the right to tell their own story in their way, and have this maintained in any retellings.

Relationship Between Participatory Video and Narrative Theory

Participatory video relies on narrative, particularly the narrative of life experience. Narrative theory claims narrative as "a solution to a problem of general human concern, namely, the problem of how to translate *knowing* into *telling*" (H. White 1980, 5) - a primary goal narrative shares with participatory video.

This study adopts the dimensional framework of *past, present, future; personal, social; and place* as an organizational guideline for integrating narrative theory into the participatory video process. This is done, in part, to add structure necessary to evaluate PV through a narrative lens. During this research, the framework was applied by ensuring that the resulting story line was grounded in each of the three dimensions. The study was situated in *place* through the physical boundaries of the selected group, and even explicitly presented in the title of the final

film. In this way, *place* also helped serve a unifying function in the study, and in the project. Time was largely set in the present, due to the demonstrative nature of the video, but included references to past farming experiences by some participants, and references to future ideals and goals. *Personal* and *social* dimensions are prevalent in participants' interpretations of farming, often expressed visually and poignantly. There is also a personal dimension present in the relationship of the participants to the researcher, as evidenced during the filming process when participants feel they are communicating their narratives directly to me, the researcher, as one might have a personal conversation over the telephone, where the camera replaces the phone.

More generally, the opportunity to apply narrative theory to participatory video is supported by the particular way it frames inquiry:

Narrative inquiries are always composed around a particular wonder, a research puzzle. This is usually called the research problem or research question. However, this language and wording tend to misrepresent what we believe is at work with the narrative inquirers. Problems carry with them qualities of clear definability and the expectation of solutions, but ...narrative inquiry carries more of a sense of continual reformulation of an inquiry than it does a sense of problem definition and solution. As we think about the phenomena in a narrative inquiry, we think about responding to the questions: What is your narrative inquiry about? or What is the experience of interest to you as a narrative inquirer? (Clandinin and Connelly 2000, 124)

The interest of this study is, at its heart, an exploration of the experience of individuals who are engaged in the cutting edge of sustainable practice. It is an open-ended request for information about what it's like, literally, in the field. Whether these individuals recognize it or not, they are practicing on a daily basis what the environmental field is calling out for in theory. The Contoocook Valley farmers, for example, are organizing around their actions in very public ways. My assumption is that this public organizing challenges them on an individual level and a cultural, or societal, level. This assumption is partially validated in comments recorded in the pilot study interviews. It is appropriate to investigate these experiences through narrative because

of its ability to naturally bring forth personal and cultural themes. In the nested research design, study participants take on the roles of narrative researchers, asking themselves the research questions internal to the PV project, such as 'what is my experience as a farmer today?'

Narrative brings forth key themes. In the intention to use PV to illuminate sustainability issues, the ability of narrative to bring forth key themes of importance is a valuable outcome. If individuals within the study already show innovation and take positive sustainable action in their lives, then how they reveal and identify their personal, primary themes around sustainability through story provides deep insight into their motivations and values.

My interest in using film to produce narrative is in its ability as a medium to add a visual dimension to the oral narrative. By requesting that participants document their stories through a visual medium, this becomes a study of the *art* of filmmaking, where *art* is the experience of creating the film (Mello and Clandinin 2007). So, we can look at participatory video as a visual form of narrative inquiry. Bach (2007, 281) defines visual narrative inquiry as "an intentional, reflective, active human process in which researchers and participants explore and make meaning of experience both visually and narratively." Here, through the process of producing visual narrative, art allows us "to see more in our experience, to hear more on normally unheard frequencies, to become conscious of what daily routine have obscured, what habit and convention have suppressed" (Greene quoted by Mello and Clandinin 2007, 213). Adding the visual layer to an inquiry expands the opportunities for emergence of personal and social contexts that narrative tends to reveal.

Mello and Clandinin (2007) go on to identify the strategies of *arts-based/informed narrative inquiry* to include: "creative field text gathering, creative research text presentation, empowering one's coresearchers/participants, inviting readers to make their own conclusions,

supporting construction of personal knowledge, and honoring multiple perspectives" (215). Such strategies directly align with the methods and outcomes documented in the participatory video literature: using process film as a creative form of field text, product film as a creative research text presentation (i.e. the final film product), previously discussed empowerment benefits of PV, the possibilities of social connection with the audience, translating one's own lived experience, and creating a story that contains the variety of individual points of view of all participants.

By adding the dimension of visual expression to narrative, participants in this study were intended to have more options available to them for interpreting and communicating their lived experiences of sustainability. The act of filming causes the filmmakers' attention to focus; where the person "seeing"... "almost instantly becomes acutely conscious of the moment and of herself in that moment the more that she attends to an object. This is especially true if the object looks back and is another person" (Grady 2008, 7). The choice of using film to capture narrative amplifies the opportunity for successful sustainability communication beyond written and oral narrative through the addition of the visual.

By filming one's own story, a person shares his personal perspective and priority with his audience each time he points the camera at something. "It is similar to what happens when someone shouts, 'Look!' and everybody 'looks'" (Grady 2008, 7). The camera provides an "assist" in drawing out the narrator's key themes. By using a camera, the participant creates a literal and metaphorical frame, and makes selections based on what he perceives to be significant.

Narrative inquiry also informs participatory video through its concepts of voice and signature, where each storyteller has his own unique *voice* and the researcher applies her *signature* to those voices as she works with them. "In its broadest sense, voice may be thought of as belonging to participants...for whom a text speaks" (Clandinin and Connelly 2000, 146).

Voice can become a vulnerability for the researcher when working with narrative texts as the researcher exercises judgment during an inquiry, making editorial choices that impact a participants' voice. The researcher's signature emerges within a narrative text as she negotiates participants' narrative voices, here, to blend them into a combined, larger story. "The dilemma is how lively our signature should be: too vivid a signature runs the risk of obscuring the field and its participants; too subtle a signature runs the risk of the deception that the research text speaks from the point of view of the participant" (2000, 148). Signature and voice in narrative inquiry directly connect to the direction spectrum of participatory video. Too heavy of a directorial hand removes the ability of the participant to control their own message; too light, and the video produced can appear chaotic and disconnected.

Methods: Designing the Research Spiral

In order to better understand how the process of filmmaking affects individual and collective visions of sustainability, I designed this study based on participatory video techniques. I used principles of narrative inquiry to guide my design as I evaluated existing PV methods to create and test a new method of sustainability communication.

In moving through the design phase, it was necessary to critique stages of the process in a neutral way, without considering the content of the narrative, the focus of the subject group or any content details of previous PV research. To keep my focus neutral, I looked at the pieces separately, as stripped-down elements in an overall process - a spiral created out of parts of PV and narrative practice that could be used with any group of individuals, regardless of thematic content. In other words, my objective was to build an empty system equally effective with a group focused on sustainable agriculture as with a group focused on marine debris issues or endangered species.

This chapter introduces the Research Spiral (Figure 1), first, through a description of its parts as applied during the research phase, and second, with a more in depth discussion of the guiding principles that combine participatory video with narrative inquiry to create its underlying framework.

Spiral Elements

Sample

A targeted research sample provided the opportunity to look deeply at the application of the methodology within the larger context of sustainability. The study group was comprised of a

set of individuals who share a common sustainability topic, express different perspectives on the topic, use differing approaches towards achieving their goals, and are interested in promoting their voice. In this study, participants were selected based on their occupation as farmers, their use of sustainable agriculture techniques, and their geographical location in southern New Hampshire.

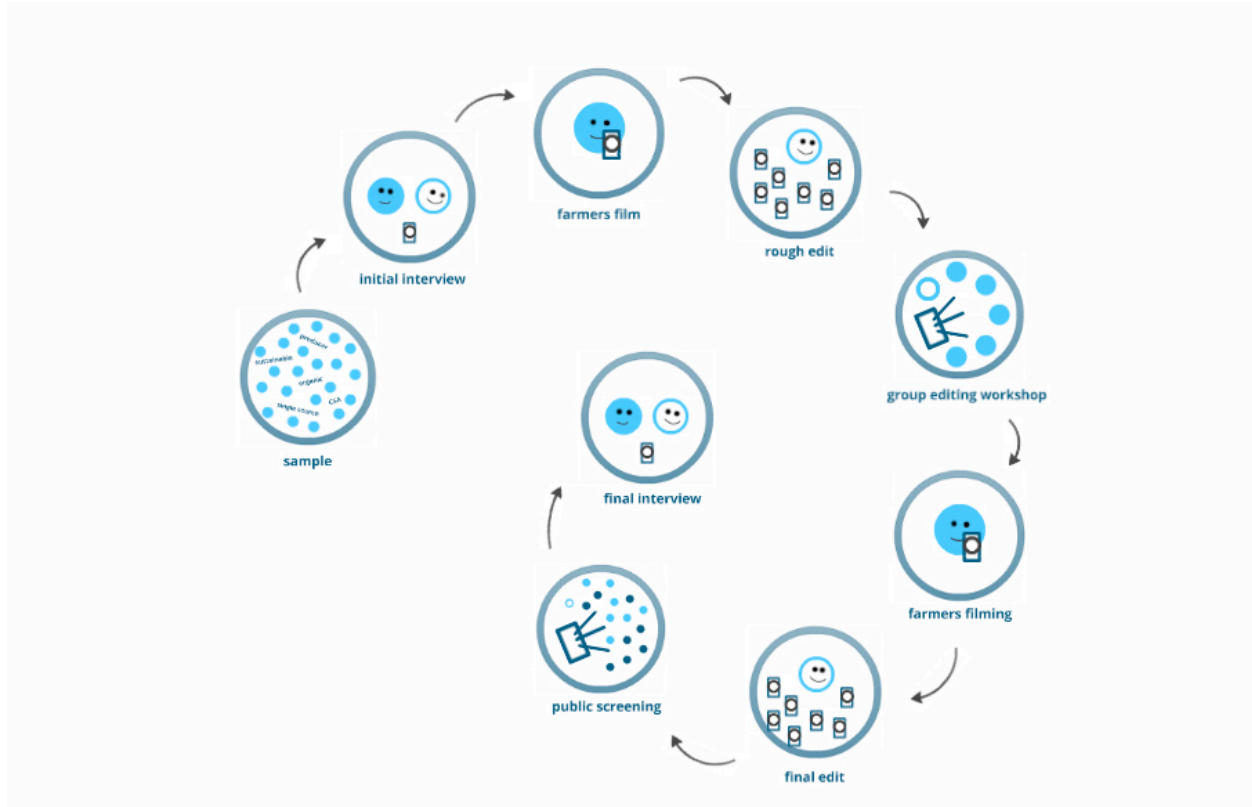


Figure 1: The Research Spiral and its Elements

Initial Interview

The first phase of research began with an introductory meeting to generate individual farmers' filming agenda, get to know the camera, and conduct the first interview. The meeting was based on a selection of typical participatory video techniques (Shaw and Robertson 1997; S. A. White 2003; Lunch and Lunch 2006) including shooting practice video, brainstorming

filmmaking agenda and individual message, and setting expectations for the film project and its content goals. It is not uncommon to begin a PV project by bringing all the participants together for the first meeting as a group. I chose not to do this. Instead, I connected individually with each participant, which provided opportunities to hear their concerns, gauge their commitment level to the project, and initiate a direct relationship. By making this initial connection one-on-one, I also hoped to encourage participants to reach out to me directly with any issues that arose during the course of the project, rather than end their participation abruptly should something go wrong.

The goals of the camera training were to increase comfort with both the technology and hardware, and to initially explore freedom of expression within the film medium. Other goals of the meeting included identifying a general filming agenda and timeframe, explaining the use and importance of the filmmaking worksheets, and completion of baseline evaluation through the initial interview.

The types of cameras used for PV studies range from inexpensive pocket-sized digital video cameras to 8 mm film cameras to high-end production cameras. Much of this camera choice appears to relate to the level of researcher filming versus participant filming. I chose to use small-sized, affordable, high definition digital video cameras, which conveniently fits inside a coat pocket or carrying bag. I hoped that, by having the camera handy, the participant was more likely to take advantage of opportunities to film as they arose during daily activities. These cameras also tend to be very easy to operate, adding to the likelihood of participants feeling comfortable capturing footage quickly and accurately. High definition cameras offer a better quality image, which gives more flexibility in the editing stages when using the footage.

A small tripod with articulated legs was also provided. This was, in part, to add flexibility when in the field because the legs of the tripod can be wrapped around objects to secure the

camera for filming in unusual locations. A tripod is key to filming a stable shot and also allows for single operators to set up the camera, start recording, and move away from the camera to narrate or include themselves in the footage.

Participants were asked to complete a filmmaking worksheet each time footage was gathered (see Appendix C). These worksheets enabled the farmers to report what they filmed, evaluate how it went, and identify for themselves if it brought up new questions or directions.

The goal of the first interview was to document each participant's current opinions, sustainable farming practices, and vision for the future of farming, and to achieve a type of baseline data with which to reflect back on completion of the project. Questions used in the interview were open-ended and focused on their farming practices, their reasons for participating, and how they perceive themselves in their social environment (for specific questions, see Appendix B). Participants were offered a choice of either audio recording or video recording to document the interview. This choice was offered for the comfort of the participant. Participating in the project did not necessarily mean being in front of the camera. There were options for narrating from behind the camera, for example, and other ways to be part of the film without ever being directly on camera (see Appendix C). This choice offered a gentle beginning for those who may be “camera shy.”

Farmers Film

Each participant was asked to shoot a series of film clips (up to 4 minutes in duration) and complete associated filmmaking worksheets. The short duration was intended to keep the file sizes small enough to easily transfer, and to keep each idea or concept within a bounded timeframe. It was suggested that each participant aim to capture 6-12 clips during this first round of filming.

Worksheets and footage were collected in hard copy at the end of filming. I made at least one check-in during this round of filming to communicate with the farms and support their ongoing work, answer questions, and make arrangements for collection of materials and results.

Rough Edit

Before reviewing the film and starting the edit, I immediately backed up all of the raw footage onto an external hard drive labeled "original footage." This was an important failsafe against unwanted loss of working footage files during the editing process. It enabled retrieval in the case of the abandonment of edited film in favor of original material if the direction of the edit changed. I also created ongoing and regular backups of the edited footage.

Creating the rough edit consisted of a systematic review of the interview footage and all the film clips collected from each participant with the accompanying descriptions and goals as stated in the matching worksheets. These three field texts (interviews, participant footage, and worksheets) provided the data used to create a rough cut. Each video clip was analyzed both in its own context and by how it fit with other participants' clips as a whole, identifying key narratives (see Appendix D). This analysis led to the creation of an emerging narrative that linked together the key issues identified as important by participants.

Group Editing Workshop

All participants were invited to attend a three-hour afternoon workshop to meet each other, view and evaluate the rough cut of the film. Participants screened the rough cut and evaluated the content of the film, discussing whether they felt it captured their individual message accurately, and what they would add or remove to complete the group message. The group also created a list of film clips that needed to be shot in order to complete the narrative,

and agreed on who would film each piece. I gave out cameras and tripods for this second round of filming, with a time frame for collecting the data.

Farmers Filming (second round)

Participants left the group workshop with a filming agenda and timeframe for completion. This was intended to be a more directed round of filming that could be brief or highly involved depending on the goals developed during the group editing workshop. By now, participants were better aware of how to use the cameras and had an understanding of the direction of the group message and their own voice within that group message.

Final Edit

After the second filmmaking period, I collected the cameras and conducted a final edit to incorporate the new footage and complete the film based on the strategy and goals of the group editing workshop. I had earmarked this stage as an appropriate time to reach out to my professional network of filmmaking partners for editing support and production of the final film.

Public Screening

The final film was shown at a public screening event local to the participants. The purpose of the public screening was to honor and celebrate the participants' work and to provide an opportunity for participants to observe themselves and their story in a public arena.

Final Interview

After screening the final film, participants were each interviewed and asked to evaluate any changes in their perspectives they could identify over the course of their participation in the project (for specific questions, see Appendix B). This offered the chance for reflection on the

various stages of participation (filmmaking, group editing, public screening) and encouraged discussion on whether any affects could be assigned directly to each stage in the process.

Another goal of the final interview was to gather qualitative and reflective insight into the way participation in the project may have changed participants' opinions, types of farming practices, and vision for the future of farming. In doing so, it was hoped that this second interview would provide a counterpoint to the first interview, illuminating any changes.

Guiding Principles of The Research Spiral

Benefits

We saw how participatory video claimed a number of specific benefits for it participants and audience, and how activities within PV might be directed towards achievement of certain outcomes. I chose to add certain elements to the spiral that built individual confidence in communicating, revealed personal contexts, created new social connections in the project community, and amplified the project message in the public arena.

To build confidence in communication, I used the process elements of initial interview, camera training, filming, group workshop and, to some extent, the public screening. The initial interview included questions intended to draw out their understanding of sustainability and their own actions, and verbally communicate them. Camera training introduced the technical aspects of a tool for collecting visual communication. Filming sessions lead participants deeper into continued communication sparked during the interview, adding the layer of visual data backed up by the written filmmaking worksheets. All of these elements were used to draw out stories by providing physical tools, and introducing and focusing the subject framework (their sustainability). The group workshop was intended to build confidence in communication through

the opportunity to see their stories played back, observe and evaluate them. It also showed individuals how their stories fit in with other, similar stories of their peers. Receiving feedback from the group and being able to approve or adjust their own story were predicted to be crucial steps in achieving confidence in communication.

Participatory video projects are often conducted in an afternoon workshop setting or within an extremely condensed time frame. By turning over the cameras for a two-week period, I provided a time span that I hoped would encourage a freedom of expression that just a few hours with the camera would not have. My assumption in doing so was that personal contexts would be more deeply revealed if granted a longer span of time filming daily life. This is partly because of the increased opportunity to capture a variety of events on the farm. The reveal of personal contexts is also reliant on the editing process. Participants may have successfully translated their opinions or philosophies about farming, for example, in their footage, but unless the facilitator highlights these segments in the rough cut or the final film, it only serves as a self-reveal. Inclusion in the final film brings the reveal beyond the individual, into the project community and the community at large.

The specific goal to create new social connections within the project community was largely focused on the group workshop, which was designed to serve a crucial teambuilding function. It allowed the opportunity not only to self-advocate, but to offer critique and support to their peer participants. Viewing one's own story as a contribution to the group story builds a social identity within the group. Seeing the stories linked together, participants can find their own connections with the others in the group.

Public screening was included in the research design to amplify the project message in the public arena. Public screenings are not always included in participatory video projects,

particularly when projects are focused on process. However, creation of a final film is necessary to present the research method as a tool for communicating sustainability beyond the group of participants, into the larger community. This was not the only reason to include the screening, but I chose it as the primary means of meeting this particular goal within the process. I chose not to add audience evaluation measures within the scope of my research, instead focusing the evaluation on how the public screening affected the participants. I looked for the results of this within the final interview.

Participant/Researcher Roles and Story Integrity

My objective is for the method to allow participants to interpret their story on film as they experience it. Therefore, it is not my role to shoot their footage and give my interpretation to their story - that role belongs to them.

I view my role as that of a facilitator. In this role I provide: the tools for them to accomplish documenting their story (camera, training, tripod); communication and support channels during their process (written worksheets, check-ins, editing workshop); and enough initial editing of the story line to provide a productive framework for group editing to be accomplished in a realistic amount of time. As facilitator, I see my role as a balance between providing support that moves the project forward while stepping back enough to allow for an open and creative result. This places me towards the middle of the PV spectrum where the researcher acts in partnership with participants in generating messages.

I made story integrity an ethical priority in the study design both as it relates to my role as researcher in interpretation of the research texts, and also as it relates to participants' roles as they collaborate to interpret the stories of their peers. I addressed this in two ways: (1) through reliance on mechanisms intended to draw out participants' explicit story priorities, creating

editorial awareness that aided my ability to maintain what they identified as important to their story; and (2) by selecting process elements of participatory video that create transparency in the production of the film.

For the first, I created a written worksheet (see Appendix C) that accompanied filmmaking sessions. Each time a participant shot footage for their story, they were asked to replay the video clip and fill out a worksheet describing what they were trying to capture with the footage (concepts, specific activities, location, idea, etc.). The worksheet also asked them to briefly reflect on whether they felt the clip accomplished their stated intention, and communicate its priority within their collection of clips. My assumption was that by offering a more familiar written tool as a "back-up" communication device for the less familiar filmed style of communication I was introducing, it would increase the participants' confidence in their abilities to capture their stories and communicate priorities successfully. These filmmaking worksheets provided an additional field text to serve a triangulation purpose during the editing and decision-making processes for the individuals during filming, and for me as facilitator developing the film.

For the second measure toward story integrity, transparency was addressed through the inclusion of a group editing process. All participants were invited to a group workshop to view a rough cut of the product film that first revealed an edited version of their own stories, and hinted at the message their stories generated when seen as a whole. My assumption here was that providing an opportunity for evaluation and feedback at this stage allowed individuals another opportunity to authenticate the integrity of their story as it situated within the group story, and to advocate for their representation within the group. Encouraging participatory input during the process of editing the emerging narrative is crucial for story integrity because it is still their

story, even though at this stage I am controlling the edit. By producing the first major edit as a "rough cut," it gives the group an opportunity to insert itself into the editing process without becoming overwhelmed by conducting the actual edit. This is part of my role as facilitator, to be able to present their own content reflected back to them as a larger, more organized narrative. I can also maintain a tighter time frame during the workshop and be respectful of both participant farming schedules and researcher time.

This discussion ties to the narrative concept of signature. Through low levels of direction and in the chosen methods of adherence to story integrity, I land on the side of a light signature. By doing so, I give preference to their stories as a guide in the editing, imposing as little of my own narrative on sustainability into the story as possible.

Direction

I chose to include two levels of direction in the method. In the beginning stages, direction was very open and unlimited within the frame of sustainability. Open direction is evident in the camera training activity, which only went as far as basic operation such as turning the camera on and off, how to operate the zoom, and how to replay the video. It is common in PV training sessions to include filmmaking techniques, camera angles, and other specifics. However, I chose to include only basic camera operation in the training because I wanted participants to explore filmmaking for themselves so that control of their own visual presentation evolves as part of the process.

For these farmers, their shared overarching goal of sustainability served as the primary framework for the visual inquiry. I provided open-ended direction within that larger framework, asking them to shoot examples of the ways they are working towards their sustainability goals, and to spend some time narrating (either in front of the camera, or behind it) why they think their

actions are important. I chose to frame the process on the low end of the direction spectrum for the same reasons that the camera training is unspecific: so that what emerges as each participant films is unique to their point of view and not suggested by me during the process.

The second round of filmmaking contained more specific direction generated by participant-led discussion after viewing the rough edit. It was anticipated that after seeing the story as a whole, participants would gain clarity about what specific footage was still needed in order to complete their story. Even then, the direction generates from the group, not necessarily from my direction.

Process Continuity

In order to evaluate the research method in its entirety, participants joined the project with the expectation that to remain involved they were required to complete all stages in the process. For example, if a participant was unable to attend the group workshop, they missed a primary teambuilding element, which would bias their reflections on the overall process when it came to the final interview. It would then become impossible for them to be able to assign degrees of value to all the steps along the research spiral and their absence in key group activities would create a detrimental gap in the project community.

Results

Participants

Because the Contoocook Valley farmers from the pilot study made up a relatively small number of individuals, the loss of any participant during the research phase would deeply impact the study outcome. Therefore, I expanded the study beyond the pilot sample to include farmers with similar goals in the Seacoast region. This successfully increased the study sample size while maintaining a geographical focus on small farms in southern New Hampshire. This particular choice of participants served to focus the content of the research project on participants' interest in agriculture, sustainability and the local food movement, while maintaining the broader study goal of evaluating this new method as a tool for sustainability communication.

I identified eighteen farms and sent letters of introduction to the project with an invitation to participate (see Appendix A). Seven farms agreed to participate, with five farms remaining involved in the research to completion. Participants ranged in age from mid-twenties to early-eighties. They represented a broad range of types of farming, including one beekeeper and one youth gardening/farming program. All levels of farming experience were represented, from novice to experienced, life-long farmers.

List of Participants:

- Phil Brand and Becky Moore of Brandmoore Farm in Rollinsford: a young couple leasing their first farm, primarily dairy with poultry and some vegetables.
- Dick Wollmar of Moor Farm in North Hampton: eighty-year old farmer and initiator of the Portsmouth Farmers' Market in 1977.

- Brendan Cornwell of Victory Bees: beekeeper setting up hives at organic farms in the Seacoast region; travelling to the farms to tend his hives, rather than the common practice of moving hives from farm to farm.
- Ellen and Conrad Dumas of Ten Talents Farm in Greenfield: a couple on the verge of retirement farming sheep and creating fiber arts.
- Ruth and Dan Holmes of Sunnyfield Farm in Peterborough: a couple operating a dairy farm, raising sheep and other "proteins".
- Kin Schilling of the Cornucopia Project in Peterborough: director of a grade-school gardening and farming education program. (Dropped out partway through the research.)
- Maggie and Glenn Crawford of Maggie Mae Farm in Chester: a young couple taking over a heritage agricultural estate to continue the farming tradition on the property. (Dropped out partway through the research.)

Technology

The cameras proved to be effective in that they were easy to use, small and portable. People expressed difficulty and hesitation at first in using the cameras, but most who felt this way reported that once they got going, they found the technology easy to work with. Most experimented with the tripods, but it is evident in the footage that some did not use it. That footage is more difficult to incorporate into the film because of the distraction when viewing the bumpy clips, for example, when people walked and filmed at the same time. However, some of the most unorthodox, non-tripod clips became memorable film elements, such as a clip of Becky filming Phil inside the moving truck, where the bumpy footage and close angle gives a viewer the feeling of being inside the truck with them for the ride.

Introductory Meeting, Camera Training and Interview

During the month of October 2013, I conducted the first meetings with seven participating farms. The meetings each lasted from 30-60 minutes including a brief camera training with the equipment plus a filmed interview. All participants agreed to be filmed during the interview, which provided not only documentation of the interview, but added to the footage available to me during the film editing process. I left the camera and tripod with each participant for a span of two weeks. I also put together an accordion folder for each farm with my contact information written on the front that contained all the project paperwork: written research consent forms, a filmmaking and camera tip sheet, multiple copies of the filmmaking worksheet, and video release forms for anyone included in the footage (see Appendix C). The folder was large enough for the camera and tripod to fit inside, so that the entire project could be contained in one place on the farm.

The camera trainings were brief, with one participant using his own camera. All the cameras had instructions inside the camera box. Although we explored how the camera operates, with each of them shooting a test clip while I was there, participants didn't appear to retain much operational information from this by the time they actually began filming. In these cases, they reported having to figure it out again on their own, which they were able to do without much trouble. I also explained to each participant that it was important part of the process to review each clip they took and record it in a worksheet. Only three out of the seven farms actually took the time to do this.

When I explained the project goals before the interview, I kept it very brief, focusing simply on the goal of capturing on film what they think is important about how they farm and their personal views on sustainability. If they asked questions to get more details, my response

was always just to reiterate that single framework. I chose not to make suggestions about what to film in particular, or ways to film things, specifically so that I would not lead participants in any creative direction. I also assured them that whatever they came up with would be "right" because the goal was to get their perspective, so any response of theirs would fit.

For the interviews, most were conducted in an active farming spot (near the bee hives, in the cow barn, etc.). One took place in the kitchen. Two of the couples, Ellen and Conrad, and Becky and Phil, were both present for the interview. For Ruth and Dan, Dan participated in the interview while Ruth conducted all of the filming.

The interview experience ranged from very guided to fairly loosely focused. For most, all I needed to do was to set up the camera, ask one focusing question to get started, and then not interrupt them for 20 minutes. A few took much more interaction from me to get them talking. Some had a quick response in front of the camera, and appeared to articulate their points of view easily and in depth. Others were extremely camera-shy and appeared to find it difficult to express themselves verbally.

I left the first meeting with verbal commitments to continue the project from all seven farms.

Editing the Rough Cut

During the review of footage I kept a log of content notes with time stamp markers. Beside the details of each clip, I made general note of clips with good audio, good video, and both together. In order to begin identifying emerging themes on sustainability, I kept note of the sustainability information appearing in clips (visual imagery and verbal content) as it arose, regardless of usability of that particular clip. After all interviews and film clips were reviewed, I evaluated the results as a combined unit, noting where sustainability information was repeated

between farms or sustainability concepts overlapped. These specific notes on evidence of sustainability became a growing chart of sustainability themes (see Appendix D).

Reviewing the first round of film, I was immediately struck by how different each farm's film collection was, and how deeply it revealed their personalities and points of view. Sustainability themes emerged in obvious ways, either deliberately expressed, or shown in their practices. As I reviewed the data, I also kept track of what stood out to me as interesting and revealing quotes. These tended to appear as imagery or verbal quotes that were summarizing, defining, or surprising. For example, Brandmoore's footage contained an image of Phil walking up a hill with a wind turbine in the distance. I found it surprising because they had not discussed renewable energy specifically during the interview, yet this clip presented it visually. From this clip renewable energy was added as a sustainability theme.

I repeated this process of viewing and reviewing the films, expanding on my notes each time. I found that I needed to review film as an immersive event. For me, uninterrupted film review allowed more crisp retention of details, which helped me make clear editorial choices and move the process along. Each time I reviewed the films, I was able to see the larger narrative more clearly as a sum of the emergent themes. I then began to make editorial decisions prioritized by the explicitly stated importance of the theme being addressed, which participant stated or visually represented the theme effectively, and the quality of the film. The rough edit was a negotiation between creating balance in representing each participant equally, each theme being communicated effectively, and the level of quality in the selected clips.

I also made ongoing notes of the narrative arcs that emerged during this review process, in other words, places where one clip suggested a response or an introduction to another clip. In this way, I began noting where clips could pair together and create small narrative sequences.

Next, I organized it further by pacing and content flow. I made notes on visual mixtures (distance and scenic shots versus close ups and detailed shots) and emotional mixtures (blending happy and sad, serious versus lighthearted). I made an effort to break up lots of talking with quiet visuals so the audience would be able to pause and process what was just said. I kept an eye out for clips that made natural beginnings or endings, either because of something they said that felt introductory, or conclusive, or sometimes because of humor.

In a large part, I based their narratives on the content of the interviews. I then used their own clips as supporting documentation for what they said during the interviews. I relied heavily on dubbing interview audio over visuals to craft a large portion of the entire narrative. There was so much going on already as five separate stories were woven together, that I made editorial choices to add simplicity and consistency. For example, I chose to use simple cross-fades between clips and kept the fade time uniform throughout the entire film (between 15-30 seconds). I also chose a consistently timed fade to black for content transitions, and a long fade to black transition between farms.

It was at this point in my process that I realized I had to adjust my editorial trajectory. As I attempted to build the narrative around the emergent themes, I had started to intercut footage from multiple farms. I was structuring the larger narrative so that viewers would receive the film as the series of the themes in linear succession. This created a number of issues immediately. The nature of narrative and story is that it is not linear. A clip that demonstrates free-range grazing also has embedded in it evidence or discussion of three or four (or more) additional sustainability themes. This made it nearly impossible to rely on the themes themselves as an organizational structure. This was also causing me to jump around between farms to build each thematic case. Besides losing track of which farm we were seeing at any given point, I was becoming aware of

a much larger problem: what if one of these farms drops out of the project? Only partially through the study, participant attrition was very likely. If I kept along the current editorial path, losing a farm threatened the entire narrative.

Because of this concern, I shifted the focus to building the story within each farm. By doing this, the editorial process was immediately less unruly, as each farm began to stand alone narratively. When I looked at the narratives one at a time, all I really needed to consider was that farm, and it simplified the process considerably. I still had my notes on the overall themes and possible connectors between farms, which took me into the next phase of building the rough edit.

An initial process of deletion helped me narrow down to a selection of primary clips for each farm. I removed clips that were unusable because of poor audio, visual issues, or clips that did not represent a theme as strongly as another farm or clip did. From there, I went back through the usable footage and looked at the way each farm had its own emerging narrative. I organized the clips by farm, developing this farm-specific narrative first. Within the collection of usable clips of a single farm, I then organized the story by the way each clip flowed in and out of the narrative smoothly.

I used the three-dimensional narrative inquiry space to ensure that each farm narrative could stand on its own. Physically seating the story on a farm in southern New Hampshire was easily represented in the footage. Personal and social dimensions were evident for all the farms, and I made sure to intersperse the abundant landscape footage (place) with dialogue and social settings. Time was most evident during the interview dialogue because I had asked questions about the future and about their view of things currently. Throughout the film I cut audio in from the interviews as a descriptive overlay on un-narrated visual information.

When I was finished, each farm had a short film that ran from 5-11 minutes long. Creating these segments took about 10-12 hours per farm. Leaving the film in farm-based segments for the group edit had the additional benefit of making it as easy as possible for the group to collaborate on the story together. I suspected that presenting a more organized narrative within each farm's story would allow us to focus on getting the details right as a group. Presenting them with film clips that were more unorganized, with very little story flow, would likely have proven overwhelming and chaotic.

I found the editing process to be exciting and organic, in part due to the plethora of evidence of sustainability represented in footage visually and in verbal descriptions, which provided me with multiple options during editing. When I experienced any trouble with an editing decision, or things didn't flow well from one scene to another, I left it open so that it became a part of the group editorial decision-making. My general rule was to observe where I found myself with a decision that could go two ways, or that had no obvious solution, and mark it for group discussion. This awareness within my editing process, and the subsequent decision to mark those places as points of entry for the group edit, helped me navigate my role as facilitator, and negotiate my signature.

Group Editing Workshop

The group convened for the workshop a few weeks after filming was complete. I focused my process of creating the rough edit into a two-week window because I wanted to be sure we kept the momentum moving at a good pace and finished filming before winter set in. To my surprise, Conrad and Ellen Dumas offered to host the workshop. I had been looking for a meeting hall space that was halfway between the two regions, which lie two hours apart by car. I easily abandoned that plan in favor of the warmer, more personal setting newly offered by the

host farm. Before committing to the location I first double-checked with the furthest group of farms (the Seacoast farms) to make sure they were comfortable with the distance. I also felt that the desire to see another farm might encourage those farmers to travel the extra distance.

The workshop took place 48 hours before hurricane Sandy was scheduled to hit our region. Maggie Mae Farm was unable to attend due to storm preparations on their farm, as they were new to the property. Another farm - the Cornucopia Project youth program - was also unable to attend. Since I had already identified the importance of participant continuity to the integrity of the study, I made the difficult decision to remove their completed rough-cut films from the project. While this served to effectively preserve the group dynamic, it proved to alienate two farms who were deeply invested in the project, and it removed their narratives from the group story. Since no one else saw the rough cuts of the missing farms, I am the only one who fully appreciates the loss of their powerful narrative additions to the story.

The five continuing farms were treated to a generous farm dinner the Dumas' prepared and shared with us, which helped ease introductions over informal table conversation. Some farmers knew of each other, but none of them really knew each other, with the exception of the Holmes' and Dumas' who are related through the marriage of two of their children. After eating, we moved into a screening room for more formal introductions and an overview of the agenda for our workshop. I reiterated that the goals for the workshop were to make sure they felt the content of their portion of the film was accurate to their intentions, and that they had "permission" to ask that something be removed or altered, because it is their story (not mine).

We watched each farm's short film one at a time, stopping after each one to discuss it as a group. I asked for feedback from the group, but specifically from the farm being shown, and asked whether they felt it was authentic to their message, what was missing, and what

adjustments they would like to see. During this time, the majority of their comments were focused on what other farmers were doing in their films. They had questions for each other about the farming techniques or types of livestock unfamiliar to them. They were also offering lots of supportive comments to each other, encouraging and appreciating the other farm's methods. This was especially true for the group in reference to the youngest farmers, Phil and Becky. The other farmers were immediately offering support and care through their feedback after seeing the Brandmoore footage. In fact, watching the films elicited so much dialogue across the group that I had to quiet them down a number of times during the screening because they were talking to each other over the film and not paying attention!

After discussing and viewing each of the short films, we then charted the course for the final film by broadening the conversation to focus on the group message. Many members of the group suggested new things they wanted to film that could be edited into the final piece. We discussed the length of the final film, and I posed to them the question of how we want to leave the audience feeling after they see it. Did we want them to leave feeling like there is a problem? Did we want it to be positive or leave them agitated in some way? Were we looking for them to take any specific actions? I had become aware of my signature strongly around these types of questions as I posed them to myself during the course of my editing. I found myself building a very positive feeling narrative even though there were many levels of emotion represented in the clips.

For example, in part of Dan's interview he talks about his breeding program saying, "We've killed a lot of cows." During review, my immediate reaction was dismissive because of the extreme nature of the statement. Then, almost as immediately, I considered that this statement may in fact be an important consideration for Dan and should be included. I became

aware of my signature on the narrative in that moment, and the tension the editorial process puts on issues around participant/researcher roles. I considered whether I should present a series of clips that I cut from the edit because of what they left out of the story - the narrative outliers - during the upcoming workshop. Instead, I navigated this tension by holding an awareness for the tone of the footage as a group. I was unconsciously prioritizing positively oriented narrative in my editorial choices. Once this shifted into a conscious issue, I gained confidence in that editorial decision as I continued to edit what was primarily positively focused participant film.

I felt that it was important for me to check in with the group about my instincts here, without leading them, so I asked questions about the tone of the film during the workshop in a very open manner, without suggesting a positive approach. The overwhelming group response was that they wanted it to be informative and uplifting. They wanted the film to leave people feeling like something positive was going on in agriculture in their region.

Second Round of Filming and Editing

After the workshop, three farms requested to keep filming to capture specific content that they felt was an important part of their message and missing from their story. I left cameras behind to collect again in two weeks. One farm was unable to charge the camera and had no new footage to contribute. The other two turned in additions they felt satisfied with.

During the workshop, it had been suggested that Moor Farm's short film be split up and used as the opening and closing pieces of the final film since it has embedded references to the ways farming has changed locally over time. In the second edit, as I focused on editing the individual farms into the larger film and create a solid narrative flow, I expanded on this suggestion and split up Moor Farm's story even further. Moor Farm's owner, Dick Wollmar, is 80 years old and a life-long farmer. He is articulate about his method and philosophy, so there is

a lot of footage from him that spans nearly all of the content themes. As I laid out the full narrative, I placed the farms in order based on the way they introduced themes or referred to them, and the way they visually flowed from one to another. As I did this, there were two obvious gaps developing in the story, where I was unable to find clips to link from one concept to the next. I was able to bridge those two gaps with previously unused Moor Farm interview footage, and essentially created a narrator out of Dick Wollmar. This allowed me to leave the other farms' stories in tact. As the elder of the group, Dick makes a successful, natural sounding narrator without delivering deliberate narrator dialogue. As the most experienced farmer of the group, the position of narrator also honors the wisdom he offers the group narrative.

During this final edit, I became aware of another editorial tension: flow. By that I mean the pacing and interest of the story line over the course of the film. At this point in the editorial decision tree, I had limited certain narrative options with the earlier decision to keep the farms separated (with the exception of Moor Farm). Ellen was the only participant who strongly felt that a piece of her narrative was left out, and asked that a certain clip be included to show her breeding priorities and successes. As it happened, her farm was next to last in the overall sequence, placing their narrative at a point in the film where audience attention begins to naturally tire. Because of the humor and visual interest present in Sunnyfield's narrative, and the way their story suggested a natural closure to the film, I had placed their story last.

Ellen's footage tended to be explanatory and educational. She doesn't move around much when she's on camera and neither does her sheep. She communicates effectively, but her clips are lengthy in order to relay the details of her breeding program. Ellen also tends to speak without much vocal inflection and on the day she filmed this clip she was hoarse with bronchitis. I was left with the choice of either inserting this clip into what was already the slowest paced

section near the end of the film or denying her request. I was uncomfortable with both choices, but unwilling to ignore an action necessary to the authenticity of a participant's voice. I edited the clip as much as I could while keeping her description in tact and placed it in the film.

It is important here to note that I received two pieces of direct feedback about that decision during the public screening. In her final interview, when I asked Ellen what it was like to see herself on screen, she laughed and said, "You know, I didn't realize how boring I am. I don't know why we filmed ourselves the way we did." The second piece of feedback came from an audience member after the public screening. When I asked him what he thought of the film, the only person he mentioned specifically was Ellen, whom he thought was fascinating and wondered what else she might have to say.

Public Screening

Because of the physical distance between the two groups of farms, two separate screenings occurred. All farms were invited to attend both screenings.

The film screened in Peterborough on March 16, 2013 during a regional Grange meeting to an audience of about 40 people. The Contoocook Valley region participants were all present with the exception of Dan Holmes. The film screened with only a short introduction because I did not want the screening to be focused on me as the researcher, but instead, to focus on the participants. I opened it up to questions afterwards, some of which were specific to the content of the film and directed to the farmers present, and some were directed to me about how the film was part of my dissertation.

The Seacoast screening took place two months later, during the Whaleback Environmental Film Festival on May 12, to a general audience of about 70 people. The film was part of a double feature, following the screening of another film about farming in the Midwest.

We followed the screening with a formal panel discussion. The first film's filmmaker joined me, and all the seacoast participants, on the panel. We fielded a variety of questions, including requests for the specific location of the farms so that the audience could visit their farm stores.

Final Interviews

All of the final interviews were conducted within one week of participants' attendance at a film screening. I did not film the interviews, but did audio record them. I kept the questions open, as I did during the first interview, so that I could see what emerged in their responses. The consistent, specific question that I asked everyone was whether participating in the project changed the way they think about farming, or their perspectives on sustainability. The interviews were fruitful, and yet, when asked this direct question, none of them responded affirmatively.

However, other responses revealed that the film process positively impacted their views of themselves and each other, and increased their feelings of connectedness to the group. Overall, everyone felt that the film was a success and that they had positive reactions to participating in the study. When I asked if there were parts of the process they could do without, or to reflect on whether each part of the process was effective, they had trouble breaking down the parts and reflecting on them. The exception to this is that everyone highly valued the workshop experience, and did not think any one part of the process needed to be dropped.

Discussion

The goal of this research was to conduct a qualitative study applying narrative theory to participatory video methodologies in order to better understand how the process of filmmaking can create a method of sustainability communication. To do this, the study collaborated with individuals who are currently practicing different types of sustainable agriculture in southern New Hampshire. The *study* yielded results that can be used by both participatory video and narrative inquiry practitioners, and successfully created a method for sustainability communication. Nested within the study, the *project* created an emergent narrative about sustainability on small farms in southern New Hampshire.

Communicating Sustainability

Participants' views on sustainability emerge in two ways during the study: through what they say, and what they do - or show - on film. When directly asked, "how do you describe your sustainable actions through farming?" participants offered different types of response. For some farmers, this was the only question necessary for the bulk of the interview. Dan, Dick, and Brendan to a lesser degree, were all easily launched into detailed explanations of their farm operations and philosophies within an explicit frame of sustainable agriculture.

On the other hand, Conrad and Ellen, and Becky and Phil didn't talk about their farming in a sustainability context, although sustainability is evident in most of their practices as they discuss or show them. For Conrad and Ellen, the question challenged them to place their methods and thinking within a sustainability frame, and they process the question out loud throughout most of their interview. In fact, the sustainability frame was initially a barrier for Ellen as she considered participation:

I [have] some questions about [the label] sustainability, and in some regards, I feel a little dishonest because I think of sustainability as an onsite process. And we're not sustainable onsite in that our soils are minerally deficient, and we depend on things to be imported. And then the bigger piece of petroleum. How everything - winter hay - how does the grain get here?

As they continue to talk, they are able to move past their initial hesitance, and build a case for their sustainability throughout the interview, with Conrad often ending a piece of the conversation with, "and for us, that's sustainable."

Becky and Phil appeared to be a bit surprised by the sustainability question during the initial interview. They offered a listed description of their farm's efforts using buzzwords including composting and organic, without elaborating much beyond those labels. It was difficult to get them to talk at all during the interview. Phil's responses to my questions were often long pauses followed by "let me think on that a little while" or some other deferral. Their film clips, however, were thoughtful, engaged responses to all my questions. They were largely nonverbal in their communications, and the majority of their film clips were not narrated. The filmed response added a crucial layer of communication to their story without which, we would not understand them as deeply.

Therefore, the intention to use visual methods to help reveal sustainability perspectives proves to be a critical aspect of the project and integral to its communication success, especially for those individuals who appear to have more difficulty verbalizing their points of view. Looking to the process as a whole, each farm's sustainable practices become more apparent when amplified through their visual story, with the interview serving to initiate the communication process.

When asked what they hoped to get out of participating in the project, the most common responses were: to get the word out about their farm, to help spread understanding of sustainable practices on the farm, and to help me, or aid with my research.

"It's important for people to understand that there's something going on in NH agriculture that's a little bit beyond [the norm]," Dan elaborates. In order to create positive change "it's not going to be the farmers talking to themselves, it needs to be the farmers talking to their neighbors, and their customers, and the people at the farmers' markets, to spread the word."

Interestingly, many of them expressed to me, at one point or another early in the process, that they didn't think they had much to contribute to the film's story, or that they didn't feel their footage was very worthwhile. I noticed that these comments stopped after the workshop. I attribute this as evidence that by observing their own messages on screen they were better able to understand their own value as part of the larger message. After the workshop, the comments switched to a sense of wonder at how it all came together.

Sustainability Themes

Because this process enabled participants to communicate their perspectives on sustainability successfully, I was, as a facilitator, able to analyze their data, identifying sustainability details for each farm and see the emerging narrative arcs connecting the farms together as a whole group. I began to hear their group story during the third interview. Already, they were repeating each other's topics of conversation within the subject of sustainability but talking about them from their own unique perspectives and experiences. More than once, in the early stages of the process, I had a Contoocook Valley participant wonder out loud to me how I

would ever make sense of all the various information, since their perception of the other farms in their region is that they are all so different. Yet, even through all the differing details being expressed, the themes emerged strongly, which, as a researcher was exciting to observe so early in the process.

Appendix D shows the emergent sustainability themes within the project and identifies which farms present the theme through their interview responses, footage narration, and visual imagery. Examples of each theme are also included. Themes appeared as specific references, such as the use of the term "organic." Themes also presented as groupings of similar concepts, such as the theme of land protection, which combines references to conservation easements and also to the importance of soil. A different researcher would no doubt create a different list of themes since many of the sustainability details overlap and repeat, creating an interpreted list of headings. I found that creating a chart of each specific theme proved most important in the way it served as a map for the editing process, rather than an outlay of concluding data.

An example of a theme's emergence and repetition can be found in discussions of breeding, a subject raised by multiple farms. Ellen goes into the deepest description about breeding practices for her sheep, so much so that it was her primary request during the second edit to elaborate on her clips detailing specific breeding strategies she uses and why. She reveals that her goal is to breed sheep hardy enough to survive New Hampshire winters, yet produce the most desired wool for fiber arts. This may not appear to be overtly sustainably focused, yet as she describes the qualities sheep need to survive on NH land Ellen talks about how a NH sheep breed will require fewer resources, live supported by the natural landscape and need little to no supplemental diet or imported items related to their care. Brendan uses the same type of reasoning when he describes his goal of breeding a "truly New Hampshire bee" - one that

overwinters successfully and removes the need for bringing in bee colonies from other parts of the country. Dan goes into great detail about Sunnyfield's breeding program in his initial interview. The common thread within each farm's breeding philosophy is the sustainability of being truly local in their production.

The theme of breeding overlaps with another theme, which is the desire to not bring in resources from outside of the farm. Phil and Becky state directly that this is a primary goal of theirs: to be as self-reliant as possible over time, providing for their own resource needs on-farm. They focus this part of their conversation on the fact that they are haying their own land to feed their cows through the winter, and that they compost everything which, in turn is used to feed the land, which feeds the cows.

Looking at the sustainability themes that emerged, those themes specific to one farm revealed their sustainability practices on an individual level. These themes revealed their self-identity around sustainable action. Next, key themes of the project community were identified because of the way the individual themes repeated for any number of the participants. These themes revealed a community-identity around sustainability. Priorities for low-input of outside resources, breeding for New Hampshire stock, and becoming a producer of food for the region are examples of key themes of importance to this project community.

Multiple farms focused on using little to no dietary supplements. Brendan's individual sustainability action is to not harvest his late fall honey. This means his bees will have enough food for the winter and he won't have to add sugar water to the hives, which is a common practice, but not natural to the system. Conrad's individual sustainability action is to make arrangements with his neighbors to move his sheep onto their property so that the sheep have greater variety in food source and longer availability of pasture into the winter, reducing the need

to bring in grains and mineral supplements. Many of the farms show, or discuss during the process, the ways they reduce their reliance on outside dietary supplements. Their combined individual actions help identify a larger picture of consistent community sustainable action.

Emergent themes appeared as a blend of philosophy and method. Dick made reference to knowing your farmer and the health importance of eating food that comes from a local, natural source. He then shows this reference when he films his cows ranging free in the field and talks about raising cows that are grass-fed and selling raw milk. These are all connections he makes between his methods that lead to animal health that he believes creates consumer health and supports the philosophies on which he expounds. Here, one narrated clip of his cows in the field spans multiple themes. During the editing process, I used the list of themes as a review system to make sure there was evidence of all of them within the storyline, as a means of authenticating the group narrative.

While themes served as an important editorial guide to identify and review sustainability specifics, its reductionist conclusion and the nature of its overlapping divisions caused me to reconsider its stand-alone value as the sole representation of the emergent themes of this project. The very nature of narrative, and its expansion as visual narrative, means that its contents challenge a linear approach. Reducing the richness of the narrative into a delineated, two-dimensional list felt nearly impossible while in progress. So, upon completion of the chart, I took a broader view of the emergent themes to create what became five overarching or grand themes that reflect the narrative view of the project. These grand themes represent a set of guiding philosophies revealed by participants (Figure 2).

These guiding philosophies are summarizing, narrative conclusions resulting from this particular group of farmers as they engaged in this research study. If the sustainability themes are threads that weave participants' stories together, and can be picked out as individual narrative units, the guiding philosophies are the figures emerging from the completed tapestry, gaining clarity as one steps back to view the piece as a new whole.

Health	Prioritizes animal health, consumer health, soil/land, returning to more natural systems, low inputs, no chemicals/organic, free range, managing for health
Local	Sense of key role as producer, communicator, educator, security provider for own community
Longevity	Sense of being part of something beyond their time on the land, and <u>planning for it; continuing/improving on what came before</u>
Thinking in Systems	Multiple use of things within the system/farm, diversity, economic viability, <u>carrying capacity</u>
Happiness and Deep Connection	Spiritual-level of deep connection with farming, animals, community, and nature

Figure 2: Guiding Philosophy Theme Table

The Art of Everyday Life

Participants support the view that producing visual art allows us "to see more in our experience, to hear more on normally unheard frequencies, [and] to become conscious of what daily routine have obscured, what habit and convention have suppressed" (Greene quoted by Mello and Clandinin 2007, 213). Evidence of this can be found in their expression of a new awareness after watching the film, and in the way the film reminds them of forgotten, yet important, aspects of their farming.

Conrad reflects, "You know, we complain sometimes about how tired we are, but the film makes me realize that we really do like..." Ellen finishes his thought, "...what we're doing." This

self-reflection, particularly after viewing the film, shows how "film as mirror" is evidenced in the process. In viewing the film, participants gain awareness of their personal contexts, drawn out during the process. Conrad sees himself in the film - film that he helped create - and is aware of how happy farming makes him, and how important it is to him. It transcends his daily routine and allows him to "see more in his experience."

Ruth had a similar reaction. She has this to say when asked what it was like to see herself on film at the screening:

I have to say it was really nice. I felt it was really nice. There's that aspect of farming where you get up every day, and you do all this hard work and nobody sees it and nobody appreciates it [laughs] and then the end result is this package in the freezer in our store. People come in there and they look and sometimes you have those days where they say 'what? There's no lamb?' And it's like, [sigh], do they *know*?... One of the ways for people to really appreciate what they're getting and what they're paying for is to really understand what it takes to raise a turkey or a lamb, or beef. So to sit there and have anybody see that, and get a glimpse of the different aspects of what we're doing actually makes me feel quite proud of what we're doing.

Where the mirror validates Conrad's hard work to himself, Ruth takes it one step further and is aware of its effect on the audience. She finds validation for her hard work when she projects that the audience will also see and appreciate her hard work when they not only view the film and understand her better, but when they take action because of that new understanding and come to her farm store.

On an individual level, the act of using film to tell their story leads to an intimacy in communication. As an audience, we are given a more intimate level of visual access to their lives. This is most obvious in Phil and Becky's story. They are playful and soulful in their footage. When Becky films Phil inside the moving pickup truck, we see how excited he is to move the chickens. It communicates to us how meaningful he finds one of their farming techniques. As an observer it is difficult not to get caught up in his excitement about moving

chickens. We see the chickens respond to Phil with equal excitement. If this were a traditional documentary, with even a small camera crew on scene, would the chickens and Phil be that natural? It would likely capture a muted version of Brandmoore's poultry methods. The audience may be informed sufficiently, but would viewers *feel* the situation in the way we feel transported into their truck, driving across their field towards the chickens, who receive us?

The same can be said for the short but powerful footage of the calf's birth in the field. It is as if we are secreted on to the scene just after a difficult birth. The timbre of Becky's voice, the quiet of the field, and the stillness in the air allude to the drama that just unfolded. She is familiar to the cows, therefore we, as viewer, are granted the same intimate access that she has. We are received not as a camera crew of strangers but as a natural part of the farm's daily rhythms. The study's participatory filmmaking method transports us from objective observer to subjective participant.

Ellen elaborates: "That's because *we are* intimate. We go out there every day. We touch those animals every day. Many of those lambs are delivered into my hands. I help dry them off, you know? It is intimate for us. And Brendan and his bees. It's very intimate. Frightening. A camera crew would look in on it, but we're there with it."

Because of the intimacy that emerged from participants operating the cameras and directing their own story, there is also an authenticity that is relayed. There is a truth and honesty to the everyday events captured over the two-week filming period. This is evident as each farm's footage has its own distinct personality - a personality not yet revealed during the opening interview. It is the participant filmmaking that reveals the personality, aided by the lack of structure in direction, permitting *any* filmed "response" to the overall project inquiry.

Social Connections

The value of the process is expressed differently for each participant. Dick, who is outgoing and vocal about his philosophy, identified value in "bonding" with other farmers. His feedback revealed a caring nature for the other participants, a respect for them and what they are doing, and even a sense of awe, wonder and pride. Dick comes in to the process with confidence expressing what he does, why he does it, and why everyone else ought to be doing it. For him, he said, it connected him to other farmers in the community that he might not normally be connected to, and he found value in that. I suspect this stands out for him, because it is not something he gets all the time, but it clearly means a great deal to him. He has plenty of opportunities to speak publicly, but he points out the value of the bonding. He is one of the older farmers who is very focused on the younger farmers and expresses concern and care for them. That was revealed in many ways through the process. It lends to the ability of the process to bridge age distinctions, and implies the possibility of bridging other distinctions as well. The process draws out the connecting links between participants. It makes accessible enough information that people can find ways to connect to each other. Dick's focus on bonding results provides evidence that the process accomplishes goals of social connection within the project community.

Conrad and Ellen also found value in the social aspects of the process. "It's good to meet more people," Conrad explains. "That was one of the values of this project. There's going to be a ripple effect." Ellen continues, "yeah, farmers tend to be insular, so that was valuable to us. To make connections with other farmers and even to go to the Grange meeting [screening]." Conrad finishes, "if anyone who sees that film would call us, we would give them time on the phone.

We're like that." Here, Ellen and Conrad project the social connections generated from the process into the broader community—into the audience. By doing so, they suggest that the audience on viewing the film product will make their own connections to the participants in the same way that the participants found connections to each other as they watched each other's story. This result supports the positive influence of framing participatory video as a narrative inquiry. "The narrative inquirer does not prescribe general applications and uses but rather creates texts that, when well done, offer readers a place to imagine their own uses and applications" (Clandinin and Connelly 2000, 42).

Ruth specifically mentions the connection benefits of the workshop:

I found it nice to have some incentive to sit down with the other farmers and listen to what they had to say. And get the other perspectives... I thought the workshop worked really well. I thought it was a key component for getting to the next step - being able to see it [the film] before it was put out there. Giving you feedback felt good to me. We have people like newspapers writing articles and you never see it before it goes in then you look at it and say, 'ack, that's not what I said'. So I thought it was a key component. I think we were lucky that we got the extra viewing too, at the Grange.

She also points out the value she found in having control of her own message, one of the primary goals of the workshop and the group editing experience.

The intimacy and authenticity captured during filmmaking transferred to the group workshop experience. Watching the stories on screen, participants got to know each other in a way that they immediately responded to, offering feedback and commentary to the farm on screen almost instantly that revealed new personal connections within the group. They asked questions about what they observed and made comparative statements about connecting their own farming with that of the farm on screen. The high level of participant cross talking during the workshop is one of the best testaments to just how effective this method is at communicating points of view and creating social connections.

Other evidence of the social connection that developed is found in the way participants showed increased care and respect for each other, revealing a shift in their perspectives during the process. Some of them knew one another before hand, and came out with a deeper understanding of that person after the process. Dick expresses this during his final interview:

I like Dan Holmes, he is a gentle soul. ...They know their trade, I mean, they're wonderful. Look at the range of animals they have there. And I love the way he said, 'maybe some day we will get the same kind of treatment as our animals.' I like that, because there is a certain amount of tenderness, and a nice feeling about that. And I hope that it's going to make everybody happy watching it. And I think it does. ...And I'll praise the honey guy, someone asked him from the audience 'well how do you make any money off this?' And he said, 'it's not about making any money, it's about the lifestyle.' And see, that's what that film really does. So in a sense, I think that it can be very inspirational. But then you take Becky and Phil, they're a nice, wonderful young couple. Seeing other people in their age group seeing this, they can be inspired by this film.

Many reflected on how the process connected them into a new community. Dick said it most explicitly when he said the workshop "was good for bonding." These community outcomes, as promised in the PV literature, are evident in participant reflection during the final interviews. "We had no idea what [the others] were filming," Ellen reflects, "and when you put them together, *surprisingly* [laughs], all these stories sort of interweave with each other." Conrad adds, "Compliment each other." Ellen concludes, "We felt like we were in good company."

Becky also references the new community:

It's nice to feel a part of it [the local agricultural scene]; I think the film kind of makes us feel that way - part of the agriculture here, the sustainable agriculture. Hearing Dick Wollmar's perspective on this area and seeing how passionate he is definitely is inspiring to me, and to us. Just seeing somebody who has dedicated his life to it, they want to see it continue so it is definitely inspiring to me to be a part of that vision.

The community building results are also expressed as a desire to work together in the group beyond the process. This was evident in the workshop discussion about the screening, when Dan suggested that we all come together to screen it during a regional Grange meeting

(which he subsequently arranged, but the Seacoast farmers were unable to attend). Many of the farmers expressed the desire to screen the film beyond the research screening, offering suggestions for different uses of the film during the final interviews.

These community outcomes would likely increase if the group were made of participants more conveniently local to one another. The separation of the two regions makes it difficult for future planning, especially combined with the busy life of a farmer. A different group of individuals might see the longer-term benefits of staying organized and moving forward together. As Ellen says, farmers are an insular group.

The process connects beyond the individual and the project community, to the audience. Evaluating effects of the film on an audience falls beyond the scope of this research. However, informal conversation after the screenings reveal that audiences shared similar reactions to the film as participants did to the process. Audience members ask questions about the same memorable scenes that participants bring up in their final interviews and reflections. They express similar care for, and connection to, individuals in the film, that the participants express for each other after participating. Audiences ask me how the young couple are doing ("Are they ok; are they making it?") and how are the bees/beekeeper ("Are the bees ok? How are his hives doing?"). They comment on "the charming couple in the kitchen" and how knowledgeable they were (Ellen and Conrad); how cute the piglets were and that little girl feeding them; and how moving it was to hear about the farmers' markets (Dick's story).

These memorable moments that connect participants to each other during the process, and connect audience members to participants, are the places of intimacy in the film that would be impossible to create through traditional documentary methods. People are moved by Dick's story because he shares that the success of his efforts overwhelmed him to the point of tears.

People care about Phil and Becky because they allow their clips to show their trepidation and their joy. They share how new they are to this, revealing how much fun they have in everyday tasks, and at the same time, how scary it all can be. People respect and are fascinated by Brendan because we don't understand (and are a little afraid of) bees, and he gets right in there with them, moves among them, admires and protects them. Giving Brendan the camera and open permission allows him to take us with him among the bees. In doing so, he protects us too.

The benefits of the social connections that are created come back to the participants. Phil and Becky, who were just as reserved verbalizing their views in the final interview as they were in the first meeting, identified the value of the film in connecting viewers with their farm, and helping them get established in the region as new farmers. They reported gaining a number of new customers to their farm stand from audience members at the Seacoast screening. Because they are less outspoken, they may find it challenging to be vocal in their community as they establish their farm. The film appears to have given them a platform to express things in a way they may be more comfortable with, and certainly, in a way that connects them with their customers, as they said.

Brendan found value in learning about other parts of the state, and what is going on in agriculture there. He is very active in the Seacoast local food movement, which tends to be a strong but inwardly focused network. He says:

I thought it worked well [the process]. It was good to have the different perspectives. I feel like my perspective is different and I think it works well in the overall film. It's just; it's weird to see. When you do something, or when you talk about something, you always feel that you're in the 'right', you know? Like your beliefs are right. And I'm not saying anyone's beliefs are wrong or right, it's just that because we [the group] all have the same beliefs it's just [interesting] how we express that.

Dan offers more evidence to suggest the way he connected with the project community and how that caused him to reflect on his connections in the broader agricultural community:

It gave me an idea of the diversity of agriculture in NH. And also to get some sense of why all these farmer lunatics are doing what we're doing [laughs]. We're certainly not doing it because we're getting rich. There's something about it. There's something about the art, and the mystery and the science of it that all sort of blends together in a way that makes each farm kind of special. And then you take what's coming off the farm and put it on people's plates, and you add strength to it. And then you throw the farmer personality and individuality into the mix and it's like 'wow, this is pretty incredible stuff'. So, to get a little taste of that was nice. It's too bad you can't find a way for that sort of thing to happen all the time.

He is also alluding to the mystery of the process in terms of the depth of its ability, and success, at revealing layers of personal context within the narrative. Here, he says that the film combines the elements integral to explaining what farming is for him - seeing the farm, understanding the farmer and their personalities, and how that connects an audience to what is on their plate. For Dan, this process accomplished a presentation of farming that includes this realistic complexity - this mix of the art, mystery and science of farming - that he sees translated to the audience.

Innovation and Local Knowledge

Participants revealed innovations and local knowledge through interview discussions and film clips. It seemed natural for them to add demonstrations and informative descriptions in visual data and narration. For example, Ruth shows her method of moving sheep to and from neighboring property, and while she captures it on camera, she narrates the process and explains its purpose and intention. Dan offers this example during his on-camera interview:

Hopefully, there will be more farms that are similar to Sunnyfield down the road. If we can demonstrate that it is a viable situation to farm on our scale, with our methodology, then there may be others that are willing to pick it up and utilize the things that we might be able to help them with or make a go of a farm that is not a clone of Sunnyfield, but [take] what we've learned and put it into practice in another location.

Brendan reveals innovation when he talks about how he is different than other beekeepers:

The bees stay put. I move around. A lot of commercial beekeepers...truck them everywhere. I choose to leave the bees and I drive around and visit them myself. It's better for them... Moving hives really stresses out the bees and I want my bees to be happy. ...The health of the colony is extremely important. If they're under stress they can get diseases and that can be devastating... I don't use any chemicals and I try to interfere with them as little as possible.

Here, we see a combination of innovation in method (him moving, not his bees) and contribution to local knowledge by sharing that the innovations are based on his direct experience with his bees over time, and what he has concluded is best, regardless of being the norm in beekeeping. He reveals this again in the following comment:

A lot of beekeepers will harvest in the fall. I find that dangerous because you can easily over-harvest and not leave the bees with enough food for the winter. ...If somebody accidentally over-harvests in the winter, in general, they will have to feed their bees a sugar syrup. I don't think that's good. Lots of processed sugar is not good for humans, it can't be good for bees.

Phil frames his innovative methods in connection with a return to the past when he talks about how they sell their milk. "We think of the raw milk as old fashioned milk... So long as the cows are healthy and everything is done in a clean manner, then we think that keeping the milk alive is beneficial for health reasons and tastes better and allows us to do an independent thing a little easier." In doing so, he links innovation with local, or historic, knowledge in the same way that Bobbi referenced sustainability in agriculture as a "recovery rather than a discovery."

Process Tensions

One of the primary tensions experienced during the process revolved around the decision for low-level, or open, direction. Using an open style of direction created both participant and researcher vulnerabilities. When the direction is left open, and parameters are defined loosely,

participants tended to be more hesitant at first. A number of them expressed discomfort and confusion during the camera training, asking questions about what exactly I wanted them to film. In every case I reiterated that it was up to them, and the only parameter was to show sustainability on their farm. There was also a point during the workshop, when I asked the group if they felt the rough edit was authentic to the story they wanted to tell, and one participant answered by asking back to me if their story was what I was looking for. I replied that yes, it was, because I was looking for them to tell their own story authentically, so if they believed they had done this successfully, I had in turn achieved my research goals.

The tensions on the research-side of this decision involved concerns over film quality. Without detailed camera training, or a basic understanding of the principles of filmmaking, there was the real risk of getting unusable footage. The cameras were simple, not professional quality, yet I was hoping to produce an audience-quality film at the end of the process. I made these choices because I prioritized ease of communication, simplicity of technology and a minimal time investment for participants all in an effort to make the filmmaking experience unthreatening, unrestricted and flexible. I also wanted to encourage creative expression and opportunistic filming; both of which I believed could be hindered through any increased level of direction or training.

Even with this tension, however, the results support the goal of truly participant-driven narrative. Keeping the filmmaking instructions nonspecific forces participants to trust their own judgment and take a felt risk moving forward. It creates tension academically and visually when both researcher and participant are not prioritizing guidance from known film techniques. By providing the most skeletal structure for a task, people have the freedom to trust and express their own inner creativity and wisdom. This led to innovative camera shots and unanticipated

content that added richness and depth into the final film. In fact, it is often the unorthodox footage that provides the most memorable details in each story. If they had been asked from the outset to film in a specific way and document a certain list of details, that narrowing of focus would not have produced such a range of response. Some of these resulting clips were viscerally translated to the viewer and became part of the way viewers gained deep access to the farmers' story. There certainly were unusable film results, but the benefits of open direction proved to far outweigh its negative aspects.

As mentioned previously, tension in the process was also evident during editing as I negotiated my signature on the project. Signature is another place to support the priority for story integrity. I found that reliance on the method elements allowed me to keep a light signature on the project. Use of the filmmaking worksheets, the opportunity for participant input during the workshop (in the middle of the editing process), maintaining the three-dimensional narrative inquiry space, and the narrative emergence of key content themes all came together effectively to guide the edit.

Connected to issues of signature and direction, there was tension in decision making around how explicitly to present their message in the final film. I could have chosen to present sustainable agriculture even more explicitly through the use of screen text or voiceover. This may have been an appropriate addition if my goal was educational or audience-focused. While these types of film techniques would certainly present more explicit messaging, I consider the intentional avoidance of these techniques to be part of my signature. A different researcher may choose a signature that is more explicitly educational. I choose a signature that is more artistic, intuitive, and results in a more abstract representation of its information.

Applications for Sustainability

Definition of the participating group is a key consideration when applying the process to various sustainability goals. I designed this method for use with a group of participants who shared at least one common reference point, where that reference point becomes the subject of the project. Three common reference points exist in this project: each participant shares a focus on sustainable agriculture, farms on a small scale, and is located in southern New Hampshire. These shared reference points become the defining characteristics uniting the group and form the basic structure undergirding the narrative. Identifying and relying on this foundational structure prevents the divergent details inherent to multiple perspectives from becoming narratively chaotic.

The defining characteristics of the group provide commonality from which we can then compare their differences and fill out the narrative. A different set of common reference points will create a different narrative for its participants. Because of this, the research method can be applied to any group of participants who share points of reference concerning sustainability. For example, a participant group of fishermen using sustainable techniques can move through the filmmaking process to create a narrative about sustainable fishing. Fishing with sustainable methods becomes their common reference point. In this way, the method should prove as effective at revealing narrative around any sustainability topic provided that the group of participants shares the topic as a point of reference.

Once the shared reference point is established, it becomes the unifying variable from which all other individual variables pivot. This offers the potential to use the process toward goals of unifying divergent perspectives involved in opposition to an issue - and even shrinking the gap in negotiations over an environmental debate. For example, consider a group of

stakeholders involved in debate over siting a wind turbine. Their shared points of reference include the wind turbine and their geographical location. By giving a camera to each stakeholder (property owners, city officials, turbine engineer, energy utility representative, energy consumer, etc.) and participating in the process, there is potential for the process to positively impact sustainability outcomes.

Results of the process suggest that the mix of individuals within the group strongly influence the direction of the group message, and the social learning that occurs within the group. In this study, we can consider Brendan to be a type of outlier for the group. Beekeepers are not traditionally considered farmers. And yet his methods are unique within the beekeeping community in that he literally farms hives, whereas most beekeepers are more of a farm service as their hive travels and temporarily visits each farm. As an outlier in the group, he became memorable and of interest to the other farmers. His work stood out because it was different, but the process still connected him to the group. The audience (both the participants and the general audience) expressed strong respect and interest in his work and point of view. Even using the same film clips, Brendan's narrative would have shifted if included in the same process with four other beekeepers, rather than the four farms in this project.

The process hints at broader application beyond the participants and group through its effect on the viewer, and ways the results promote sustainability to an audience. Ellen describes being deeply inspired by Dick's story of the farmers' market - how it started small and grew into a thriving winter market. "I was so moved when he talked [about it] and how it brought tears to his eyes," she says. "When you hear stories like that, and you think 'if that's possible there, it's possible here; if that's possible for him, it's possible for us. ...I was inspired and encouraged."

It also has potential for broad application by the way it takes subjects popularized through large-scale media and brings them into a local focus. Dan observes, "We get a lot of things like Food, Inc., you know, that are national in scope, and it's nice for people to see that their neighbors are doing things, that there's some intelligence and some enthusiasm for what we're doing right here." Ruth adds:

It was nice for you to feature the smaller farms and farmers. Twenty years ago, if someone wanted to do an interview on a farm, they probably would have gone and found a mega-dairy farm. And said, 'this is the norm.' Leaving out all of the small farms, the niche farmers, which I think is probably more realistic in terms of the future of NH...and seeing that - that counts.

As a final thought on the power of this process and its application for sustainability, I want to share specifically the way Ellen and Conrad experienced participation in the study. When I arrived at their farm for the first meeting, ready for camera training and the initial interview, to my complete surprise Ellen began by saying that she didn't think this was the right thing for them to be doing. I listened to her voice her reticence, wondering if I was going to lose them from the study before we even began. But as we kept talking, they became more engaged and we began discussing sustainability issues without formally starting the interview. When I realized what was happening, and that we were not recording, I stopped the conversation, asked if they were in or out, because, I explained, if they were in, I needed to hit "record"!

On viewing their interview footage, they appear thoughtful, engaged and relaxed. We ate dinner together and I left a full two hours later. It was Ellen who offered to host the workshop two weeks later, and feed the whole group. Here is what Ellen said during the final interview:

I originally started doing this because Conrad said we should do it. It would be good for us to present ourselves and our farm and what we're doing, and it would be good for you. I was sort of resentful, like how would I add one more thing to my schedule? But I learned something from the process. I don't think of myself as somebody who has any facility with digital... I was having enough trouble with my old camera... And

participating in the process of filmmaking gave me a tiny little window into filmmaking, which I had never considered before. And then to think about how to explain to people who might have no...experience in farming... how to explain simply some of the concepts involved in farming.

Because of the project, and the way it focused them to publicly define their farm, their methods, and their philosophy, they have started to talk about it more in public, and are now being a more active voice in the region. The project asked questions framed around sustainability, so it took them the extra step to self-identify as sustainable, and what that exactly means to them. Now they tend to operate explicitly from that frame. It focused them in a new, sharper way; helped them clarify their point of view, and become better at communicating it.

"Ever since you met us," Conrad shares, "this whole issue of what do we do, how do you make it ongoing, and connecting to a larger community [all ways that they define sustainability]; well, we talk a lot more about that. I feel like you poked us." In fact, they were recently invited to speak at a local sustainability event. "It's all part of the poking," Ellen laughs.

Suggestions for Future Research

There are many ways this research method could be modified for different outcomes. Changes along any of the participatory video spectrums would shift the research focus and intention. More camera training could increase film quality. Heavier direction could be used to focus the resulting message more specifically, or more narrowly. If the goal was to narrow the subject, breeding for New Hampshire stock, for example, it makes sense to reduce the frame from "film sustainability on your farm" to "describe your efforts at breeding to create a locally successful New Hampshire breed."

The same strategy of focusing the direction could be applied to gain increased documentation of local knowledge and innovation. Participants shooting demonstration footage, or specifically directed to capture on film what makes them different, could direct towards that goal. Filming the opinions and reflections of elders, or taking on a historical perspective of the farm would also be part of this direction.

Participants could take on a larger role in the editing process. This would be beneficial for accuracy in theme identification. In this project, much of their content falls within my environmental field of knowledge. If the group were engineers talking about their work, I may not have the knowledge base to observe their emergent themes. In such a situation the group needs to be more involved in the editing process, relying on their knowledge of the subject to identify key themes in each other's film if the facilitator cannot.

This research study did not formally survey audience response to the film product. Future research might chose to evaluate how the process effectively communicates sustainability to the non-participant viewer, including possible links to viewer motivation for adoption of pro-environmental behavior.

I also see tremendous potential for this filmmaking method to be studied as a mediating tool in environmental debate. The process successfully draws out narrative points of view and visually communicates them in a deep and personal way. It unites participants around a common theme, and showcases how each member of the participating group contributes to that theme. Here, it framed the group's shared ideals about sustainable farming. I wonder if it would continue to support commonalities when the participants have increasingly different views? Using the land trust example, what if a group was formed from a variety of stakeholders—each with different interests—connected to a parcel of land being considered for conservation. If they

went through this filmmaking process, focused on their point of view regarding the property in question, what new insights might the group gain about other stakeholder perspectives? Would the process help draw out more commonalities in the individuals participating and create a community vision? In what ways might the view through a camera lens reveal how a developer and a biologist see the same landscape? How might that result help the group move forward together in the best interest of the land? It would be worthwhile to test the process for its effects on a group that held stronger differences of opinion, to see if it had a uniting mechanism.

These are all broad projections. More specifically, I would like to expand this research in a couple of ways. I would like to find grant funding to allow the inclusion of the two missing farms that dropped out during the process. Their films add depth to the existing narrative. I would also like to work more with the emergent themes. The film clips could be reorganized by themes to create an educational series on sustainable farming. Another way to reorganize the film is to break it out into smaller films featuring each farm. These pieces have promotional and educational value for the farms to use, and take the results of this research into a practical application with a life beyond this initial film.

Conclusions

Today, we have unprecedented access to basic filmmaking tools. High-quality video cameras come embedded in the phones we carry with us every day. Easy to operate film editing software is delivered to us pre-installed on new computers, laptops and tablets. There are widely accepted global platforms for video on the Internet offered at no cost that provide a public arena for personal video sharing. It makes sense to explore personal filmmaking as a tool in our quest for sustainability.

Through the combination of participatory video techniques and narrative inquiry, this research presented a new method for sustainability communication. The results of the study confirm the ability of participatory filmmaking to increase individual's opportunities for successful communication, to create new social connections within the participating group (project community), and to reveal innovation and local knowledge. The use of narrative techniques within the method identified emergent themes of importance to the participants which served as a guide during the editing process, ensuring inclusion of relevant themes into the combined narrative. Operating within a three-dimensional narrative inquiry space maintained a narrative framework for the evolving storyline that was grounded in time, place and personal/social contexts.

All of the elements of the process appear to work together and be necessary to create the relationship between individual perspectives and community vision revealed through this study. Combining each of the farm's films into the final film produced a community vision, but the process of the initial interview and filmmaking provided the creative channel for emergence and documentation of each individual perspective.

White points to the interactivity of the PV process as the element that "enables a partnership in generating messages" (S. A. White 2003, 37). In this study, the first interactive partnership is between the participant and the camera, which becomes a tool for individual message development. The second interactive partnership occurs within the group during the workshop, allowing the formation of the group, or community message. Taking it one step further, I suspect that a third partnership is created between the audience and the participants, when the film is screened. The layered partnership resulting from the process produces a more authentic message than the traditional one-directional messages created by documentaries without participant control.

Focused here on farming, the method offers a tool for successful sustainability communication when the participating group shares a common point of reference around a topic of sustainability. Here, the shared reference is the topic of sustainable agriculture. Within their shared topic, participants expressed varying points of view, which they felt were authentically represented in the film product. This same method has positive implications for use with other sustainability topics of interest to a connected group of people willing to participate.

This new process successfully fulfills my goal to recreate the feelings of pride and connectivity that originated in my experience of shooting my first film, and participating in the larger *One Day on Earth*. Participants make numerous evaluative statements that reflect their experience of these same feelings: pride, as they see on film what it is they do every day, and a new connection to their own work and the members of the participating group. It is the participatory element holding up to its promise combined with the power of narrative as an editorial guide. I am actually surprised at the deep level in which this took place for the participants, and for me.

It would be interesting to try the process with a larger group to see if that changes the level of intimacy felt in the process and the resulting product. How would it change if the group went from 5 to 10 farms, or to 50 farms? Would more participating farms water-down the result? It would certainly not allow for much final film time per farm, so perhaps the viewer would not feel as connected to each farm. If more farms participated, the filming could be used to create a series of documentaries. However, part of the power of their combined story is communicated by viewing it all in one film, in a single sitting. Would a series diminish this effect, or amplify it by continuing the message over a longer period of time?

In hindsight, there was one primary limiting factor to my research, and that my self-imposed framework based on farmers' time. Having worked with farmers for years, I am very aware of their busy lives. Out of respect, I hesitated to ask for everything I really wanted because of the amount of time it would require. Ideally, I would have asked for them to film longer than two weeks. I often think how amazing it would be to put together film clips taken over a calendar year, and the opportunities that would allow for capturing any number of farm occurrences, particularly those that are seasonal. Given more time from farmers, I would have included more than one group workshop. The workshop was so valuable to them, as they reported, that I can imagine the beneficial connections the process might develop over longer periods of time. A few of them actually expressed a longing for this in their final interviews. The workshops and group time was also highly beneficial to me during editing. I made most of the editorial decisions, but I longed for more input from the farmers as I made those choices. I had visions of numerous group meetings where we became equal partners in the editing process. However, considering the reservations expressed early on, I did not want to overwhelm them, as many seemed happy to not peer behind the glass, and trusted me with the process. If the farms were in closer geographic

proximity, more meetings may have been possible, and certainly, more opportunities to connect the group over time would be likely.

Overall, I found this filmmaking method to be so successful, that I hope to work with more groups who are willing to communicate a lived experience of sustainability. It remains my belief that in order to become a more sustainable community, we need to look to those who are living it every day. Through film processes like this one, we can communicate models of sustainable living like these five farms, in a way that inspires the rest of us to not only support our sustainable neighbors, but also become more sustainable ourselves.

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Appendices

Appendix A: Participation Letter

Participant Address

May 12, 2012

Dear _____,

I am a doctoral student in the Environmental Studies Department at Antioch University New England studying farmer's points of view about farming and sustainability. I am contacting you to explain the purpose of my research and invite your participation.

I am using a method of community filmmaking called "participatory video." In the study, farmers participate in making a film about their sustainable farming practices. I provide a brief training in using a standard point and shoot, hand-held video camera, and then ask participants to record a series of short (4 minutes or less) film clips that document the types of sustainable farming practices they use, and why they feel these practices are important.

The purpose of this study is to gain insight into the experience of participating in a filmmaking project. I am interested in the experience of everyday (not professional) filmmaking. I am also interested in how people with similar sustainability goals can come together to share their ideas through film, and how these ideas can be combined into a single film that creates a group vision.

The farmers involved in the project will all be from southern New Hampshire. You were chosen to participate in this study because of your sustainable farming practices, and because you represent an interesting point of view about farming practices.

If you choose to participate in the study, it would require an initial one-hour long meeting for the camera training and a 30-minute interview to talk about your farming practices. Then I will leave a camera with you so that you can record video over the following few weeks. There will be one workshop scheduled in early September where all the participants will come together to watch a rough cut of the video clips. We will work as a group using a process called storyboarding to arrange the collection of film clips into a single story. This will be a 2-3 hour workshop held in the Concord area. After the film is edited and completed, you will be invited to attend a public screening. I will conduct a follow up interview with you to get your impressions of the process, and the final film.

Study participants may opt out of the project at any time, but I will only be able to use the data from participants who attend all of the scheduled activities. This will be a very public project, and your video may be made public within the film itself, posted online, and/or used in the dissertation text. However, you will have the opportunity at several stages during the process to review and approve the footage that you share with the public.

I hope you will choose to participate in this exciting project. If you have any questions, please contact me at...

Appendix B: Interview Topics Guide

First Interview

The intention of the first interview is to document participant's current opinions, sustainable farming practices, and vision for the future of farming.

Examples of the types of questions asked are:

- How would you describe your experience as a farmer (e.g. how long have you been farming, how did you get started, why do you farm)?
- What types of sustainable practices do you use and why? (What does sustainable farming mean to you?)
- What are the most important or favorite stories you have about your sustainable farming practices?
- How would you describe your farming within the context of agriculture in the region?
- Are there any goals in your life as a sustainable farmer that this project might help you achieve? (What would you like/not like to see happen as a result of this project?)

Focus on what they do that is different.

Focus on what their 2-3 point message is.

Second Interview

The second interview will be conducted after the public screening of the group film, and is intended to gather qualitative and reflective insight into the way participation in the project may have changed participants' opinions, types of farming practices, and vision for the future of farming.

Examples of the types of questions asked during the second interview are:

- Has your understanding of why you farm changed over the course of the project?
- Are there any new types of sustainable practices you might try and why?
- How do you feel about working with groups of farmers during this project?
- What does sustainable farming mean to you? (Has it changed since the project began?)
- How would you describe your farming within the context of agriculture in the region? (Has it changed since the project began?)
- Are there any goals in your life as a sustainable farmer that this project has helped you achieve?
- What was unexpected about participating in this project?

Appendix C: Filmmaker Packet Contents

Filmmaking and Camera Tips

The purpose of leaving you with a camera is so that you can shoot video that tells the story of your farm and shows your farming philosophy. Always play back your recordings so that you can see how the video and audio turned out. This way, you can make adjustments about how you are recording and even try capturing that content again if it didn't come out how you would like the first time. Leave the film clips on the camera's memory and I will return to collect the camera with the recordings inside.

What to Film

- Things that are interesting to you about your farm
- Things that are important to you about your farm
- What is your message about what you do and why you do it?
- Brainstormed List:
 - _____
 - _____
 - _____

Camera Tips

- Keep film clips to under 4 minutes each (so the files don't get too large)
- Watch the clip as soon as you shoot it to see if you want to reshoot
- Delete clips that are: shaky, too dark, have too much background noise
- The microphone picks up lots of street noise, cars, wind, breathing, sniffing
- Do not include people in the footage that we don't have permission to include - or ask them to sign the release form
- The way you see the edges of the shot will be the way the film is cropped. It is not like a camera where you can get in Photoshop and crop the edges.
- The camera must be held upright
- Use the tripod whenever you can, it always makes the clip more usable
- Even if the video is bad, if the audio captures something important, save it
- Even if the audio is bad, if the film captures something important, save it

Film what you think is beautiful

Film what you think is true

Use your footage to show people what is important to you

Experiment and have fun!

Flip Camera Note:

Use the arrow/triangle button to review clips

Antioch University New England Individual Research Consent Form

Project Title: Farming and Filmmaking: Participatory Video Meets Sustainability Narrative

Project Investigator: Dyanna Smith

Dissertation Chair: Dr. Alesia Maltz

1. I understand that this study is of a research nature. It may offer no direct benefit to me.
2. My participation in this study is voluntary. I may refuse to participate or may withdraw at any time without creating any harmful consequences to myself. I understand also that the investigator may drop me at any time from the study.
3. The purpose of this study is to explore filmmaking as a way for people to share their ideas about farming and their goals for the future. The results of the study will be used to create a filmmaking process that tells a group story out of separate videos. The resulting film will not be used for commercial purposes (profit), but will be circulated publicly through the environmental nonprofit agency called The Red Eft Project, headquartered in Portsmouth, NH.
4. As a participant in the study, I will be asked to take part in the following procedures:
 - Individual face-to-face interview, between August-October 2012. I will have the choice of recording my interview on video or audiotape.
 - Individual or small group training session on the basic use of a video camera, between August-October 2012.
 - Use a small video camera to document different aspects of my farming between August-November 2012.
 - Complete simple video worksheets to document my intention and meaning for each video recording I choose to submit as research data.
 - Group workshop in Concord, NH area during September or October 2012 with other research participants (who are also NH farmers).
 - Voluntarily share my videos, notes, and insights, etc. if I am comfortable doing this.
 - Watch and validate my individual videos and the group film to check for accuracy and to make sure my intention and meaning is captured. I will assist in revisions, and additional video recording as necessary.
 - Attend a public screening of the final film between December 2012-May 2013.
 - Follow-up individual face-to-face interview within 30 days of the screening. I will have the choice of recording my interview on video or audiotape.

Participation in the study is estimated to take 10-15 hours over the course of one year.

5. The risks of the above participation in the research are low and could include my being identified as a research participant in this project.

6. The possible benefits of the procedures might be:

- Direct benefit to me, the research participant: I will practice authentic research in the field and will learn about the academic research process. I will learn how to record video. I will also learn about storyboarding and the process of building a narrative. I may help guide other farmers and interested individuals through my participation.
- Benefits to others: Sharing my experiences as a farmer has the potential to inform other individuals interested in farming, and to help them understand their own experiences.

7. Information about the study was discussed with me by Dyanna Smith.

8. Though the purpose of this study is primarily to fulfill Dyanna Smith's requirement to complete a formal research project as a dissertation at Antioch University, I understand that she intends to include the data and results of the study in future scholarly publications and presentations. I also understand that she intends to include the data and results of the study in future public presentations of the resulting film, through public screenings of the film and by possibly posting the film on the Internet. Our confidentiality agreement, as articulated above, will be effective in all cases of data sharing.

If you have any questions about the study, you may contact Dyanna Smith by ...

If you have any questions about your rights as a research participant, please contact Dr. Kevin Lyness, Associate Professor and Chair of the Antioch University New England IRB at ... or Dr. Stephen Neun, Vice President of Academic Affairs, Antioch University New England at ...

Name _____

Date: _____ Signed: _____

Video Release Form

I understand that Dyanna Smith is conducting scholarly research about the filmmaking and sustainable farming practices, to be used in the process of completing a Ph.D. degree, including a dissertation and any other future publications.

In order to assist her in preparation of this work, I have agreed (a) to be video taped, and (b) to approve the use of this video footage in any form and in any media, in connection with this research study and the products of the study.

I hereby grant the researcher:

1. The right to quote, paraphrase, reproduce, publish, distribute, or otherwise use all or any portion of the Video Materials and any future scholarly work I am included in.
2. The right to use my name, image, and biographical data in connection with any use of the Interview Materials, including as described above.

I acknowledge that I have no copyright or other rights in this research or any other future scholarly work that includes information from the Video Materials.

I have read the above information and give my consent to participate in this project.

Signature

Date

Please print the following information:

Name: _____

Address: _____

Phone: _____

If you have any questions about the study, you may contact Dyanna Smith by ...

Filmmaking Worksheet

For each video taken, please document the following:

Your Name: _____

Date of video: _____

Subject of video: _____

What are you trying to show in this video clip?

Do you think you were successful? Yes No Not Sure

Are you going to try something different as a result?

Check all that apply:

_____ I'm pleased with this clip, it gets my point across well

_____ I wish the video quality was better

_____ I wish the audio quality was better

_____ Definitely use this clip if you can

_____ Only use this clip if necessary; I have other clips I prefer

NOTES:

(Ex: Ignore the cow scenes and focus on the bees that come halfway through the clip; only use the footage up until the lake scene; audio is too noisy but the images are good; etc.)

Appendix D: Chart of Emergent Sustainability Themes

Theme	Brandmoore Farm	Victory Bees	Moor Farm	Sunnyfield Farm	Dumas Farm	Examples
Focus on local	E	E	E	E	E	sense of key role in local food movement, as producer
Consumer health	E	E	E	E	E	knowing where food comes from, toxin free product
Animal health	V	E	V	E	E	living conditions, less interference, natural forages
Long range planning	E	E	E	E	E	sense of participating/planning beyond scope of own time
Chemical free	E	E	E	E	E	no pesticides, no herbicides, no medicines
Organic	E	E	E	E	E	certified land, suppliers are also certified
Land protection	E	E	E	E	E	conservation easements, investing in the soil
Rotational crops/grazing	V	E	E	E	E	herding livestock to neighboring fields, moving turkeys every day
Low input	E	E	V	E	E	bringing in as little as possible from 'off farm'
Community interaction	E	E	E	E	V	CSAs, farmers markets, farm stores, direct sales to consumers
Education/Outreach	E	E	E	E	V	sheep and wool festivals, inviting community onto farm
Intergenerational farmer education/Outreach	E	E	E	E	E	serving as a resource to other farmers, helping new farmers get started
Creating own breeding stock	E	E	E	E	E	healthy overwintering livestock, producing NH stock for other farms
Free range	V	E	V	V	V	animals able to move around, not penned in small enclosed spaces
Grass-fed/Natural forage	V	E	E	E	V	preference for natural forages over grains
Alternative energy	V	E	E	E	E	solar cooling unit for milk, wind turbine
Duplicating nature	E	E	E	E	E	not separating mother and calf, raw milk, raw honey
Quality over quantity	E	E	E	E	E	skipping fall honey harvest, breeding for health versus production
Deep relationship with animals/nature	V	E	V	E	E	connection to the weather, respect and care for animals
Multiple use/systems thinking	E	E	E	E	E	sheep grazing invasives, garden waste feeds sheep, composting, manure
Diversifying	E	E	E	V	E	product diversity and niche, filling out the system, non-monoculture
Economic viability	E	E	E	E	E	financial sustainability, scale versus viability, business planning
Happiness/Pride/Lifestyle	E	E	E	V	E	always wanting to farm, deliberate lifestyle choice, service to community

E=explicitly stated, V=visual evidence