

FINDING NEW REPRESENTATIONS IN SCIENCE AND NATURAL
HISTORY FILM THROUGH A DECONSTRUCTION OF
TELEVISED WEATHER FORECASTING

by

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GLOSSARY

NEXRAD Doppler Radar – NEXRAD (Next-Generation Radar) is a network of 158 high-resolution Doppler weather radars operated by the National Weather Service.

NEXRAD detects precipitation and atmospheric movement or wind. It returns data which when processed can be displayed in a mosaic map which shows patterns of precipitation and its movement. NEXRAD has an increased emphasis on automation, including the use of algorithms and automated volume scans.

Subjunctive Documentary – Computer imaging of what could be, would be, or might have been. (Wolf)

Semiotics – Semiotics is, most simply, the study of how people make meaning through the creation and interpretation of signs. A sign can be almost anything that someone sees as standing for something else, such as words, music, images, or gestures. More precisely, a sign is the combination of a signifier, the form a sign takes, and a signified, the concept it represents. A sign is the “whole meaningful ensemble” of the signifier and the signified. (Chandler)

ABSTRACT

Broadcast television networks limit their representation of the weather by embedding weather forecasting with ideologies of science, capitalism, and patriarchy, thereby creating a dispassionate monolithic regime as the totalizing representation of weather in popular media. This is not to say that TV weather forecasting is not useful, but that it is a narrowly focused scientific representation of nature, and as such denies experiences of the weather beyond utilitarian prediction. Non-fiction film employs a set of representational tools that, when applied to the weather, can deconstruct the mainstream representation of the weather and create alternative representations that reconnect viewers with their personal experiences of the weather. Non-fiction film allows filmmakers the freedom to directly author messages and choose systems of signs that deconstruct the mainstream broadcast of the weather. It can restore an assumption of a filmic representation and allow viewers the ability to interpret the weather in their own contexts. These ideas led to the production of my own film, *Weatherscape*, which simultaneously re-contextualizes the weather to encourage the viewer to create his or her own weather experience and critiques the TV weather representation. Deconstruction through non-fiction film proves to be a robust tool for creating representations that rethink our portrayal of nature.

INTRODUCTION

Television weather forecasting creates a specific cultural knowledge of the weather. By deconstructing representations of the weather on television, filmmakers can create alternative programming that re-visions nature in the media and accesses a broad array of representations not yet seen. Once filmmakers lay bare the discourse behind something as common and omni-present as broadcast weather forecasting, simple changes might lead to fundamentally new approaches in representing the weather through film. In my film *Weatherscape*, I intend to demonstrate how shifting these components into my personal worldview can create an experiential representation of the weather that calls for a different perspective on nature.

In this essay I deconstruct television weather forecasting as a culturally-created historical text, known as meteorology, attempting to uncover the ways in which the modalities of western televisual society determine weather's cultural identity. Deconstructing the television weather is not an attempt at subverting its meaning or usefulness but a means through which we can understand its origins and motivations, thereby finding its limits and creating new media to pick up where it leaves off. In the first chapter, I outline the narrative drama of the broadcast weather forecast as it fits into the nightly network news and the relationship it forms with the weather. The second chapter shows how the weather's meteorological identity alienates people from physical weather phenomena and promotes a commodifying ideology. The third chapter addresses computer simulation as an aesthetic technique of forecasting that limits the weather as a representation of the physical world. In the fourth chapter I demonstrate how non-fiction

film might provide an alternative representation based on deconstructive semiotics, or a system of signs and images that differ from television news forecasting. In the fifth chapter I turn to my own film, *Weatherscape*, and show how it replaces the forecasting goals of meteorology with ones relating to emotional satisfaction, personal connection, and value in the sublime or the emotionally satisfying aspects of nature. As a representation built around prediction and forecasting, broadcasters inherently limit the weather and its potential wealth of experience. As a non-fiction filmmaker, I believe it is artistically and socially valuable to create additional portrayals of the weather.

THE WEATHER ON TELEVISION

Televised weather forecasting is a special kind of historical text. As a narrative history it makes strong claims to a direct access to the future and how people should behave in that future. There is, in fact, nothing given about weather forecasting; it is a culturally created artifact that has evolved over time. Although present day society sees forecasting as a simple dispenser of useful information, it has an involved cultural history.

American meteorology was once an amateur venture conducted by enthusiasts across the nation until 1870 when the War Department's Army Signal Service nationalized it. The government thus established weather forecasting as a formal federal institution. In 1891 the War Department de-militarized forecasting by creating the civilian Weather Bureau, and then the National Weather Service in 1970. Jim Fidler made weather forecasting a media venture when he gave the first experimental televised forecast in Cincinnati in 1940. (Ravo) Fidler's original broadcast showed weather forecasting to be a promising subject for the burgeoning technology of television, and it wasn't long before news broadcasters integrated weather segments into news shows on other networks. Weather forecasting on TV has steadily grown in popularity, culminating in today's Weather Channel, which is available in 93 million U.S. households. (Tucker) Throughout this time, televised forecasting has evolved a common and standardized means of representation.

Weather forecasts exist as a temporally and stylistically distinct segment within the half hour traditional news broadcast. During a typical broadcast, news anchors "go to

the weather” and the program shifts from the news desk to the green screen that displays the maps and graphics that television meteorologists use to discuss the weather.

Weathermen then have a limited amount of time to cover the past and current weather conditions, historical precedents, and predictions for the future.

Accuracy of the weather forecast can be a tool for attracting and holding potential viewers and a way to distinguish networks from their competitors. Broadcasters use the meteorologist’s role as a scientist, who always strives for the most accurate and up-to-date information, to portray their station as a more reliable news source. News stations often give special names to their weather staff or the technology they use. Lead-ins to news programs stress the hard working nature and commitment to accuracy of their “precision storm teams” and the advanced technology of NEXRAD Doppler radar. Meteorologists act as interpreters of scientific knowledge, turning changes in pressure, temperature, and humidity into future weather conditions.

Meteorologists begin a forecast with a quick look at current conditions or an update on the effects of yesterday’s weather. Forecasters commonly show photos of weather systems that passed through the day before or a view of the local conditions from a rooftop camera. Then the meteorologist will “go to the radar,” which appears layered over a regional map displaying familiar symbols for fronts, high and low pressure systems, jet streams, precipitation, and Doppler radar reflection data. As fronts and cloud formations develop, move, and dissipate, the meteorologist guides the viewer to an understandable meaning such as, “there is a slight chance of rain tomorrow,” or, “the hot

weather will continue.” Following a look at the radar, the forecaster will then move to the “extended” forecast.

The extended forecast lays out a graphic displaying the next five, seven, or ten days, each day associated with high and low temperatures and a general weather condition such as partly cloudy, snow, or thunderstorms. The meteorologist walks the viewer through this simplified prediction of the weather and often takes this opportunity to comment on how the predicted weather might effect upcoming holidays, community events, or seasonal activities. The forecaster will then make a final statement summing up the general weather conditions for the coming week, often addressing the news anchors as a transition back to the news desk.

The standardized presentation of the weather on TV creates a narrative in which meteorologists are the story’s protagonists. Meteorologists perform on camera as both scientists and entertainers for the dual purpose of conveying information about the weather and capturing and retaining viewers for the broadcast. The American Meteorological Society grants its Seal of Approval to broadcast meteorologists “who meet established criteria for scientific competence and effective communication skills in their weather presentations,” and according to Andrew Ross’s analysis of the weather on TV in his book Strange Weather, while meteorological data is free to the public through the National Weather Service, “the media, especially TV, spends millions on staffing overlays and simulation technologies in order to humanize this information and present it as an entertainment segment on the news.” (Savoie; Ross 226) A weatherman in North Carolina, who calls himself an “edutainer,” takes this role to an extreme by rapping the

weather forecast, dressing up like a snowflake and flower, and playing the drums on air. (“Mark Mathis”) A meteorologist going to such extremes to entertain viewers is uncommon, but this particular weatherman is a unique indicator of the importance broadcasters place on entertainment in weather forecasts.

Forecasters fulfill a unique role in the drama of the news broadcast. Whether male or female, forecasters are often segregated as an “Other” or marked character, supporting the drama of the news broadcast. They are the heroes of the weather forecast, but in the greater narrative of the news they are sidemen, often male comic relief, authoritative yet aloof scientists, or attractive weather girls. By filling this role, all forecasters, whether male or female, become weathermen.

By casting weathermen as protagonists of the forecast in the dual roles of entertainer and scientist, broadcasters portray the weather as *antagonist*. The meteorologists’ goal is to understand, predict and ultimately create a sense of control over the weather. The broadcast weather’s narrative follows the trope of a weatherman who strives against an unreliable and potentially dangerous nature in a classic man vs. nature conflict. The tension between humanity’s inability to control the weather and people’s need to feel that they determine the course of their lives comes to a head during the daily weather forecast.

To enact the tension and conflict between the weatherman and the weather, the television weather forecast creates a depiction of nature based on masculine ideas of power and control over the feminine. Televised forecasting casts the antagonistic weather as a stereotypical female, which weathermen, cast as male even if female,

attempt to control. The historical basis for this ideology goes back to American frontier history when men viewed the environment as a female virgin to be controlled, subdued and made to produce resources. (Merchant 122-123) Colonizers of the New World commonly thought of the land as something that had little or no value until men plowed, irrigated and harvested it. As a new civilization took hold and dominated the frontier, ideas concerning the land's feminine nature became less prevalent. Throughout the colonization of America and into the present day the weather was a part of nature that remained uncontrollable. In the face of the uncontrollability of the weather, modern weather forecasters continue to utilize patriarchal ideas to portray nature. Forecasters depict the weather in a range of feminine roles: the caring mother, the uncooperative partner, the vengeful bitch.

For example, weathermen often refer to the weather in the terms of a romantic relationship. Forecasters, and especially news anchors, "hope the weather will cooperate," "feel beaten down by the heat," or "have been blessed with rain" after a drought. Ross points out the weather's unpredictability and potential for violence as causes for the weather's feminization when he writes, "March...is 'fickle,' July is 'sultry,' and the practice of feminine naming of hurricanes was, until recently, reserved for the most unpredictably violent of tropical storms." (234) Television weather has used these conventions for so long that they go virtually unnoticed, but their subtle feminization of nature as the weatherman's adversary attempts to grant forecasters and their viewers a sense of patriarchal control over the ever-changing and uncontrollable weather. In spite of the subtle anti-feminist nature of the modern weathercast, news

broadcasters and meteorologists have made it the standard across the nation because it provides society with an easily digestible means of communicating basic weather information.

NATURE COMMODIFIED

This essay attempts to elucidate the gaps, omissions and biases in the way that forecasting represents nature. It is important to note that I do not claim that weather forecasting or meteorology is not useful. Obviously, forecasting does a reasonable job making short-term predictions, and, if rain is in the forecast, I carry an umbrella. I do point out that weather understood meteorologically is not the totality of weather experience and that a diversity of representations can benefit society. In addition, there are specific issues that arise from the way society and meteorology influences the representation of weather in the media. The first two issues—the positivist view of a predictable nature and the commoditization of nature for profit—relate directly to the way society sees nature through the lens of televised weather. The third issue—that of computer simulation—relates to the way broadcasters use the filmic medium to represent the weather.

Meteorology, the empirical study of the weather, opens the door to the commodification of nature. TV broadcasters, as for profit companies, commodify the weather to attract advertisers and connect viewers with weather-related products and services. Broadcasters create new ways to incorporate weather forecasts with consumer goods advertising. Meteorologists give special forecasts for UV radiation levels sponsored by Coppertone sun block, and Thermalite Thermal Wear sponsors features on cold weather. (Ross 239) Corporate tie-ins are a kind of product placement that create revenue for the TV broadcaster, but they force a depiction built around consumer goods, which help people combat the weather. This type of representation encourages people to

relate to the weather by “measuring its nuisance value” or, “the degree to which it will restrict [people’s] everyday business.” (Ross 216)

Televised weather uses science to normalize subjective experiences, which allows people to form expectations about what the weather should be and how it should fit into their lives. By portraying the weather as a predictable phenomenon based purely in the realm of meteorological science, broadcasters help people relate to the world around them in a rational way. A scientific, positivist view of the weather is useful because it allows meteorologists to describe the weather as quantified data sets that they can compare to other weather data sets. For example, the forecasters use historical meteorological data to establish averages and normal values. Each day’s forecast uses these historical precedents to locate the current weather and provide a context for the viewer to experience it. As the CEO of The Weather Channel Debora Wilson put it, “it helps people understand their place in the world.” (Wilson)

The reliance on meteorology for the experience of weather also creates a false sense of how nature works. In reality there is no such thing as normal weather. (Ross 243) For example, the average high temperature at Gallatin Field Airport in Bozeman, MT for the last sixty-five years is thirty-five degrees Fahrenheit. (Ainsworth A3) However, only a single year during the past sixty-five recorded a temperature of thirty-five degrees. Thirty-five degrees is the statistical average but it is far from what common sense would label normal. (Ainsworth A3) When TV weather forecasters refer to current conditions above or below normal, they make a highly interpretive statement that often has little to do with the physical world.

COMPUTER SIMULATION

Weather forecasting relies heavily on computer simulation to visually represent the weather as it might have been in the past or as it could be in the future. Mark Wolf refers to this type of computer imaging as “subjunctive documentary” and establishes it as a form of non-fiction film. (274) Weather broadcasters use computer-generated images, animations, and simulations to predict the weather. These depictions of the weather are mathematical reconstructions of sets of empirical data that are, by definition, simplified statistical versions of historical events. By utilizing computer simulations, meteorologists make TV forecasting possible as a means for predicting the future, but simulation carries with it subtle assumptions about what is and is not important to a representation of the weather. Two main assumptions closely tie computer simulation together: the assumption that the simulation’s representation of the physical world is complete and objective, and the assumption that the simulation has a direct connection to the physical world. These assumptions show the limits on representation of meteorology on television and reveal some of the omissions that a deconstructionist text can use in the creation of new media.

Computer simulation gives the impression of being a perfect and unproblematic representation of the physical world when it is in fact a highly mediated one. Meteorologists process information about the natural world to create a simulated image of its future. The illusion of a new more detailed and more useful world obscures the fact that it is a specific and incomprehensive representation. Meteorologists discard

information about the physical world to make simplified statements about the weather that are regarded as more meaningful or useful to society.

To create the images seen in televised weather broadcasts, computers first sense the world through satellite and terrestrial radar, digitizing the differences in analog signals. Radar systems pipe the data into computers, which process it into images, but “before this happens programmers and engineers make decisions about what data is important and what isn’t.” (Bains 2) Meteorologists constrain the instruments they use to gather data about the world “to provide only the most relevant information. The computer can “see” only what it’s been told to look for.” (Bains 2) All meteorologists use the same technology to choose their predictions for the future from a set of standardized weather conditions. Partly cloudy, for example, does not take into account the type of clouds or their color or shape, only the percentage of the sky they obscure. Computer simulation seems to provide an image of the world that includes new information previously invisible to viewers but existing in nature. The TV weather makes invisible pressure systems and fronts of hot and cold air seem to move across the landscape. By choosing to focus on a simple scientific representation of the weather to provide easily digestible weather information, broadcasters cannot acknowledge the weather’s infinite variability.

Selectively discarding information is essential to the function of meteorology, but in seeking out alternative representations of the weather it can be useful to deconstruct the popular model. The idea of deconstruction claims that any historical text, including meteorology, leaves out information. A lack of completeness is not a fault of the text, but

simply inherent to explanation; one cannot say everything about something. (Faulconer) For the practical purposes of meteorology its omissions are irrelevant. However, once it is broadcast into the social sphere it is open to critique. Deconstruction is a form of critique that focuses on a text's omissions, not with the goal of making the text complete but to show its inherent incompleteness. (Faulconer) In turn, the knowledge of a text's omissions can lead to a new text, which makes those omissions its primary focus.

Creating a film that concentrates on the omissions of the television weather broadcast can simultaneously reveal those omissions and create a representation of the weather with alternative social purposes. It is important to note that this new text will also be inherently incomplete. The point of deconstruction is not to find the perfect representation or accuse texts of being wrong, but to continually re-think how people represent things. "We have to study the models and the history of the models and then try not to subvert them for the sake of destroying them but to change the models and invent new ways of writing." (Derrida qtd. in Olsen, 128) What Derrida says of writing holds true for filmmaking, and, further in the essay, I will show how my film *Weatherscape* creates a deconstructed representation built around an experiential relationship with its viewers.

Deconstructing broadcast weather to create alternative representations in the medium of film requires an understanding of how the images meteorology uses relate to the weather phenomena meteorology talks about. Once we define this relationship, we can determine the approaches that broadcast weather is unable to take by representing the weather the way it does and then develop new concepts that focus in these areas.

The study of semiotics is one way to describe the connection between weather simulations in forecasts and physical weather phenomena. Forecasters use the computer simulations and graphics seen in broadcast weather as signs to communicate weather information. Meteorological signifiers like Doppler radar images, warm and cold fronts, and graphics of clouds and suns stand for signified concepts, or referents, like “it’s going to rain tomorrow” or “the storm is moving to the west.”

Computer simulations and meteorological graphics predominantly fall into the category of icon¹. Computer generated suns and clouds represent their physical counterparts and even Doppler radar, when layered over two-dimensional maps, resembles cloud formations moving across the landscape. Iconic signs can be misleading because they can suppose an indexical link when one does not exist. Icons look like what they stand for and people can easily mistake them for representing more of the physical world than they do. Kent Grayson observes, “Because we can see the object in the sign, we are often left with a sense that the icon has brought us closer to the truth than if we had instead seen an index or a symbol.” (36) For this reason iconic images are resistant to deconstruction. Grayson, in “The Icons of Consumer Research: Using Signs to Represent Consumers’ Reality,” adds, “instead of drawing our attention to the gaps that always exist in representation, iconic experiences encourage us subconsciously to fill in these gaps and then to believe that there were no gaps in the first place... This is the

¹ There are degrees to which signifiers are dependent on or motivated by the signified. Charles Peirce elucidated three broad categories, called modes, relating signifiers to their referents. (Chandler) These are index, icon, and symbol. Iconic signs are those in which the signifier seems to resemble or imitate its referent. Drawings, models, and sound effects are iconic signs.

paradox of representation: it may deceive most when we think it works best.” (36)

Broadcast weather and its iconic imagery is therefore a prime candidate for deconstruction, and semiotics has identified two categories of representation that a deconstructionist text can use: index and symbol².

The next section of this essay explores how non-fiction film can create deconstructive weather representations by utilizing indexical and symbolic signs. It also shows how different signs create different concepts in people’s minds and how they affect the message and meaning of a representation. Non-fiction film, freed from the constraints of commercial broadcast, offers a powerful set of rhetorical and aesthetic approaches for broadcast models of weather.

² The most basic and least arbitrary mode is the index, in which a signifier *indicates* its referent directly such as smoke to fire or a footprint to someone’s passage. If a signifier has a physical or causal connection to a referent they are indexically linked. Symbolic signs have an arbitrary connection between signifier and signified which people must learn. Language most prominently falls into this category as well as numbers, computer code, and traffic lights.

THE NON-FICTION ALTERNATIVE

The American public refers to the modern standardized representation of weather as “the weather,” and while that representation is highly useful in a narrow way, the physical weather, as the basic medium of human existence, deserves less limited perspectives. Non-fiction film is a form of rhetoric. It is also an art form with a range of aesthetic possibilities that allow filmmakers to explore personal relationships with people, ideas, and the historical world. By forming rhetorical arguments and creating artistic experiences, non-fiction film can simultaneously explore new forms of representation and critique past forms. By deconstructing the commercial model for broadcast weather, non-fiction film can fundamentally change the narratives and formal techniques of weather representation.

Three of non-fiction’s tools that are useful in deconstructing television weather are its strong and relatively singular authorship, its use of indexical and symbolic signs, and non-fiction’s use of reflexivity, or its ability to reveal its own constructedness. Non-fiction’s greatest strength in controlling messages rests within its authorship. A person or group of people directly authors a work and maintains a direct relationship with both the material it is representing and the way it represents that material. Unlike the broadcast weather’s institutionalized rhetoric and aesthetic, non-fiction film has greater freedom to convey its messages and meanings.

Filmmakers, who are not tied to the economic model of broadcast, have the freedom to address their subject matter in other ways. For instance, a filmmaker might choose to represent the weather purely as a source of natural disasters and encourage

people to support efforts for greater control over dangerous weather phenomena.

Anecdotal evidence suggests that representations of Hurricane Katrina in the media created a heightened awareness of global climate change as scientists presented ideas about global warming's potential impact on the frequency and severity of hurricanes.

While typical broadcast news standards limit their representations, filmmakers covering Katrina could have chosen any number of ways to represent the physical and social impact of the hurricane. For example, Tia Lessin and Carl Deal, in their film, *Trouble the Water* (2007), examine the aftermath of Katrina and choose to focus on a young black woman who discovers “that to be poor and black in America is to be an exile in America.” (Dargis) Filmmakers’ choices reach beyond simple decisions about who or what to shoot, to their awareness of the underlying cultural and theoretical basis for the arguments they seek to make. Their personal, rather than corporate, ideologies directly determine the messages of their films.

Non-fiction filmmakers can choose indexical, iconic, or symbolic signs to create meaning in their films. Non-fiction and documentary filmmaking has a long history of producing indexical signs. Historical photographs are indexical signs because film renders them through a one-to-one correlation with the physical world. The indexical bond is the assumed mechanical and direct connection between the photographic image and that which was in front of the camera. The indexicality of an image can only go so far as to establish the presence of objects in the camera's field of view, but cannot speak to the claims to truth made by that image. In short, the indexicality of non-fiction images does not establish their veridicality or coincidence with historical fact.

Non-fiction film's use of afilmic, as opposed to profilmic, subject matter can make claims to historical fact³. While all non-fiction representation is "a process of approximation towards reality," afilmic material inhabits a space closer to reality. (Chanan) Televised weather creates icons with the express intent of broadcasting them, making them largely profilmic elements. No film can claim to be one-hundred percent afilmic or profilmic, but while the computer simulations of broadcast weather diminish its claim to fact by creating profilmic images with tenuous connections to their referents, non-fiction film's use of afilmic photographs assumes a more factual relationship with the historical world. Non-fiction's use of afilmic photography in place of meteorology's profilmic iconography is a step forward in the deconstruction of televised weather forecasting because it assumes a higher degree of veridicality.

Non-fiction film can also make strong use of symbolism through filmic conventions. Symbolism requires the knowledge of a system of signs, or code, to make connections between signifier and signified. Film and television have their own code of conventions that are familiar to most media-savvy members of society. Film and sound editing can create symbolic juxtapositions between shots to create meanings that are unrelated to the images individually. Montage brings a string of images together to build symbolic signified concepts. Music and sound effects can also symbolize specific referents that are caught in the social consciousness. For example, music is often used in

³ The French scholar Etienne Souriau coined the terms afilmic and profilmic in the 1950's. Profilmic refers to selected elements of reality placed in front of the camera strictly to support the purpose of the film. Hollywood-style fiction film is made up of almost entirely profilmic elements. Afilmic refers to reality as it exists independent of the camera and is the basis for documentary and non-fiction film's claim to represent the real world.

film to identify the roles of characters. Viewers understand the musical (as well as visual) cues that identify characters as heroes or villains, and they learn these conventions over time.

In the next chapter, this essay discusses the indexical and symbolic signs I use in *Weatherscape* to make commentary on television weather forecasting. *Weatherscape* provides an example of the new direction a film can take when it deconstructs broadcast weather and shows how moving from icons to indices and symbols, and from profilmic to afilmic footage, shifts the purpose of the film from forecasting to an interpretive experience of nature.

WEATHERSCAPE

In the production of *Weatherscape* (2008) I deconstruct broadcast weather to create a film that embodies alternate motivations and cultural uses of television forecasting. Whereas the broadcast weather seeks to establish credibility through science and computer simulation, I seek to do so through appealing to viewers' personal experience. Whereas the broadcast weather searches for ratings and advertising dollars, I funded the film personally with no expectation of capital gain. Whereas broadcast weather uses icons to hide the gaps in its representation, I chose to expose *Weatherscape* as a cultural construct. Through the use of signs uncommon to televised weather, *Weatherscape* provides an alternate vision of weather that contests broadcast forecasting as the dominant representation of weather in the filmic medium.

Weatherscape uses indexical signs to expose broadcast meteorology's reliance on iconography and create an emotional rather than utilitarian response. *Weatherscape* uses wide-angle photography of super-cell thunderstorms in long takes to establish an empathetic relationship between the weather and the viewer. I intend for these images of storm systems moving quickly across the landscape to evoke visceral feelings associated with witnessing a powerful thunderstorm. Dramatic lighting strikes, loud thunderclaps, and enormous air masses of obvious power dwarf the camera's wide-angle perspective and reveal the grand scope of the storms. By placing the camera on the ground as storms pass by, the film's representation of the weather relocates the viewer from the omniscient view of broadcast weather's national map to a natural landscape. *Weatherscape* attempts to create a surrogate experience that relies on viewers' past encounters with the power of

nature. Feelings of beauty, awe, fear, shock, or even boredom are all valid responses because *Weatherscape*'s primary purpose in deconstructing broadcast weather is to evoke an emotional response.

Weatherscape also uses symbolic signs, in the form of filmic conventions, to make commentary about the relationship between broadcast weather and the physical world. The beginning of *Weatherscape* briefly intersperses archetypal commercial television clips into long dramatic takes of natural weather phenomena. This technique symbolically highlights the juxtaposition of profilmic television with afilmic non-fiction. The television footage increasingly interrupts the viewers' empathic connection with the weather and reminds them of the artificial nature of typical broadcasts. *Weatherscape* continues editing storm footage with broadcast forecasting footage in a narrative of a struggle for power. Forecasters interrupt storm footage and are then cut off by the storm. The balance of power shifts back and forth as forecasters impose their system of signs on the thunderstorm and vice versa. The film overlays iconic graphics over indexical clouds, uses sound design to allow the sounds of the storm to disrupt televised forecasts, and montage editing to poetically draw attention to the networks' use of icons. The most powerful symbol in the film is that of a lightning strike and its accompanying thunderclap, which signify the weather's strongest support of an experiential basis for weather representation. Ultimately, the film leaves the battle for power unresolved with the parting statement by a news anchor, "...you sure gave us something to think about with that one..." (*Weatherscape*, 2008) Her statement represents the fact that neither representation of the weather is more valid than the other. By drawing attention to the

differences in representation between *Weatherscape*'s afilmic and indexical footage and forecasting's profilmic and iconic images, the film deconstructs the broadcast weather and provides an alternative representation.

Some of the value in *Weatherscape* comes from its ability to use different signs to create a new social purpose. It is able to do this in part because its emphasis on an emotional response rather than a practical one leaves more room for viewers' interpretations. *Weatherscape* seeks to create personal emotional meaning as a deconstruction of broadcast weather's impersonal dispassionate meaning. To do this it must expand on TV weather's emphasis on the value of empirical data with an emphasis on interacting with viewers' personal contexts. *Weatherscape* relies on viewers' life experiences to contextualize its images and form a personal interaction with the film.

It is possible to rely on viewers' personal contexts because there exists an interpretive step between signifiers and signified concepts. *Weatherscape* and televised forecasting present signifiers, but viewers must interpret exactly what they mean to them. Meteorologists mediate the interpretation of signs in meteorology; they interpret the meteorological signs, and, over time, we learn what the traditional iconic signs mean. While I suspect there are certain common emotional responses to the indexical signifiers of storms in *Weatherscape*, some viewers might have an unanticipated response or they might not form an empathic connection at all. As a filmmaker my job is to provide signs that I believe will carry meaning to the viewer, but that job stops at the screen, and "interpretive meaning, as opposed to manifest content, is not inherent in the screen but is generated in the space between the screen and viewer's eyes." (Channan) *Weatherscape*

does not provide pre-packaged information to “help people understand their place in the world” but asks for the viewer’s active participation in creating personal meaning from its images. (Wilson)

The active process of interpretation also encourages viewers to see *Weatherscape* as a highly mediated cultural construction. *Weatherscape*’s indexical and symbolic signs, unlike network forecasting’s iconic signs, demand a level of interpretation that raises awareness of the film’s limits and omissions. When the sounds of wind and rain slowly drown out an on-screen weatherman’s forecast, the film is not saying *everything* about his relationship to the weather as it is saying *something* about it. In addition, *Weatherscape* uses reflexive film techniques, like speed and motion control, to manipulate weather footage and draw viewers’ attention to itself as a cultural and technological construct. Altering photographic shots of weather phenomena diminishes *Weatherscape*’s indexical bond by interfering with the images’ direct correlation to an event. While this seems to run counter to my argument supporting indexical imagery, it supports the film’s argument that knowledge of a text’s mediated construction is equally important to the deconstruction of broadcast weather.

Weatherscape provides an alternate representation of the weather in film by deconstructing televised network forecasting. Its use of symbolic and indexical signs, its afilmic rather than profilmic nature, its ability to allow viewers to interpret its signs based on their personal context, and its willingness to emphasize its constructed view of nature all place it in a new realm of weather discourse. By making more explicit the signs of

broadcast weather and finding alternatives, *Weatherscape* performs the valuable function of showing how common ideas can give rise to new perspectives.

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