

Analytic Filmmaking: A New Approach to Research and Publication in the Social Sciences

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New digital video technologies are transforming how people everywhere document, publish, and consume information. As knowledge production becomes increasingly oriented towards digital/visual modes of expression, scholars will need new approaches for conducting and publishing research. The purpose of this article is to advance a systematic approach to scholarship called *analytic filmmaking*. I argue that when filming and editing are guided by rigorous social scientific standards, digital video can be a compelling medium for illustrating causal processes, communicating theory-driven explanations, and presenting new empirical findings. I furthermore argue that analytic films offer policymakers and the public an effective way to glean insights from and engage with scholarly research. Throughout the article I draw on examples from my work to demonstrate the principles of analytic filmmaking in practice and to point out how analytic films complement written scholarship.

People communicate differently today than they did a decade ago. Communication is not necessarily less textual, but it is certainly more visual and interactive. Similarly to how the printing press delinked written expression from the Catholic Church, new tools and technologies have freed audiovisual expression from the hands of film and television studios, allowing *individuals* the opportunity to create and broadcast high-quality video content on a small budget.¹ These tools—which include compact and affordable high-definition (HD) video cameras, user-friendly video editing software, and websites like YouTube and Netflix—are transforming how people everywhere document, publish, and consume knowledge.²

These changing modes of communication are even beginning to permeate academia. A growing number of scholars and students in the natural sciences, social sciences, and humanities are exploring how new digital video technologies can be used to create “audiovisual publications” that stretch the boundaries of traditional scholarly work.³ Some institutions are even getting in on the act. Perhaps signaling a coming trend in “mixed-media publication,” the Graduate School of Arts and Science at Harvard University recently created an interdisciplinary program called Critical Media Practice, which allows Ph.D. candidates in any discipline—including political science—to integrate digital video and other digital media into their dissertations.⁴

As knowledge production becomes increasingly oriented to digital/visual modes of expression, scholars will need new approaches for conducting and publishing research. The purpose of this essay is to advance a systematic approach to audiovisual scholarship that is consistent with the standards and practices of positive social science. I call this approach—which is both a new way of publishing social science research and a new way of making nonfiction films—*analytic filmmaking*. I argue that when filming and editing are guided by rigorous social scientific standards, digital video can be a compelling medium for illustrating causal processes, communicating theory-driven explanations, and presenting new empirical findings. By using audiovisual data to present scholarly findings, I argue that we develop a more accurate and complete body of scholarly knowledge and offer policymakers and the public a uniquely effective way to glean insights from and engage with scholarly research.

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I became interested in audiovisual scholarship in 2007–2008 while writing a dissertation on the political economy of international migration.⁵ Originally, my goal was to use a video camera to collect qualitative data while directing a sample survey in Mexico. Over time, I refined my filming methods and ultimately shot 32 hours of interview and observational footage. The footage was fascinating and revealed insights that text and survey data could not. Upon returning from the field, I became convinced that creating a “video companion” to my dissertation would be the most effective way to present my qualitative data. Unable to find good models of “political science on film,” I developed my own methods and approaches through trial and error. I worked not as a documentary filmmaker trained in the art of visual storytelling, but as a social scientist interested in using new tools and technologies to advance theoretical claims and empirical findings. The end result of that long, iterative process is a 55-minute “analytic film” called *The Other Side of Immigration*.⁶

The Other Side of Immigration—henceforth, *TOSOI*—has allowed my Ph.D. research to cross disciplinary and professional lines in ways that would not have been possible had I only produced a text-based dissertation. I have presented *TOSOI* and discussed related findings from my dissertation at more than 100 universities, conferences, community events, and government institutions. Many of these events include forums that, as a political scientist, I never expected to attend, such as public health conferences, education policy conferences, mental health forums, law conferences, agricultural policy forums, medical schools, churches, cultural institutions, high schools, public libraries, and dozens of interdisciplinary university events. *TOSOI* has furthermore brought my research to thousands of viewers through online distribution networks like Netflix, iTunes, and Amazon Instant Video. *TOSOI* is a serious work that many audiences appreciate for the unique way it presents information. Shortly after its release *TOSOI* was named “most original presentation of a current political issue” at an event sponsored by the Bipartisan Policy Center (a think tank founded by four former Senate Majority Leaders). In 2011, *TOSOI* became one of fifteen films added to the American Library Association’s List of Notable Videos for its “significant contribution to the world of video recordings.”⁷

This article systematizes the approach that informed the production of *TOSOI*. The first section of this article provides a general definition of analytic filmmaking, distinguishes analytic filmmaking from documentary filmmaking, and outlines a set of core concepts and techniques. The second section draws on examples from *TOSOI* to show how one can apply the analytic filmmaking approach in practice. Here I situate *TOSOI* within a larger research program that includes written scholarship to explain how analytic film and textual work are complements that

together contribute to a more complete and accurate understanding of the social and political worlds. The third section discusses some extra-scholarly advantages of analytic film and explains why audiovisual scholarship is able to transcend some of the barriers that keep scholarly knowledge from leaving our subfields and why broader dissemination is to the advantage of both scholars and the public. I conclude with some thoughts about how scholars who are interested in analytic filmmaking can receive proper training and how incentives can be created within the academy to encourage good digital/visual scholarship in general.

Analytic Filmmaking: An Overview

An analytic film is an audiovisual work that uses theory and empirical evidence to systematically explain social and political outcomes.⁸ Analytic filmmaking is the application of the standards, rigor, and objectivity of social science to audiovisual media to communicate and disseminate *original* social science research. Analytic films are scholarly publications that advance new hypotheses and new empirical findings, not works that merely report on or synthesize existing studies through narration or interviews with scholars and other experts.⁹ Analytic filmmaking begins by posing research questions and outlining possible explanations. Various arguments, explanations, and theoretical claims, including new hypotheses, form the backbone of the narrative. Video data—i.e., footage from interviews, observations, and experiments—are arranged around that theoretical structure in order to create a coherent audiovisual narrative. The ultimate goal of any analytic film should be to make nomothetic statements based on empirical evidence and to complement inferences made in written work by illustrating how, in reality, human behavior follows hypothesized logics. Analytic films are a particularly vivid way of illustrating causal processes and are best suited to research that involves human subjects and where individual or group preferences, opinions, or behavior are causally important. They may be viewed independently of or in combination with written scholarship and may range in length from a few minutes to many hours long, depending on the needs of the researcher.

Analytic filmmaking is not documentary filmmaking by another name. Documentary filmmakers typically adhere to a set of practices and norms that are incompatible with positive social science.¹⁰ Above all, most documentary filmmakers are trained and identify themselves as storytellers. Their stories tend to follow and describe the actions of “characters”—the real-life individuals or groups (which may include the filmmaker or journalist) whose lives, struggles, journey, or achievements create the kind of conflict, action, or suspense that drive the plots of their films. The search for “engaging characters” and “narrative tension”—two key ingredients to a successful documentary,

according to one authority¹¹—explains why so many documentaries feature eccentrics and outliers. It also explains why many documentaries blur the line between fiction and nonfiction without alerting the viewer, using staged or semi-scripted scenes to develop more dramatic, romantic, or emotional narratives.¹² Finally, through their characters' stories, many documentaries aim to “say something” about politics or society. These statements, however, tend to be normative arguments based on opinion, emotion, or unique (and often extraordinary) experiences.

Analytic filmmaking is thus different from documentary filmmaking in that (1) it emphasizes the general over the particular; (2) it engages in original theoretical inquiry and nomothetic explanation over descriptive storytelling and character development; (3) it is categorically non-fictional and privileges accuracy above all else; and (4) it advances positive arguments based on theory and evidence rather than normative arguments based on opinion, emotion, and dramatization.

The remainder of this section introduces three core concepts of analytic filmmaking: *video data*, *theoretical pillars*, and *strategic reiteration*. The subsequent section provides examples from *TOSOI* to demonstrate how social scientists can put these concepts to use to create analytic films in practice. Just as every scholar has a different approach to written expression, every scholar will have a different approach to creating audiovisual scholarship. The objective here, however, is to systematize some essential aspects of analytic filmmaking in order to establish a set of guidelines and standards for using digital video tools to conduct and disseminate social science research.¹³

Video Data

Although usually thought of as entertainment, video is fundamentally a medium for capturing and storing information. Instead of confining human behavior, statements, and opinions to numerical codes (as one might with a survey) or relatively thin text-based descriptions (as one might when making field notes), video uses audio and moving images to create dynamic records of whatever we point our camera at. Video has the unique ability to *simultaneously* capture and store various kinds of aural and visual information, much of which cannot be stored nearly as effectively, exhaustively, or simultaneously as text, numbers, or audio,¹⁴ including contextual and environmental factors, body language, facial expressions, group dynamics, behaviors, actions, and tone of voice. It can furthermore capture important attributes of a person, event, or situation, such as credibility, authority, mood, intention, sincerity, and authenticity. A single video clip may therefore hold many bits of information, some of which one may have never anticipated.¹⁵

This “video data” is the central component of any analytic film. Collecting it should be systematic and

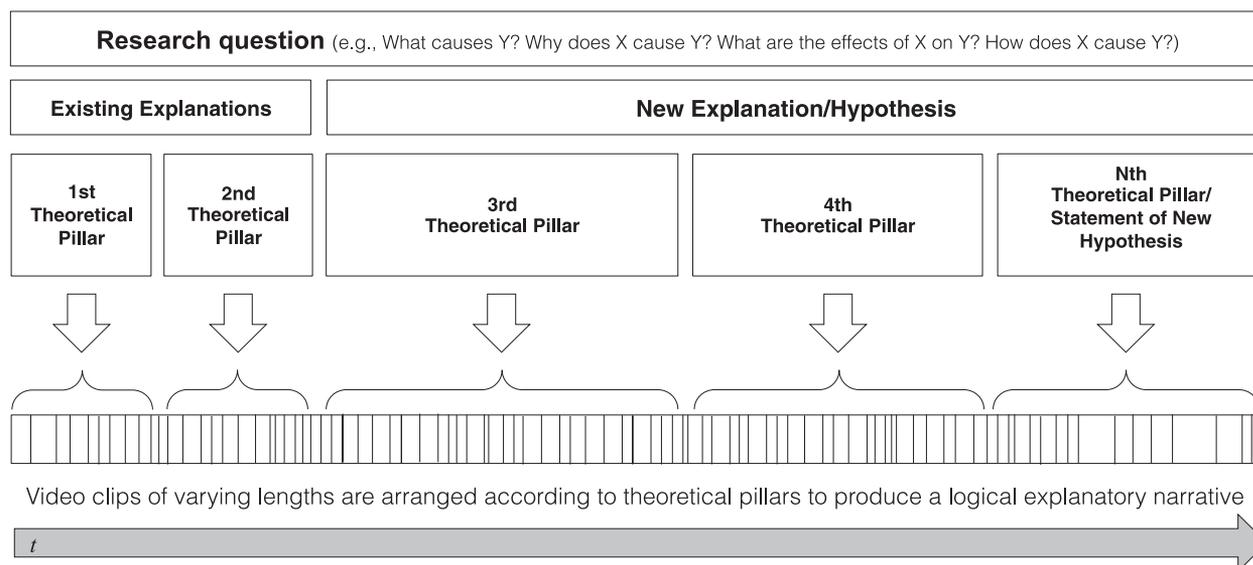
guided by theory. Before beginning to collect video data, scholars should pose research questions, outline existing explanations, and develop new hypotheses. These questions, explanations, and hypotheses, along with *a priori* substantive knowledge, should inform choices regarding who is interviewed or what is observed. In some cases, researchers may collect video data through random sampling. However, since the goal of analytic filmmaking is to illustrate causal processes rather than test hypotheses, useful samples may be nonrandom.¹⁶ Whatever the sampling strategy, it is essential that researchers use their scholarly judgment and academic training to collect video data from credible sources (i.e., not necessarily the best “characters” or most entertaining personalities) which present the most accurate (i.e., not dramatized or sensationalized) representation of the populations, events, or phenomena they study. Later in this piece I will discuss techniques for minimizing the kinds of biases that can threaten the validity and reliability of video data.

Theoretical Pillars

With the help of nonlinear video editing software like Adobe Premiere, Avid, and Final Cut Pro, video data can be analyzed, parceled, and edited into a self-sustaining audiovisual narrative. Instead of telling a story about a particular person, group, time period, or event, the narrative in an analytic film should advance a series of theory-driven explanations about social or political outcomes. To do the kind of explaining that is expected of social science research, one should establish and edit video clips according to *theoretical pillars*. Theoretical pillars are organizational subsections that structure the explanatory trajectory and theoretical logic of analytic films. They guide argumentation and the presentation of theoretical explanations, and thus organize how video clips are presented to the viewer. As a narrative device, they are analogous to the plot points and scenes that structure most other films. Without theoretical pillars, one is left with little more than an unstructured and unfocused collection of statements and observations.

Figure 1 presents a schematic overview of the process of editing an analytic film. The first step is to pose a research question that will occupy a major section of the analytic film, or possibly the entire analytic film. A number of possible existing and new explanations inevitably flow from the research question. Theoretical pillars are the schools of thought, theories, new hypotheses, and logical steps that advance those explanations. Before the video editing process begins, one should have a strong sense of what theoretical pillars might be used to structure the narrative. Video data should then be grouped according to those theoretical categories. Video data that do not fit in preordained theoretical categories may find a home in substantive/empirical categories or new theoretical categories, the creation of which may cause one to rethink the

Figure 1
Overview of the process of structuring and editing an analytic film



original theoretical outline. After video data has been organized along theoretical and substantive lines, one should select and arrange video clips that best convey particular arguments and explanations. The next task is to use video editing software to fuse and interweave distinct pieces of video data together so that clips of varying lengths come together to produce a logical explanatory narrative that sheds light on the causal processes that underlie some social or political outcome.¹⁷

Strategic Reiteration

A key objective of analytic filmmaking is to offer general explanations rather than describe particular cases. On one hand, generalization is pursued by organizing video clips according to theoretical pillars rather than according to the story of any particular individual, group, or event. Even still, theoretical propositions are conveyed through statements made by individual respondents or through observations of specific events, places, or points in time. To overcome the particularity that is inherent to any single video clip and give the viewer confidence that one's video data are expressing generalizable concepts, arguments, and explanations, I recommend a technique called *strategic reiteration*. Strategic reiteration means editing two or more different video clips so that they are presented simultaneously or in close succession to generalize and infer beyond any particular example, statement, or piece of evidence.

Strategic reiteration can mean at least three things in practice. First, one could engage in strategic reiteration by showing observational footage that reveals a process or

demonstrates a point that is being described by a respondent. The observational footage, presumably filmed at a different place and time but presented to the viewer simultaneously, suggests to the viewer that the respondent's statement generalizes beyond his or her immediate experience. Second, one may present video clips that make nearly identical statements but which come from respondents who differ on certain demographic variables, such as profession, race, age, location, or socio-economic status. This can signal to the viewer that a particular belief or understanding spans different populations or subpopulations. Finally, one may present the stories or experiences of many different kinds of respondents in a way that highlights a unifying theme or underlying process. This approach shows that although the details of any respondent's experience may be unique, they are linked by some more general variable of interest. In the next section, I use examples from my work to demonstrate how, in practice, one can use these and other techniques to create analytic films.

Analytic Filmmaking in Practice

To make the process of creating an analytic film less abstract, I use examples from *The Other Side of Immigration (TOSOI)* to illustrate how, in practice, one collects good video data, edits according to theoretical pillars, and generalizes through strategic reiteration. In this section, I also explain the relationship between *TOSOI* and my written scholarship to indicate how video and text complement and interact with one another. Together, these forms of expression help us accumulate different

kinds of knowledge and contribute to the creation of a more accurate and complete body of scholarly knowledge. Finally, in case the key differences between analytic filmmaking and documentary filmmaking remain unclear, I briefly compare *TOSOI*'s narrative approach to narrative approaches taken in a handful of documentary films on the same topic.

Project Background

TOSOI was filmed as part of dissertation fieldwork I completed in Mexico between January and April of 2008. Although embedded within the same study that informed my dissertation, *TOSOI* is not the “film adaptation” of my dissertation. Rather, they are distinct works that complement one another, overlapping in some respects, but more importantly, revealing things about their common topic that the other cannot. My dissertation explores the political determinants and political effects of migrants’ remittances in developing economies.¹⁸ Two key arguments are at the center of this study. To put them succinctly, I first argue that fiscal austerity in developing countries prompts citizens abroad to send more money to family and friends in the homeland, filling what could be thought of as a “social insurance vacuum” left when developing states curtail or eliminate subsidies and social welfare programs. Second, I argue that because remittances are cash injections that insulate poor households from market vicissitudes, remittance recipients have fewer economic grievances and are thus less likely to punish politicians for an otherwise ill-managed economy. To test these arguments, I collected survey data from 767 randomly selected Mexican households.

In an effort to develop stronger causal theories and illustrate causal mechanisms, I collected qualitative data during the period that my research team collected survey data. Through in-depth interviews and observations in high-emigration areas, I was interested in gaining a more general understanding of the political, economic, and social processes that cause people to emigrate and in turn how emigration and remittances impact the communities and households migrants leave behind. As part of my qualitative fieldwork, I collected 32 hours of video footage using a small HD camcorder. Most of this footage consists of interviews with a broad range of people in the communities where my research team collected survey data—e.g., smallholder farmers, return migrants, residents with family members in the United States, and local politicians, candidates, and community leaders of all political parties—and with policymakers and bureaucrats in the state capital. Interviewees were selected purposively in an effort to extract reliable information about the intersection of emigration, politics, and economics in the locales where I conducted fieldwork. Other footage was observational: e.g., the look of the homes that return migrants had built with money earned abroad,

propaganda from a recent political campaign, and mothers lining up to participate in a conditional cash transfer program.

Selection Bias, Response Bias, and Nonresponse Bias

Biased data are a threat to good inference.¹⁹ While collecting video data, I was attentive to three types of bias in particular: selection bias, response bias, and nonresponse bias. These three biases are certainly not unique to video data, but may manifest themselves in ways that are unfamiliar to scholars who have never collected video data.

First, selection bias becomes an issue if one succumbs to the natural impulse of recording only when “something interesting” is happening or when something interesting is being said. This impulse is problematic because the most interesting moments, people, and statements may in fact be outliers that tell us little about the true processes we are interested in understanding. To collect data that is representative of the population or phenomenon being studied, it is critical to record often and to allow one’s camera to roll uninterrupted for long periods of time. Uninterrupted recording is now possible due to the decreasing cost of storing digital video footage on hard drives and the fact that most video cameras are now equipped with high capacity internal hard drives and/or record to high capacity removable data cards. My camcorder, for example, recorded footage to a 60-gigabyte internal hard drive that could store seven hours of HD footage at a time. I furthermore used a three-hour battery and traveled with a power cord and two backup batteries. In addition to reducing selection bias, capturing large amounts of video data is advantageous because it creates more observations for one to analyze later, whether those analyses inform written scholarship, audiovisual scholarship, or both.

Next, anytime we collect human subjects data, we must take steps to mitigate nonresponse bias and response bias. Nonresponse bias occurs if respondents systematically refuse to participate in a study. Response bias occurs if respondents systematically misrepresent their opinions or provide inaccurate information (often for reasons of social desirability) in the presence of an observer.²⁰ Video cameras may exacerbate these biases. For example, people may refuse to participate, or clam up if they do participate, due to camera-shyness (nonresponse bias). Others may feel compelled to perform, exaggerate, or withhold information in order to put forward a favorable image for the camera (response bias).

I attempted to mitigate these biases by minimizing the camera’s role in the interaction. First, I predicted that a crew and professional film equipment would intimidate or distract many respondents. Those who are intimidated might refuse to participate or act withdrawn during the interview; those who are distracted by a crew, big camera, or bright lights may feel compelled to perform or feel

unable to speak naturally. To make the on-camera interview less daunting and to minimize these distractions, I worked alone and used an inconspicuous setup that consisted of only a small consumer-grade camcorder on a simple tripod. I refrained from using a lighting kit, and I did not attach lapel microphones to interviewees. These decisions had adverse effects on production quality: many of my shots were out of focus and poorly lit, and most of my audio contained hiss and background noise. I think, however, these decisions made the interview feel less formal and made it easier for respondents to ignore the camera. Finally, to make on-camera interviews feel more like natural conversations between two people, I did not formally “start” and “end” interviews with countdowns or signals. Rather, I began recording prior to entering the conversation and generally left the camera rolling on a tripod the entire interview.

Nonresponse bias was ultimately not a problem: only one out of 37 people I approached for interviews refused to go on-camera. I performed two tests to check for response bias. First, on a handful of occasions, I conducted off-camera pre-interviews and returned later with the camera. I noticed little if any difference in the disposition of interviewees or the kind of information they provided between the off-camera pre-interview and the on-camera interview. In general, people seemed to ignore the camera after only a couple minutes—something observed by other visual social scientists.²¹ I also checked my video data against my survey data and my own understanding of the topic when possible. I did not find evidence that the camera was causing respondents to provide inaccurate information. Using the camera to collect observational data did not appear problematic either—because I was using a small, consumer-grade camera, I was routinely ignored, probably taken for a tourist.²²

Are cameras too disruptive to collect good data? In some instances they may be, especially in places where recording is prohibited. At the same time it may be more possible than ever to collect good data with a video camera. Video recording—whether it is people shooting video on their cellphones in public or security cameras watching overhead—is now so ubiquitous that people “take decreasing notice of the technology.”²³ My argument is not that researchers should ignore or wish away the potential disruptions that video cameras may cause while gathering data, but that there are ways to minimize and check for biases that video cameras may induce.²⁴

Communicating Arguments and Evidence

Using Final Cut Pro software, I edited my video data into a 55-minute narrative that addresses the following research questions: (1) What causes international migration? [2:50–15:12] (2) Under what circumstances do people choose “exit” (emigration) over “voice” (political participation and protest)? [16:27–27:18] (3) What are

the implications of migrants’ remittances for political and economic life in migrant-sending communities? [27:45–32:33] and (4) How do mass emigration and U.S. immigration policy affect migration patterns and social dynamics in rural Mexico? [32:34–47:00]. The fifth section concludes the film by offering some policy recommendations, just as a book or article might [47:00–52:03]. In each of these sections, a series of explanations is provided, followed by a central argument or explanation. (Throughout this discussion, bracketed numbers reference time points in the film.)

To illustrate how I used video data to advance an original social scientific audiovisual narrative, consider the theoretical logic behind the first key section of *TOSO!* [2:50–15:12]. This section of the film is made up of about 80 video clips that were edited together to present explanations and evidence to a single research question: What causes international migration? My objective here was to offer explanations that go beyond the clichés we hear in public debates—e.g., “people migrate in search of a better life”—and present a set of systematic explanations based on existing theories and a new hypothesis that grew out of my research. I was also interested in going beyond the most common economic explanations to show how changes in economic *policy*—not just exogenous economic shocks or economic conditions—trigger mass emigration. To advance these explanations, I established three theoretical pillars.

Economic theories of international migration constitute the first theoretical pillar [2:50–6:10] and are conveyed through observational footage and statements made by residents of high-emigration Mexican towns. One resident, a return migrant, argues in favor of Stark and Taylor’s theory of relative deprivation²⁵ when he states: “You create big expectations when you see family members and neighbors come back from the U.S. [with] their nice clothes, their new cars, their new trucks. You think it’s easy to go up there (the United States) and in a short time have the same.” As he speaks, images of well-dressed people walking through poor communities and driving pickup trucks help generalize the point [3:35–3:51]. The simultaneous presentation of the respondent’s statement and accompanying observations is one of many examples of *strategic reiteration*. Other factors that explain emigration include wage differentials between sending and receiving economies and the availability of employment opportunities in receiving economies (commonly known as “pull factors”),²⁶ expressed through statements and observational footage that compare a rosy picture of working in the United States with the difficulty of finding decent paying work in rural Mexico.

After exploring economic theories of international migration, the film shifts gears and begins to offer a new “political economy explanation.” Specifically, this

section of the film argues that in combination, an open trade policy and low social spending cause emigration. The second theoretical pillar initiates this argument at the 6:49-mark with discussion of the distributional effects of international trade.

Although good for growth in the aggregate, the transition from a closed to open trade policy exposes once-protected industries and producers to new competition and the vagaries of the invisible hand, creating new economic losers. Statements from Mexican policymakers and smallholder farmers convey this logic. For example, the mayor of one small town explains how the pork industry once thrived in his community and employed a significant percentage of residents, a point *strategically reiterated* in the next clip by a peasant farmer [6:49–7:21]. A farmer from another town discusses how he and his neighbors once grew corn for subsistence and cultivated beans to sell at market [7:24–7:57]. A farmer from yet another community explains how there was once great demand for the strawberries he grows on his land. Each respondent then explains that his pork, corn, beans, and strawberries were priced out of the market after Mexico opened its economy to agricultural imports. Various interviewees point out that abandoning their land and emigrating was the most rational course for small farmers who suddenly found themselves unable to compete in a market dominated by cheaper foreign goods [8:13–10:53].

The decision to include four different examples here—pork, corn, beans, and strawberries—is another example of strategic reiteration. In this instance, my objective was to make general statements about the distributional effects of trade in Mexico. If pork had been the only example, the argument would have been that *small pork farmers* were the losers of Mexico's trade policy. This is certainly true, but by focusing on examples that fall into four different agricultural categories—livestock, vegetables, grains, and fruits—my aim was to convey the message that with only a few exceptions, *small farmers* were the losers of Mexico's trade policy [10:54–11:47].

To this point, it sounds like an open trade policy and exposure to new foreign competition cause emigration. The third theoretical pillar [11:49–15:12] adds a new layer to the explanation by focusing on the role of government spending. Rodrik and others have argued that the kind of external risk that small Mexican farmers were exposed to creates new demand for social insurance—a demand that many governments have responded to by increasing spending on subsidies and social welfare programs that insulate workers from market vicissitudes.²⁷ The positive relationship between trade openness and government spending—often referred to as the “compensation hypothesis”—has found strong empirical support in studies of developed countries. The relationship, however, does not hold up so reliably in samples of developing countries. Some developing states, in fact, reduced their social insurance commitments at the same time that they

were opening their economies.²⁸ The film illustrates the Mexican state's waning commitment to small-scale agriculture through statements about the unbearably high costs of unsubsidized farm inputs [9:32–9:40] and low levels of spending on subsidies [12:02–12:30]. One farmer—a return migrant—says, “We don't have any government support. We're forgotten by the political system” [13:41–13:53]. The idea that small farmers are not supported is strategically reiterated by clips that show the antiquated technologies many continue to use: horses to plow fields [12:24–12:32], machetes to cut grass [13:23–13:30], and small tractors that look many decades old [13:30–13:44].

The combination of open economy policies and weak safety nets may leave certain groups—in this case, small farmers—completely unable to compete. Some political scientists predict that the losers of state retrenchment and trade competition organize and punish politicians for adverse economic change.²⁹ Others argue that market losers “swallow the bitter pill” and wait for better times.³⁰ This subsection of *TOSOI* makes a different argument: some market losers cope with fiscal austerity by emigrating. As one respondent points out, he has no choice but to find a way to recuperate losses if what he invests in growing his crops exceeds his income from selling them. In the absence of a robust social safety net, the burden falls to him to self-insure. He points out that the most effective way to do this is to work in the United States and save and send money home [14:20–14:53].³¹

Reminding us of Albert Hirschman's seminal framework,³² the next major section of *TOSOI* explores why emigration (“exit”) might be viewed as a more effective way to deal with economic adversity than expressing one's economic grievances through formal political channels (“voice”) [16:27–27:18]. In short, with the narrative again supported by a set of theoretical pillars, this part of the film explains how low levels of political knowledge [16:27–19:58], clientelism [19:59–21:27], and the widespread perception that the government is corrupt [21:27–23:20] erode marginalized citizens' faith in political institutions [23:20–25:00]. Lack of faith in political institutions and the need to self-insure leads to a “culture of emigration” in marginalized towns. Those who stay behind can often turn to family members abroad to help them meet their economic needs. As a result, remittance recipients have fewer economic grievances than they otherwise would, making them less compelled to punish politicians for a bad economy [26:25–26:41]. Structured logical explanations are advanced in the remaining sections of the film.

The Complementary Nature of Analytic Film and Written Scholarship

Analytic filmmaking and written scholarship are complements. First, through the analytic filmmaking process, scholars create a vivid record of their fieldwork.³³

The opportunity to watch and re-watch an audiovisual record of one's fieldwork through the video editing process allows scholars to see evidence they overlooked the first time around due to cognitive biases,³⁴ cognitive limits,³⁵ and failures to pick up on subtleties in language, customs, and behavior that were not immediately familiar. "Re-experiencing" one's fieldwork in this way can improve written scholarship by contributing to the development of more accurate interpretations, better hypotheses and theory, and new ideas about how to specify empirical models and operationalize concepts.³⁶

Together, analytic films and written scholarship contribute to a more accurate and complete body of knowledge because either medium is able to achieve things that the other cannot. A central achievement of analytic filmmaking, for instance, is that it is able to illustrate causal processes far more vividly than text. Written scholarship, on the other hand, is better equipped to advance general models and quantitative analysis is better equipped to test those models. The first major section of *TOSOI* [2:50–15:12], for example, lays out the causal mechanisms behind the claim that market losers who are unable to count on government support self-insure by emigrating and sending money home. A testable implication of this causal process is that, all else equal, remittances sent to a developing economy or poor household should increase when government spending decreases. In my dissertation, tests of time-series data and survey data provide support for the hypothesized negative relationship between government spending and remittance flows.³⁷ Moreover, at the 26:22-mark, a respondent argues that people in his community have little interest in holding their politicians accountable because so many are able to count on family members abroad to satisfy their economic needs. A testable implication (which I disaggregate into multiple hypotheses) is that remittance recipients will use political channels to express economic grievances less than neighbors who do not receive remittances. Again, I find robust support for this hypothesis in analyses of survey data I collected while filming *TOSOI*.³⁸

The critical point is that all of the above are useful ways to advance explanations based on a systematic theoretical logic and scientific evidence. To treat them as "competitors" is, I think, to create a false choice, similar to the false choice that once existed between quantitative and qualitative approaches. Together text-based scholarship and analytic film have the potential to reveal more things about human behavior and social reality than either could reveal on their own.

Contrasting Analytic Film and Documentary Film

Notice that the objective of *TOSOI* was not to describe life in a Mexican village, recount the history of Mexican migration to the United States, report on a new immigration policy initiative, or convey a dramatic three-act

narrative about how a particular person or group overcame some economic or interpersonal hardship—all characteristic approaches of documentary filmmaking. Instead, the goal was to offer more general explanations that connected bits of micro-level evidence from my interviews and observations in an attempt to shed light on macro-level trends about why people migrate and how migration affects political, social, and economic dynamics in sending communities.

To further understand this distinction, compare *TOSOI*'s theory-driven approach to the character-driven approach taken in any number of other documentary films about emigration. Mark Becker's acclaimed documentary *Romántico*, for instance, tells the story of a musician named Carmelo who struggles to make a living in his hometown of Salvatierra, Mexico after returning from a stint working in San Francisco, California.³⁹ Alex Rivera's PBS film *The Sixth Section* tells the story of a group of Mexicans immigrants in New York who pool their money to build a baseball field, purchase an ambulance, and build a well in their hometown of Boqueron, Mexico.⁴⁰ Juan Carlos Rulfo and Carlos Hagerman's award-winning documentary *Los Que Se Quedan* (English title: *Those Who Remain*) provides a window into the daily routines of a handful of people living in rural Mexico to tell a story that builds to the dramatic separation of one family and reunion of another.⁴¹ All of these films make mention of some of the causes and effects of international migration. In contrast to *TOSOI*, however, their primary objectives are to tell their characters' stories, not systematically unpack causal processes or present new evidence from an original social scientific study.

Engaging Broad Audiences and Promoting New Collaboration

Analytic filmmaking is a uniquely effective way to communicate scholarly findings to researchers in other disciplines, people working in other professions, students, and the general public. As I have seen in my experiences presenting and discussing *TOSOI*, there is no shortage of intelligent people who are hungry for credible, well-researched information. The problem is that most of these people do not have the time or training to obtain that information from text-based scholarship. Video is useful in this regard: Not only do films typically take less time to watch than books take to read, but they require less prior knowledge of a specialized language than text. When engaging with text, readers who are unfamiliar with a certain vocabulary or who confront a poorly elucidated concept may quickly become lost and give up. One can present sophisticated concepts through video, on the other hand, and though viewers may be unfamiliar with the language behind those concepts, they may still be able to extract salient information by way of the visual and aural context.⁴²

Another advantage of video is that it can be consumed simultaneously in a group setting. Everyone reads at a different pace, and reads better in some environments than others. Hundreds of people, on the other hand, can watch a video in the same space and at the same time. The opportunity for people of different backgrounds, professions, and education levels to consume sophisticated information simultaneously and obtain some level of basic understanding across the group can greatly facilitate discussion and learning at forums that bring together diverse stakeholders for a limited amount of time, as is often the case at conferences, community events, government institutions, and interdisciplinary and university-wide programs.

Analytic film is thus capable of transcending some of the barriers that keep scholarly knowledge confined to a single field or subfield. Transcending these barriers is particularly important at present as market pressures erode journalistic standards and eliminate opportunities for in-depth reporting, making it increasingly unclear what on the internet is created to inform and promote critical thinking and what was created to sell advertisements. Even at esteemed media outlets, whether or not there is an engaging *story* to tell plays a central role in determining whether or not a particular *topic* will be reported on. Scholars, of course, are not beholden to the market pressures that journalists and filmmakers are and therefore have an important role to play in providing credible, well-researched information to the public.

But it is not only the public that gains when we use new digital tools to make scholarly research more accessible. Scholars gain as well. In fact, a 2013 report from the American Academy of Arts and Sciences puts better communication with the public at the center of its recommendations for addressing the funding crisis that threatens the humanities and social sciences. It argues that the burden is now on scholars themselves “to make the case for the public value of their work much more effectively than they have in recent years”—to drum up funding and support by engaging with a broader audience. “Renewed funding may arise altogether,” the report argues, “with renewed effort to remind Americans of the meaning and value of the humanities and social sciences” and “is unlikely to come without it.”⁴³ This message is consistent with the guidelines of the National Science Foundation (NSF), whose “broader impacts” criterion requires that grantees do socially relevant research and work to improve the public’s scientific literacy by disseminating results broadly.⁴⁴ Among other recommendations, the NSF encourages scholars to “publish in diverse media” and present “research and education results in formats useful to policy-makers, members of Congress, industry, and broad audiences.”⁴⁵ My experiences presenting *TOSOI* have persuaded me that analytic films are a particularly effective “format” for presenting sophisticated

information to audiences outside our fields or subfields, for reminding the public of the value of social science research, and for having real influence on how policymakers and other members of the public think about important social and political issues. This does not mean “dumbing-down” our work, but instead communicating findings through a medium with which more non-specialists are willing to engage and are better prepared to glean insights from.

In addition to communicating knowledge across disciplines and professions, analytic filmmaking has the potential to promote new kinds of collaboration within universities—another NSF priority. First, students who lack advanced quantitative skills—whether because they are naturally more right-brained or because racism, poverty, gender inequality, disability, or geographic disparities prevented them from receiving decent math and science instruction earlier in life—gain new opportunities for mentorship when invited to collaborate with faculty on the production of analytic films. Second, the technical and communicative requirements of learning to work with video may compel more social scientists to build bridges with colleagues in the arts and humanities for feedback and consultation. The universal language of visual media may likewise encourage scholars from the social sciences, the humanities, and the natural sciences to find new areas of common ground, leading to new collaboration on topics that do not fit neatly into a single academic discipline, such as sustainability, inequality, and human mobility. Finally, digital video has the potential to bring together scholars with different methodological strengths to collaborate on projects that employ many different kinds of data, including audio-visual data, quantitative data, and text-based data.

Conclusion

The current pace of technological change is astonishing. Over the past decade, and especially within the past five years, new and powerful digital video technologies have transformed how people record, produce, and exchange information. In this article, I have argued that these digital tools present interesting opportunities for social scientists, opening the door to new ways of collecting data and publishing our research. Here, I have proposed a specific brand of digital and visual scholarship called analytic filmmaking, which I define as the application of the standards and principles of social science to the filming and editing of digital video data. When well executed, analytic films communicate general theoretical explanations and present new empirical evidence. They achieve these goals through the systematic collection of video data, the establishment of theoretical pillars that convey a logical narrative that offers general explanations of social and political outcomes, and a generalizing technique called strategic reiteration. I contrasted the analytic filmmaking approach with the descriptive

storytelling and reporting that is characteristic of documentary filmmaking.

Analytic films complement written scholarship by vividly illustrating causal processes. They are furthermore a uniquely effective way to disseminate social science research beyond our subfields—to communicate scholarly findings to broader audiences, including scholars in other fields and non-specialists who work in any number of professions, such as public policy, public health, education, law, and others. This is an important advantage: Social scientists do research on matters of great importance that people in other fields and professions are interested in learning more about. But because those people do not read our journals or know how to make sense of our theories and empirical work, they remain oblivious to that body of knowledge. Analytic filmmaking helps to resolve this disconnect between scholars and the public by communicating research in a universal audiovisual language that non-specialists are better able to comprehend. The benefits of broad dissemination include a better-informed public and a public that is more engaged with and thus more willing to support scholarly research. Publishing scholarship in more accessible formats could also mean greater influence over policy and public thinking.

Scholars will need the proper training and incentives if they are to take advantage of new digital and visual tools. The technical skillset one needs to start making analytic films is easily taught in classrooms. Introductory media production courses are offered on just about every campus. Faculty and students who are interested in working with digital video would do well to sit in on one or read a basic introduction to nonfiction filmmaking.⁴⁶ But learning basic cinematography and video editing techniques is only the beginning. As with writing and quantitative analysis, the creative aspects of analyzing video data and employing it to create a social scientific narrative are more difficult to teach. These skills develop only through time, practice, and learning from failure. Scholars must engage in an iterative process of finding what works until best practices develop and paradigms emerge. More universities should establish interdisciplinary programs like Harvard's Critical Media Practice to encourage this kind of training and experimentation.

Political and social scientists will not experiment with analytic filmmaking or any other approach to digital/visual publication without the promise that good work will be rewarded. In the early stages, the individual departments and universities that are willing to embrace digital/visual scholarship must decide for themselves what constitutes valuable scholarly contributions for purposes of hiring and promotion. Eventually, systems for presenting and reviewing analytic films and other forms of digital and visual scholarship will develop, similar to those that exist for written scholarship. Conferences are one forum where political and social scientists should present visual

work and receive feedback. Ultimately, there should be peer-reviewed journals that publish visual scholarship on the internet. Even conventional text-based journals could expand their mission to include video research, just as many newspapers now integrate video alongside or within text-based articles that appear online. Finally, there should be dedicated distributors of long-form analytic films. Just as university presses provide incentives to produce written works not supported by a mass market, these academic distributors would provide the necessary incentives for scholars to produce a brand of in-depth audiovisual publication that is not typically produced by filmmakers and journalists.

Scholars should not ignore the remarkable communication breakthroughs of the past decade. How the world disseminates and consumes information is changing. New digital video technologies provide incredible opportunities for capturing and publishing knowledge. Social scientists should begin to debate how we can best take advantage of these tools to produce and publish research that advances understanding of politics, society, and human behavior while remaining true to the practices, standards, and principles of positive social science.

Notes

- 1 At the time of writing in August 2013, a staggering 100 hours of video footage were uploaded to YouTube every minute. This is up from 35 hours per minute in October 2010 and 6 hours per minute in June 2007. See the official YouTube blog: <http://youtube-global.blogspot.com/2010/11/great-scott-over-35-hours-of-video.html> and <http://youtube-global.blogspot.com/2013/05/heres-to-eight-great-years.html>. Accessed August 20, 2013.
- 2 Students, for example, are no longer stuck with bad teachers: they can log on to websites like Khan Academy, Coursera, and iTunes U to watch free lessons from some of the world's best instructors. Chemists, microbiologists, and medical researchers no longer have to reinvent the wheel every time they want to try a new experimental technique: they can log on to *The Journal of Visualized Experiments* to see exactly how colleagues around the world have approached particular procedures and techniques. Human rights advocates and researchers are no longer limited to the opaque reports of state news agencies: we can see inside many of the world's most repressive regimes thanks to cellphone cameras and YouTube. Even the most staid periodicals, such as *The Economist*, feature video content on their websites to complement and enhance text-based reports. The list goes on.
- 3 In addition to the author (Germano 2010a; Germano 2013a), Peter Galison, Pelligrino University Professor of History of Science and Physics at Harvard, has used film to disseminate his research on government secrecy

- and nuclear waste containment (Galison and Moss 2008; Galison and Moss Forthcoming). Jeffrey Togman, associate professor of political science at Seton Hall University, has used film to make valuable contributions to the study of housing and urban poverty (Togman 2005; Togman 2011). Wesley Shrum, chair and professor of sociology at Louisiana State University, created a video companion to his NSF-funded research on Kenyan politics (Shrum 2012). Using methodologies he developed in Africa and Asia (Shrum et al. 2005), Shrum has also collected nearly a thousand hours of footage that document the long-term recovery of New Orleans after Hurricane Katrina—a treasure trove of data for scholars interested in public responses to natural disasters. Russell Belk and Robert Kozinets, both professors of marketing at York University’s Schulich Business School, have argued for greater use of audiovisual methods in scholarship on consumer behavior (De Valck et al. 2009; Kozinets and Belk 2006). In 2006, microbiologist Moshe Pritsker founded *The Journal of Visualized Experiments*, a peer-reviewed “video journal” that allows natural scientists to share experimental breakthroughs and techniques with each other over the web (jove.com). These contributions are in addition to a rich tradition of visual work in anthropology (MacDougall 1998). See also Joonas Rokka’s call for scholarly “video publications” in the *Financial Times* (Rokka 2012).
- 4 Ireland 2011.
 - 5 Germano 2010b.
 - 6 Germano 2010a.
 - 7 American Library Association 2011.
 - 8 I distinguish analytic filmmaking from visual anthropology and visual sociology. Visual anthropology and visual sociology are not systematic approaches, but refer quite generally to the use or analysis of photographs and moving images in anthropological and sociological research. See Morphy and Banks 1999; Grady 2007.
 - 9 Ethnographic filmmaker David MacDougall makes an important distinction between visual anthropological scholarship and films about anthropological topics. MacDougall contends that “distinguishing between the anthropological film and the film about anthropology. . . is to assess whether the film attempts to cover new ground through an internal exploration of data or whether it merely *reports on* existing knowledge. Films about anthropology, by and large, employ the conventions of teaching and journalism; anthropological films present a genuine process of inquiry.” I think we should use the same metric to distinguish between films that are about social and political topics and works of visual social scientific scholarship. MacDougall 1998: 76.
 - 10 Grady 2007.
 - 11 Rabiger 2009, 12.
 - 12 Some overt examples of films that blur the lines between fiction and nonfiction include *Catfish* (Joost and Schulman 2010) and *Exit Through The Gift Shop* (Banksy 2010). But even many “serious” documentaries, like *Waiting For Superman* (Guggenheim 2010), a film about charter schools, contain fake and staged scenes. See Otterman 2010. Many well-regarded documentaries, such as *Man On Wire* (Marsh 2008) and *Thin Blue Line* (Morris 1988) contain dramatizations and reenactments that further blur the line between fiction and nonfiction. Fictionalization and reenactments are even characteristic of ethnographic filmmaking extending back to Robert Flaherty’s (1922) groundbreaking piece *Nanook of the North*. See MacDougall 1998, Ch. 3.
 - 13 This kind of systematization has largely been absent from anthropological and sociological debates about how to use visual tools in social science research. MacDougall 1998; Grady 2007; Pauwels 2010.
 - 14 MacDougall 1998, 190.
 - 15 MacDougall 1999.
 - 16 Tansey 2007; Lynch 2013.
 - 17 Just as scholars are careful not to distort meaning or cherry-pick evidence in their writing, they should seek to edit video according to some theory or hypothesis only when the data accurately reflect that theory or hypothesis. To make editing decisions transparent, scholars should consider posting their unedited footage online for others to verify, scrutinize, and evaluate, similarly to how many quantitative social scientists post their raw datasets online.
 - 18 Germano 2010b.
 - 19 King, Keohane, and Verba 1994; Groves et al. 2004.
 - 20 Groves et al. 2004.
 - 21 Shrum et al. 2005; Heath et al. 2010: 49.
 - 22 In a similar vein, MacDougall argues that people sometimes act *more naturally* in the presence of an observer with a camera than one without. Someone with a camera, he argues, “has an obvious job to do” so people “leave him to it.” MacDougall 1975, 113.
 - 23 Shrum et al. 2005, 11.
 - 24 For other checks that can be performed to explore the effect of the camera on participants, see Heath et al. 2010: 47–49. See also Shrum et al. 2005; Togman 2011.
 - 25 Stark and Taylor 1989.
 - 26 See, e.g., Todaro 1969; Piore 1979; Massey et al. 1998.
 - 27 Rodrik 1997; Rodrik 1998; Katzenstein 1985; Cameron 1978.
 - 28 Wibbels and Ahlquist 2011; Rudra 2002; Kaufman and Segura-Ubierno 2001.
 - 29 Pierson 1996; Hiscox 2002.
 - 30 Weyland 1998; Stokes 2001; Przeworski 1991.

- 31 See also Stark and Levhari 1982; Massey 1988.
 32 Hirschman 1970; Hirschman 1978.
 33 Mead 1975.
 34 Simons and Chabris 1999.
 35 Lupia 2013.
 36 Mead 1975. Social scientists, for example, tend to measure remittances with a dichotomous variable or in terms of total dollars a household or individual receives from a family member abroad in a given time period. As I re-experienced my fieldwork during the year it took to edit *TOSO!*, I questioned this approach. I noticed in my footage that the benefits of remittances are relative and not best captured in a single dollar amount. This led me to use my survey data to develop the *Remittances Index*, or RI, which measures the impact of remittances on any household's welfare by taking into account the following factors: the salience of remittance income relative to total household income, how reliably family members abroad send remittances in times of economic crisis, and the number of years a household has received remittances. See Germano, 2013b.
 37 Germano 2010b, Ch. 5.
 38 Germano, 2013b.
 39 Becker 2005.
 40 Rivera 2003.
 41 Rulfo and Hagerman 2008.
 42 In general, educational psychologists find that people gain the deepest understanding when they are presented with both images and text. Levie and Lentz 1982; Mayer 2003; Mayer 2001; Tibus et al 2013.
 43 American Academy of Arts and Sciences 2013: 39–40.
 44 National Science Foundation 2012.
 45 National Science Foundation 2002.
 46 e.g., Rabiger 2009; Barbash and Taylor 1997.

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Analytic Filmmaking and the Persistence of Narrative: A Response to Roy Germano

Sunita Parikh

While there is much to appreciate in Roy Germano's essay, I argue that the analytic filmmaking project as currently presented has flaws that need to be addressed before we can proceed with this approach. First, Germano underemphasizes many of the similarities among visual, audio, and textual data collection and analysis while at the same time failing to note important ways in which the two differ. Second, the discussion of documentary filmmaking focuses on a particular style of documentary and neglects to consider documentaries that are similar in their construction to the type of analytic filmmaking he argues for in the article. This emphasis on the differences creates needless and potentially problematic schisms between two groups of empirical researchers who have a great deal in common, in terms of interests and methods. Finally, the theoretical framework and the connection between theory and data need to be presented much more explicitly so that the viewer can follow the argument of the film.

As visual communication becomes more and more commonplace, it makes sense for scholars who have communicated primarily through text to consider how they might make contributions through a different medium. Roy Germano's analytic filmmaking approach argues that scholarship can be effectively presented through the documentary film format and that political scientists will reach larger and more diverse audiences by doing so. Many institutions are seeking ways to make pedagogy more innovative and interactive, and Germano is offering an analogous approach to improve the dissemination of scholarly research.

There is much to appreciate in Germano's essay. His emphasis on theory-driven research, on the ways in which analytic films can complement written scholarship, and his argument that we can reach policymakers and the public more effectively through film, are all persuasive. His experience in showing his own film, *The Other Side of Immigration (TOSOI)* to more than a hundred different audiences bears out his claims (p. 664). I was able to view *TOSOI* easily using my Netflix account, and my knowledge of the film enhanced my understanding of his article. However, while I am convinced by the general argument that the medium of film can provide an important extension of scholarly communication, I argue that the project as currently presented by Germano has flaws that need to be addressed before we proceed further with this approach.

Germano's term, analytical filmmaking, recalls a prior scholarly endeavor that joined analytic methods to an existing narrative format: *Analytic Narratives*, as discussed and demonstrated in the Bates *et al.* volume of the same name.¹ That approach showed how combining deductive, rigorous theories with narrative empirical data could provide us with richer and more convincing arguments and results than we had previously obtained. While the book was the subject of spirited debates about both the general premises and the specific analyses the authors carried out,² we have seen the approach adopted by scholars across political science since then.³

Analytical filmmaking offers similar promise in the way it combines the benefits of narratively structured filmmaking with a more deductive and transparent theoretical framework. Before it can fulfill that promise, however, we need to address two general areas in which the current proposal fall short.

First, Germano presents analytic filmmaking as a new enterprise, one that departs sharply from existing methods of conducting and disseminating research. While he is largely correct that political scientists have neglected the collection, analysis, and dissemination of visual data, he underemphasizes many of the similarities among visual, audio, and textual data collection and analysis while at the same time failing to note important ways in which the two differ.

Germano's discussion of the way video data is collected and analyzed suggests a much greater departure from qualitative techniques than is the case in my experience. Researchers who collect data from interviews, archives, and participant observation use similar types of methods to gather purposive samples, almost invariably collect more

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audio and textual data than they will present in their finished projects, and code and analyze the data using systematic methods that can be understood and accessed by scholars who follow them. There is a greater commonality between video, audio, and text collection and analysis than the essay recognizes, and a greater attention to points of agreement would not only make the connections clearer, it would show scholars who are interested in producing video projects that they are further along the learning curve than they may realize. To the extent there are differences, such as the potential willingness of subjects to be filmed rather than recorded or have notes taken at interviews, it would be more useful to discuss these issues comparatively rather than as completely new issues in qualitative research. For example, Germano's discussion of bias in data collection is very similar to concerns shared by researchers who conduct audio interviews of respondents drawn purposively from a given population.

Second, Germano's discussion of documentary filmmaking focuses on a particular style of documentary and neglects to consider documentaries that are similar in their construction to the type of analytic filmmaking he argues for in the article. This emphasis on the differences and his overall tendency to categorize most documentaries as atheoretical storytelling create needless and potentially problematic schisms between two groups of empirical researchers who have a great deal in common, in terms of interests and methods.

The examples Germano offers illustrate the argument that current documentary filmmakers "typically adhere to a set of practices and norms that are incompatible with positive social science" since they emphasize "engaging characters" who are usually "eccentrics and outliers" (pp. 664–665). But the range of documentary film subjects and approaches is far greater than that presented by Germano. There are numerous important and well-known documentaries that take historical and social scientific events and processes as their subjects; the oeuvre of Frederick Wiseman, for example, is almost completely comprised of sociological concerns even though the films are nominally about specific institutions. *Eyes on the Prize* was about the Civil Rights Movement, and while it highlighted the roles of important individuals, it did not neglect the larger social context.⁴ Some documentary filmmakers make popular projects like Joost and Schulman's *Catfish*, but others produce sociologically rich and analytically insightful studies.⁵ Drawing explicit links between analytic filmmaking in political science and these works seems both appropriate and useful.

Turning to the subject of Germano's own work, immigration, I was struck while watching *TOSOI* how much I was reminded of *Journey to America (JTA)*, an episode of the PBS series *The American Experience*.⁶ *JTA* focuses on Ellis Island as a clearinghouse for immigration at the end of the 19th century, but its larger topic is the

immigrant experience. Its structure mirrors the immigrant's journey, as it begins with narrated extracts from letters and diaries describing the home countries, continues with the arrival into New York harbor and the stressful processing of newcomers through Ellis Island, and ends with descriptions of the variety of American cities, towns, and rural areas in which the immigrants settled. Obviously there are many differences between the experiences of 1890 and 2010, but similarities are evident. Both substantively and stylistically, the two documentaries share a filmmaking style with their emphases on passage, movement, and the uncertainty and danger inherent in border crossings.

Perhaps the similarities between the films were especially apparent to me because when I began watching *TOSOI* I expected the differences to dominate. But in both cases, the documentaries are characterized by an overarching narrative structure despite the emphasis on the sociological and processual aspects of the analysis. It is difficult to escape the storytelling aspect of film as a medium, even when filmmakers are guided by deductive theory.

If analytic filmmaking is to fulfill the promise Germano expects, then the theoretical framework and the connection between theory and data need to be presented much more explicitly so that the viewer can be guided by it as the evidence is set forth. Without voiceover narration or an on-screen narrator laying out the theoretical points that shape the interpretation, the narrators presenting the evidence, who are complex and interesting characters in their own rights, can dominate the stage and draw attention away from the points they are making. Otherwise the audience can become focused on the characters, whether they are fictional or real. The more compelling and interesting the personal stories, the more likely the viewer will connect with the speakers, to the detriment of the specific arguments they are representing, and the viewer response to those arguments will be shaped in part by her sense of connection with the speaker.

These modifications to Germano's approach bring analytic filmmaking closer to the methods and substance of textual analytic narratives. It foregrounds the theoretical foundations which distinguish the latter framework while still retaining the focus on narrative forms of data as sources of empirical evidence.

Roy Germano has posed a provocative and important argument in his article. Political scientists need to be attentive to and find ways to participate in the increasing role of visual communication. But if we are to extend our research through techniques like analytic filmmaking, it is important that we pay attention to the links it shares with existing forms of textual and visual qualitative research methods and projects.

Notes

- 1 Bates et al. 1998.
- 2 Elster 2000, Bates *et al.* 2000, Parikh 2000, Carpenter 2000.
- 3 Bowen and Petersen 1999, Rodrik 2003, Schiemann 2007, Zagare 2009.
- 4 Hampton et al. 2006.
- 5 Joost and Schulman 2010.
- 6 Guggenheim 1989.

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I Am Not a Camera: On Visual Politics and Method. A Response to Roy Germano

Dvora Yanow

No observational method is “point and shoot.” Even bracketing interpretive methodologies and their attendant philosophies, a researcher—including an experimentalist—always frames observation in terms of the topic of interest. I cannot ever be “just a camera lens,” not as researcher and not as photographer. Framing research “shots,” an observer always includes some features of the research question terrain while excluding others—of necessity, given human limitations and the partiality, always, of what we can know and the knowledge we can claim. With “shutters” open, we are never passive, always thinking, always world-making. While attention to videography and other visual research methods is welcome, researchers doing “visual politics” need to ask “political” questions: who has created the image being analyzed, for what purpose(s), what imagined viewer(s), and what unintended viewer(s), as well as consider the ethical issues that these methods entail.

I am a camera with its shutter open, quite passive, recording, not thinking.

—Christopher Isherwood¹

The camera’s aid to observation is not new; Leonardo da Vinci described its principles.

—Collier and Collier²

What we need is a critique of visual culture that is alert to the power of images for good and evil and that is capable of discriminating the variety and historical specificity of their uses.

—W.J.T. Mitchell³

I grew up surrounded by visual materials: from my father’s 8 mm. home movies, my parents’ newly acquired television, and my grandparents’ photographs of family members (some lost to the Nazis) to the films of various sorts that populated my undergrad and graduate programs. So in what sense are we “*more* visual” in our communications today, as Roy Germano claims? And is audiovisual expression truly in need of freeing “from the hands of film and tv studios”?

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I read Germano’s essay within the broader context of “visual methods.” These include not only researcher-created materials that “record” data (technologies from pencil-and-paper [mapping, sketching, etc.] to video and still photography), but also situational members’ creations constituting potential data for analysis (from eighteenth-century French paintings “read” for their depictions of contemporaneous race relations to organizational members’ photographs, e.g., at Abu Ghraib; from political cartoons to policy-relevant spaces/places) and visual displays of data.⁴ I appreciate his call for increasing engagement with film in political science, which joins other disciplinary efforts: Jim Johnson and Mark Reinhardt’s ongoing American Political Science Association Short Course (since 2009), International Studies Association film screenings (since around then), and Western Political Science Association “Visual Politics” exhibits, Methods Café tables, and panels (since 2013). As things visual are part of the material world in and with which political acts take place, they warrant researchers’ attention.

That said, Germano’s treatment of visual methods concerns me. I find it unreflective methodologically vis à vis positive philosophy, filmmaking practices, and the protection of research participants. In addition, its treatment of contemporary documentary and anthropological filmmaking does not comport with current discussions and practices.

Film-making = worldmaking

I agree with the sense of Germano’s statements that film can help researchers see what “text and survey data could not”—a claim commonly voiced by ethnographers and

participant observers—and that film “takes” fieldnotes of a particular sort, enabling re-viewing in ways that print cannot. But film does not “reveal” those insights on its own, and filmmaking does more than just “captur[e] and stor[e] information.” It is not a “mirror of nature,”⁵ belying Christopher Isherwood’s statement (first epigraph) which led W.H. Auden, in a 1969 poem whose title I’ve borrowed, to proclaim the opposite.

Germano’s approach adopts the conceit of “I am a camera” objectivity, his “analytic” filmmaking intended to comport with “the standards and practices of positive social science”: being “objective,” “value free,” and so on. Yet all film-makers, himself included, shape the stories they tell. His desire for “more accurate and complete” research—a recurring refrain—via filmmaking belies this framing *and* the research reality that all social science can only ever achieve partial knowledge of its subject. Films are “ways of worldmaking.”⁶ Arguing that his filmmaking “privileges accuracy,” Germano elides the film-maker’s authorial eye and standpoint. Here is Isherwood’s passive seer, taking everything in without composing, structuring, selecting, editing, arranging, cutting—all the techniques Germano writes about using. Completeness is a promise held out by the heritage of early social philosophy’s notion of a finite and hence completely knowable social reality, as if a filmmaker could be omniscient and all-encompassing concerning the range of views on his topic. (Germano’s inclusion of researchers’ “*a priori* substantive knowledge” is therefore curious precisely because it speaks to the partiality and positionality of researcher knowledge.) His camera rolling uninterrupted has still been set up to frame some things in and others out. Even film that has the pretense of realism highlights some features, occluding others.

Consider the viewer’s sense-making of the videotaped interview with a return migrant against background “images of well-dressed people walking through poor communities.” This may be “strategic reiteration,” but all the socialsciences in the world cannot mask the fact that that image creates worlds of ideas, themselves framed and thereby “pre-interpreted,” for the viewer. Germano asks questions, off-camera, as he and his interlocutors seek to make sense of one another, in Spanish and in English, and as he seeks to understand their experiences and convey those understandings to his (imagined) viewers. Here is the intersubjective character of meaning-making “all the way down”: a triple hermeneutic,⁷ viewers interpreting the filmmaker’s interpretations of others’ interpretations of their own lives. Far from being external to what they are studying, documentary filmmakers, as Germano admits, are embedded in their settings, interacting with people, shaping—*making*—the film. Although a videographer may achieve some degree of blending in, she can be no more invisible than the ethnographer, despite the illusory promise of Timothy Pachirat’s imagined “Fieldwork Invisibility

Potion,” which offers “the possibility of . . . research uncontaminated by observer-observed interactions.”⁸ The minute a researcher “arranges” video data “to create a coherent . . . narrative,” she has engaged in non-objective worldmaking. Germano’s practices do not meet his own methodological criteria—because they cannot.

Others of Germano’s assertions are also methodologically contestable. How does film generalize? It is nothing if not grounded in particulars—including Germano’s examination of the very particular immigration experiences of Michoacanos and others. Having used (still) photography in my own research, I would claim that one cannot film “the general.” As to random sampling, what is the sampling frame here—a complete list of immigration problems? contemporary? historical? a complete set of villages in the state? of villagers? Or is Germano’s sample drawn randomly from hours of a day? days of a week? something else?⁹ Ruling out films portraying particular individuals’ stories, Germano eliminates oral histories, shadowing, and other methods potentially central to political science research films. Furthermore, filmmakers would not necessarily turn only to “credible sources,” nor do “credible sources” necessarily produce “accurate representations.” Donald Rumsfeld, for instance, not so credible in the end on WMD, would surely be key in a film on the Iraq war precisely because of those (mis-)representations. Indeed, sometimes the “lies” people tell—their “inaccurate” portrayals of events or actors—are highly useful sources of information.¹⁰

Finally, although Germano proclaims his analytic filmmaking suitable for research involving human subjects, the essay is mute on the ethical issues entailed. What of human subjects protections (informed consent, privacy guards, avoiding harms to individuals or communities) required in many parts of the world? Many an ethics review committee would likely have something to say about “posting . . . unedited footage online”! Rolling his camera before beginning interviews, did Germano tell his subjects he was filming? Refusing to be filmed may be due not “to camera-shyness,” but simply because people wish—for *whatever reason*—not to be filmed. A central concern for photo-journalists and visual anthropologists alike, picture-taking and dissemination commonly require signed releases. Additionally, is Germano implying that he would film anyway where recording is prohibited because people are now used to it? These concerns obtain regardless of methodological approach.¹¹

Visual=power

Are we newly “visual”? The Lascaux cave drawings—arguably “the first picture show”¹²—suggest otherwise. Moreover, the Gutenberg “revolution” did not happen overnight,¹³ suggesting that Germano’s heralded changes may not erupt quite so radically.

Differently visual, perhaps. And there is no doubt that attention to visual matters and methods is rising on the political science horizon, however *en retard* (the journal publishing changes that Germano rightly calls for already existing elsewhere): visual sociology harks to mid-nineteenth-century documentary photography; visual organizational studies, to Frank and Dr. Lillian Gilbreth in the early 1900s; and visual anthropology, to Margaret Mead and Gregory Bateson in the early twentieth century and Timothy Asch in the 1970s. Still, neither Germano's arguments about visual anthropology/sociology nor his definitions and discussions of documentary and ethnographic film fit either contemporary methodological treatments¹⁴ or my experiences at the American Anthropological Association conference, whose Society for Visual Anthropology screened and discussed over a dozen documentaries, and at the International Documentary Film Festival Amsterdam (IDFA), with over 300 films. The blurring of fiction and nonfiction and staged shots are problematized within visual anthropological debates and, today, are widely discredited; Germano's description of how video works describes precisely how ethnographic filming proceeds; and there is more to documentaries than "eccentric," "outlier" story-telling films and more to documentary filmmakers than those identifying as storytellers or focusing primarily on "engaging characters."

Research filmmaking does not live in a unity of science realm with a single set of "standards and principles." Indeed, visual "literacy" is not innocent. Through socialization or training, we learn to interpret visual materials just as we do textual ones, as Timothy Pachirat reminds me: "The visual is not some unmediated mode of communication that escapes the . . . hermeneutics that we apply to texts."¹⁵ The power of visual literacy and the visual image can explain Germano's observation concerning film's potentially wider dissemination: even documentarian Frederick Wiseman's latest *At Berkeley*,¹⁶ clocking in at over four hours, takes less time to watch than a typical social scientific book takes to read, requiring less specialized vocabulary, thereby potentially reaching more numerous and far-flung audiences, although some ethnographies have been equally impactful as some documentary films and not all videos draw the same attention that Germano's has. (Might that have something to do with his topic, immigration, being "hot" or, perhaps, with his marketing abilities?) But that power is also the source of the visual's potential for harm, as W.J.T. Mitchell notes concerning "the power of images for good and evil" (second epigraph). While I applaud the essay's promotion of film in political science research, its methodological blindspots detract from this advocacy and are potentially misleading for those engaging visual methods. As political science opens up to matters visual, we need treatments that are deeply reflective on the methodological challenges such uses pose and sensitive to their ethical issues.

Notes

- 1 Isherwood 1939.
- 2 Collier and Collier 1967/1986, 7; cited in Czarniawska 2014.
- 3 W.J.T. Mitchell, *Picture Theory* 1994; quoted on Jim Johnson's blog <http://politicstheoryphotography.blogspot.nl/>, accessed November 27, 2013.
- 4 Respectively, Bellhouse 2006; Van Veeren 2011; Danjoux 2013; Yanow 2013/2006; Tufte 1983/2001 and subsequent books. For a list of possible visual research materials, see Yanow 2014, table 10.1.
- 5 The phrase is Rorty's, 1979.
- 6 In Goodman's phrase, 1978.
- 7 Yanow 2009.
- 8 Pachirat 2009, 41.
- 9 I am obliged to Peri Schwartz-Shea (personal conversation, December 5, 2013) for suggesting these details.
- 10 Fujii 2010.
- 11 On ethical concerns in documentary journalism and in social sciences, see Ward 2011, *inVisio* 2013.
- 12 Wachtel 1993.
- 13 Cook 1995.
- 14 For up-to-date engagements, see Bell et al. 2014, Pink 2013.
- 15 Personal communication, December 5, 2013.
- 16 Wiseman 2013.

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Analytic Filmmaking as Social Scientific Research: A Response to Roy Germano

Jeffrey L. Gould

This article engages Germano's film and essay. The author lauds the fundamental thrust of the essay towards achieving scholarly recognition for film projects based on scholarly research. At the same time, the author questions Germano's sharp opposition between analytic and documentary films. He appraises *The Other Side of Immigration* very favorably, while pointing out that the aesthetic choices and the power of the testimonies do not fall neatly within the categories established by Germano. The author then discusses his own experiences in conjoining historical research and documentary filmmaking.

A decade ago, I presented my first documentary film at Indiana University. The film, *Scars of Memory: El Salvador, 1932* was informed by several years of archival and oral historical research.¹ Following the screening, the dean of the College approached me to offer his congratulations. After thanking him, I said, "But it wouldn't get anyone tenure or promotion." He chuckled but then moved on. Apparently, the academy still has not found a way to treat films (whether documentary or analytic) as substantive scholarship. Roy Germano's essay strikes a powerful blow in favor of such a fundamental revision in tenure and promotion policy with respect to the creation of films as a form of scholarship.

Germano's provocative and timely essay makes a strong argument that "analytic films" can be an important complement to social scientific research and analysis. He also sharply differentiates "analytic" from documentary films. For Germano, the analytic film reproduces and illustrates social scientific research. Whereas the documentary film tells stories that focus on specific individuals and groups, the analytic film consciously strives to generalize its "video data"—in short its primary goal is to "advance a series of theory-driven explanations about social or political outcomes" (p. 665). Similarly, "theoretical pillars" structure the film. The author also suggests that the film itself generates new knowledge that the written work cannot.

The Other Side of Immigration is a fine film; It is entirely understandable that Germano desires to push his work forward as a new model that allows scholarship to reach a broad audience. The film creatively expresses his basic

findings, namely that government policies, especially the reduction of social spending in the context of free trade agreements that negatively impact agriculture, are a direct cause of migration. Increased remittances from family members in the U.S. help mitigate poverty and, in turn, serve to pacify people who otherwise would be inclined to protest against ineffective and unresponsive government.

Yet, despite the power of the essay and the quality of the film, I am not fully convinced by Germano's main arguments about analytic film. For Germano, the analytic film generates new knowledge primarily through the ability of the filmmaker/researcher to return to the footage and study it more closely (pp. 669–670). He recognizes that not only does the footage convey data, it also conveys more subtle kinds of contextualization through intonation and facial expressions. The film, however, is primarily illustrative of the basic theses of the study: "When well executed, analytic films communicate general theoretical explanations and present new empirical evidence" (p. 671). The film's expository quality limits the kind of new knowledge that can be produced. At the same time, part of what makes *The Other Side* such a good film are the aesthetic choices that Germano made—decisions I imagine were made largely independently of social scientific criteria. Those choices condition the ending of the film with its relatively optimistic tone about the future. At the same time, Germano does not seem to grant the possibility that scholarship can fully inform and aid in the creation of documentary films, due to their insistence in conveying emotions and telling stories.

My own experience suggests that it is possible to combine scholarly research with filmmaking that potentially allows for new insights. Most significantly, the interviews themselves need to be interrogated and not merely evaluated for bias. Our first film, *The Scars of Memory*, dealt with the 1932 massacre of some ten-thousand

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Salvadorans, mostly Indians. We experimented in vain to avoid the use of an omniscient narrator. Due to different forms of traumatized memory, all but one of over 200 informants suppressed indigenous agency in their accounts of the January 1932 insurrection that preceded the massacres. Indigenous survivors of the massacre and their offspring blamed the insurrection on the ladino (non Indian) *other*, despite overwhelming documentary evidence that thousands of indigenous people did participate in an insurrection against the military and political authorities. To narrate the film directly through the informants therefore would have impeded any reasonable assessment of the historical record. To deconstruct the traumatized memory of the narrator or participants would have made the film overly complex as well as inflict a form of symbolic violence that we wished to avoid. In this sense, the process of filmmaking itself created a tension with direct scholarly research implications, namely the necessity to grasp the immediate and long-term repercussions of the narrative suppression of indigenous agency.

The need to interrogate oral historical sources also became clear in our second film, *La Palabra en el Bosque* (in collaboration with Carlos Henríquez Consalvi), that deals with the impact of Liberation Theology on a group of peasants in Morazán, El Salvador during the early 1970s.² Many of the peasants who had been active in creating communities modeled on the early Christians joined a nascent guerrilla movement in 1974, before the Christian Base Communities had suffered repression. Yet, in their reconstruction of events, all of the informants claimed that state repression was the reason for their enlistment in the guerrilla band. The discrepancy between the testimonies and the archival record compelled us to analyze two dimensions of the historical process. First, the impact of the massive repression on the region's peasants in the latter part of the decade served to accelerate (and therefore confuse) a sense of time. At the same time, we could assess the impact of the ideology of the guerrillas on peasants' memories. That ideology, informed by Marxism-Leninism, conceived of consciousness in stages. Within that framework, the peasants relegated their religiously-informed activities to a primitive stage. These scholarly insights, in turn, informed the filmmaking process. We recognized that we were dealing with a community memory that evolved over time, one that had its basis in fact as well as in certain ideological prejudices that favored a seamless story of popular empowerment and courage through armed struggle. Within the limits that narrative coherence allows, through the expression of ambivalences, we tried to leave open the possibility of alternative interpretations for the transformation of the Christian Base Communities into a base for the guerrillas.

The above examples suggest that the interrogation of the testimonies can allow us to understand forms of historical consciousness, otherwise inaccessible. Collective memory, in turn, has salient historical consequences. Ultimately, as an historian I am interested in the contradictions and the *desencuentros* (over-determined misunderstandings) that make historical interpretation so challenging. Testimonies allow us to grapple with what Gramsci called contradictory consciousness. At the risk of over simplification, social science (with the clear exception of James Scott among others) is more interested in the dominant, explicit expression of that consciousness. And yet, without interrogating the testimonies, *The Other Side of Immigration* allows the viewer to see the emotional and cultural cost of migration. Indeed, what makes it such a fine movie, in my view, is that it allows an intimate glimpse of the family's consciousness and the pain that often informs it. My suggestion then is that Germano's efforts might be even more fruitful if he blurred the lines somewhat between the strictly expository quality of analytic film and the individual and group stories of transformation that characterize documentary film. Part of our problem is disciplinary. In emphasizing the difference between analytical and documentary films he suggests that the former emphasizes causal processes. Here, I would insist that causal processes must include history. And despite *The Other Side of Immigration's* wonderful accessibility, historical context is lacking in the film, including, for example, background on political parties, social movements, NAFTA, and drug trafficking in Michoacán. Of course, the decision about what gets left on the cutting room floor is always painful, but here *The Other Side of Immigration* does seem to neglect history as an integral component of causal explanations.

Despite our disciplinary differences, I recognize and applaud the quality of this creative scholar's work. And we are very much on the same side of an issue that will grow in importance within the academy. As Germano so forcefully argues, filmmaking can be an important component of and supplement to scholarly research. Moreover, it is an absolutely fundamental tool that allows scholarly research to reach the public. It is time tenure and promotion committees recognize those facts.

Notes

- 1 Please find information for this film at <http://icarusfilms.com/new2003/scar.html>.
- 2 Please find information for this film at http://ffh.films.com/id/24426/La_Palabra_en_el_Bosque_The_Word_in_the_Woods%E2%80%94in_Spanish_with_English_Subtitles.htm.

The Woodgrain of the Chessboard: A Response to Roy Germano

Henry Farrell

Roy Germano argues for an “analytic filmmaking,” which would use film as a means to elucidate social scientific laws and generalizations. Yet film, even when it seeks simply to document the truth, is a form of narrative. To strip these ambiguities away in the name of a crude empiricism would rob these narratives of just that kind of information that makes them most valuable—the subtleties and nuances that they can capture and that simple transcripts cannot. Better models for understanding film can be found either in the direct acknowledgment and exploration of these ambiguities, or, alternatively, in the “analytic narratives” approach. Unlike Germano’s analytic film making, which prizes the abstract over the particular, analytic narratives gather their energy from the continuing tension between the particular and the abstraction.

I talo Calvino’s grave and lovely novel, *Invisible Cities* (1978),¹ describes a debate between Marco Polo and Kublai Khan about chess and social inquiry. The Khan wants to simplify his vast, diverse, and exasperating empire into something corresponding to the stark simplicity of a chess game, in which the rules that govern the “angular shifts” of the knight, and the “diagonal incursions” of the bishop would somehow capture the hidden logic of the empire and its cities. Polo argues back by pointing to the quiddities and contingencies of the chessboard that the emperor is using:

The square on which your enlightened gaze is fixed was cut from the ring of a trunk that grew in a year of drought: you see how its fibers are arranged? Here a barely hinted knot can be made out: a bud tried to burgeon on a premature spring day, but the night’s frost forced it to desist.²

Calvino’s imaginary argument is one version of the enduring fight between nomothetic approaches, which seek to establish abstract and universal laws, like those that dictate the knight’s hopscotch perambulations across the chessboard, and idiographic ones, which devote themselves to the particulars.³ Roy Germano’s argument on behalf of analytic filmmaking wants to discover abstract rules, but through a medium better suited to nuances and contingency. There is a tension between Germano’s aspirations towards nomothetic explanation and the specific advantages of film making, which he suggests are found in the *testing* of nomothetic arguments, but which

are really in public presentation, and in film’s ability to capture and preserve the nuances that are strained out of the mixture by more traditional forms of social inquiry.

Germano’s ambitions are clear. He wishes to contribute to social science as traditional social scientists commonly understand it, that is, to the steady accumulation of law-like generalizations that can be tested using standard evidence. As he describes it, analytic filmmaking emphasizes “nomothetic explanation over descriptive storytelling and character development” (p. 665). At greater length,

The ultimate goal of any analytic film should be to make nomothetic statements based on empirical evidence and to complement inferences made in written work by illustrating how, in reality, human behavior follows hypothesized logics. (p. 664)

The problem, as Germano effectively acknowledges, is that analytic film does not represent any very useful *method* for testing nomothetic statements. More traditional forms of quantitative and textual analysis are much better suited to this kind of testing. From Germano’s perspective, film still has two benefits. First, raw footage presents a repository of unprocessed information that can be referred to later in order to detect and correct earlier mistakes of interpretation. Second, appropriately edited films can illustrate causal processes “more vividly” than text. While both of these aspects of analytic filmmaking are useful, they are largely ancillary to the scientific project. If analytic films serve primarily to check errors and to present scientific findings to the broader public, they are hardly central to the process of scientific discovery.

There *is* a broader argument lurking behind Germano’s unnecessarily narrow justification of analytic film. As he says, film can capture information—nuances of facial expression, of tone, of body language—that written

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interview transcripts and quantitative data have difficulty conveying.

The problem is that such information is typically not the kind of information that nomothetic accounts can make use of. It is difficult to formulate universal laws about what a shrug of the shoulders or a wink means, because a shrug or a wink can mean very different things in different contexts and to different audiences. They provide information about the knots and woodcarvers' gradients in the chessboard, but not, or at least not directly, the abstract rules of the game of chess. There is, of course, a body of scholarly knowledge that speaks to such nods, shrugs, and winks, but it is explicitly and emphatically not nomothetic. It is the approach of the late Clifford Geertz, who prized idiosyncrasy over universals and who quoted Thoreau to emphasize that we did not go to Zanzibar to count the cats.⁴

An analytic filmmaking that was strictly nomothetic would do its damndest to filter and strain out such ambiguous and equivocal information, retaining only the purified element of abstract scientific knowledge. It would fail, of course, since it would necessarily convey more and more ambiguous information than its maker intended it to convey. Such failures might be both self-deconstructing and constructive. A self-aware analytic filmmaking might indeed exploit such contradictions to create a social science equivalent to *Rashomon*, transforming brute data into a space for Keats' negative capability, in which "multiple possible causes for an outcome can be allowed to exist alongside each other without being resolved, or even given definitive weights" (Spufford 2012). Robert Irwin's novel, *The Arabian Nightmare*, describes a terrifying world of dream where there are always more causes than events; this may be closer to the current state of the social sciences than we usually care to imagine.⁵

Such radical playfulness is likely to make most social scientists uncomfortable. The analytic narratives employed by Robert Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry Weingast present a different, and perhaps more practical model for analytic filmmaking (filmmaking is, after all, certainly a form of narrative).⁶ Bates and his colleagues do not begin with the ambition of discovering, or testing, universal laws; instead they start from specific empiric puzzles. They employ the strictures of game theoretic reasoning to build abstract models (although one could employ other forms of reasoning to generate them). The detailed causal narrative is not a simple application of the model; instead, the narrative and the model argue with each other, inform each other, and end up to some degree changing each other. As Margaret Levi argues, some degree of contingency is necessary to make an analytic narrative—if it were simply an illustration of some grand abstract law working out its ineluctable logic, it would lose its complexity and most of its interest.⁷ The tension between the abstract and

the particular, the model and the story it is supposed to illuminate, is a useful one.

It is understandable that Germano appeals to nomothetic language in order to justify his claims for the virtues of analytic filmmaking. This language has appeal to political scientists, even if they have tacitly abandoned the grand ambitions of their predecessors to construct a vast edifice of law-like generalizations with universal application. Yet an analytic filmmaking that seeks only to illustrate abstractly hypothesized logics will fail to deliver on its promise. Because films are dense, rich narratives, they can convey an intimacy of detail that standard kinds of social science knowledge cannot. Yet it is exactly the most valuable details that are least likely to fit well with the promised "hypothesized logics." Films, like all good narratives, will surely escape from the shackles of empiricism that we use to try to subdue them, and we can discern their true worth only if we recognize this.

Notes

- 1 Calvino 1978.
- 2 Calvino 1978, 131.
- 3 In Calvino's own (1996, p. 74) description, "From the moment I wrote that page it became clear to me that my search for exactitude was branching out in two directions: on the one side, the reduction of secondary events to abstract patterns according to which one can carry out operations and demonstrate theorems; and on the other, the effort made by words to represent the tangible aspects of things as precisely as possible."
- 4 Geertz 1973.
- 5 Irwin 1983.
- 6 Bates et al. 1998.
- 7 Levi 2002.

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Cinéma vérité and the Ontology of Cinema: A Response to Roy Germano

Davide Panagia

In this response I discuss the cinema ontology of Roy Germano's project of analytic filmmaking. I argue that though the project is at once compelling and ambitious, there are challenges posed by the medium of cinema itself that ultimately undermine Germano's commitments to indexicality, referentiality, and continuity in political science research.

"Seeing people immobile in space, the photographers realized that what they needed was movement if their photographs were to become a picture of life and a faithful copy of nature."

A. Bazin, "The Myth of Total Cinema"

From its technical and aesthetic inception in the latter half of the nineteenth century, cinema has been preoccupied with its own reasons for being. What is cinema? And what can it do? Is cinema an art of light and shadow? Or is it a technical medium for the exploration of human psychology? And why not both, as well as so much more? These have been pressing—almost to the point of overbearing—questions that govern the scientific and artistic innovations of film. Cinematic thinkers like Henri Bergson, William James, and Hugo Münsterberg pondered them, as did film innovators like Auguste and Louis Lumière and Georges Méliès before them. Cinema is, in this way, an exemplary modernist discipline: fully self-conscious of its own existence and perpetually critical of its limits.

In tandem to the techniques, practices, and forms of critical self-consciousness of cinema, films are also a site of attention for scholars interested in studying the relationship between aesthetics and politics. Such inquiries find indebtedness to the writings of Walter Benjamin, Georg Lukács, Theodore Adorno, and other proponents of Frankfurt School Critical Theory, as well

as the Althusserian-inspired apparatus theorists of the 1970s—including Christian Metz, Laura Mulvey, and Teresa de Lauretis—and, most recently, those explorations stemming from the theoretical writings of Gilles Deleuze and Jacques Rancière. Some recent American political thinkers—notably William E. Connolly, Michael Shapiro, Joshua Foa Dienstag, Elizabeth Anker, Mort Schoolman, Robert Pippin, and Bonnie Honig (to name a few)—are exemplary proponents of the importance of film to political analysis and thinking. All of this to say that there is a rich and well established conceptual and practical research tradition that attends to the politicality of film as a site not only for the transmission of ideas, facts, and norms, but also—and arguably more importantly—as a source for the creation of political ideas and their multivalent perceptibilities.

Professor Roy Germano's project of analytic filmmaking fits comfortably within cinema's tradition of self-doubt and self-affirmation, as well as the cinematic tradition of political inquiry sketched out above. In this regard, Germano's ambitions are exciting, thoughtful, and compelling. Indeed, they are welcome on so many fronts that to argue with them amounts to nitpicking. But nitpick I must.

The concerns I express below are not with the project *per se* but with some of Germano's assumptions about what cinema can do; that is, with his media ontology. My sense is that Germano is too enthusiastic about the efficaciousness of causal and direct medial transmission, as if cinema could be as efficacious and static a medium as a blackboard. I intuit in Germano's project a desire for analytic filmmaking to avoid interpretive ambiguities by making vividly manifest causal processes (pp. 669–670). Film and text, he claims, will produce "a more accurate and complete body of knowledge" (p. 670). Though such a political science *cinéma vérité* may be an admirable ambition, there are certain features of film capturing, film

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editing, and film viewing that make that ambition utopic and—from the position of an ontology of cinema—circumspect.

Allow me to explain. I take the “analytics” in analytic film making to register a compression of the space and time between transmission and reception of message such that, as Germano avers, analytic filmmaking can help “develop a more accurate and complete body of scholarly knowledge and offer policy makers and the public a uniquely effective way to glean insights from and engage with scholarly work” (p. 663). I note a contrast in this ambition with the expression of a sensation to which Germano admits while, in the subsequent paragraph of his essay, coming to terms with his novel approach to research creation and projection: “Over time,” Germano affirms, “I refined my filming methods and ultimately shot 32 hours of interview and observational footage. The footage was fascinating and revealed insights that text and survey data could not” (p. 664). What, I wonder, is the relationship between fascination and revelation? More importantly, is what is fascinating and revealing localizable in a manner that it is repeatable? That is, can analytic filmmaking reproduce the same moment of fascination and revelation for any viewer whatsoever and thus generate a sense of conviction in the accuracy, or realism, or credibility of the information projected? If so, is analytic filmmaking transmitting a sensation, or is it communicating knowledge, or both?

I don’t presume to provide Germano with answers to these questions; but these are questions that need to be addressed not just for the research ambitions of analytic filmmaking but also, and especially, for any project that solicits aesthetic experience (i.e., the absorptive fascination that Germano offers his readers as a source of compelling evidence as to why one might turn to film) as a politically and intellectually viable quotient of and for political science research.¹ That said, I do wish to outline what I take to be some of the stakes of the media ontology that Germano defends.

Most notably there is the matter of editing. Germano places great emphasis—and hope—in the power of editing to produce the kind of capacious accuracy of knowledge he seeks. Indeed, the “theoretical pillars” that Germano outlines are directives for visual editing which, once again, must be oriented towards accurate and credible presentation of information. But editing is a notoriously slippery, elusive, and evasive art and tethering the visual to the textual doesn’t help in firming up accuracy, as any museum curator will no doubt tell you. Editing, to be brief, evinces a blink in time. This is how the pre-eminent Hollywood film editor, Walter Murch, describes part of the editing process in his classic study *In the Blink of an Eye*: “The truth of the matter is that film is actually being ‘cut’ twenty-four times a second. Each frame is a displacement from the previous one—it is just that in a continuous

shot, the space/time displacement from frame to frame is small enough (twenty milliseconds) for the audience to see it as *motion within context* rather than as twenty-four different contexts. On the other hand, when the visual displacement is great enough (as the moment of the cut), we are forced to re-evaluate the new image as a *different context*: miraculously, most of the time, we have no problem doing this.”²

Germano’s “fascination” for what he saw is echoed by Murch’s awe for the miraculousness of the viewer’s capacity to process cuts as continuous, even when they never are—something that David Hume had also remarked upon in his *A Treatise on Human Nature* when he famously affirmed that “The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations.”³ Hume’s conclusion was a notable one: Experience is mobile, not static. And I might make the same point here, for one of the issues that Germano wishes to (indirectly) insist upon through the elaboration of his theoretical pillars for film editing is the possibility that the making of film produces an accurate depiction of an event such that its accuracy rests on an ontological stasis. Analytic filmmaking, in other words, projects static information and its staticity is what guarantees its accuracy and credibility. This is Germano’s ambition for a political science *cinéma vérité*, and the medium of film (either celluloid or digital) doesn’t allow for it.

Allow me one last explanation: There is an irresolvable tension between Germano’s research ontology and the ontology of cinema. As many philosophers of film note—André Bazin, Siegfried Kracauer, Stanley Cavell, and Gilles Deleuze chief amongst them—film involves the assembly of a stochastic series of views.⁴ Such an assembly presupposes the fact of motility—that cinematic images are beholden to frame rate. The question then is not that of accurately representing capacious information but, rather, how to project the event of information as a static and immobile unity when film, by its very nature, is discontinuous movement? To presume a method of filmmaking that would halt the motility of film is counterintuitive at best and ideologically problematic at worst. It is counterintuitive because film projects moving images; it is ideologically problematic because the kind of affective experience of accuracy Germano hopes for requires a form of direct and unambiguous transmission of information, not unlike Moses’ burning bush. By nitpicking in this way, I simply want to raise the question as to what kind of evidentiary support, if any, we can expect from a moving image? As we saw with the Rodney King trial, even raw and unedited film footage was insufficient for prosecution (i.e., did not count as accurate evidentiary support) because the prosecuting attorneys took advantage of the stochastic nature of film to evince doubt as to which

moment during the beating—which instant in the series of shots—was the actual moment of excessive violence.⁵ If that raw footage couldn't stand as accurate information, how can we expect analytic filmmaking to bear such a burden of proof?

Notes

- 1 I should note that for those unfamiliar with recent developments in political theory in an aesthetics of politics, by “aesthetics” I don't refer to specific art forms (like storytelling or documentary filmmaking). Rather, aesthetics refers to the sensorial dispositions that emerge when bodies interact with objects. Such an experience, as Hume, Kant, and many others have noted, is an experience of disinterest not in the sense of a detachment from the object in question, but in the sense that the experience of sensation dislocates the body experiencing from any relation or structure of interest that could and would help make sense of the object/experience in question. I outline the specifics of this aesthetic theory of sensation for political theory in my book, *The Political Life of Sensation*—see especially Chapter 1.
- 2 Murch and Coppola 1995, 6.
- 3 Hume 2000, 1.4.6.4.
- 4 On the stochasticity of cinema, see my “Why Film Matters to Political Theory,” *passim*.
- 5 Panagia 2009, 13–15.

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Analytic Filmmaking: A Response to Critics

Roy Germano

I would like to begin by thanking Jeff Isaac for organizing this symposium. I am also grateful to the five commentators—Henry Farrell, Jeffrey Gould, Davide Panagia, Sunita Parikh, and Dvora Yanow—for taking the time to think about my target essay and to offer such thought provoking comments and critiques. Even if the commentators have reservations about the analytic filmmaking approach, I am encouraged by their enthusiasm for the fundamental idea contained in my target essay: Audiovisual media can and should be used to publish social science research. This rejoinder aims to briefly clarify my positions on some of the major issues raised by the commentators. The first part addresses questions about how we should structure audiovisual publications, while the second part examines the nexus between analytic filmmaking and scientific inquiry.

Structure Matters

Early in my essay, I distinguished the theory-driven, explanatory structure of analytic films from the kind of character-driven, dramatic storytelling that is used in many documentary films. I made this distinction because I think method and structure should be taken just as seriously in audiovisual scholarship as it is in written scholarship. We have no problem distinguishing between causal explanation and dramatic storytelling in written work. The same should hold true with respect to audiovisual work. Sunita Parikh disagrees. She says that my distinction between theory-driven analytic films and character-driven documentaries “creates a needless and potentially problematic schism.” She cites the documentary series *Eyes on the Prize* and the oeuvre of Frederick Wiseman as examples of films that are presumably “similar in their construction to . . . analytic filmmaking” due to the

fact that they “take historical and social scientific events and processes as their subjects.”

I agree with Parikh that *Eyes on the Prize* and the works of Frederick Wiseman are important and insightful works about politics and society, but I disagree that this necessarily qualifies them as good models for social scientific filmmaking. In fact, I believe these two examples help to highlight rather than undermine the importance of the distinction I was trying to make. For instance, Henry Hampton, the executive producer of the *Eyes on the Prize* series, is not known for structuring his films around causal explanations, as I recommended in my target essay, but for his use of dramatic storytelling techniques and character-driven narratives. Sam Pollard, who co-directed two episodes of *Eyes on the Prize*, reflected on Hampton’s style and influence in an interview with Sheila Curran Bernard, another *Eyes on the Prize* alum, in Bernard’s book *Documentary Storytelling*:

Before I became a producer in documentaries [in 1988, on *Eyes on the Prize*], I had edited a lot of docs, but I wasn’t always thinking about how to tell a story and have it escalate dramatically and emotionally. That’s something that I learned from the irascible Henry Hampton [executive producer of *Eyes*, a series that used a three-act structure to tell historical stories] What I’ve learned . . . is to always make the story dramatic. Get the character up a tree, how’re we going to get ‘em down? I apply the three-act structure to everything. I don’t always adhere to it as closely as we did on *Eyes*, but it’s always in the back of my mind.¹

Similarly, in a 1998 interview, Frederick Wiseman discussed the role of dramatic storytelling in his work: “The first thought: I’m trying to make a movie. A movie has to have dramatic sequence and structure. I don’t have a very precise definition about what constitutes drama but I’m gambling that I’m going to get dramatic episodes.”² Elsewhere, Wiseman has stated that he rejects “thesis-oriented films” and approaches filmmaking “just like someone writing a novel.”³

The point is this: Social scientists do not structure their written publications so that they “escalate dramatically and emotionally.” They do not gamble that their field notes will be full of “dramatic episodes.” Why should

The author thanks students in his Spring 2014 Visual Social Science course at Sarah Lawrence College for lively debates about issues raised in the commentators’ essays.

social scientific filmmaking be any different? From the social scientist's perspective, the problem is not necessarily that a researcher-filmmaker would choose to explore a dramatic topic or that audiences would feel emotion when watching a work of audiovisual nonfiction, but that structuring one's film with the goal of telling a story that escalates "dramatically and emotionally" creates incentives to present information in ways that prioritize the arousal of emotions over the presentation of the most accurate, objective account. For example, looking back on one of the episodes he directed for *Eyes on the Prize*, Pollard says that although he presented Muhammad Ali's "real story," he also "feels a sense of artifice"—that the story "feels a little jerry-rigged."⁴ These are precisely the kinds of reactions that good social science seeks to avoid. Furthermore, theoretical explanation will take a backseat when one's primary goal is telling a dramatic story with protagonists and antagonists and a beginning, middle, and end. Three-act narratives are simply not how social scientists structure their publications. For this and other reasons, my objective was to propose an alternative approach to nonfiction filmmaking that uses causal theories, not plot, as its backbone. To be clear, I am not arguing that creative nonfiction is incapable, whether through text or film, of producing and communicating knowledge in ways that are insightful and important. Rather, I am arguing that creative nonfiction is not a good model for social scientific filmmaking.

Although Dvora Yanow has her doubts, the submission guidelines and decisions of the principal organizations that fund, exhibit, broadcast, and distribute serious social and political documentaries make clear the documentary filmmaking profession's emphasis on character-driven, dramatic storytelling.⁵ At the same time, Yanow is not incorrect when she says that "there is more to documentaries than 'eccentric,' 'outlier' storytelling films and to documentary filmmakers as those identifying as storytellers or focusing primarily on 'engaging characters.'" For example, some documentaries, like Alex Gibney's *Taxi to the Dark Side*⁶ and Charles Ferguson's *Inside Job*,⁷ are more concerned with advancing causal explanations than telling character-driven stories. These thesis-oriented documentaries, however, are relatively rare, vary widely with regard to scientific rigor, and are often more interested in making normative rather than positive arguments. Furthermore, dozens of important ethnographic films have been produced over the past century. Many social scientists, however, are not ethnographers and will be uncomfortable with the kinds of "reflexive, collaborative or participatory methods" that tend to characterize ethnographic filmmaking.⁸ Therefore, if social scientists are to use film to disseminate their findings, they may seek an approach that more closely aligns with the qualitative approaches they and their colleagues are already familiar

with. My objective was to advance a filmmaking approach that is more consistent with my training and the training of many other political scientists.

Jeffrey Gould suggests that "Germano's efforts might be more fruitful if he blurred the lines somewhat between the strictly expository quality of analytic film and the individual and group stories of transformation that characterize documentary film." Similarly, Henry Farrell suggests that "the analytic narratives employed by Robert Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal and Barry Weingast present a different, and perhaps more palatable model for analytic filmmaking." Farrell goes on to say that "the tension between the abstract and the particular, the model and the story it is supposed to illuminate, is a useful one." I agree with Gould and Farrell that hybrid structures—a sort of mix between analytic and ethnographic filmmaking—could be useful. Scholars using a hybrid structure would establish theoretical pillars to develop their films' expository structure. Then, to illustrate theories and processes, they would embed ethnographic or historical vignettes into the larger theoretical structure. I experimented with this approach somewhat in *The Other Side of Immigration*. The story of Carolina's family [32:35–41:47] illustrates dynamics that are discussed in more general terms by various interviewees. Scholars who use ethnographic or historical vignettes in their analytic films should make an effort to present a wide range of stories selected on the basis of some set of theoretically relevant criteria or to present stories that represent the average tendency. There must also be an effort to connect individuals' stories to larger trends in order to demonstrate how consistent or inconsistent these stories are with the average tendency.

Finally, on the topic of structure, I think Parikh raises an important point when she argues that "if analytic filmmaking is to fulfill the promise Germano expects, then the theoretical framework and the connection between theory and data need to be presented much more explicitly so that the viewer can be guided by it as the evidence is set forth." The question is how exactly how to do this. One approach, which Parikh recommends, is voice-over narration. Ethnographic filmmaker Robert Gardner is known for making arguments and insights explicit through narration, as are thesis-oriented documentarians like Gibney and Ferguson. Another approach is to break one's film into chapters and use on-screen text to help explicate theoretical arguments. A third approach would be to publish short essays that explain how one's analytic film makes its theoretical argument, similar to the "Communicating Arguments and Evidence" subsection of my target essay. These essays might appear online, published alongside the video. Scholars may also write separate articles that make explicit, reference, test, or expand on theoretical insights that are otherwise implicit to the structures of their analytic films. Finally, scholars may create an audio

commentary that can be played over the regular audio track (like a director's commentary on DVDs) or a video appendix at the end of the film. These approaches allow the researcher to explain certain methodological decisions and make theoretical concepts explicit without interrupting the flow of the film. One can imagine a film that uses all or some of the above approaches in combination.

Analytic Film and Scientific Inquiry

Farrell argues that "because films are dense, rich narratives, they can convey an intimacy of detail that standard kinds of social science knowledge cannot. Yet it is exactly the most valuable details that are least likely to fit with the promised 'hypothesized logics.'" I disagree that there is necessarily a trade-off here. Video simultaneously transmits many different kinds of knowledge, meaning that it has the potential to convey both intimate and general information at once. For example, many people who have seen *The Other Side of Immigration* have mentioned to me that they found the people I interviewed to be "articulate" and "insightful." That the hundreds of smallholder farmers and return migrants I encountered while doing fieldwork in marginalized Mexican communities tended to be articulate, insightful people is not a detail I thought to include in my written work. This detail, however, comes through naturally in an audiovisual publication and may be valuable to some viewers in the context of more general causal explanations regarding the political economy of emigration. In response to Davide Panagia, it was the ability to present such different kinds of information simultaneously that I found particularly fascinating and revelatory about using video to complement written and quantitative analyses.

Panagia raises a point I hear often when he describes video editing as "a notoriously slippery, elusive, and evasive art." Yanow adds that "all film-makers, [Germano] included, shape the stories they tell," and that cameras are "set up to frame some things in and others out." All true statements, but aren't all forms of knowledge production potentially deceptive exercises in editing, framing, and shaping? Quantitative research is full of subjective choices, among them, how to measure concepts and collect data, which variables to include in one's model and which to exclude, how to deal with violated assumptions, and which models and results to report to the public. Writing involves countless decisions about how to interpret material and what to include or exclude in final drafts. Just as a video editor can use images to misrepresent a situation, quantitative analysts and writers can easily fabricate data and present data in ways that distort meaning. Does the fact that human beings are involved in the research process mean that we should make no effort to reduce the impact of personal biases or that we should not develop rules, norms, and review procedures that discourage deceptive uses of data? Of course not.

Indeed, just as we do in written and statistical work, we need rules for audiovisual scholarship that help us approximate objectivity, make our methods and level of participation transparent, and open the door to scrutiny and replication by other scholars.

Panagia raises an important question when he asks, "What kind of evidentiary support, if any, [can we] expect from a moving image?" To begin to answer this question, I think it is important to first ask what kind of evidentiary support we can expect from any work of social science or any kind of data or evidence used in the social sciences. Most social scientists accept that we are in the business of persuasion and are rarely, if ever, able to offer definitive proof for our propositions. We attempt to persuade by advancing theoretical explanations, often in tandem with data that offers only a modicum of support for our arguments. We reduce uncertainty and improve our understanding of social and political phenomena by marshaling as many kinds of data and evidence as possible, whether in the same study or as a community of scholars. Indeed, the act of accumulating many different kinds of quantitative and qualitative evidence to develop a clearer understanding of big questions is what I meant when I wrote that analytic films help us develop a "more accurate and complete body of scholarly knowledge." Analytic films alone do not make our understanding *fully* accurate or *fully* complete, but they may complement our text-based and mathematical methods, revealing new pieces to the puzzles that occupy us. Combining different kinds of data can, as Gould argued in his essay, lead to new insights that take our research in new directions (see also note 36 of my target essay for an example).

Finally, I agree with Yanow that it is important to consider ethical questions when conducting audiovisual research. In my audiovisual work, I obtain a signed release from anyone appearing on camera, offer to protect identities when appropriate, and honor requests not to be filmed. In the editing phase, I give careful consideration to people's reputations and future personal safety when deciding which clips to include in the final cut of the film. While I believe that high ethical standards are important, I also think it is important not to overstate the risks of conducting audiovisual research. Broadcast journalists, documentary filmmakers, and reality TV shows have filmed people around the clock for many decades. Journalists often do not obtain consent or alert those they are filming. At the university level, journalists and documentary filmmakers are typically not subject to the same institutional review board (IRB) requirements as social scientists. The risks of audiovisual research may in fact be lower than other kinds of research because just about everyone knows what a video camera is and what they are getting themselves into when they go on camera. The same is not often true when a researcher knocks on someone's door asking for responses to

a questionnaire, as I discovered while collecting survey data and video data in parallel.

Conclusion

What will scholarly publication in the social sciences look like a decade or two from now? Will we still be reading printed journals and PDFs formatted to the standard length and width of the printed page? Or will scholarly publication evolve to make better use of new digital technologies, offering authors and readers a more visual and interactive experience? Early efforts, like Harvard's Critical Media Practice Ph.D. track, peer-reviewed online "video journals" like the *Journal of Visualized Experiments* and the recently-announced *Journal of Video Ethnography*, and even this symposium are clues that changes are on the horizon. Political scientists should not stand on the sidelines and watch while these changes occur. We should join with scholars in other fields to define and debate them. We should develop and advance systematic approaches that engage the unconverted. We should demonstrate the value and relevance of those approaches to our fields and the scholarly community as a whole. I wrote my target essay with those objectives in mind and appreciate the commentators' enthusiastic engagement with the issues and arguments I presented. I hope this symposium is just the beginning of a long and fruitful debate about how audiovisual publication and other forms of digital/visual publication can serve as credible alternatives or complements to written publication in the years ahead.

Notes

- 1 Bernard 2011, 330; bracketed comments in Bernard's original text.
- 2 Peary 1998.
- 3 Stewart 1998.
- 4 Bernard 2011, 324.

- 5 Submission guidelines to the PBS documentary series *American Experience* state that the program "is looking for dramatic and compelling stories about the American past—stories about people both ordinary and extraordinary . . . We are particularly interested in stories that . . . have a clear narrative arc and strong characters"; see <http://www.pbs.org/wgbh/amex/guidelines/>. "Character driven stories," "compelling personal stories," and "innovative storytelling" are also prioritized by other PBS documentary programs like *Independent Lens* and *POV*, as well as leading documentary film festivals and funding sources like the Sundance Documentary Fund, the MacArthur Foundation Documentary Film Grant, DOC NYC, and others. See also Bernard 2011, 1–7.
- 6 Gibney 2007.
- 7 Ferguson 2010.
- 8 Pink 2013, 35.

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