CHANGING THE CLIMATE WHILE REPRODUCING POWER?: EXAMINING THE SOCIAL CONSTRUCTION OF "RENEWABLE" FRAMES IN MASS PRINT NEWS MEDIA, 2000-2010

by

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Changing the Climate While Reproducing Power?: Investigating the Social Construction of "Renewable" Frames in the Mass Print News Media, 2000-2010 Thesis directed by Professor Kathleen Tierney

As climate change has become an increasingly salient topic among policy makers, scientists, politicians, and the public in many nations around the world, various social scientific studies have addressed the way this issue is socially constructed. However, an important component of these constructions that often goes under examined are the social pathways through which possible solutions to climate change, such as renewable energy, are themselves constructed. Considering the contemporary mass print news media's prodigious ideological influence and the potential value of renewable energy in addressing climate change, investigating the social construction of renewables in the mass media is crucial. In order to address this underdeveloped subfield of the sociology of energy and the environment, I interviewed 23 reporters and performed a critically-informed qualitative frame analysis using 980 news articles from five of the most prominent newspapers in the United States as sources. Utilizing the literatures of environmental sociology, critical theory, critical discourse analysis, communication, social constructionism, and policy studies, this project describes the ways in which large scale economic, technological, and cultural processes and changes have altered newsmaking practices and processes, and how this ultimately results in a narrow set of renewable-source electricity (RSE) frames in the news. Though this incomplete picture of RSE poses significant challenges for the emergence of a more climate-friendly, democratic, and reflexive public energy policy, the changing news production process offers opportunities for positive change.

To my families and friends. It has always been about you.

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CHAPTER 1

INTRODUCTION

In April 2010, the Obama administration gave federal approval for the "Cape Wind" project. Cape Wind, a proposed "wind farm" off the coast of Massachusetts in Nantucket Sound, has been the subject of an intense symbolic contest since its proposal in July 2001. It is set to be the first offshore wind farm in the U.S.—arriving 125 years after a wind turbine was first used to generate electricity. During the decade of Cape Wind's contestation, mass media portrayals of the Cape Wind project reproduced and reflected the dominant discourses and debates of renewable source electricity (RSE) in policy contexts across the country. In this time period, RSE discourse increased in salience, and was also marked by a number of shifts in character. These shifts were caused in part by the association of RSE with events that were shaping larger culture. From the presidential elections of 2000, to the events of September 11, 2001, to the 2006 release of *An Inconvenient* Truth, through China's rise to prominence in the RSE sector and the "great recession" of 2008, RSE (as a conjointly constituted entity) both changed, and was changed by the public character of these events.

As these events and their effects rippled through American culture, the dominant relationships in energy endured. Coal remained the dominant source of energy for electricity, and though its industry faced some pointed criticism from Congressional democrats, the oil industry logged record profits. Further, during this time there were comparatively modest increases in RSE deployment, and small, piecemeal RSE policy gains. Based on public opinion surveys, however, these incremental gains were less than the public desired. Bell, et al. (2005) call this distance between public opinion and RSE policy and deployment, the "social gap." Considering this gap, the growing public demand for solutions to climate change, and the importance large

news outlets play in constructing the character of public issues, understanding the symbolic and public character of RSE becomes ever more crucial.

Though RSE coverage and climate change coverage move relatively in sync beginning in 2005, the subsequent death of federal cap-and-trade legislation dealt a harsh blow to those seeking to capitalize on the increased exposure of the economic benefits of RSE. Further, the economic crash of 2008 dealt another blow to RSE's economic viability, as did the rise of natural gas—the latter of which undermined the symbolic value of RSEs "domestic energy" label. These themes that have supported RSE frames for the past decade: RSE as having economic benefits, being a solution to climate change, and as a form of domestic energy, have all been undermined since 2008 by the rise of natural gas.

Despite the problems at the federal level, the "social gap" continues to close at the state level. Thirty states now have binding RPS (Renewable Portfolio Standards) legislation, and seven more have non-binding goals (EIA 2012). Primarily, the thirteen remaining states are those that offered resistance to the national RPS legislation proposed by Congressional Democrats in 2009. The reasons for resistance primarily involve the interplay of three factors: high levels of fossil fuel production (and often low energy prices), low levels of wind potential, and the dominance of Republican politics.

In this sociopolitical milieu, characterized by under deliverance of RSE, political disputes, a slowly improving economy, and the tight coupling of economic growth and electric power consumption, this consumption seems likely to rise. How the U.S. collectively addresses this increase in demand will have far reaching economic, political, and environmental consequences. Further, how mass media reflect and respond to these solutions will also have their own important effects on public perceptions of the effect RSE can have in addressing the

problems that will stem from a rise in electricity demand that will be predominantly delivered by fossil fuels. This fundamental premise—that the media are both a critical source of public information and a potential location of domination—underlies this research. I seek to describe the process of RSE newsmaking as a vehicle through which hegemonic economic, energy, and ideological relationships are portrayed and maintained, though these relationships are also occasionally challenged. In general however, these relationships fundamentally justify an energy infrastructure and policy approach that contributes tremendously to climate change.

This study uses qualitative interviewing and a qualitative frame analysis to address the social construction of renewable energy news from a critical perspective. I investigate newsroom processes, as described by reporters; the ways in which these processes affect the way in which reporters report on and write about RSE; the framing of RSE in mass media news discourse; and the specific ways in which these portrayals are related to both newsroom processes and larger organizational, professional, cultural, and political-economic phenomena. The analysis focuses on the way the existing frames in RSE news, and their production, are related to the re-creation of hegemonic energy, economic, and cultural discourses.

This project explores these issues through data gathered in 23 semi-structured interviews, 980 articles from mass media news sources from 2000-2010, and stakeholder websites. By conceptualizing these data sources as heavily interdependent, I attempt to interrogate RSE news and newsmaking as a discursive process. Using interview data, I first describe the formative social processes that characterize RSE news production—focusing on the role of change, in terms of how economic, cultural, and technological shifts have fundamentally altered the newsmaking environment. I then describe the professional and organizational conditions in which journalists have been reporting on and writing about RSE in this time period. Because the macrostructural conditions have both changed traditional newsgathering routines and created news ones, I then use the interviews to describe the newsmaking process—from story idea to article publication—in an attempt to clarify the ways in which the process of newsmaking, and the changes to it, manifest themselves in the everyday routines and writing of reporters. Finally, I analyze the frames present in the news articles in an attempt to ascertain their character, and to empirically connect this character to the shifting discursive and social processes that organize their content.

In the analysis presented here, I attempt to explain the social construction of RSE news in as holistic and cohesive fashion as possible. I endeavor to do this by putting the reporters, and the way they interpret and act on normative organizational and professional structures while producing news in an increasingly constrained environment, front and center. The journalistic routines and norms they employ are changing rapidly, as are the multiple institutional realities of both news production and RSE. These co-occurring changes present challenges for reporters and the reading public alike. The advance of disparate and complex technologies, the acrimonious debates on Capitol Hill, and the multitude of contexts in which RSE is relevant, make RSE difficult to get an accurate, thorough handle on in news. Where this complexity intersects with journalistic processes and pressures, RSE news serves the requirements of hegemonic power structures by simplifying and homogenizing this content while functionally limiting and marginalizing unofficial accounts and sources. Though I draw heavily on the experiences of reporters, I do not do so in an attempt to explain RSE framing as the work of specific individuals, but as a way to get a firsthand account of how the organizational, professional, and social processes of newsmaking affect the portrayal of RSE. Though this research takes a critical approach, the reporters I talked to are wholly dedicated to producing the most publically useful

information that they can. They are not willing pawns in a game of domination; the news they and their colleagues produce is not purposefully misleading. Through this research, I have more trust in them and their work than I had previously, but less faith in the social organization of news that continues to increase their workload, trim their stories, and homogenize story content. As the salience and import of RSE continues to increase in U.S. culture in the midst of increasing domestic and global energy demand, the increasing occurrence of disputes over climate change, and positive public opinion regarding RSE policy and deployment, the import of RSE news discourse will only increase—and the pressure on energy and environment reporters will increase concomitantly.

LITERATURE REVIEW

I drew from a diverse set of literatures in this study, including critical theory, discourse theory, social constructionism, environmental sociology, media studies, and the various literatures in which framing research is housed. This diversity was necessitated by the broad design of this project, which allowed me to use these literatures and the varied data types to make linkages between the related phenomena, and to more fully conceptualize RSE news production as an interdependent, discursive process. This review traces its way through these literatures, not seeking to encompass each area's complexity within it, but to highlight and clarify the path this particular project necessitated. Since the relationships between these literatures has already been explored by numerous researchers before, I highlight work as necessary to help solidify the linkages I make between literatures, epistemologies, and methodologies, and to clarify the gaps in these literatures I am attempting to address with this research. Below, I present the broader critical and constructionist theoretical frameworks I will be using, specifically addressing the problems presented by social power in mass media in

modern life, while considering how the process of newsmaking itself is implicated in this. I then address the literature on newsmaking itself, discussing the various ways researchers have attempted to explain and describe this general process' effects on the news itself. Finally, this section concludes with a discussion of news output, dealing in detail with framing theory. Within each of the separate sections, I will discuss how each deals with environmental and energy issues in order to clarify and more specifically organize my contributions to the various literatures.

A Critical Approach to Constructed News

Hegemony, as Gramsci conceptualized it, deals centrally with force and consent. Citing this theorist, Richardson (2007) defines hegemony as "the process in which a ruling class persuades all other classes to accept its rule and their subordination" (35). Force is a less legitimate form of rule, and the successful acquisition of the consent of subordinate classes by ruling classes is the primary defining characteristic of the concept. As Richardson (ibid.) says of hegemony: "When successful, the ruling class can implant its values with the minimum of force since the ruled acquiesce to the power and political legitimacy of the rulers." In general, hegemony is discussed as a process driven by the willful actions of agents of the ruling class. However, Gitlin (1980) approaches the concept differently. He acknowledges the importance of the indirect nature of some hegemonic practices, while emphasizing hegemony's situatedness in everyday life and unseating it from its predetermination in economic processes. From this perspective, hegemony dovetails conceptually with discourse at this location. Laclau and Mouffe's (1985) theorization of hegemony is a good example of this intersection. These scholars further loosen Gramsci's conceptualization of hegemony, conceiving of it as a tool to describe hegemonic processes in multiple contexts, with multiple and dynamic causes (as opposed to the foundational base/superstructure logic Gramsci uses), while specifically welding hegemony to

discourse theory. It is this approach to hegemony that I find to be most apropos for considering the workings of hegemony in newsmaking, as it introduces flexibility into understanding the hegemonic functions of the processes productive of news, the news output, and importantly, newsmakers themselves.

Newsworkers certainly do not set out to dominate subordinate classes. Though they are aware of their role as information gatekeepers and keepers of the public trust, I would not suspect that they consider their work to be expressive of ideology or necessarily supportive of class inequality (though this is likely less true of authors of Op-Eds). Althusser (1972), however, would argue that the collectivity of dominant news organizations serves as an ideological state apparatus, which communicates and recreates the logic of the "reproduction of production"—the rationale that social formations use to recreate the social conditions that will allow their persistence. I follow in this interpretation of news organizations; that is, I conceptualize news as a location wherein hegemony is recreated. Because news organizations rely primarily on sources embedded within the institutions most deeply invested in the maintenance of status quo economic, political, and energy relationships, the normal operation of news organizations facilitates and reifies the legitimacy of these institutions simply by producing stories that rely on them as sources. More succinctly, this process recreates dominant ideology.

Roughly, following Althusser (1972), I conceptualize ideology as a representation of the illusion individuals have of their relationship to their real conditions. This definition fits nicely within a study of newsmaking, as the newsmaking process necessarily filters out information that would allow for more a comprehensive understanding of RSE on the part of the public. Althusser traces the creation of subjectifying categories to the state and its dependent apparatuses, and so can be somewhat limiting, especially in an analysis of newsmaking. News is a location of

symbolic battles, and assuming the victories always benefit the state seems, as Anderson (1997) notes, somewhat overly deterministic and mechanical. Nonetheless, conceptualizing ideology as a systemic logic that embodies a misrepresentation people have of their material conditions implies the importance of subjectivity in hegemonic domination, and so, fits nicely with my conceptualization of RSE news production as a discursive process. Further, this particular use of ideology implies the need for a use of a notion of power that deals with its existence as a hidden capacity for domination. Dowding's (1996) description of power as "dispositional" (referring to the ability for action, not the action itself) is particularly apropos because the everyday, takenfor-granted norms and routines of newswork mask their capacity to mobilize hegemonic RSE discourse. Fittingly, Weber (1958:228) called bureaucracy "a power instrument of the first order," because it is so difficult to disentrench, once established. As I use it in this project, power is present in news when one group systematically benefits from a particular institutional design, whether that benefit is a direct or indirect result of purposive action. This is Domhoff's (2005) "Who benefits?" indicator of power. This measure assumes that we may understand which social groups are relatively powerful in a given situation by analyzing the distribution of social goods to those groups. In this research, these "goods" are federal subsidies, private investment, RSE deployment generally, and because this project is a study of the symbolic nature of RSE, fair, favorable and beneficial coverage in news.

These systems and outputs of news I conceptualize as "RSE news discourse." I approach the social construction of RSE news from a discursive perspective, seeking to emphasize the social embeddeness of discourse (as opposed to more linguistically-centered variants of discourse analysis), as well as the operation and outcomes of power dynamics that are expressed in the creation of RSE news (Alexander 2009:3, Foucault 1980). Broadly, in this pursuit I follow

the early work of Stuart Hall and others at the University of Birmingham, who attempted to make explicit the discursive system that links textual representation to ideology, focusing on the study of "cultural circuits" and more specifically, the process of "encoding—decoding" (Hall 1980). This tradition also emphasized the importance of the historic situatedness of discourse, as noted by Tekin (2010), and is of great import in this project. As Kellner (2009) points out, Hall and his colleagues gradually began to focus empirically on textual and audience reception work, leaving the larger social processes relatively unattended (100). Adherents of critical discourse analysis have picked up this torch, to some degree (Fairclough 1992; Fairclough and Wodak 1997; Richardson 2007). This tradition has also sought to combine the social and linguistic approaches to social construction, and formulates discourse in this way—as both an element and constitutor of the various forms of social facts (Fairclough and Wodak 1997:258; Tekin 2010). Though I do not apply a linguistic analysis in this project, I borrow from all of these traditions. I recognize the import of lexical use, and seek to situate RSE news discourse-as a system of power-within the historical, cultural, social, and organizational events and processes that concomitantly formulate and are formulated by it.

A number of studies of environmental discourse deal in a significant way with climate change (Carvalho 2005, 2007, 2009; Boykoff 2007a, 2007b, 2008; Boykoff and Boykoff 2004, 2007; Boykoff and Mansfield 2008; Doyle 2011; Fletcher 2009; Liu, et al 2008; Trumbo 1996) and disasters (Ashlin and Ladle 2007; Tierney, et al. 2006). Further, some studies also trace the existence or movement of large environmental discourses in media portrayals of environmental issues (Adger, et al. 2001; Davidson and McKendrick 2004; Lockie 2006; Huttunen 2009). Finally, research on renewable energy media discourses are less common, and primarily address wind power (Pasqualetti 2001; Stephens, et al. 2009; Wilson and Stephens 2009; Fischlein, et al.

2010) and biofuels (Huttunen 2009; Sengers, et al. 2010, Wright and Reid 2011). With this project, I hope to contribute to this literature topically, as well as methodologically. More specifically, by integrating reporter interviews into research on the production of RSE discourse, I follow Boykoff's (2007b, 2008) and Boykoff and Mansfield's (2008) research on the construction of climate change discourse.

Constructing the Social, Constructing News

Constructionist research involves the investigation of the processes and factors through which a social phenomenon is created and becomes entrenched as practice, institution, or set of symbols (Berger and Luckmann 1966). In going beyond basic descriptive analyses, constructionist projects investigate the details of the social processes that give symbols their particular characteristics. In this approach, social power is the driving factor in this "creation and institutionalization of reality." When different, or conflicting, constructions of nature emerge from different groups of actors, access to social power will help decide which group's definition comes to predominate (Dispensa and Brulle 2003; Greider and Garkovich 1994; McCright and Dunlap 2003; Scarce 1998, 2000; Slater 1995). In this respect, a critical approach fits well with a constructionist one. Antilla (2005) and Bolsen (2011) use a constructionist approach in the analysis of news discourse, but there are few that deal explicitly with renewable energy discourses. Importantly, not all researchers who analyze discourse explicitly subscribe to the constructionist paradigm. Though this might be the case, constructionist epistemology subsumes the discursive approach in some ways, as it theorizes and is focused upon the sources and processes of knowledge creation, and the subsequent sedimentation and recreation of this knowledge in interaction and text (Berger and Luckmann 1966; Searle 1995).

When the sedimentation of an environmentally relevant practice occurs, such as that which occurs in routine RSE newsmaking, Macnaugten and Urry (1995, 1998) advocate "reading" the resultant "natures" sociologically. Doing so helps clarify the ways in which environmental symbols have been imbued with their particular character in the media. In this "reading," the social location of each group in relevant power relations will be an important consideration in determining which "nature," or "landscape" will come to dominate a discursive contest (Grieder and Garkovich 1994; Macnaugten and Urry 1995, 1998). In this sense, sourcing in news more generally is a crucial vehicle through which power may be realized because of the fundamental role official sources play in the making and defining of news—especially when these sources are unnamed, and thus, unaccountable.

Finally, within particular constructions of the environment, underlying cultural symbols may serve as justifications and foundations for social action, and may help situate these constructions within the prevailing dominant logic (Bell 2009; Eder 1996; Macnaghten and Urry 1998; Scarce 2000; Walton and Bailey 2009). Describing the relevance of cultural themes and "macroconstructions" helps locate research on environmental issues within the greater cultural milieu, facilitating a more comprehensive, meaningful analysis. A good example of this approach comes from Scarce (2000) and his description of "macroconstructions," of which he uses "rationality" as an example. Rationality, as a cultural logic, legitimates a wide array of actions in Western culture, "science" being the important one to Scarce. His characterization of the social construction of salmon as a product of biological science, dependent upon the import of rationality as a cultural resource, is illustrative. A number of macroconstructions emerged in this project, the most salient being the valorization of technocratic, capitalist, and democratic values. These ideals organize energy discourse in a way that fundamentally characterizes energy

issues as primarily technical, economic, cultural, or political problems (as opposed to historical, class, or racial ones). In turn, each particular symbolic orientation implies its own set of causes, solutions, winners and losers. In RSE news, these characteristics often reify hegemonic energy, class, and cultural constructions.

Making news. Arguably, the constructionist research concerning the creation of news that is the most enduring is Tuchman's (1978) *Making News: A Study in the Construction of Reality*. This study, along with others in this era (Fishman 1980; Gans 1979; Gitlin 1980) sought to describe the process of making news from within the newsroom. These scholars, having rejuvenated the "Golden Age" of media sociology of the 1930s and 1940s (powered in large part by Robert Park; see Jacobs 2009), sought to discover the features of news processes that affect news output, and (to differing degrees) the ways in which social power was implicated in this process, including ideas about who benefitted from news production. As Jacobs (2009) notes, "the general argument of the newsroom studies was that news, as a social accomplishment, resulted from the attempt by news workers to solve the organizational problems that emerged from their work" (12). These studies sought explanations for news content not in purposive bias on the part of reporters, editors, or sources on their own, but rather in the sedimented, normative organizational and work structures within which reporters worked.

There has been much scholarship since 2000 on the workings of online newsrooms (Allan 2006; Boczkowski 2002; Paterson and Domingo 2008). Conceptualized as the next step in news, online news as a separate entity has materialized to some degree, but none of the papers at which my interviewees worked had separate online reporting staffs. Research on online news fundamentally deals with the ways in which print journalism has changed and differs from online journalism—specifically at the interface of traditional news, and technological adaptation and

evolution (Boczkowski 2004; Cottle 2007; Miekle and Redden 2011). For the most part, this literature does not represent what I see online news to be. As my interviewees frequently told me, the "shelf life" of news has decreased greatly since the mainstreaming of online news, and during these times of relative upheaval in the work of making news, the research investigating it may have a decreasing shelf life as well. Much (but not all) of this work is ethnographic and will soon deal more with the "convergence" of online newsrooms and traditional ones (see Singer, et al. 2011, on how convergence affects audience participation in news creation)—specifically the making of traditional journalists into online/traditional hybrids, as I largely found reporters to be.

As journalists contend with these changes, their work is also influenced by their adherence to "ethical principles" (Richardson 2007:83). Most interviewees I asked to talk about "ethics" or "ethical principles" were often somewhat confused as to what I wanted to know. Though Hanitzsch, et al. (2011), based on survey research, found widespread adherence to ethical standards in Western journalism, I often got the impression that reporters' adherence to these standards: "seeking and reporting truth, acting independently of sources and other journalists, minimizing harm, and being accountable for their work" (Richardson 2007:83, from Iggers 1999:23, 38) was better classified as a "job requirement," as it was so foundational, and so closely tied to their work routines and procedures. However, objectivity is discussed as an "ethic" within journalism by Sachsman, et al. (2008). These authors discuss the divide within environmental journalism regarding the place of objectivity in reporting. They found that about 62% of environment reporters disagree with survey questions asking if they should sometimes be advocates for the environment (126). Tuchman (1972) called the practice of seeking objectivity in writing a "strategic ritual," which was pursued by reporters to avoid critiques about their work. Though this may be partially true, a majority of reporters (and environment reporters)

adhere to ethical standards and feel a deep sense of responsibility to their readership to report fair stories. This likely goes just as far in explaining the pursuit of objectivity in newsrooms as do Tuchman's conclusions.

As this project does, a few others have sought to explain media content with interviews with reporters (Boykoff 2007b, 2008; Sachsman, et al. 2010; Singer et al. 2011; Yang 2004), while others use survey methods to explain the traits of environmental reporters (Sachsman, et al. 2008) and their reporting (Wilson 2000). I attempt to make linkages between interviews and news content as well, in both direct and indirect ways: some of the interviewees are reporters who had written articles in the article sample, though most were not. The great majority of articles I analyzed were written by reporters I did not interview, simply because there were so many different authors. However, my impression from speaking with environment reporters was that they didn't differ significantly from other reporters, as Sachsman, et al. (2008) found, and thus were operationalized in this study as a functionally homogenous group. This homogeneity was expressed, for example, in the way reporters described their work. The descriptions were quite similar, including those dealing with the reporters' relationships with their editors.

The reporter-editor relationship in journalism is arguably the most crucial one, aside from the source-reporter relationship. Editors serve as gatekeepers, consultants, and in some cases, mentors to reporters. The role of editors in newsmaking, as I found in this study, is changing. Cawley (2008) has found that some online reporters are able at times to file their own stories and skip much of that interaction with the editor. Shoemaker and Reese (1996) also describe "frequent conflict" between editors and reporters because of their differing allegiances: reporters to their sources, and editors to the readers (147). Neither of these trends were evident in this study. Further, discussions of editing and editors often focus on the work of editors (Schudson

2003; Tuchman 1978), and not on the reporter-editor relationship Shoemaker and Reese (1996) discuss. Anderson (1997) discusses this relationship in covering the issue of reporter autonomy, and generally finds, as I did, that reporters perceive themselves to have a large amount of independence in their work; one reporter summed this relationship with his/her editor thusly: "He has the veto, but we select [stories]" (66). Sachsman, et al. (2010) also come to this conclusion with their survey data, finding nearly 90% of environment reporters reporting "almost complete" or a "great deal" of autonomy in story selection and design, though this group's measure for autonomy was less than that of U.S. journalists in general (84). Shoemaker and Reese (1996:162) and Anderson (1997:67) also describe the potential for reporters to self-censor. In these cases, reporters, to some degree, select and write stories with the editor in mind. They do so because time is a precious commodity in newsrooms, and as a reporter, it makes little sense to occupy your workday with a story of which the editor will likely disapprove.

Studies that address newsworker perceptions of their relationships and work environments, such as Sachsman, et al. (2010), Singer, et al. (2011), and Yang (2004) are somewhat rare. Lee-Wright (2012) takes this approach in an assessment of the perceptions of newsworkers and news stakeholders concerning the changing nature of newswork due to political-economic, cultural, and technical shifts. Using the same approach, Lee-Wright and Phillips (2012) and Witschge (2012) more specifically address the import and use of technology as it has changed newsmaking, following work by Ornebring (2010) that found that technology was perceived by journalists to be the most important driver of the change in news. My data indicates that this "technological determinism" is causally problematic, given the degree to which technological change in news is tied up with the normative definition of news (which must be new, important, or interesting), as well as the political-economic and cultural changes in news that are occurring in lockstep with the technological ones.

This co-constitution and co-evolution of technology, political-economic, and cultural change is manifest at the junction of social networking websites and news. New research is emerging that explores the import of social networks in newsmaking, primarily focusing on Twitter (Ahmad 2010; Crawford 2011; Hermida 2010; Lasorsa, et al. 2012; Stassen 2010; Strömbäck and Karlsson 2011). "Microblogging," as the practice of "tweeting" has been named in this branch of research, is being studied for its general influence on newsmaking (Ahmad 2010), as a representation of professional norms in journalism (Lasorsa, et al. 2012), and as a mode of reader involvement in news (Strömbäck and Karlsson 2011). Twitter is now a normal part of many reporters' lives, and offers a way for them to disseminate their own work outside of their home publication's platform, and thus drive online users to that website and generate ad revenue. However, Twitter use can also be cumbersome for some reporters, and thus a misuse of valuable time and resources (Crawford 2011). The diverse outcomes stemming from the use of Twitter seem to be borne out in this study, and seem dependent on when and how reporters use it. Twitter is also an embodiment of part of the normative definition of "news" that journalists use: that of novelty.

Novelty is one of many typifications (Tuchman 1978) that journalists use to classify stories into "newsworthiness" categories. As Fishman (1979) notes, these judgments are part of the rationalized system of news production, and are thus required to maintain its efficient operation and allow deadlines to be met. Regular sources are a frequent source of story leads, and thus part of this rational system (Tuchman 1978); so, "news" is also defined by where it comes from. This scholar also points out that "news nets," the systems for gathering information

that may become news, is rationalized, and operates on three basic principles. These assume that people are interested in occurrences in specific localities, activities of certain organizations, and specific topics (25). Further, many scholars recognize the importance of longevity in selecting "news." Schudson (2003) discusses the importance of the judgment of whether or not a story has "legs," or staying power on an agenda, while others describe the importance of a story's existence in news previously (Fishman 1980; Gans 1979; Gitlin 1980; Tuchman 1978). Because there are potentially many "angles" from which a story may be approached, a topic may exist as "news" in many different ways. Numerous typologies of these "news values," or criteria for judging newsworthiness exist (Galtung and Ruge 1973; Gans 1980; Harcup and O'Neill 2001; Sachsman, et al. 2008; Shoemaker and Reese 1996), and commonly include novelty (Gans 1979; Tuchman 1978), distance or proximity (Bendix and Liebler 1999), celebrity (Anderson, et al. 2005), timeliness (Tuchman 1978), and conflict (Sachsman, et al. 2008). Anderson (1997:121-123) offers three characteristics that make environmental stories more likely to receive coverage: the degree to which they are event-centered (that is, a response to an event), the degree and ways they may be visualized, and the degree the story can be adapted to a 24-hour news cycle (though the news cycle is continuous now). Because energy issues are generally not event-driven, this makes it difficult for them to get coverage. Indeed, one reason RSE coverage began to rise was its linkage with climate change—though this began to change as RSE policy gained independent salience in media. A number of the above criteria for newsworthiness are represented in interview data and article data, though coverage is also driven by other institutional schedules (e.g. Congressional debates) and occurrences (changes in oil and natural gas prices).

Drivers of story construction itself are not as easily found in the scholarly literatures related to newsmaking. Schudson (2003), however, describes the "lead" (the opening paragraph

or lines in a story) as a subjective matter—as something the reporter must hunt for in the story. The "lead," or *lede*, as it is known to journalists, serves as a short summary statement of the entire story, which is why Bell (1991:176-177) calls writing the "lead" properly as "arguably the journalist's primary writing skill" (from Antilla 2005:340). This certainly was reflected in my data, with some reporters saying they spent a majority of their time writing stories on the lede and the "nut graf" (the longer summary, or "nut" of the story, which directly follows the lede). Schudson (2003:185) also discusses the dominant format of story writing: the "inverted pyramid," wherein the "lead" contains the "who, what, when, where, and (sometimes) why." This strategy proposes that the most important information in a story goes at the top and is placed in descending order of importance throughout the story. Although many interviewees referenced this strategy, only a few described actually using it. More common were much messier and inexact strategies. Often reporters would provide detail about how to write "the top" (the lede and nut graf), but speak about writing the middle of the article as significantly less strategic (though some mentioned the relationship between source quote positions in the story as an important part of balance).

Regular sources are common sources of story ideas. Reporters' and editors' reliance on "reliable" sources of information produces "routine" sources that gain differential access to reporters, while "non-routine sources struggle for access" (Herman and Chomsky 2002:22). This dependence on (and quoting of) few, official sources serves to filter the information that appears in the news. These routine sources are instrumental in allowing journalists to generate stories regularly, and by doing so, help the organization meet its imperatives as well. Further, press releases, wire services, and other newspapers are other important sources for reporters, and also allow for the efficient production of news, as they cut down on the time it takes reporters to

report and write up stories. Schudson (2003:150) notes that ethnographic research of newsrooms indicate that "(J)ournalism on a day-to-day basis, is the story of the interaction of reporters and government officials, both politicians and bureaucrats." Whether or not they are government sources, "official" sources such as scientists and CEOs are regularly consulted for story ideas, or for source attribution in other stories. These powerful sources are often the most available ones, and thus, are most conducive to the overall goal of news organizations: To be efficient, because of deadline constraints (Gans 1979). On the other hand, some of these sources, such as scientists are important to have as sources, as information from them can improve science reporting (Wilson 2000). Because of their potential value, and hazard, the reporter needs to manage these sources with professionalism and candor. Often reporters will refer to ethical standards (i.e. not allowing sources to buy them coffee at a meeting) to manage this relationship and place a high amount of value on being "fair" to them-that is, reporting a story that is fair to all stakeholders involved. Crucially, these sources are often able to remain "off the record" when they feed a reporter information. Again, reporters rely on ethics to manage how they use this information. As the audience is concerned, Bennett (2010) notes that source attribution is a way to enhance the audience's reception of their message. Though journalists defend their right to have anonymous sources, and one could make a case that this anonymity is useful in exposing institutional abuses of power, much of the limited research on anonymous sourcing deals with the ideal-type anonymous source: the whistleblower. However, this "belies a whole array of unnamed sources who crave anonymity to offer unattributed opinions or information" (Carlson 2011:42). This is certainly a significant hole in this literature, and this hole is defined by a practice that resulted in hundreds of uses of anonymous sources in the articles in this study.

Further, Castello (2010) found that when chemical industry officials were used as sources, reporters often adopted their framing of the issue and portrayed them favorably threequarters of the time. Callaghan and Schnell (2001) also demonstrated source influence on the framing of an issue. Yang (2004) found this reliance on official sources as well with environment reporters in the U.S., which was more prominent when the reporters were lacking in scientific training. This finding is especially crucial, given the reduction in environment beat reporters the industry has seen in the U.S., as it will likely result in an increasing dependence upon "authorized knowers." While Takahashi (2010) discovered an abundance of official sources, Anderson, et al. (2005) documented the dearth of stakeholder groups. Schudson (2003:151) explains one reason for this struggle: "A corollary to the power of the source is that resourcepoor organizations have great difficulty getting the media's attention. If they are to be covered, they must adjust to modes of organizational interaction more like those of established governmental and business organizations." According to Carlson (2009) and Tuchman (1972), reporters seek out sources that will confirm their interpretation of a story. This paints a pessimistic view of the source—reporter relationship, and somewhat demonizes reporters for adhering to a definition of "news" that they have been taught, and that has been organizationally and professionally rewarded throughout their career. This definition includes consideration of the source of information. The title of Carlson's work asks if, within source—reporter relationships, there is "Dueling, dancing, or dominating." Based on the need for both source and reporter to benefit from the relationship, "dancing" is clearly the most logical, and this reflects how interviewees explained this relationship. Much research in this vein is characterized by the removal of agency from reporters-reducing them to the role of dupes in political machinations beyond their comprehension. In addressing this problem, this research should help reinvigorate

research in newsmaking that puts reporters, who are in the most important position in this process, front-and-center.

Reporters also must manage time and space constraints as they report and write up stories. Deadlines, which some online news researchers have de-emphasized, are still a highly relevant part of the workday of most reporters. Sachsman, et al. (2010:151) found that "time constraints" were the most pressing barriers for environmental journalists. Further, the routinized process for producing news requires deadlines to deliver news in a predictable fashion, and in a volume adequate to fill a newspaper and populate a website every day (Fishman 1980; Gans 1979; Tuchman 1978). As this concerns RSE reporting, because RSE is often scientifically or technically complex, time and space constraints that negatively affect other reporters may affect energy reporters in a deeper fashion (Weingart, et al. 2000), perhaps limiting their ability to properly contextualize the information in the article. Space constraints, though seemingly irrelevant for online news, are anything but. Article lengths here are limited by perceptions of newsworkers about the length of story a reader is likely to finish, and sometimes by the need for stories to be condensed for websites with limited space on a certain page. In general though, reporters do not feel constrained in the same way by both deadlines and news space. As my data suggest, the relationship between time and space constraints is more accurately described as a dialectical one: it simply becomes about how to craft the best story in a finite amount of time and space because these constraints are dependent upon one another.

News Frames: A "Window on the World"

As reviews of framing literature note, framing has been used in many fields to study many different things (Van Gorp 2007). From politics (Shah, et al. 2002), advertising (Goffman 1979), social movements (Benford and Snow 2000), nuclear power (Gamson and Modigliani

1989), and climate change (Good 2008) to health care reform (Pielka, et al. 2010), chemical risk (Sjolander et al. 2010), and wind power (Stephens, et al. 2009), the concept of framing has been used to describe patterns in topical communication in varying discursive environments. The latter work, along with a few others, describes renewable energy framing in news, though these studies typically focus on wind. This project addresses this gap in the framing literature by describing the framing of renewable energy more generally.

This rest of the section below describes my critical conceptualization of the "frame," which uses Gamson and Modigliani's (1989) design as a guide. I define the frame and describe its elements, and describe the benefits of a qualitative approach to frame analysis. One of these benefits is the ability to analyze frames as dynamic structures, susceptible to longitudinal shifts and dependent upon contextual change. The section continues with a discussion of the importance of considering how framing processes systematically exclude certain perspectives and stakeholders, and closes with the description of journalistic norms, one particular mechanism of frame exclusion.

That the process of framing excludes certain viewpoints is a foundational assumption in framing theory, and is reflected in Entman's definition of frames, which I use in this project: "'(T)o frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described'" (Entman 1993:52; from McCombs and Ghanem 2001:70). As numerous scholars have demonstrated, this definition fits well with a critical approach, as they have much in common (Fletcher 2009). Additionally, in the literature, the concept of framing is operationalized in a variety of ways (Van Gorp 2007), so any researcher attempting to use "framing" must be careful

to articulate what is meant by "frame" clearly. Further, as Koenig (2006:62) notes, even given the popularity of framing research, "the corresponding methodological literature is scant," and "the methodological obscurity of Goffman's (1974) initial formulation" is partly to blame. I also found this to be true, and this trend is particularly problematic in terms of the few examples researchers are able to draw from when seeking an approach to frame design—especially for researchers drawing frames inductively. Often these descriptions of frame design are scant, at best.

Ideally, the frame itself is operationalized in a way that allows for flexibility, breadth, and detail in design. Frames that exemplify these characteristics are more easily linked to other frames, as well as diverse types of discourses and temporal periods. Further, these characteristics indicate to researchers what elements of frames (e.g. metaphors) shift, change in nature, or go missing—all of which can signal changes in discourse. With all of this in mind, I define frames as "structures of meaning made up of a number of concepts, and the relations among those concepts" (Reese 2010:24; from Hertog and McLeod 2001). When this definition is considered with that of framing above, they accurately reflect my approach to this research because they address, to varying degrees, the *origin, character, constituent parts,* and *implications* of each particular frame.

Gamson and Modigliani (1989) integrate culture into their analysis of media frames of nuclear power using the concepts of "media packages" and "framing devices." The latter "suggest how to think about the issue," and include metaphors, exemplars, catchphrases, depictions, and visual images (Gamson and Modigliani 1989:3). I make use of framing devices in how I chose to build RSE frames (loosely following Van Gorp 2007). I also sought keywords that serve to illustrate and highlight frames (Reese 2010:20), reasoning devices that embody

"core framing tasks" (Benford and Snow 2000), cultural resonances (which include "master narratives": [Reese 2010:24])—which allow the frames to persist through time (Gamson and Modigliani 1989:5), the "triggering events" (Downs 1972) that activate portions of frames, and finally, the sponsors associated with each frame (which changed for some frames as these frames themselves changed). Finally, Gamson and Modigliani (1989) suggest that cultural resonances, along with sponsor activities and media practices, affect the careers of media packages. I follow their logic in this study, though I integrate the resonances into the conceptualization of the frames themselves, and posit the effects of sponsor activities and media practices separately. This approach reflects my interest in both the content and context of RSE framing.

My use of a qualitative approach to frame analysis and interpretation also reflects this interest, and realizes that "the most important frame may not be the most frequent" (Reese 2001: 8). The relevance of frames will also shift, so saying frame "A" is the most important from 2000-2010 because it is the most frequent ignores other frames, which at certain times might be much more culturally significant at a given time than "A," though much less frequent. My approach allows me to be flexible in how I contextualize the frames in terms of other cultural or social attributes that affect them, whether cross-sectional (an event) or longitudinal (tropes or metaphors in culture) in nature.

Longitudinality is an important consideration in critical framing studies because demonstrating the existence of hegemony is significantly stronger if longitudinal data are available. Importantly, as Kelly (2009:35) observes, both critical discourse analysis (CDA) and framing theories emphasize the importance of power enacted through language, and assume, in the case of news texts, that these are locations of power struggles. However, the difference is that CDA is typically focused more on the relationship of language use and on "the relation between

discourse and particular social, political, and cultural contexts (Carvalho 2007:227). Good examples of the merger of critical approaches and framing approaches to understanding media discourse are numerous (Boykoff 2007a, 2007b; Carvalho 2005; Fletcher 2009; Good 2008; Kelly 2009). This enjoining also makes sense in terms of the history of ethnographic newsroom research, as many of the foundational works in this area (Fishman 1980; Gans 1979; Gitlin 1980; Tuchman 1978) interrogated the role of media practices in their relationship to, and maintenance of, dominant social structures and relationships.

Scholars who pursue critical framing research must remember that it isn't simply about which frames occur in media. The maintenance of hegemony, as explicated in media texts, relies upon the systematic exclusion of certain viewpoints and frames. As Richardson (2007:134) observes, it isn't necessarily the case that the ruling class is "literally or directly responsible" for every idea that is produced in a given culture, but that "'the ruling ideas are by and large *compatible* with or at least do not openly confront the ideas or (an important distinction) interests of the ruling class" (from Wayne 2003:135). Indeed, much of the content of RSE articles in my sample reflect this relationship, which may be traced to norms in news production.

Boykoff and Boykoff (2007) distinguish between "first order" norms such as personalization, dramatization, and novelty, and "second order" norms related to balance and authority-order. "First order" norms "are significant and baseline influences on both the selection of what is news and the content of news stories" (3). Evaluating the effect of first order norms on RSE news makes sense from a critical perspective, which assumes the change of news from information to entertainment commodity (Kellner 2009:96). Indeed, novelty does drive some RSE coverage, as does dramatization, if it is interpreted loosely as including the presentation and highlighting of conflict. Effectively, Boykoff and Boykoff (2007:4) note, the adherence of journalist professionals to these norms has limited the transfer of unbiased and accurate climate change information to the public, and while also under the influence of second-order norms, has portrayed the climate change debate in a misleading fashion that downplays the strong scientific consensus on anthropogenic climate change by presenting it as a "hot scientific debate within the upper echelons of the science community." Balance is a highly relevant norm in this project as well. As it does with climate change, balance helps misrepresent and marginalize RSE. It does so by homogenizing discourse and recycling old debates. Though there is some research into energy discourse and balance (van Alphen, et al. 2007), and numerous studies on climate change deals with balance, save Stephens, et al. (2009). Soloski (1997:152) also found that news production routines (specifically the adherence to norms concerned with objectivity) ended up being supportive of dominant interests: "Although journalists do not set out to report news so that the existing politico-economic system is maintained, their professional norms end up producing stories that implicitly support the existing order."

OVERVIEW OF CHAPTERS

It is clear that news production processes privilege some sources and ideas, and marginalize others. Though these processes have changed in many ways, they still function to reproduce hegemonic relationships in the dominant culture. However, these changes also create fissures in a once static process and provide opportunities for reporters and news consumers alike to fundamentally change, and challenge, the hegemony expressed in news production. This dissertation describes news production as a discursive process, specifically as it applies to RSE, using interviews with reporters, newspaper articles that discuss RSE, and stakeholder websites as data. Fundamentally, analyzing RSE news as discourse using a combination of constructionist and critical perspectives allows me to address the specific practices and instances within the newsmaking process that facilitate the reproduction of hegemony, as well as those that produce potential locations of resistance.

Chapter 2 introduces the methodological approach I have taken in attempting to understand RSE newsmaking. I describe my approach to studying RSE discourse itself as a creative, dynamic, though ultimately hegemonic process. I include a description of data sources, data collection and analysis procedures, and the relationships among the three data types: newspapers, reporter interviews, and stakeholder websites. I also carefully explain my technique for frame design in a desire to contribute to methodological literatures in framing that are scant on these details, and attempt to answer various calls in this literature for the empirical linking of frames and framing processes to power and culture.

Chapters 3 and 4 use the interview data to describe the general newsmaking milieu and work process of reporters, respectively. In these chapters, I establish the import of the politicaleconomic, technological, and cultural changes of the past two decades as generative of new routines in the workday of reporters. I also describe the reporters themselves, and the more stable portions of their work, including the normative definition of news that reporters share, which drives the way they adapt to change, conceptualize their work, and organize their workday. Further, I place reporters at the center of the analysis, and find that they are a critical bulwark for stemming the tide of decreasing news quality and depth, owing to the selection of specific traits of reporters in professional training and layoffs. Drawing on Laclau and Mouffes' (1985) conceptualization of hegemony, I go on to describe the characteristics that organize their workday as both hegemonic and potentially emancipatory in nature, but ultimately formative of RSE frames. In terms of the making of RSE news, these chapters contribute to literatures on

reporting, framing, balance, newsroom processes, and industrial change from which RSE is virtually absent. In particular, I find that balance in RSE news is complex and somewhat contingent on the use of the problem frame, the invalid comparisons of RSE to fossil fuels, and the tendency of reporters to compare these two categories by "lumping" sources and technologies together in a way that misrepresents RSE.

Chapter 5 describes the four primary frames I found in the news articles and describes the narrative of RSE news discourse chronologically, highlighting shifts in frames, as well as the associated triggering events and shifts in frame sponsorship. Critically, this chapter also links these frames to the formative social processes and discursive practices outlined in Chapters 3 and 4, and solidifies the analysis as descriptive of a discursive process that ultimately privileges official sources, and hegemonic energy and class relations. Further, I find that RSE news that this process produces is fundamentally oversimplified, homogenous, elite-focused, and incomplete, and re-affirms the primacy of fossil fuels in post-modern life.

Chapter 6 brings the analysis full circle. It summarizes the study's findings, and describes the practical and theoretical implications of these findings. In doing the latter, it deals specifically with how deliberative policy analysis might suggest solutions to the fundamental problems RSE news production creates in facilitating hegemonic domination.

CHAPTER 2

RESEARCH METHODS

This research uses a critically informed qualitative frame analysis and in-depth interviews to investigate the construction of renewable energy discourse in mass media newspapers. Because the mass media are an increasingly ubiquitous and influential agent of socialization in U.S. culture, studying information from these culturally legitimated news sources will help clarify one important process through which we all learn about what is socially constructed as "renewable energy." To do this, I chose five of the highest circulating and most respected newspapers in the U.S., assuming circulation and prestige, taken together, are a valid proxy for relative cultural influence. I also interviewed journalists who write, or have written, on renewable energy, in order to get a better sense of the social reality that journalists share and how it might affect renewable energy coverage. Finally, I used stakeholder websites to help illustrate which, and whose, ideas are most and least prevalent and relevant in this news. These data will highlight linkages among journalists and stakeholders, frames, and ideas illustrated in the news to lend stability, coherence, and substance to the analysis of renewable energy as a "regime of truth" (Foucault 1980). In the following sections, I justify the use of these data sources and describe my preparation for data collection and my approach and procedures for data collection and analysis. When necessary, I also specifically address the locations at which the three types of data intertwine as I describe my approach to studying the construction of the renewable energy news discourse

DATA SOURCES: NEWS PRODUCTION AS RSE NEWS DISCOURSE

Though I use in-depth interviews, qualitative frame analysis, and document analysis, these data represent one thing: the production of news. Each of the three sources of data—

interviews, news articles, and stakeholder websites—tells a crucial and complementary part of the story of the making of renewable energy news. Ultimately, this project is an investigation into the production of news and its product as a discursive process. Following Richardson (2007), I use Fairclough's (2003) approach to critical discourse analysis, which breaks the system of newsmaking into three parts: social processes (macrosocial and sometimes extrajournalistic processes that affect newsmaking; addressed in chapter 3 using interview data); discursive processes (the process of newsmaking itself; described in chapter 4 also using interview data); and the news output itself (the news articles; described in chapter 5, using the media and stakeholder data). This approach is useful because, as Richardson (2007:37) says of Fairclough's work: "to understand what discourse is and how it works, analysis needs to draw out the form and function of the text, the way that this text relates to the way it is produced and consumed, and the relation of this to the wider society in which it takes place." I seek to accomplish these tasks in terms of RSE news, though I do not address the reception of news by readers. The concluding chapter, however, will address the relationship between RSE news discourse and public policy from the perspective of deliberative policy analysis.

PREPARING FOR DATA COLLECTION

Prior to the collection of interview or news article data, I prepared myself in three ways. First, I read a selection of newspaper articles about RSE from the initial sample, regardless of whether they ultimately were included in the final article sample. I also began to familiarize myself with the stakeholders in the RSE arena. This latter group consisted of groups, people, and websites that represented as wide a range of opinions and approaches to RSE as possible. Finally, I familiarized myself with historical, political and scientific aspects of RSE production.

Reading a selection of articles from the newspapers of interest allowed me to become aware and knowledgeable about shifts in coverage my study participants might mention. For example, I noticed a large spike in coverage in 2006 that was later noted by a few interviewees. I was also able to get a sense of the way in which renewables were covered in the articles. For instance, it was at this stage that I noticed a tendency of many articles to mention renewables at the end of articles, but make little or no mention of them in the body of the article itself. These mentions are called "kickers." Also, I was able to get a sense of which renewable energy technologies reporters were including in the category "renewable," which is an important consideration in understanding portrayals of renewables in news and in contextualizing public opinion about renewables more generally. Ultimately, reading these articles facilitated the design of an initial interview guide that was more likely to elicit relevant information from my interviewees than would have been possible otherwise (Kvale 1996:126). Understanding journalists' own framings of RSE is also important because, as Lindlof and Taylor (2002:117) note, "...documents reflect certain kinds of organizational rationality at work. They often embody social rules—but not necessarily the reasoning behind the rules—that govern how members of a social collective should behave."

Second, I read RSE stakeholder websites. I identified these groups by their mention in articles, my own background knowledge of relevant groups, and through internet searches. This allowed me to get a sense of the breadth of the debates in RSE technology and policy, and helped alert me to sources or ideas that might be used in the articles or mentioned by interviewees. Further, in seeking a more thorough understanding of RSE, I followed Hertog and McLeod's (2001) recommendation that researchers not only read scholarly research on the given topic of analysis, but also familiarize themselves with the literature within their own culture generally,

the discourse of "ideologically divergent sources," as well as popular texts from outside of the home culture on the topic, in order to familiarize themselves with the fullest possible range of perspectives on their issue of concern.

Third, I sought out and kept notes on information about the historical, political, and technological milieus of RSE in the U.S. This information came from a number of sources, such as books, policy papers, academic research, and various websites, including those of RSE hardware manufacturers, and many websites of federal departments and agencies, such as the Department of Energy (DOE), the Energy Information Administration (EIA), and the National Renewable Energy Laboratory (NREL).

To understand these milieus further, I also kept notes and made a list of important events in the history of RSE production in the U.S. in these areas, specifically noting major shifts in policy, technology, or cultural discourses about RSE. This list included events from 1970—2010. I then printed out a longitudinal distribution of my article sample, separated by publication, and noted events from the event list on this separate timeline. This allowed me to visually ascertain the potential relationships between events and changes in article production volume. Examples of these events include policy debates (e.g. an upcoming "energy bill"), energy-relevant international conferences (such as the 2010 United Nations Climate Change Conference in Cancun, Mexico), the release of a film (such as *An Inconvenient Truth*), or a change in federal energy law (such as increased RSE subsidies).

Ultimately, preparing in these ways—reading articles and keeping track of stakeholders and of historical, policy, technical, and scientific information—allowed me to ask better, more nuanced questions of my interviewees, made it possible to design a more effective interview guide, and taught me which organizations, experts, events, and ideas to watch for in the news

articles and interviews. As I learned early on, journalists make sure to do their homework before calling experts for interviews. I wanted to be sure to do the same—not only to earn their respect, but also to be a more knowledgeable and effective interviewer.

DATA COLLECTION AND ANALYSIS

To answer my research questions, I have chosen to utilize a historically and critically informed constructionist media analysis called qualitative frame analysis (QFA), as well as indepth interviews. The research questions concern the creation of RSE news discourse, as manifested in the social and journalistic processes generative of RSE frames, the frames themselves, and the place of these frames in the recreation of dominant social relations. This section will describe the collection and analysis of data used to address these questions: interviews with reporters, news articles covering RSE, and stakeholder websites.

Reporter Interviews

I interviewed 23 reporters and former reporters for this project. They were able to provide information about the news production process and about how it has been changed by the Internet and the financial struggles the industry experienced in the 2000s. Because a constructionist approach requires the investigation of the details of social processes in order to understand and draw conclusions about the outcome of these processes, I needed to interview actors involved in newsmaking. As Berger and Luckmann (1966:116) note: "To understand the state of the socially constructed universe at any given time, or its change over time, one must understand the social organization that permits the definers to do their defining."

Data collection. To learn about the making of renewable energy news, I recruited journalists who had written on renewables in the past. Interviews were conducted from May to October, 2011. I recruited via snowball and purposive sampling, and was able to successfully

recruit 24 journalists for interviews, though I finished with 23 interviews for analysis. One interviewee withdrew consent, as he/she became uncomfortable with data being publically available in published form. Though I assured this interviewee of the anonymity and confidentiality of individual data, the interviewee remained unassuaged.

Because fewer than 37% of newspapers had dedicated environmental reporters (let alone energy reporters) as of 2005, snowball sampling was essential (Sachsman, et al. 2008:4-5). This sampling method can be effective when studying a "dispersed group of people who share certain practices or attributes" (Lindlof and Taylor 2002:124). The reality of shrinking numbers of dedicated environment reporters also led me to believe that a snowball sample would be necessary to recruit a viable sample of interviewees.

The snowball sample began with referrals from professors and colleagues inside and outside of the Department of Sociology at the University of Colorado at Boulder. This portion of the snowball sample initially resulted in four interviews. Initially, introductions were made via email by the mutual acquaintance. Once I had connected with the interviewee and the interview had been conducted, I asked each of the interviewees who else I might contact for my research. These suggestions did infrequently result in email introductions being made by the recommender, but in many cases, the recommender suggested that I email the potential interviewee myself, which I did in those cases. I would ask the recommender if it was acceptable to mention his or her name in my email to the new potential interviewee. If so, I mentioned it in the email, and if not, I did not. I also was able, via this snowball sample, to get in touch with a key informant. This person is not a journalist (I did not interview her/him), but is in contact with reporters. It is this person's job to contact reporters who cover energy issues and act as an advocate for renewable energy technologies. This informant was able to put me in touch with a

number of reporters who ended up becoming interviewees. I was able to successfully recruit eight interviewees this way. Many of these interviewees were in the Denver and Boulder area, and either worked at local and large metropolitan papers (or had done so in the past), or were national freelance journalists.

One of these interviewees gave me a list of journalists who cover energy and suggested I contact them. I made sure to vet this list of reporters by doing research to discover if they had written on renewables, which they all had. This list was quite helpful for me, and it also included some reporters on a list of the "top five" journalists writing on energy at each paper (based on their authorship of articles in my sample) that I had made as the basis for my purposive sample (discussed below). On the list provided by my interviewee, I emailed those who were listed as energy reporters, or whose names were in the "top five" list. I successfully recruited eight interviewees this way. The former list also contained a number of journalists who worked at newswire services (e.g. Reuters, The Associated Press) and whose names were not in my list of authors from the sample. I ended up interviewing three reporters (included in the eight) at newswires. This was helpful in an unanticipated way. Prior to my interviews, I did not have a full grasp of the importance of newswires in the contemporary political economy of newsmaking, which these interviewees discussed. These reporters also had insights into the increase in newsmaking speed that other interviewees described.

For the purposive portion of the sample, I contacted journalists via email whose articles appeared in my initial article sample (Reese and Lewis 2009). I chose the reporters who had written a large number of articles in my first sample, and entered their names in a spreadsheet, being careful to choose the "top five" of this categorization from each paper. I then began contacting these reporters to request interviews. However, I noticed shortly after I began doing

this that some journalists were responding to requests by notifying me that they did not cover renewables anymore. I then decided to investigate this fact for myself for the remaining members of my list who I had not yet contacted. I figured that this approach would weed out journalists who were likely to reject my request for an interview, and would save me time in recruitment. Once I had completed this process I began to email those reporters who had written on renewables at least once in the last three years for recruitment into the study. To recruit reporters, I sent up to three emails, with seven to ten days between emails. My purposive sample resulted in approximately six interviews, but this is inexact because there was overlap with those recruited from the list mentioned above. Most interviewees recruited in this way were interviewed over the phone.

Other journalists declined interviews because they were not comfortable with the amount of renewable energy work they had done, or had done recently. This only happened in a few instances, and often these rejections were very polite, and were accompanied by a recommendation about whom I should seek out instead. Even though these journalists fit my recruitment protocol (simply having written renewable stories in the past), I interpreted these refusals as reflecting both an unwillingness to be interviewed and the journalists' own selfperception as being unsuitable. Because of this, I politely thanked them for any referrals they provided (if applicable) and did not contact them again.

For those that did agree to be interviewed, I met those that lived within 100 miles of Denver face-to-face. All of these interviews were digitally recorded, and were conducted in public places of the interviewees' choosing. For those that did not live in the area, I typically interviewed them over the phone, and used a special adapter to record the interview. I was also able to schedule one face-to-face interview out of town. In total, 11 interviews were conducted

face-to-face, and 12 were conducted over the phone. Interviews took between 34 and 111 minutes, with an average of approximately 69 minutes. For face-to-face interviews, I had interviewees consent via a hard copy of the consent form that I brought with me (though I emailed the form to the interviewee prior to the interview, so they could read it beforehand and bring questions about it to the interview, if necessary). For those I interviewed on the phone, I emailed them a digital copy of the consent form, and either obtained a digital signature on the consent form, or received it via fax.

The development of my interview guide was informed by my research questions and scholarly work—primarily in sociology and media studies—as well as methodological literature regarding the design of successful interview questions. Once the guide was developed, I printed out a copy and took it with me to interviews. I did so for two primary reasons. First, because, as Lofland, et al. (2005:106-7) describe, doing so allows the interviewer to keep track of topics covered (and remaining), and to note key words and phrases. Also, I noted on the guide times on the digital recorder when these key words, phrases, or quotes came up, to facilitate locating these after the interview. Second, I wanted to demonstrate to interviewees that I was being diligent and focused during the interview. The value of this practice was based on my interpretation, derived from interviews, that the approach conveyed respect.

The format of the interviews was semi-structured. I began interviews with general questions, such as "[C]ould you tell me about your career as a journalist?" Questions like this allowed interviewees to reflect on their careers, and helped them become comfortable in the interview talking about themselves. As Lindlof and Taylor (2002:188-190) urge, I was also careful to manage my demeanor—to appear respectful, positive, and "eager to learn." In initial interviews, I learned that it was crucial that I appear well prepared; this not only helped to gain a

measure of respect from the interviewees (as this is recognized as a crucial element of interviewing to them), but it seemed to lead to more openness and comfort on their part in the interviews. Further, the information I learned during preparation also allowed me to ask more nuanced questions about their work, their approach to writing about RSE, and their knowledge about RSE more generally. Though this preparation was critical in facilitating high quality interviews, I was careful not to give interviewees the impression that I already knew the answers to my questions, so that they felt comfortable giving detailed answers. As interviews progressed, this became a dual identity that I needed to constantly monitor: the curious, naïve observer and the knowledgeable colleague.

I asked multiple types of questions, such as "follow up," "indirect," and "interpreting" questions during the interviews (Kvale 1996:133-135). This was primarily to get interviewees to expand on short answers, or to further pursue a topic they had mentioned. As I completed interviews, I added, changed, removed, and reordered questions to maximize my time with interviewees and the interviews flowed more smoothly and logically. This practice was based on what I learned in earlier interviewees' answers to my questions, and it helped minimize the degree to which I was flipping through the interview guide during the interview (which interrupted the continuity of the conversation).

Once interviews were complete, I reviewed my notes (taken on the interview guide). I made changes to the interview guide based on these notes, and also added relevant notes to memo files (as Word documents) I had created after the first interview. I kept two files of memos from these notes: one for "general interview memos," which contained my thoughts about interview strategy, potential lines of questioning to pursue, relationships to textual or stakeholder data, and other things I learned that might be more generally helpful, and one for "interviewee

memos," in which I covered things that were unique to each interview: key quotes, interesting insights, personal proclivities of note, or simple notes about the interview location.

I did all interview transcriptions myself. Lindlof and Taylor (2002) argue that doing your own transcriptions can be beneficial because you become familiar with your interviewees' speech patterns, habits, and relationships, and it gives you a chance to catch things you missed in the interview. I certainly found this to be true, as some interviewees gestured with their hands during their interviews to illustrate points, and I was able to recall and memo about this as I transcribed. Further, because of the low quality of some of the recordings, having done the interviews myself, I was able to recall the details of the interview and fill in some of the inaudible gaps.

To do the transcription, I imported the digital files of the recorded interviews into the software program *f5*. This program allows for text input directly into rich-text format (.rtf) format, which is what the qualitative data analysis software I used, *Atlas.ti*, requires. Once the importing was done, I used Dragon Dictate for voice transcription in *f5*. This software allowed me to complete the transcriptions more quickly than I could have by typing them. Further, because this program requires the researcher to speak the interview to transcribe it, it allowed me to relive the interviews in a more real sense, by recalling gestures and meanings of some terms in the argot of reporters, for example, and more succinctly, to actually speak the words my interviewees did—and thus, to "speak like a reporter."

For interviews conducted face-to-face in quiet spaces, transcription was comparatively fast, though when interviews were done face-to-face in louder places, it was cumbersome. The interviews done over the phone varied in terms of their comprehensibility, due to background noise on the interviewees' end or a problematic phone connection. These interviews were done

while the interviewees were in their offices, driving, or running errands, and I was at my home office—the only place I had good reception on my cellular phone, and a reasonable ability to avoid background noise. In places where I could not understand parts of the recordings during transcription, I noted this in the transcribed text. If I chose to use sections of interviews with questionable audio quality in the data chapters that follow, I was careful to listen to the selection multiple times to assure the transcription was accurate. Once the transcriptions were completed, I edited them for spelling and grammar, and then imported the .rtf files into *Atlas.ti* for analysis.

I have fully adhered the University of Colorado's IRB (Institutional Review Board) guidelines regarding informed consent and confidentiality. Anonymity was a concern for a few of the interviewees, so I have been careful to maintain data confidentiality in terms of storage, as well as in the write up of the data. I have also anonymized the quotes in these chapters by using descriptive phrases such "a former reporter at a large general-interest daily," and have removed details from quotes that I believe could compromise an interviewee's identity.

Data analysis. Once I had imported interview transcripts into *Atlas.ti*, I began coding the data for sources, themes, metaphors, and other patterns. The process of "initial coding" yielded 74 codes in 907 unique quotations (Charmaz 2001). Some codes were derived using "in vivo coding"—the "words of real people"—though most were not (Bernard 2000:444-445). I memoed continuously throughout the coding and analysis process, being careful to record ideas and interpretations of the codes and their relationships.

Atlas.ti software allows the user to memo within the program itself, as opposed to making freestanding memos outside the program. Because the program also enables the researcher to make schematic diagrams of code relationships as well, and can incorporate memos, memoing within the program allows the researcher to link memos to codes, other memos, and code

families. I made a diagram of the relationships in the data in this way, which changed as my analysis required.

Code families are groups of codes the researcher is able to make that define larger relationships. For example, I made a code family for "sources" to describe the various places from which journalists quoted and gathered information for articles. I made code families and diagrams as I began "focused coding," where codes were merged into code families, and commonalities across codes were noted. This allowed me to describe and analyze patterns in the data in more depth. At this stage, I was able to ask "more focused and analytic questions" of the data (Lofland et al. 2006:201). My coding at this stage reflected not only my theoretic commitments, but also additional insights that these commitments could not thoroughly account for.

To facilitate coding at this stage, I produced code outputs of each code that listed each instance of its "co-occurrence" with other codes. I read through these, and noted the patterns that existed within these codes, as well as making note of relationships I noticed between them and other codes or discursive patterns in the media data or stakeholder literature. Considering these code outputs, the patterns and relationships I noticed, the diagrams I had made, as well as considering the media data and the sociohistorical conditions under which news production has changed in the last two decades, I was able to organize and record trends and commonalities in data during focused coding.

Newspaper Articles

The news articles themselves represent an important outcome of the discursive process of making RSE news, as they are the material from which the public formulates perceptions about public issues. These data lend insight into the process of newsmaking and provide evidence for

the hypothesized relationships among news output and the social and discursive processes that also constitute RSE news discourse.

Data collection. I used news articles from five different U.S. newspapers: *USA Today*, *The Wall Street Journal, The New York Times, The Los Angeles Times,* and *The Washington Post*. I use *USA Today* because it has the largest readership of any paper in the U.S., and because it is a "nationally representative national news organization" (Reese 2010:29; Stephens, et al 2009). The other four papers were chosen first because they are ranked 2nd, 3rd, 4th, and 6th, respectively, in daily readership in the U.S. (5.15, 5.04, 2.39, 1.82 million, respectively; World Association of Newspapers 2006:II-471). The paper ranked 5th in readership, *The Daily News*, is a tabloid, a qualitatively different publication from the others, and is unsuitable for analysis in this project. Additionally, the five papers I analyzed are part of what McChesney (2000) calls the "prestige press." The content of these papers is also widely used by smaller local papers (Boykoff 2004; Boykoff and Boykoff 2007:5), which expands their readership.

I decided to begin the sample of articles one year before the Intergovernmental Panel on Climate Change's "Third Assessment Report" (IPCC3), which was issued on January 20, 2001, beginning the sample on January 1, 2000. IPCC3 was chosen because it is an example of what Carvalho (2005, 2007) calls "critical discourse moments" (Boykoff 2007b) because of its conclusions about the anthropogenic roots of climate change. Critical discourse moments are instances in culture in which dominant discourses change because of an influential event, or the emergence of new knowledge. Beginning the sample a year prior to this particular moment, the release of IPCC3, allowed for the assessment of this moment in the analysis. The sample runs through the end of 2010, the last full year of data available.

To retrieve the articles for this research, I used the *ProQuest* database. This is the only research database that allows access to all five papers from which I drew articles. Because "renewable energy" is an inexact term, a search for this term among the papers of interest and in the time frame specified would likely not capture all relevant articles that address renewable energy technologies and policies. At the urging of my dissertation committee, I expanded the search by including "alternative energy" with "renewable energy." At this stage, I did the searches for these terms using ProQuest's "citation and abstract" text delimitation. However, as I explored other terms to add to these search terms, I realized that I could not find a pattern in how the database was defining the articles' abstracts, and could not be sure that all qualifying articles (those that mention renewables) were being returned in the search. At this point, I decided to instead use the "document text" delimitation in the database to assure that articles with mentions of search terms anywhere in them were returned as results, so as to not exclude potentially meaningful articles. I then began testing a number of different combinations of search terms to find the combination that returned the highest proportion of articles that would pass my criteria for inclusion in the sample. Those criteria will be discussed below.

I tested random pages of search results in *ProQuest* (each page has 30 results) to find the proportion of qualifying articles. After numerous searches and tests, I decided that the following search would yield the best sample (about 50% of articles qualified for inclusion): renewable energy OR alternative energy OR renewable w/5 (electric* or energy) OR alternative w/5 electric* (The "*" character tells the database to return results with "electric" with any suffix, such as "electricity" or "electrical"). I used the temporal parameter 12/31/1999 - 12/31/2010, in the five newspapers of interest. This search yielded a population of 9,111 articles. These data are represented in figure 1.

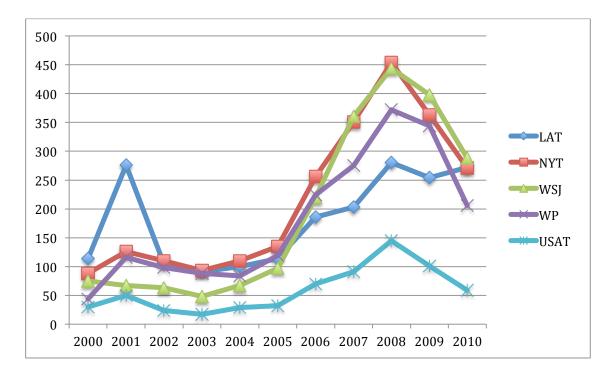


Figure 1: Article Population, by Year and Publication

I decided to seek a sample of one-sixth of the population, which was considered an accepted proportion in similar work (Boykoff and Boykoff 2004; Boykoff 2007a, 2007b). Because the pretests of the particular combination of search terms (described above) yielded 50% of the articles as acceptable, I decided to sample every third article. This resulted in a second sample being drawn to 3,034 articles, which I expected would yield a final sample of about (3,034 x .5) 1,517 results; one-sixth of the population of 9,111.

I printed out the list of 3,028 (six were missing for unknown reasons) articles and began reading through each one on *ProQuest* to determine if it should be included in my final sample. I used two criteria to make this judgment. First, the article had to discuss renewables in more than a cursory fashion (Bantimaroudis and Ban 2001; Wright and Reid 2011). Second, the article's discussion of RSE could not be focused on "biofuels," which were often referred to as "renewable" or "alternative" in the news (though these fuels were mentioned in many of the articles). This is important because biofuels are not only tied up in their own rhetorical, cultural,

and material histories, but also have separate lobbying networks and political dynamics on Capitol Hill. Including them might therefore cloud or disguise the framing and discursive assessment of RSE.

The process of article selection involved several steps. First, when the article was displayed in ProQuest, I executed a "find" in the browser window for "renew" (able) and "alter" (native), as well as any other words I saw that might have been related to RSE and the articles, such as "solar," "wind," or others. This search gave me a quick sense of the frequency and juxtaposition of mentions of RSE and was a good reference point for making decisions about whether or not to include the article in my sample. If this decision could not be readily made, I did so by making a "?" mark on my printed list of articles. If it did not qualify, I made a note about the nature of the exclusion by indicating which of the two criteria (or both) it did not meet ("C" [cursory] for violating criterion one, and "NE" [not electric] for those violating the second criterion). Because this article selection method is not straightforward, I kept memos on which articles would be included, and which were not included, so as to note patterns. Examples of articles that were excluded would be those in which RSE was only mentioned tangentially. In this evaluation process, I began to use two-sentence-long mentions of RSE as a rough proxy for articles that should be included (though this, of course, was not the only criterion). Finally, once I had read through all articles, I went back through my list and reread all articles marked with a "?" in order to re-evaluate their suitability for inclusion. Once this was complete, and all articles had been evaluated, I tallied the reasons for exclusion. The resultant descriptive statistics of this process are listed in table 1.

Exclusions	
Tangental Mentions	1713
Tangental/ Non-Electric	49
Non-Electric	145
Tangental/Unrelated to RSE	E 19
Unrelated	112
Missing	5
Duplicates ,	5
	335
	2048

Table 1: Number of Articles Excluded, by Cause

I included 980 articles in my sample, tallied them by month, and mapped this distribution on the graph of the second sample of 3,028 articles in blue, with the 980 in green, in Figure 2.

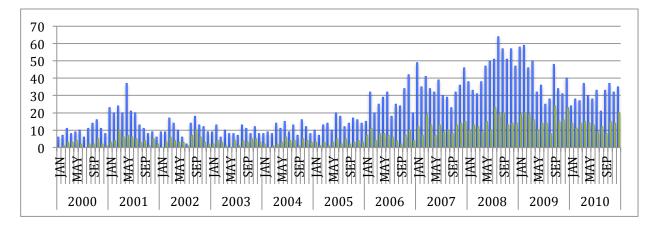


Figure 2: Article Sample Distribution

Though my final sample of 980 articles is significantly lower than the 1,517 that I was anticipating based on pretest results, I judged this to be acceptable because my research goals hinge on the overall patterns and relationships expressed in the data, and I judged frequency to be only a part of the overall narrative of RSE over the time period, and neither a valid nor comprehensive proxy itself for frame import.

Once the final article sample had been established, I went back into *ProQuest* and "checked" each of the 980 qualifying articles. Once 50 had been selected (the maximum allowed

in *ProQuest*), I emailed these results to myself, in full-text format. I then cut and pasted each 50article set into single Microsoft Word documents. There was a significant amount of extraneous data in these documents, such as the *ProQuest*-generated abstracts, headings, and document detail lists, so I cut this information out of the articles to ensure an accurate analysis. To facilitate use in *Atlas*.ti, I cut-and-pasted the pared-down articles individually into rich-text format (.rtf) documents, and imported them into the program. This resulted in 980 documents for analysis.

Data analysis. I chose to draw frames from these data qualitatively. This approach is vulnerable to the "ad hoc" critique discussed by Reese (2010). Proponents of this critique charge that frames drawn in this manner are idiosyncratic, and are less useful in uncovering broad cultural, political, or temporal patterns in frame occurrence, endurance, and deployment. However, an inductively derived frame cannot be excluded from consideration as potentially indicative of a general trend, especially if relationships between this frame and larger social dynamics are designed into the research and made clear in the analysis-both of which have been done in this project. Understanding these relationships is a focal point of this project, and this goal is manifested in the project's longitudinal design and discursive approach. Further, I use a qualitative approach for two reasons. First, relying on frames derived from prior research on the framing of renewables may be problematic because there is such a small amount of this research. Further, much of this research is focused only on the framing of wind power. The use of these frames could lead to invalid deductive analyses of RSE news frames. Second, I prioritized flexibility in my research design in the defining of frames, their interrelationships, and their change over time in order to more readily account for nuance and contextual and temporal shifts in their form. Though this is the case, I was careful to be systematic and thoughtful in the frame design process in order to further assure frame validity, as well as to establish a rubric

from which future framing research may draw; again, because as Koenig (2006) observed, methodological framing scholarship is scant. This process may be seen in figure 3.

My unit of analysis for the frames is the excerpt (which I define as a unit of text of variable length containing a cohesive idea), because, following Reese (2010:29), I conceptualize frames as "embedded across a body of discourse and speakers, rather than cleanly identified within a single article." This means that I did not examine each article for a fully formed frame. Rather, I assumed that frames are persistent and cohesive structures across time, and sought them out accordingly.

Once the articles were in *Atlas.ti*, I began initial (primary) coding. I coded these articles for content, specifically including events, themes, ideas, metaphors, sources, or any other patterns I noticed, while diagramming and memoing as I went. As I continued to code the articles and approached saturation, I began focused coding (Charmaz 2001), which "categorizes coded data based on thematic or conceptual similarity" (Saldana 2009:151). My initial list of codes derived during primary coding and initial focused coding contained 193 codes, representing 8,770 unique quotations. At this point, I made a "tag cloud" for my codes, which is simply a list of the codes, with each code name in a different font size, based on the number of times it was used in the data. For example, the "subsidies" code was the largest, and other primary codes were also large, including "RPS/RES" (Renewable Portfolio Standard/Renewable Energy Standard) and "enviro/energy groups," owing to the high degree to which I coded them. The tag cloud allowed me to see, very quickly, which codes might be relevant.

In order to help uncover and clarify relationships in the data, I then examined the codes and their content for patterns. I created a list of codes within *Atlas.ti*, wherein each code had a list underneath it—ranked by number of occurrences—of proximate codes (as I operationalized it

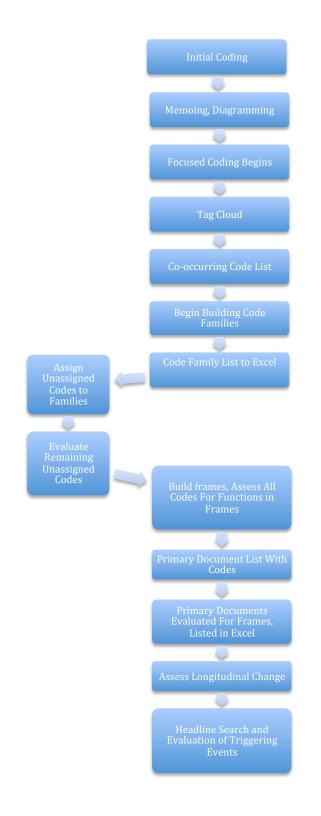


Figure 3: The Frame Design Process

within the program, to codes proximate within four paragraphs). I did this for the top 80 most numerous codes, though only the top 50 or so had more than one or two frequently proximate codes. Using this list as a guide, I was able to group codes loosely into different themes and ideas (Reese 2010) by creating "code families" in *Atlas.ti*.

I continued focused coding and both combined and broke apart codes, as needed. This process resulted in the addition of 30 codes. I added these codes to code families, as appropriate, which allowed me to create the more conceptually cohesive code families—"Frame_Energy Security," for example—that eventually became frames. Through this process, in conjunction with the examination of my codes' quotations, conceptual diagrams, memos, and the event and article timeline, patterns emerged in the data, and I was able to make valid groupings of codes.

To help keep track of the code families, I exported the code list from *Atlas.ti* to Excel, and noted next to each code which of the code families it was assigned to. For those codes that were unassigned, I examined quotations and memos assigned to it, assessed which code family it would be a part of, if any, and assigned codes to them as necessary. I then examined the codes that remained unassigned, looking for patterns within them. I did not find patterns in these codes, which were generally assigned to a small number of quotations. Once I had finished this process, I ended up with a comprehensive list of relevant codes for each code family. This allowed me to see the relative makeup and conceptual breadth of each of them, as well as potential linkages among them, in terms of the codes they contained. Code families identified at this stage formed the building blocks of the frames.

As I finished assembling the code families, I was also diagramming and organizing the codes in terms of their function in the frame: whether they were frame keywords, framing devices, reasoning devices, or if they represented a cultural or historical narrative that would bear

on the frames. In terms of the latter function, I looked for codes that represented things such as historic and structural *mechanisms* (such as fossil fuel dependence, media centralization, economic and political inequality, or consumer society), "enduring values" (Gans 1980), cultural influences (e.g. Scarce's [2000] "macroconstructions"), relationships to other environmental issues (such as climate change; see Stephens et al [2009]), and media processes (see Entman [1989] and Boykoff and Boykoff [2007]).

This process resulted in the construction of the four frames: energy security, policy and politics, feasibility, and funding. As I continued to both specify and elaborate on the frames, I used another tool within *Atlas.ti* to help me understand the longitudinal relevance of the frames. This tool listed all of my PDs (primary documents—the news articles), and the codes I applied in each of them. Using this in conjunction with the list of each frame's constituent codes helped me see how frequently codes were used and to identify patterns in co-occurring code use (for which I also had output from *Atlas.ti*), that might also hint at the structure of, and temporal shifts in, the frames. For the time period 2000-2005, I selected every other article on this list, because of the neadline, lede, and nut grafs in order to ascertain which frames (or frame elements) were present in each article, and noted this in the margin. I used this same procedure for the remaining years, but sampling every third article, due to the higher volume of articles in those years. Once this process was done, I entered the results into a list in Excel in order to more easily discern temporal, and other, patterns.

Finally, with these results in mind, I noted potential triggering events on the event and article timeline. These events were explicitly indicated in the data, in relevant literature, and in conclusions I made based on relationships I noticed in the data. More specifically, I looked for

shifts in frames and their structure and for relationships between those shifts and the timeline of events. At this point, I also recorded the number of stories in my sample that were front-page stories by searching for "A1" and "A.1" in *Atlas.ti*. I assumed these stories were potentially indicative of some triggering event. I found 41 of these stories, and used them to help locate and describe shifts in the discourse.

Stakeholder Documents

To understand the context in which RSE frames are produced I analyzed stakeholder documents. These documents were primarily websites of organizations I deemed would have a reasonable interest in, or effect on, or to be affected by RSE technology and policy. I compiled a list of these stakeholders, which included renewable energy companies, fossil fuel companies, government organizations, environmental NGOs, and both left and right-leaning think tanks. Examples of these organizations are AWEA (The American Wind Energy Association), Vestas, British Petroleum, The Heritage Foundation, and The White House. I derived this list prior to, during, and after gathering the other forms of data by reading prior research, news articles, government documents, and by searching the internet. As I learned of additional groups and people through interviews and article analysis, I added these groups to the list. This portion of the analysis allowed me to establish linkages between sources, stakeholders, and article content.

Data collection. To gather these data, I typed "renewable energy think tanks" into Google and clicked through links and referenced material. I did this for government organizations as well, using "renewable energy policy," and also went directly to stakeholding government agencies at federal, state, and local levels. For information about corporate stakeholders, I started with searches for petroleum and coal companies and companies that are involved in the renewable industry. Through these searches, I was able to make an extensive list of stakeholders.

I then investigated the websites of each organization on the list, by searching for their websites with Google using their names in combination with "renewable energy" (or simply visiting their sites and searching for renewables there), and memoed about their portrayals of renewable energy. As the research progressed, I also noted and investigated websites of organizations I discovered in the article and interview data.

Data analysis. Using these websites, I looked for patterns in messaging across stakeholders, the degree to which stakeholders were used as news sources in articles, the degree to which their messages were being used in articles, and the nature of this usage. More specifically, this involved seeking out and noting similarities in the use of metaphors, themes, and frames on these websites that I was concurrently seeking out in the articles themselves. I did not discover any significant discrepancies between any stakeholder websites and their associated quotes or attributions in the articles. Further, I did not deem the use of Atlas.ti necessary for this portion of the analysis because of the small volume of renewable energy information on these websites. For the most part, renewable energy is a tangential issue on the majority of these websites—though there was more information on renewable energy technology manufacturer's websites. While these data informed my assessment of RSE discourse, they could not be taken as permanent positions on topics because they are cross-sectional in nature and ended up being only marginally informative. This being so, I found it more appropriate to ascertain a stakeholder's interpretation of an event or issue by finding and interpreting this position within the article and interview data.

CONCLUSION: WHAT DO THESE DATA TELL US?

Taken together, the news articles, stakeholder documents, and reporter interviews allowed me to examine the issue of RSE news discourse thoroughly and holistically, as

constructionist and discursive approaches require. Through the process of interviewing reporters, I gained insight into the details of the discursive and social processes (Richardson 2007) in which RSE news frames are collectively formulated as a discourse. Reviewing stakeholder documents and analyzing news articles allowed me to speak in more detail about the specific characteristics of these frames, and to locate points in the texts at which to formulate causal connections to the formative discursive and social processes under which RSE news is made.

In the following chapters, I explore the newsmaking process—covering first the social processes that have affected newsmaking in general in the next chapter. There, I describe how environmental reporters have made sense of changes in the industry, especially as these changes have altered the newsmaking environment. The subsequent chapter deals in more detail with the discursive processes of newsmaking, such as story selection and source use, as conditioned in many ways by the social processes. Finally, chapter five describes the output of these processes, as RSE frames, and endeavors to establish the cohesive nature of these three facets of RSE news discourse.

CHAPTER 3

THE CHANGING ECOLOGY OF NEWSMAKING: SOCIAL PROCESSES

In the last 15 years, newsrooms across the country have strained under the pressure created by the emergence of a number of sociocultural factors—economic, cultural, and technical in origin. The way reporters work and how news is delivered has changed dramatically in this time, but as the responses to these shifts continue, much of the character of the newsroom remains unchanged. Newsrooms are still bustling with activity. There are still deadlines, there is still competition for the front page among reporters, there are still overworked editors, and there is still very good reporting coming out of these papers. So, the analysis that follows in this chapter, as in the subsequent data chapters, uses this tension between stability and change in news and newsrooms as a conceptual starting point in describing the construction and character of RSE news frames. Shifts in macrosocial processes have driven changes in newsmaking processes, norms, and milieus that reporters must negotiate in terms of traditional newsmaking, and these changes in turn have affected news output itself.

Though I did not fully utilize critical discourse analysis as an analytic framework, I have used Richardson's (2007; from Fairclough 2003) basic logic for conceptualizing discourse research in order to organize the analysis of these trends in the three empirical chapters. Richardson's framework consists of three elements (social processes, discursive processes, and material output), and resembles the organization of some of the seminal sociological research in newsrooms (Gans 1980; Gitlin 1980).

To begin, this data chapter will describe the effects of the changes in the social processes involved in making news, the following chapter will cover the subsequent shifts in the discursive processes that influence news production, and the final data chapter will describe the resultant

RSE news frames as discourse. In this chapter, more specifically, I describe how shifts in the news's formative socioeconomic, technical, and cultural processes have generally shaped the work of reporters, from the perspective of the reporters themselves. Taken together, the effects of these shifts produce a newsmaking environment that generally requires fewer reporters to produce more stories, faster, in less space, and in new forms. This environment facilitates the potential concentration and expansion of ideological power in news discourse: there are fewer newsmakers, and an increasing—and potentially unlimited—audience. While the nascent discursive territories provide new opportunities for hegemonic domination, they supply the opportunity for resistance as well.

A successful hegemony relies upon the translation, or at least the explication, of elite discourses into various sectors of culture (Gramsci 1985). These discourses contain the ideas that legitimate the existence of the elite itself, and perpetuate the conditions for their survival as a class. Althusser (1972) discussed the institutions wherein this cultural hegemony was recreated as ideological state apparatuses (ISAs), as ideology is the primary way of conceptualizing these dominant patterns of thought. The media is one of these ISAs, but critics of this approach describe Althusser's particular theorization as rather mechanical and deterministic. Laclau and Mouffe's (1985) "post-Marxist" approach to hegemony adapts Gramsci's conceptualization by removing it from its grounding in strictly class-based subjectivities and relationships, and introduces flexibility to his rather monolithic approach. In their formulation, hegemony is a dynamic relationship, manifesting in the multiplying political and cultural spaces that have come to be described as characteristic of the "postmodern." I identify newsmaking as one of these spaces, wherein hegemony may be translated into cultural forms, but where the domination existent within news is contested and dynamic; as Fairclough (1992:47) observes, "media

discourse should be regarded as the site of complex and often contradictory processes, including ideological processes." This approach to news as a fluid, contested space relies as well on Foucault's ideas regarding the expansion of discursive spaces (infused with power) as potential locations of emergent forms of resistance. Considering this approach, I define hegemonic news as that news which is beneficial to hegemonic groups and institutions in the energy sector: fossil fuel companies and organization, politicians reliant upon campaign funding from these groups, various investors in fossil fuels, and the other various groups that make up the political-economic substructure of fossil fuel use and development. More specifically, hegemonic news reproduces and facilitates the political, economic, and sociocultural conditions that necessitate fossil fuel dependence in two primary ways: first, in the systematic exclusion of information on energy sources that may challenge fossil fuels; or, secondly, in the systematic misrepresentation of these energy sources. In the case of this research, these sources are those that generate RSE.

Collectively, the three types of trends have increased time pressures and workloads on reporters. The burden that the increased workload produces for reporters is lessened in some ways by the technological advances that helped create it. For example, the increased accessibility of information has reduced the time it takes to write stories, and has increased the stories' "factual density," though these stories are decreasing in length. Further, the increased use of newswire stories has allowed editors to reduce the impact of the increased workload on individual reporters. In short, the effects of these changes are varied in occurrence, degree, and effect. However, the general argument of this chapter is that the shrinking of the industry and the move toward internet news has generally produced an environment that is more amenable to exploitation by those in positions of power within the media sphere—owners, editors, reporters,

sources, etc.—but these conditions have also produced locations wherein the potential for increased news quality, non-elite stakeholder access, and reporter agency may exist.

To begin, this chapter will describe the reporters that write on renewables themselves. They are hardworking, dedicated public servants that are functionally the same type of reporters as any others. These traits not only facilitate the production of news, but allow news organizations to better adapt to the macrosocial shifts that are squeezing their budgets and changing the news they produce. The chapter then describes the primary effects the shifts have had on the newsmaking environment. Shifts in the economics of newsmaking have forced many publications to reduce staff, increase the workload on remaining staff, and reduce the size of their publications. Technological advances have increased the "speed" of news, the accessibility of information, and competition within the industry, while forcing many organizations and reporters to integrate social networks and multimedia technologies into their news. Finally, cultural change has shifted expectations for news and its production. Stories are often shorter, shallower, and have brought about an ethical dilemma in news that forces editors and reporters to evaluate stories in terms of their commercial value as well as their newsworthiness.

Cumulatively, the various responses to these macrosocial shifts exacerbate pre-existing time and space pressure in newsmaking. This intensification is a primary hub through which the macrosocial changes have affected the newsmaking process itself and the normative definition of news that underlies it (both covered in Chapter 4), as well as the resultant RSE frames (covered in Chapter 5). Ultimately, the frames are a result of a hegemonic discursive process that homogenizes content and functionally marginalizes non-elite sources, but which also takes advantage of the people that make the news itself.

THE REPORTERS

Though I interviewed a variety of reporters—those currently at small/medium general interest dailies, at large general interest dailies, former reporters and editors, and freelance journalists (or some combination thereof)—I noticed a trend among them in terms of demeanor and habits. Like Reese (2010:35), I found them to be "thoughtful and often self-critical interviewees," and energetic, intelligent, articulate, adroit multitaskers, who are dedicated to being responsible purveyors of information. These traits—dedication, hard work, and multitasking—have value for the organization. They make the organization itself more flexible in trying financial times by forcing reporters to absorb the workload of others that have been laid off, while not causing a drop-off in quality noticeable to the general public. Further, the ability of reporters to multitask is beneficial to news organizations in that this flexibility allows the organizations to place reporters where they are needed for a particular news day, but also, because fewer reporters are essential for their beats, they may be replaced with decreased detriment to the organizations.

The Value of Dedication

Reporters are deeply motivated by the public service function embedded in their work. As Yang (2004) found, they are dedicated public servants, working hard to provide the public with what information they decide the public needs. An energy reporter at a newswire described his motivation this way:

I believe that transparency and real information is one of the basic building blocks of democracy, and I think the more information and better information people get, the better they are to make their own decisions...The better information that's out there, the better the rational decision making that can go on behind it, leading to a better world. This reporter's approach to journalism is reflected in the normative definition of news used by journalists. Specifically, this reporter is explaining what an "important" story is: one that will inform the public in a way that will facilitate democratic decision-making. As in many aspects of the newsmaking process, the normative definition of news is fundamental to how reporters conceive of themselves and of a completed story, and they will work hard to ensure the stories meet their standards for quality. The ethic described above was quite common in interviews, and importantly, serves as a bulwark to a newsmaking system that is moving into territory that increasingly exposes its potential as a tool of power by increasing the workload of reporters and increasing the influence of commercial interests in story selection—both of which have varied negative effects on news quality, breadth, and depth.

The Value of Hard Work

Reporters are highly motivated. Most work 10-hour days, and many are on their email working from home before heading into the office. They are typically available during the weekend, if necessary, for breaking news reporting, interviewing sources, and other things they can do easily from home. These long hours are a result of downsizing to some degree, as many reporters absorb the work of those who have been laid off. It is also a result of the advance of technology—particularly smart devices—and the concomitant advances in accessibility, but also is due to increased expectations of immediacy in news. Reporters have been able to deal with this increase in speed because they are people who are able, by necessity and selection, to deal constructively with the time pressure and competition built into reporting. One reporter explained that

journalism is a high-pressure profession, so you don't get into it unless you are a personality who is kind of mildly type A, and a little bit competitive. So, you just kind of carry that pressure around with you all day long. I haven't met a lot of people in this profession who are not just naturally driven people anyway. You

wouldn't survive long if you weren't—especially in newspaper and online news. That time pressure is there—it's just kind of built into the DNA of what we do.

This illustrates that the construction of journalism as a profession that requires "drive," and this trait works to the advantage of news organizations. By creating high pressure work environments, news organizations select out those reporters who cannot keep up, and who are less likely to be able to absorb the increasing workload the organizations themselves are placing on those reporters who are able to successfully produce news in an increasingly dynamic, high-stress work environment.

The Value of Interchangeability

Though many of my interviewees are long-time environmental reporters, relatively few of them "grew up" on environment or energy beats. There is a fair amount of mobility in their careers, in terms of topics and beats covered. As a former long-time LGID reporter told me, "I covered a hundred things before I came to cover this [environment beat] and I believe I bring the same habits, good or bad, to covering renewable energy as I did to technology, as I did to politics." For this reason, I did not find it necessary to differentiate energy and environment reporters from other reporters, and also because most weren't able to choose these beats. Sachsman, et al. (2008) describe this as well, ascribing the similarity between journalists and environment reporters in the U.S to shared training and education. While this may be true, this flexibility allows news organizations to move reporters in and out of beats as needed, making individual reporters less valuable. Further, this dynamism could negatively affect the quality of reporting by reducing the amount of time a reporter has to learn the important background and sources on a beat. However, because the most hardworking and dedicated reporters are selected into employment, they quickly become functionally competent on unfamiliar beats. In this way, the news organizations are able to hedge their employment losses by taking advantage of the

traits of the remaining workforce. And though the stories get written, the end result of this relationship is a news product less likely to be of service to the public due to a potential increase in simple, inaccurate, incomplete, or elite-focused reporting. This is one location at which the tension between stability and change in newsmaking manifests itself as potentially hegemonic in the increased potential for the compromising of the journalistic ethos as a response to increased workloads—and it was expressed by virtually every reporter I talked to.

MACROSOCIAL SHIFTS

While these larger social changes are well documented, as are environment reporters' perceptions of them in quantitative research (Gainnoulis, et al. 2010; Sachsman, et al. 2008), less research addresses reporters' qualitative perceptions of the ways these trends affect their lived workday. In this section, I split these effects into three groups: those arising from economic changes in the industry, those related to technological advances in communication hardware and software, and those resulting from cultural change in the U.S. Concerning the former, newsroom staffs have shrunk, reporter workrates have increased, and available news print space has declined. Concerning technology, reporters discussed the continuous news cycle, the increased ability to find information and sources, increased competition, and the increased need to learn new software and media platforms. In terms of cultural change, the primary effect has been the shift in the length and depth of stories, and the tension this brings about with their ethical duty to produce publically valuable news.

Though these three general trends have varied effects in the newsroom, often these effects are inextricably linked. The degree to which news organizations and reporters are able to deal with the effects of technological and cultural change in the newsroom is in large part a function of how emergent budget constraints have been handled at each particular organization.

Often the responses to changing conditions have resulted in the exacerbation of problems based in the time and space constraints already characteristic of newsmaking, which are traditionally embedded with hegemonic potential.

The Effects of Economic Change on Newsmaking

Within the larger sociocultural environment of postmodernity and the technological revolution, represented in part by the increasing social and cultural relevance of the Internet, two related social processes have been taking place in journalism that have negatively affected publications' revenue streams. The first of these was the rise of Craigslist specifically, and online commerce generally. Craigslist, an online space for classified advertising, began its expansion from the San Francisco bay area in 2000, and it began to offer services first to Boston in June of that year. It has since expanded to 700 sites in 70 countries (Craigslist 2009). Because of this, according to some reporters, classified advertising revenues dropped sharply at papers across the country (at the same time display advertising revenues were also doing so). Classified advertising and national advertising dropped 42% and 45%, respectively, in that same period (Newspaper Association of America 2012a). Second, online news began to grow as well, and, importantly, a vast proportion of it was (and continues to be) free, precipitating a 21% drop in hard publication circulation between 2000 and 2009 (Newspaper Association of America 2012b).

These two processes have had a substantial negative on newspapers. With the two primary means of generating revenue (advertising and subscriptions) decreasing steadily, newspapers also were forced to deal with a third related trend, that of the "great recession," which began in late 2007 and forced some news outlets to tighten their belts further. These trends, cumulatively, drove a number of my interviewees from their jobs.

News organizations had two general responses to the decreased revenues caused by the three trends above: publication closures and layoffs, and reducing the size of their publications. The budget cuts at large papers included the closing of *The Rocky Mountain News* in Denver, large layoffs at *The New York Times*, as well as a series of layoffs at *The Los Angeles Times*. During various spells of layoffs at the latter *Times*, they lost, among others, environment writers Marla Cone and Judy Pasternak and editor Frank Clifford to contract buyouts. The paper has continued to shed staff, as longtime environment reporter Margot Roosevelt was laid off, along with a number of other longtime staff, in July 2011. Citing a *Columbia Journalism Review* study, a Congressional Research Service Report noted, as of 2009, a "total reduction in daily newsroom staffing of more than 25% from the recent 2001 peak of 56,400" (Kirchoff 2010:5).

The effects of budget cuts in newsrooms were felt in three ways: staff reductions, increased workrates, and smaller print "news holes"—the best stories to fill the publication. Staff reductions themselves are constraining to reporters simply because there are fewer people to cover the stories of the day. More specifically, there has been a marked decrease in staffing for both bureaus and specialty beats, such as the environment beat. In general, this has meant that the remaining reporters have a heavier workload. The effect of this increased workload on reporters, however, has been muted somewhat by a shrinking print news hole. This shrinking is primarily due to the shrinking of the physical size of the paper itself—a typical cost-cutting measure. However, a shrinking news hole does not always mean less work for reporters; most are producing stories for their publication's website as well. More specifically, the persistent and drastic staff decreases often mean fewer environment reporters and a smaller environment news hole because reporters are tasked with reporting on higher priority topics.

Reduced staff and fewer environmental beat reporters. Severe staff reductions have forced newspapers to combine beats and sections, close bureaus, and reduce coverage of some "non-essential" topics. It has also forced remaining staff to increase their output to some degree. A reporter at a SMGID (Small or Medium Sized General Interest Daily) noted the following about the effects of staff reductions on her/his workload "When I came on we used to have a fulltime science writer, and a full-time county government writer, and then I replaced two people and became one person." RSE stories may get covered from a variety of other, nonenvironmental beats. As this reporter indicated, one beat that RSE stories often came from, the science beat, was combined with another beat. This is a common trend in news, and it has clearly reduced the amount of RSE coverage.

Some environmental reporters have been forced out of the industry altogether, while others have moved to different news organizations or beats. The reduction in staff has been felt acutely at some papers on the environment and energy beats, and on other less essential beats. Sachsman, et al. (2008) found that papers in the mountain west, Pacific west, and northeast were more likely to have environment reporters, and that larger papers were more likely to have specialist reporters (also see Shoemaker and Reese 1996). However, even the largest and most financially secure American papers have had problems keeping environment reporters, so the effects of size and geographic effects has undoubtedly been muted by the severity and ubiquity of damaging budget cuts. As a reporter at a PPLGID (Prestige Press LGID) told me, of the relationship between environment beats and news budgets:

There are fewer major newspapers, the newspapers that are still around don't have the same money they used to have, and so while its not that people don't cover this, there's just not as much money for the staffing as there used to be.

Budget cuts drastically reduced the number of environment reporters at many publications. Importantly, however, the number of articles in my article sample increased steadily from 2000-2008. So, while this quantity was increasing, the number of environment reporters was declining. This means non-specialist reporters were covering an increasing proportion of environment stories on non-environment beats. As reporters told me, a lack of experience on a beat may mean that a reporter will have less detailed knowledge of the pertinent sources and background information of that beat, and a lesser ability to detect events worthy of coverage; in short, coverage would suffer (Boykoff and Mansfield 2008). Causal linkages such as these will be explored further in Chapter 4.

Though few interviewees spoke explicitly about the potential effects of non-specialist reporters reporting stories once done by specialists, many spoke about the value of experience on a beat. To get good information and good stories, an environment reporter needs to develop a "source base"—a set of sources that are reliable and have inside knowledge of a particular field. The benefits of having a good source base are numerous, but building this base takes time. Wilson (2000) found that accurate climate reporting was more likely if reporters were specialists, and had scientific sources, and that "[T]he misunderstanding of the scientific debate [of climate change] is exacerbated by many reporters' inaccurate understanding and use of correct terminology" (Wilson 2000:11). Because renewable energy is often highly complex, experience and sourcing are just as vital. The loss of environment and energy reporters is recognized across this community, and its effects are conceived of as detrimental to environment coverage, as discussed in similar research (Sachsman, et al. 2010; Friedman 1999).

Increased workrate. The primary effect of this reduction in staff across the industry has been the increased workrate for the remaining reporters, which can lead to a decrease in news quality. Further, because the news cycle (the time between publications) is continuous, there is pressure to produce news around the clock, and to produce it quickly. With internet news, a story can break at any time, so reporters are under pressure to get copy out quickly on a breaking story. As one veteran reporter told me regarding this continuous cycle, "almost everything is old within hours rather than days." So, not only are there fewer reporters to cover news holes, often they must work to do it more quickly than in the past. However, because the particular traits reporters typically have and because some news holes have shrunk, the effects of these combined effects are muted at some publications (often the larger ones). This reporter contends that the muting of the effects of downsizing will likely continue because of a more "tech-savvy," ambitious cohort of reporters:

So while I would say, yes, I would imagine that any reporter is probably expected, either explicitly or implicitly, to be writing more than they were 10 years ago, I don't think that it's become, at least in my experience, its become problematic, in that the work is suffering. I think a lot of the younger folks who came up in this, in the Internet world, and were raised on internet journalism creation and consumption, they just kind of live and breathe it in a way...they like to write, they like to write a lot, they're very hungry, they're busy, and they just have a very fast metabolism. They're much better multitaskers, I would say.

If this is true, then there may be an increase in news quality as the older, less "tech-savvy" generation of reporters begins to retire. This process of cohort replacement, coincidentally, may be sped along because of tightening budgets and more veteran reporter contract buyouts. This could mean that as organizations continue to tighten budgets, and younger reporters replace older reporters, the effect of shrinking budgets and increased workrates may be less troublesome, or even noticeable to the workforce, and thus, less likely to be resisted by reporters. In this way,

publications would be able to resist the negative economic effects of macrosocial change, as they have purposefully done by shrinking their publications, and would be able to take further advantage of their workforce and exacerbate existent problems caused by time constraints. These problems include the increased use of newswires, less editing of stories, fewer sources in stories, and less background information in those stories—all of which have variable effects on news quality, depth, and breadth.

Shrinking news holes. While budget cuts have caused news organizations to reduce staff, it has also forced them to make their publications smaller. The coverage used to be broader, and the papers themselves were actually larger in size. The *Los Angeles Times* was reduced from 12 inches to 11 (though a new section was added) in February 2010. As a veteran at a PPLGID, who has been a reporter since the 1980s, said of this loss of space:

The space has gotten smaller. The paper used to be fatter. There used to be more pages in the newspaper, and each page used to be larger. The dimensions of the paper, if you get out a tape measure, have shrunk. It's shorter and narrower than it used to be... we are trimming half an inch here half an inch there, and making money...saving money. We're not making money these days.

The reduction in the size of the paper brought about by budget constraints has reduced both the depth and breadth of print news coverage. So, not only are there fewer stories, the remaining stories are shorter. As previously noted, this shrinking reduced the stress on the remaining staff somewhat, but coverage has undoubtedly suffered as a result of this change. In shorter stories, there is pressure to reduce the number of sources and background information to save space, and in these cases, hegemonic messages are more likely to be transmitted. This is the case because news is typically defined by its inclusion of official sources, and any additional background information or sources that might challenge the views of official sources are limited by space constraints.

The reduction of environment reporters and the closing of many environment desks have predictably reduced the number of stories driven by overtly environmental news emerging from news organizations. This reduction characterizes the shrinking of the environment news hole, and while there was a significant increase in the volume in RSE stories beginning in 2006, this is undoubtedly tied directly to the emergence of climate change as a salient public policy issue. In this case, RSE stories emerged from a variety of desks as climate change and RSE became an increasingly relevant part of mass culture. Due to the economic pressures in the newsroom, these stories were shorter and less thorough than RSE stories prior to this time.

The Effects of Cultural Change on Newsmaking

Reporters see one major trend in the production of news that is related to cultural change associated with postmodernity, specifically those associated with time-space compression, decentering, and the increasing relevance of consumer culture: that shorter, shallower stories are increasingly appealing to the general public. To some reporters, this trend toward shallow storytelling and coverage has its roots in the commercial interests of struggling newspapers. Reporters see a growing tension between needing to draw readers to websites and producing stories that are necessary for the proper functioning of public spheres in a "free," democratic society (Fischer 2003b).

News organizations are now faced with a conundrum: how to balance important, traditional "news" coverage with the coverage driven by commercial interest. More exactly, now that traffic to news websites is being driven in a significant way by relatively superfluous stories—as indicated by reporters, news organizations, editors, and reporters are presented with choices that conflict with the journalistic ethic of providing news that the reading public purportedly needs. As access to information increases and more stories become potentially

available, the role of reporters as gatekeepers becomes increasingly important. According to Dispensa and Brulle (2003), 75% percent of potential stories are weeded out by reporters. This number is now likely higher because of the closing of so many papers without the concomitant reduction in sources and organizations seeking coverage. Considering this, along with tighter budgets, the shrinking news hole, increased speed of news production, and the normative definition of news used by journalists that defines news in part by its linkage to official sources (such as government officials and corporate elites), one would expect an increased proportion of news from official sources, and an increase in superficial stories. One SMGID reporter discusses how this dilemma, regarding the type of stories a reporter should pursue, manifests itself on a given workday:

An individual story might have pros and cons and all this stuff, but what gets coverage and what doesn't, and should coverage be driven by how many clicks it gets on the internet or not? Because if you write a story about a dog that can do a backflip, that is going to get more hits than anything else on that webpage, even if you're writing about something that's really important to the community, like childhood obesity.

As discussed above, the commercial interest of providing stories that draw people to a newspaper's website can conflict with the responsibility reporters feel to provide the most important information to the public. Further, the conflict between "news that sells" and "important news" is felt by some reporters in terms of their daily routines being affected by the commercial interests of the paper, specifically in the knowledge that those above them in the hierarchy are bound, in their work, to respect and pursue stories that "sell." One former editor at a LGID shed more light on how the trend of news being increasingly driven by commercial interests, and toward superficiality and conflict might affect coverage, in a connection he sees between journalistic practice, coverage, and larger cultural trends:

Because I think journalists often weight things in a way that gives more weight to

things than they deserve because it's controversy. For example in climate change stories, they always find the outlier too quick, and the outlier is quoted in a way that gives the outlier as much credence as the body of science on the other side. And I think there is the sort of titillation factor—the Anthony Wiener story for example of recent note—it gets far more play than it deserves and has no fundamental effect on the course of the nation.

This editor's take on this trend is certainly cynical, but it describes an example wherein the increased ubiquity of consumer culture signification was exploited by news organizations desperate to keep their heads above water in trying financial times, and this signification found its way into journalistic routines. As an example of this trend, this interviewee identifies the privileging of conflict in stories involving climate change, and this trend was also borne out in the article data, as seen in this excerpt from *The Los Angeles Times* from a December 2009 article:

As world leaders haggled to forge an international climate agreement this week in Copenhagen, the Los Angeles City Council was wresting with the consequences of plopping a mammoth city solar farm near Lone Pine. The proposed Northern California solar facility is critical to Los Angeles Mayor Antonio Villaraigosa's effort to wean the city off coal-fired power plants, but only if the project can survive a series of political cage matches with the council, environmental activists, state regulators and customers (Willon 2009).

This excerpt is representative of the primary way climate change was covered in terms of policy discussions. It was sensationalized in a way as to highlight conflict and play up the disputes in the deployment of a solar farm. Once the trend that leads to coverage like this is recreated and reified in the everyday routine of journalists, it becomes more influential, normalized, and damaging to the both the production of publicly beneficial news and the ethic that motivates reporters to produce it. Though technological innovation has allowed reporters to make more factually dense, multimedia news presentations, time and space constraints and changing cultural expectations about what news should be have muted the potential benefits of technological innovation.

The Effect of Technological Change on Newsmaking

Changes felt by reporters in their workday are often not simply matters of tightened budgets and cultural shifts. Technological changes, such as the advent of the Internet and various multimedia and social networking platforms have also drastically affected their work and how they perceive it. More specifically, these changes have forced newspapers to provide additional content in their news (such as video) and to produce news around the clock—the "continuous news cycle"—because the required information is highly accessible and readers demand it. The former development has forced many reporters to become fluent with new technology and software platforms, while the latter has increased pre-existing competitive pressures in newsmaking.

Fast news. The speed and accessibility of information on the Internet has ushered in a news cycle that requires around the clock news production. Before the Internet, there was a single deadline at most papers, and perhaps second and third deadlines for additional editions during the day. This has changed somewhat. For the organizations that produce print products, many of these old deadlines still exist, and they are often in the afternoon. At some organizations however, there are also deadlines for web posting, as internet news readership tends to spike in the morning, and around lunchtime, as noted by reporters. While some organizations live by the mantra "post it [online] as soon as it is ready," others still organize their production around the readership-driven deadlines, and some do both. In general though, organizations will post new copy and update older stories throughout the day. This tendency not only allows reporters to keep the public abreast of developing stories, but also embodies the increased ability and desire to communicate and get information immediately. This is characteristic of time-space compression and is part of the process of being socialized into postmodern culture (Best and

Kellner 1997; Harvey 1989).

The speed at which information travels on the Internet now has facilitated the development of this news cycle in three ways. First, it allows reporters to produce quality copy within a short time frame, as the background information and source input are easier to secure. As one reporter summarizes: "...with a few keystrokes I can find a world expert and their phone number." One former LGID and SMGID reporter told me that she/he thought that this accessibility of information had really improved science-based stories, but the level of improvement is still contingent upon how reporters handle space and time pressures.

Second, because this fast information gathering is possible, it is harder for reporters to get a "scoop": brand new, breaking news. This second fact has driven reporters to compete in a new way, because scoops happen 24 hours a day—not just in the morning edition. Although the Internet does make gathering information for stories easier and getting scoops potentially more difficult, it is still incumbent on the reporter to conceptualize and write the story, that is, to be the engine for news production. However, because there is so much more information available to reporters, there is also potential for more scoops. This trend may also benefit readers, in that the competition for scoops brought about by the high level of accessible information may lead reporters to seek out new topics or to cover old topics in new ways, both of which could work to give voice to stakeholders or topics that offer challenges to hegemonic interests. As one reporter told me, she/he may find these counterhegemonic scoops in emails from readers who suggest story ideas that would likely not arise from traditional newsgathering practice. As an example, this reporter wondered how else she/he might find a story from a resident living near a toxic landfill in Alabama.

Finally, the quest for immediacy facilitates the "decentering" (Best and Kellner 1997) of knowledge production from experts to news gatherers. The growing influence of social networks in newsmaking is the most salient example of this, as platforms such as Twitter allow reporters to contact sources, track down story ideas, and disseminate their work very quickly. While allowing news to move quickly, social networking also provides a vector through which marginal sources and topics may find their way into mainstream news.

Additional media platforms. The technological toolbelt that many reporters are obliged to carry has become larger, and heavier. Reporters are expected to be conversant in the various technologies that have been folded into the work of journalism, though this is dependent on the needs and the budget of the news organization. This new expertise may be exhibited in numerous different forms, from using Twitter to taking photographs, and one veteran reporter thinks that technical ability has become a new metric for measuring journalists: "Well, I think your value is measured in part on your ability to be somewhat agile with different media...you can't be a journalist now and not know how to create a hyperlink." This represents a common trend: that reporters adapt to emergent technology on their own. Some reporters told me that there used to be other employees tasked with producing multimedia content and managing the social network presence of the organization, but that those employees became expendable when budgets tightened.

The use of new media platforms, however, is becoming increasingly common on news websites and is likely to become even more ubiquitous than it is currently, given the increased cultural saliency of these platforms. For some reporters, the expanded reliance on new media platforms by the reading public requires them to produce multiple versions of the same story for different devices, further compressing their workday—something the Pew study also found. This

particular occurrence was relatively uncommon, but given the increasing normativity of mobile internet use, I imagine this reporter, who works at a LGID on the west coast, is at the vanguard of an emergent trend: "We also are filing for the web, and we have an iPad edition, so a lot of times you're filing multiple versions of the story every day, or you're constantly updating your story." Though reporters are now tasked with these additional responsibilities, social networks present the opportunity to attract new readers and increase traffic to the organization's website. However, simple internet traffic and the derived advertising revenues are not enough to make ends meet for many organizations. As Mitchell and Rosenstiel (2012) note, many papers are also moving toward a paid subscription service, and by mid-2012, the number of papers that do this could reach 250. The ability to generate revenue in this way would be very helpful for organizations hit hard by changes in the industry.

The use of hyperlinks in online stories, as one interviewee told me, is an invaluable tool for saving space. By using these, the reporter need not spend valuable space reiterating information found by clicking on the hyperlink, and risk the reader getting bogged down in wordy descriptions. Also, video allows people to watch interviews the reporter does, and allows the latter to convey stories in more appealing and thorough ways. For example, a story about an advance in wind turbine technology may be accompanied by video of it operating, or the reporter speaking with stakeholders about it. However, with continuously reduced budgets and smaller staffs, production like this is not likely to expand until news organizations recover from the recession and learn new ways to cut costs and generate revenue. This could include introducing subscription services or taking advantage of the continuous news cycle that constantly produces fresh news—but which also provides new spaces for online advertising and revenue generation just as often.

The advance of communication technology presents multiple spaces for the facilitation of hegemony in news, primarily in the exacerbation of time pressures, which can lead to reliance on regular sources, less editing, less background in stories, and the increased use of newswires. Multiple spaces are also created for hegemony's challenge, primarily in the possibilities for improved storytelling and access to information and sources.

In addition to absorbing the workload of reporters who have been laid off and adapting to increased competitive pressure, reporters are tasked with learning and integrating new software and technology into their routines. Their already-tightened workdays are further compressed by the additional workload. However, these technological advances also allow reporters to improve and democratize their work, while making it available to new audiences. Ultimately, many reporters are willing to do all of this because they are committed to their work and its public service function, but there is little doubt that the professional environment that has emerged because of these macrosocial changes has made their work more hectic and the news more amenable to hegemonic influence. Ultimately it is up to the reporters to make sure the changes have positive effects, but to a significant degree this relationship is mediated by the degree to which reporters have time to explore ideas and technology—itself often dependent upon the financial stability of their employers.

A Note About Macrosocial Interrelationships

Though I trace many of the primary changes described above in news to a single macrosocial source, it is important to note that may of these effects are interactive and multicausal in nature. I offer an example of an interactive relationship in the previous paragraph. In terms of multi-causality, the pressure of producing news more quickly is based in cultural change (the expectations of readers of this speed) and technological change (information is more readily

available). Further, the pressure toward shortening articles is based in economic change (less print space available) and cultural change (expectations that the public will not read longer articles). The shortened articles themselves present problematic consequences for democratic news, but ultimately these articles are the end result of relationships among large-scale changes in the industry. Understanding these interrelationships has important implications for addressing the decline of news. For example, even if news organizations were able to hire more reporters, reduce workloads, and write more nuanced stories, there is still a finite type and amount of news the public will read. So, addressing the primary problems macrosocial change presents is no simple matter. Whatever the root causes of these primary effects are, the result is most often an exacerbation of existing time and space pressures in newsmaking. These pressures and their intensification, along with the normative definition of news, are the primary causal linkages between the effects of macrosocial change and the consequent changes in newsmaking practice and production, discussed in chapter 4.

TIME AND SPACE CONSTRAINTS

Though their effects are wide-ranging and significant, time and space constraints in newsmaking are generally not interpreted as such by reporters. These constraints are simply interpreted as part of the job and are dealt with as practical limitations to writing stories. They fundamentally organize how a reporter will approach a story—how much time to devote to reporting and writing it, and how much background and context to include. Reporters recognize these constraints both as hindrances, but typically don't feel that news quality necessarily suffers for lack of time or space, or that any decrease in quality is terribly problematic; news is a very instrumental practice. In that way, there seems to be a disconnect in how reporters perceive the ethics of their work and how they are able to practice it. One reporter alludes to the tension

brought about by this conflict in describing when a story is "done":

Oh, it's never done. It's never done. You're never, ever going to be able to produce a story that is comprehensive. It's only the best you can—the most accurate you can portray in the given time.

This reporter's opinion is a reminder that story construction is ultimately dependent upon time and space constraints, and that these constraints fundamentally limit news content. Regular sources, PR firms and other external institutions embedded in the production of news take advantage of these constraints by offering reporters press releases and by making themselves available as sources. Though deadlines are constraining to the reporter and may affect story quality, these deadlines are important in the smooth functioning of newspapers and thus help maintain readerships (Fishman 1976:146). When under time constraint, reporters to some degree must rely on "feel" to determine when the story is done, and that there are no "loose ends":

I spellcheck it, I read over it one last time, I try to figure out if there's anything missing, and then I just let my editor know that it's ready. I don't know if you've worked in a newsroom before, but the pace at which everyone works, it's fast and furious, so there's not a lot of leisure time—like you know, "Let me go get a cup of coffee and read through this and see if I'm missing anything." For an enterprise piece I might be able to do that, but on a daily basis, you're just sort of writing and filing all the time. And, you know, you're in the habit of writing fast and filing fast and you kind of know instinctively, "this stories got it, or this story's not ready to go—I need to get the callback from that one source to make it complete." I think at this point, everyone kind of has a good gut check when something is done or not.

Time constraints are ubiquitous, and at times can force reporters to produce articles that they would rather have more time to consider and edit. Importantly, as many reporters did, this reporter talked about the importance of "instinct," or the "gut check." While this may be an effective and efficient way of assessing story quality given the workrate this reporter described, the true relevance and effects of time constraints in contemporary reporting is clear. Importantly, space and time constraints are closely related: reporters will spend their time on a given story in

part based on how much space they have to do it in—whether column inches or words. These space requirements are firm, but in some cases can be negotiated throughout the day. One former reporter told me: "With space constraints they always tell you, before you write a story we always ask "Given the budget we have today, how much space do I have?" You knew how much space you had; we could write according to length." The primary reason reporters write based on space needs, and often stick to them, is that there is limited space in the paper, and a negotiation and competition goes on throughout the day for prominent print space. Editors are juggling these "budgets" (the layout and content of the paper) for most of the day, but space constraints are a limitation only some of the time and in different ways, depending on the space available, the topic, and its placement (on the website versus the paper).

Some stories are easily written within space constraints, and other times reporters have difficulty telling a story they are satisfied is context-rich enough to not conflict with their duty to provide a publicly useful story:

There are certain things that every story has got to have. It's got to have who, what, when, where, why, and how, you know? The old cliché but it's true, and when you've only got 500 words you might have a little room for something other than who, what, when, where, why, and how, but you're not going to have much. If I've got 1000 words, I can do something, but not a whole lot.

This reporter introduces the difficulty reporters have trying to fit enough contextual information in a story that must adhere to "bottom line" standards, in terms of the information covered. What is interesting about this quote is that a 1000 word story would be considered rather long in a print edition; reporters said that their average story lengths hovered around 600-650—significantly shorter than 1000.

As with the macrosocial changes, time and deadline constraints are interdependent and varied in their effects. These two constraints, together and separately, have resulted in an

increase in newswire use and have affected editing, sourcing, story length, and the quantity of background information in stories. Crucially, time and deadline constraints have also contributed to the change in the normative definition of news, discussed in the next chapter, that dictates what gets covered and in what detail.

CHAPTER CONLUSION

In this chapter, I described the contemporary conditions that shape and organize newsmaking, paying special attention to effects of budget cuts, the rise of internet news, and other technological and cultural changes. To do this, I discussed these changes, how reporters conceptualize their effects, and positioned the ultimate consequences of these changes as generally encouraging hegemonic relationships and ideas (Gitlin 1980), but also creating fissures in the system of newsmaking that expose opportunities for democratic transformation both within news organizations, and between newsmakers and the public. This flexible approach to hegemony, elucidated by Chantal and Mouffe (1985), formulates hegemony as decentered and flexible in discursive expression and location. At the same time, I contribute to research on newsmaking in critical discourse analysis (Richardson 2007) that is typically focused on linguistic analysis, but positions social and discursive processes as centrally important to properly conceptualizing discourse.

Further, by describing the newsmaking milieu from the perspective of reporters, this chapter contributes to similar research on environmental reporting (Boykoff and Mansfield 2008; Friedman 2004; Sachsman, et al. 2010; Yang 2004) by researching a common topic on environmental beats (energy), and answers Jacobs, et al.'s (2008) call for an increased focus on journalistic agency, "which, given today's changing news ecology, is especially pressing" (3). Reporters are limited in this environment that has put increased expectations on them, and they

adapt by working long hours and making efficient use of the bureaucratic structures of their workplaces, technology, and sources for story generation, reporting, and writing. News organizations are fortunate that the employees that seemingly self-select into the profession are hard-working, driven, and idealistic, and often find ways to improve their work in this increasingly time and space constrained environment.

As critical discourse analysts such as Fairclough (2003) suggest, newsmaking is a discursive space simultaneously formative of, and formulated by, multilevel relations of power. As this chapter has described, it is much more than a monolithic medium through which hegemonic domination is translated. Contemporary newsmaking, as a discursive space, has been opened up by macrosocial change. This change exposes new avenues through which reporters and the public alike may alter previous patterns of news creation and consumption. More specifically, these avenues opened up my macrosocial change are primarily mediated by the manner in which shifting time and space constraints and the normative definition of news affect reporters' newsgathering and writing processes. These relationships are described in more detail in the next chapter.

CHAPTER 4

RSE NEWS AND NEWSMAKING: SHIFTING DISCURSIVE PRACTICES

This chapter describes the discursive practices that undergird reporters' routinized reporting and story writing processes, and will provide a segue from the previous chapter's discussion of the newsmaking milieu, into the subsequent chapter, which focuses on the news product. The previous chapter served as a precursor to this one, because I assume that beyond language, "discourse is a form of social practice, a 'relationship between a particular discursive event and the situation(s), institutions and social structures which frame it'" (Fairclough and Wodak 1997:258, from Kelly 2009:35). Within the institution of journalism, I present newsmaking as a set of discursive practices (Foucault 1972) in this chapter, and again following Laclau and Mouffe (1985), conceptualize RSE newsmaking as a discursive space wherein hegemonic legitimacy is contested. As a concept, discursive practices are the normative structures of rules in a discursive formation that, when conceiving them with their constituting power relations front-and-center, organize what is appropriately said or done (Foucault 1972). In this way, journalistic routines are discursive practices that are reciprocally productive and constitutive of RSE news discourse.

I found reporters to be highly agentic in newsmaking and to be hard working, ethical individuals, who hold the public trust in high regard, and whose daily work consists of their best efforts to put out the best "news" (as it has been historically constructed), given the various restrictions they face. At the same time, their heavy reliance on the normative definition of news could potentially lead to superficial coverage of environmental and energy. The highly bureaucratized newsmaking routine constrains reporters, though allowing for a more efficient news production process (Fishman 1980). This bureaucratization, crucially, involves highly

rationalized patterns of information gathering, including the heavy use of government and corporate sources—as I also found (Herman and Chomsky 1988)—though their reliance on press releases does differ significantly from the heavy reliance noted by Schudson (2003).

Patterns in story generation in news, as discursive practices, are implicated in the maintenance of hegemonic social relations in that they recreate both mainstream and official constructions of RSE. These patterns limit RSE news discourse and thus, the public's exposure to marginal information and sources. As Gitlin (1980:257) notes: "Hegemony is an historical process in which one picture of the world is systematically preferred over others, usually through practical routines and at times through extraordinary measures." The reporting and writing of news stories, as well as the editing and disseminating of stories are also characterized by hegemonic discursive practices, though these practices and their products are not static.

As the sociocultural conditions of newsmaking have changed, as described in chapter three, newsmaking itself has changed. It is at one time (re)creative of structures of hegemony that have long existed in newsmaking (Gitlin 1980), and is creative of fissures in the newsmaking process, from which counterhegemonic discursive practices and discourse may emerge. Chouliaraki and Fairclough (1999:25) explain:

Hegemony is a bid for closure of practices and networks of practices which is destined to fail to a greater or lesser extent because the social is by its nature open—the simultaneous operation of diverse mechanisms within any practice, and the fact that any practice is overdetermined (simultaneously determined by others), mean that outcomes are never entirely predictable, and that resources for resistance are always likely to be generated.

This chapter describes the normative definition of news, itself a critical hub from which the effects of macrosocial change affect newsmaking practice, as well as the primary set of discursive practices that are productive of RSE news discourse—emphasizing the importance of how changes in the definition and practices affect RSE news. Though both of these have been

changed by the effects of macrosocial conditions described in chapter three, they ultimately reinforce status quo relationships in energy. These shifts have also opened up new fissures in these practices, and when considered alongside similar existing spaces in newsmaking, offer opportunities for challenging hegemonic expression in RSE news discourse by increasing access to the newsmaking process for readers, as well as for marginal sources and ideas.

This chapter begins by describing the challenges presented by reporting on such a complex topic as energy and describes the aspects of the normative definition of news, how it has changed, and how this organizes the character and construction of RSE news. The discussion then moves to a brief description of the typical newsroom environment, itself productive of the increased speed of news. Finally, the bulk of the chapter covers important newsgathering and news writing practices, and describes their origin and how they are implicated in the formation of RSE frames and discourse itself. The resultant character of RSE discourse itself—as homogenous, shallow, simple, elite-focused, and inaccurate—also influences the character of the RSE frames themselves; this is discussed in chapter 5.

"NEWS" AND ENERGY NEWS

Clearly, the news does not reflect an objective state of the world. It is the by-product of a process of selection at two primary stages. The first stage of selection is determined by the dictates of the organization; that is, if the organization is financially focused, general interest, or primarily regional, for example. Second, reporters make decisions about which potential stories are news and which are not. This is called "news judgment." Reporters are aware of the somewhat subjective nature of news judgment, but are common in their belief that it represents a real, and objective difference between events. News judgment can be learned through experience and, crucially, a reporter's news judgment improves the longer he or she stays on a beat. This

means that non-specialty reporters are less likely to be able to discern the "news" of a certain beat if they have little experience on it. Considering the dramatic reduction in environment and energy reporters, the likelihood that RSE reporting has dropped off in quality is high, especially considering the complexity of RSE as a technical, scientific, political, financial, and social issue. Further, this reduction in specialized reporters and the resulting effect of news judgment could leave reporters less able and likely to question official claims about RSE, or discern the significance of changes in the field. Both of these would result in the re-creation of status quo RSE discourse. So, the importance of the reduction of environment beat reporters in developing reliable, valuable news judgment cannot be easily underestimated.

News judgment

Reporters recognize the subjective nature of the act of pulling news out of the huge amount of information they are exposed to every day and calling it "news." One veteran PPLGID reporter defined "news" this way, emphasizing the importance of the subjective nature of news judgment:

Well, that's an age-old question. What constitutes news? And who's the Supreme Court justice—was it Potter Stewart who said: "It's like pornography. I can't define it, but I know it when I see it." News is somewhat in the category. News is either something that's interesting, or well, it's something that makes you want to turn the page and keep reading. Something that a reporter and editor think is important, even if it's not something that would have occurred to the reader to ask about. Sometimes it's obvious—it's driven by events. Events that say might raise the price of oil, or lower the price of natural gas or sometimes it's driven by technology.

The subjectivity inherent to news judgment is clear from this quote, but this judgment is often made very rationally—a development was too small to be worth covering, for example—and at times, less rationally. I asked a reporter about the rules of this process:

So all reporters have opinions, and so and you get a million news releases and you're trying to just decide what rises to the level of news and what doesn't and

there's a lot of things that go into that...At some point its also just sort of like, your gut.

Interviewees told me that these situations, when they must use their "gut," are quite common. This is not to say that reporters are guessing what is important, but that there is a degree of subjectivity in judging a story's newsworthiness that cannot be removed from the process. Using Bourdieu's field theory, Schultz (2007) investigated the importance of the "gut" sense of newsworthiness and discovered that "exclusivity" was an unspoken, but learned "sixth news value" in Danish television. Because news judgment is a matter of experience, a reporter will get a sense, for example, if something sold to him/her by a source as a technological breakthrough is actually that, or is more of a pipe dream, or is something in between. In this case, the judgment is made based on what they know from previous experience on the beat, from background research and from discussions with other sources. Considering reporter interviews and Schultz's (2007) findings it seems that this "gut" is most likely beat specific and part of individual normative newsroom cultures, and not likely indicative of a single generalized news value. The "gut" is important, however, in deciphering the credibility of claims, and in interviews I didn't see any evidence that a "pass through" effect exists systemically, where a source and a reporter meet for lunch, discuss something, and then readers read the source's opinion on the matter. The opinion may or may not be included in a story, and may or may not be evaluated favorably.

Reporters I interviewed, virtually without fail, discussed the importance of providing the public with important information, and many described how important it was to actively manage the tension between the self-serving interests of PR firms and other sources, and those of the public interest. This is not to say, however, that this relationship is not potentially problematic, or that the pass through effect doesn't occur in another, or weaker, form, such as the adoption of the source's general point of view or framing of an issue—though this is more likely when the

reporter has little experience with the topic, or has few sources. Considering the ubiquity of official sources in news in this context, the reduction in the number of environment reporters poses significant challenges to the dissemination of non-official or marginal discourses in RSE news. This challenge is amplified by the degree to which official sources are tied up with the definition of news itself.

What is news?

How newsworthy a story is can be based in part on whom the information is coming from. This is one of the rules that may determine how news is judged to be important, and thus newsworthy, and is one way dominant ideology may be transmitted in the news production process. Both interview and article data support the notion of source import in news judgment. More specifically, most reporters discussed the importance of official and government sources particularly as arbiters of reliable flows of "important" information.

First and foremost, what is considered newsworthy is a judgment made with the organization's readers (or clients) in mind. For example, a newsworthy story in a general interest daily such as *The New York Times* is likely to be different than one written for a newswire, which has a more heavily corporate and financial clientele. Considering this, news judgment is made with reference to three general characteristics, or a combination thereof: it must be new, interesting, or important. This former LGID editor gives his definition of news:

There's all sorts of journalism-school-standard ways of looking at news: importance, proximity, notoriety, those sorts of things. I don't think most editors go down the checklist, but you get kind of an idea for what's important, what needs to be in the newspaper, because this is the news of record, for example, city council votes and that sort of thing. You know...[news is] what makes people want to buy the newspaper. But, not so cynically as that. I mean things that are important as well in a broader way. The subjectivity of news judgment is also present in this quote, and indicates that editors, many as former reporters, seem to use the same criteria for news judgment as the reporters they supervise. But, as this quote illustrates, editorial decisions are also made with the commercial interests of the organization not too far removed from the process. Importantly, this quote also indicates that events considered newsworthy are often characterized by more than one of the criteria, and the criterion most commonly used in combination with the others is that of "freshness," or how new an event is.

New. News, at its core, is new information. It is something people have not heard before. There are innumerable events every day that are new, and thus potentially newsworthy. Part of the news judgment reporters learn is how to judge if a development is "new enough."

For a general-interest newspaper you don't write about every development, you wait until you think there's something significant, or there is a concatenation and accretion of developments that you can write about—any single-story that will inform a reader who's got lots of other things on his or her mind and is not mostly focused on that subject. That's something people in newsrooms talk about—"Is it ripe?" It is almost a judicial term. Is it ripe to write about? Is it ready? Is this different enough from what's happened before? Is it time to do a story on this? When did we do the last one? What did we say in the last one? What are the developments since then? Are those developments actually significant enough to merit another story?

What qualifies as "new enough" will differ by topic. Some reporters told me that renewable energy stories often involve incremental developments: a solar panel with a slightly higher efficiency has been tested, or a rider in the energy bill involving renewable energy subsidies has been a matter of contention in Congress. A former SMGID and LGID reporter said this of renewable energy technology coverage:

So it's not—it doesn't fit in business, and it doesn't fit in hard science. You're not discovering new proto-humans. Their discoveries are by nature very incremental also, so it's very hard to say "This is it!," and that's what newspapers like.

Though they are "new," small policy and technology advances are unlikely to get much attention from the reading public and are often simply too minor or uninteresting to be judged "newsworthy" by reporters or editors, which limits the quantity of RSE news coverage. Because this is the case, "new" RSE developments often must also be "novel" in order to garner coverage. Frequently, developments in emergent RSE technologies are judged newsworthy based on this "novelty." The lede and nut graf below, from a March 2007 *New York Times* article are an example of this type of coverage:

The idea of replacing crude oil with algae may seem like a harebrained way to clean up the planet and bolster national security. But Liisa Morgenthaler-Jones and her husband, David Jones, are betting their careers and personal fortunes that they can grow masses of the slimy organism and use its natural photosynthesis process to produce a plentiful supply of biofuel (Krauss 2007).

Importantly, this characteristic of news drives the selection of RSE news topics. This example above demonstrates this fact in that it contains a linkage to the "energy security" frame that emerged from the data, which likely helped drive this story's selection into the paper. Novelty, a "first order journalistic norm," helps drive story selection and content (Bennett 2002; Boykoff and Boykoff 2007), but also may trivialize RSE by focusing on technologies that are still in experimental or other pre-market phases of development. As seen here, RSE coverage can be driven by the degree to which something is novel, which adds an element of "uniqueness" to the "newness" of a topic and makes it more interesting—another element of the normative definition of news.

"Turns Pages." The quote that opened this section noted that news "is either something that's interesting, or, well, it's something that makes you want to turn the page and keep reading," as did the quote from the editor above. There are a number of ways to interpret what will be interesting for a newspaper's readership, but the use of these will depend to some degree on the

paper's focus, its location, who is involved in the story, or if the story has a local focus, among other things (see Shoemaker and Reese 1996). Something reporters or editors feel will draw readers to their website, or will get readers "past the fold," are likely to garner coverage. The coverage of the Solyndra "scandal," where the Federal government guaranteed a loan to a Californian solar panel manufacturer that ultimately went bankrupt, is an example of this type of coverage. A narrative of "corruption" in the Obama White House was quickly attached to the news about the company's loan and failure, though the stimulus funding grant process had originated in the Bush administration and was a fairly bi-partisan achievement. This narrative gave the story "legs," or potential to be a running story. Running stories make the news production process more predictable in that public interest in the topic was assured, as were further developments. The most ubiquitous running story in my article sample was the debate over the "Cape Wind" project, the wind farm to be built in Nantucket Sound, Massachusetts that has been the subject of political debate for many years. This project had many different sets of "legs," primarily including those dealing with the political elites involved and disputes over transmission lines, environmental harm, funding, and aesthetics. This excerpt from a January 2009 New York Times article reveals some of this story's narrative "legs":

A federal agency said Friday that the nation's first offshore wind farm, proposed for the waters off Cape Cod, posed no serious environmental threat, bringing it a major step closer to fruition. Homeowners and boaters on the cape, including Senator Edward M. Kennedy, Democrat of Massachusetts, have fought the project for eight years, saying it would hurt wildlife, fishing, and tourism and spoil the beauty of Nantucket Sound (Goodnough 2009).

These legs kept the Cape Wind story viable for many years. Stories with "legs" are sought by news organizations for a number of reasons, but in terms of the newsmaking process itself, they make the news production process more predictable. Finally, this characteristic of news as

"interesting" is linked to the character of RSE frames. Specifically, a keyword of the cultural feasibility frame is mentioned, as are that frame's framing devices. Further, this aspect of the normative definition of news maybe linked to article topics and to the RSE frames' cultural resonances.

As reporters indicated above, they see the trend toward superficial coverage increasing as the financial situations at news organizations become increasingly precarious. According to reporters, this type of coverage has financial payoffs, as relatively superfluous articles are often the most popular draws on the organizations' websites. More specifically, this aspect of the normative definition of news has widened to include increasingly superfluous stories, which have taken on critical importance at some news organizations. Again, these articles often conflict with the reporter's desire to produce news that is critical to informed public debate. So, current trends toward superficiality are also tied up with how reporters define news, and concerning the import of this definition in the making of news, are exceedingly difficult to address.

Fishman (1980) described the importance of a running theme in the interpretation of news, and Gans (1980) noted that "running stories"—stories that had continual developments were more likely to become news. I found this to be especially true in terms of RSE legislation and ongoing projects, such as "Cape Wind." These stories also contain "running sources," and so to Gans (1980), they are "in a sense, pre-sold." These stories for reporters are relatively easy to write with running sources, as they add a measure of predictability to reporting this new event. Further, the writing of "follow up" stories days after an event is also a result of this dynamic something has been deemed newsworthy, and must be updated. In this way, potentially superfluous events, such as the developments in the Solyndra scandal, may warrant a story simply because they have been covered recently, and thus the reporter may assume some interest

and knowledge on the part of the readership. This makes it potentially newsworthy again, simply because it was in the news before—regardless of its import or contribution to public knowledge.

Important. News is also defined to some degree by whom it involves, where it comes from, what it involves, or who else has covered it. These are all indicators of the importance of a story. The sources of information themselves may legitimate a story to some degree as "news," especially if they are official; corporate or political elites, for example. Simply because a political or cultural elite discussed solar panels also may be justification enough for a story. An example of this expression of newsworthiness is seen here in an article about T. Boone Pickens, the billionaire fossil fuel investor, after he had invested billions of dollars in wind power and was campaigning for federal investment in a natural gas infrastructure:

Get ready America. T. Boone Pickens is coming to your living room. The legendary Texas oilman, corporate raider, shareholder-rights crusader, philanthropist, and deep-pocketed moneyman for conservative politicians and causes wants to drive the USA's political and economic agenda (Reed 2008).

Though Pickens holds no official office, his opinions garnered national attention, and his "plan" was written about in numerous prestige press publications. His plan was certainly "interesting" as well, but had a stakeholder without his considerable prestige presented it, the level of coverage would have been much lower. Mr. Boone's status drove this story. Further, this aspect of the normative definition of news is linked to story selection, frame sponsors (both of which may be seen above), as well as the reasoning devices of frames.

Another fundamental element of determining importance is impact: will the readership be impacted in a potentially significant way? This again is dependent upon the publication's readership in some ways, though political events of national significance are common candidates. Finally, if other news sources have covered an issue, it is functionally legitimated as important "news" and worth pursuing. This dynamic helps create an echo chamber in news production and dissemination, wherein similar stories and logics get recycled and retold (Sunstein 2001). Reporters learn what this stock of stories is every morning as they catch up on the day's news online or in newsroom conversations, but at the same time, because reporters at different publications use a similar normative definition of news, much of this similarity might be expected. One former LGID editor summed up this negotiation nicely: "What's news is what they put in the newspaper. That's what news is."

Taken together, these three characteristics of news lead reporters to pursue stories that resonate with dominant culture, and make it less possible for marginal ideas and voices to be included in RSE discourse (though when they are included it is often in a trivial or trivializing manner). This happens in a number of ways: the reduction of environmental reporters decreases the likelihood that meaningful developments in RSE policy, science or discourse will be reported; the privileging of sources' definitions of import—and these sources tend to be recurrent, official and more likely to reflect dominant notions of RSE; general interest daily newspapers are less likely to report on RSE because it is atypically "breaking"; and the seeking out of RSE stories that simply "turn pages" may reflect superficial or oversimplified notions of RSE and mechanize the recycling of dominant constructions or framings of RSE.

THE NEWSROOM AND PROFESSIONAL PRESSURES

The working environment for many reporters resembles the prototypical newsroom. These are loud wide-open places, bustling with activity and designed to allow for easy communication, and are typically characterized by a high level of collegiality between reporters and editors alike. The newsroom environment, as well as the professional pressures reporters negotiate in this setting, all facilitate the ability of reporters to handle the increased workload macrosocial change has forced them to endure. The newsroom provides an environment from

which to get story ideas, to get editing help from colleagues, and to just save time. It is also a place in which reporters work under a high degree of organizational and professional pressures, primarily competition and professionalism. These pressures, which have intensified in some ways in the era of internet news and budget constraints, are built into the profession of reporting news and keep reporters producing increasing volumes of good, respectable news.

The Newsroom

Most newsrooms have low cubicle partitions, barely separating reporters from one another. The wide-open newsroom is, as one interviewee put it, "designed to facilitate the flow of work." Primarily, this design allows for easy communication among reporters, and between reporters and editors. In the case of the former, reporters are easily able, with this design, to discuss story ideas, and to ask favors of each other regarding sources, editing, or other tasks. As one former LGID reporter noted:

The business editor, the assistant business editor, all the reporters, we could just stand up in our cubicle and shout out. You know most of the time we didn't even bother e-mailing each other, you know. We would just stand up and shout. For instance, if your story is done we can stand up and say "Hey John, do you have time to give this a read?"

The newsroom environment allows for efficient and immediate communication between reporters and editors, and in this case, reporters began to take on editing responsibilities for each other to save themselves and their editor time. Because the work of both reporters and editors is so time constrained, building efficiencies into the production process wherever possible is invaluable, especially considering the increased workloads.

Newsrooms create a space for conversations with colleagues. An environmental reporter expressed ideas about the instrumental value of newsroom conversations, not just in terms of simplifying communication, but also in terms of how these conversations generate story ideas:

"There's a lot of cross-communication happening. I find that really necessary—to go in and get that, and to have that kind of dynamic and those accidental conversations that lead to other story ideas." As these quotes illustrate, this type of newsroom design facilitates communication toward instrumental ends. Reporters often discuss current events with one another as a way to get a feel for how others see an issue, to help them think of a new angle with which to approach a story, or simply for story ideas. These conversations, and the openness of the newsroom more generally, also allows reporters to keep track of the other stories that may be competing for favorable play in the paper or on the website. In general, the design of the newsroom itself and the efficient communication it facilitates saves reporters time in searching for stories and editing work. The newsroom also serves as the context for the subtle intraorganizational competition that characterize these spaces, as well as some of the professional pressures that motivate reporters within them.

Professional Pressures: Production and Quality

Reporters have a number of pressures to deal with in their work, beyond the increased time and space pressure their work is subject to. Primarily these involve increasing competitive pressures and maintaining a high level of quality in their work. Reporters are not only looking to write good copy to impress their editors and colleagues, but do so most often for reasons rooted in professional responsibility to create publically valuable news.

Reporters feel professional pressure to produce this quality copy for a number of stakeholders—their publications, editors, and the reading public—and often in intersecting ways. This pressure, as much as competition, provides the fuel for their pursuit of the news. As much as they feel a responsibility to work in the public interest, however, they are also bound, like many other employees, by a sense of duty to their employers—to both their editors and their

organization. Cumulatively, these pressures motivate reporters to continue to produce ethically sound news, as they see it, in the face of rising time, space, and competitive pressures.

Organization and Editors. Reporters will seek to produce copy that will be valuable to their organization. Whether papers are general interest or cater to business and financial professionals, reporters often feel pressure to produce news that is useful to the organization in drawing readership and is valuable to the readers themselves. This reporter describes an intersection of the responsibility to the publication with that of responsibilities to the readers:

You feel pressure that you know...is your story interesting enough, is it going to pass muster with the editors—especially at the [paper] where we were looking for things that were pretty edgy? Am I getting too academic in my writing? Is the story really going to be of interest to anyone outside of a bunch of insiders?

This response reflects a common theme from the interviews. Reporters get a sense of what the editors and organization are looking for in the news they produce, in terms of quality and orientation, and reporters tend to respond to this, keeping their readers' interest in mind. Reporters produce work that reflects their personal professionalism and simultaneously reflects upon the organization favorably. This newswire reporter echoed these sentiments, while hinting at the responsibility he feels to professionally represent the organization, and to make sure readers get the correct story: "We have to get it exactly right. There's definitely pressure to do that, but it's not undue pressure." The pressure this reporter feels to help his organization is a direct result of that organization's downsizing: "There's more pressure to put out stories for the front of the section than there used to be, because there's fewer reporters for the front page." In this situation, the reporter feels responsible for the organization's well being, while fully aware that the reason he/she feels this responsibility is that so many newsworkers have been laid off. This desire to produce front-page copy also is a benefit for reporters' editors. The more, and better, stories an editor has to pitch in the morning "budget meeting," (a meeting at which the

editors collectively discuss what stories they each have on their desks—in the form of "budget lines" from their reporters—and what has promise for getting into the paper) reflects well upon that editor and their team. Further, this good copy leaves an editor with a little less work to do; reporters are fully aware of how busy their editors are, and with good copy, they aim to make their editor's job a little easier.

Reporters typically perceive the effects of macrosocial change on news production as having affected their editors more significantly than themselves. They perceive their editors to be busier and under much more pressure than themselves, and are actively seeking to reduce the workload of their editors as much as possible. This may manifest itself in reporters editing each others work, doing their best to produce clean copy, or working to make sure they can produce as promised on their budget lines. Considered together, these practices represent another location at which reporters are asked to absorb the additional workload caused by the macroeconomic shifts, but which also produces the conditions for improved reporting. Ultimately, the critical consideration is the willingness of reporters to take on the extra work brought about by these changes in the profession, and that their sense of responsibility to the public good that remains strong.

The Public. Many reporters described a pressure to do good work as a way to do justice to their beats, and their profession more generally. More specifically though, in doing these things, reporters show their strong sense of duty to the reading public as self-aware arbiters of information crucial for the proper functioning of a democratic society. These quotes from different reporters reflect the duty they feel to represent the profession well, and to get the public the best, most useful news they can:

The pressure is really credibility and relevance. You want those stories to be taken seriously. You want people to look at them and know that they can trust it.

I just felt pressure to choose the right stories. I felt pressure, given the breadth of my beat, to do justice to all the things I was supposed to be covering.

I think the thing that motivates me most is wanting every day to find good, interesting, nuanced, stories that exemplify this realm—this energy and environment realm—that I'm covering.

Every day, and every week, you want to make sure you're doing enough stories, doing good stories—they're substantive, they're well regarded.

So, given the pressure to produce increased amounts of copy amidst shrinking staffs and budgets, reporters retain the desire to produce the news that they deem the most useful to the public. They have absorbed the increased workload brought about by macrosocial change in a number of locations within the process of producing RSE news, which will be described later in this chapter.

Competition. Competition seems to be the most ubiquitous pressure, though not necessarily the primary motivational one, for the reporters I talked to. The pressure that competition creates manifests itself in a number of dynamics in the newsroom. Reporters may compete against coworkers and colleagues at other publications, while these publications compete against one another. Because sources are aware of the competitive nature of newsgathering, they may take advantage of this by pitting two reporters against each other.

Within the same newsroom, reporters are competing for "good display," or "prominent play" in the paper. Competition is motivated in a sense by the status and sense of accomplishment embodied an article's placement on the front page, and is earned with an A1 story. This doesn't mean that every reporter is competing with every other one, every day. Competition is subtle in this context. Beyond being motivationally and symbolically valuable to reporters, favorable play has instrumental benefits, as it may be considered in performance evaluations. Regarding competition among colleagues at separate organizations, being first to a story is an important way to establish status among other reporters, and of course, is important in getting the story prominent play:

I do feel, whether or not this is true, I think that every reporter feels that there's a finite number of stories out there, and that I've got competition who are also sniffing around these things, and I want to beat them to it. But yeah, that motivates me, which I think is good, and healthy, for the industry.

As this reporter says, competition is something that is important to the industry of newsmaking.

A sense of competitiveness drives reporters to pursue stories, rewards them for successfully

pursuing and writing a good story, and in this way helps keeps the industry "healthy."

Since competitive pressures have increased as the speed of news has increased, and considering

the benefits of competition to the industry, these technological changes could potentially be

exponentially favorable to the quality of news production.

Competitive pressures can be felt even more acutely for reporters at those papers with a

direct regional competitor, as this former energy reporter's paper (an LGID) had, and is a crucial

part of maintaining sources, getting better stories, and thus benefitting from those "gets:"

Because we always competed with the [paper], there was always this anxiety that you know, if I don't get a story, they get it before me. You know how it is—then you really look silly—you have to do a follow-up on somebody else's story the next day. You never want to do that. So the competition really, really kept me on my toes. About being really aggressive about going and getting a story before anybody else does. So that meant a lot of phone calls, a lot of coffee, meeting over coffee, going out and meeting in their office with them, and you know, digging for information.

KH: So did the competition affect how you related to your sources? Did you want to be the first person they went to if they had something to pitch?

Yes. And that's important because once you write a story, it's there for everybody to see, and it's very important that you come across as fair. Like Fox News, they're "fair and balanced," but we really had to be fair and balanced in the newspaper because it's so easy to burn sources. If they think you have not presented the story in the right way, or you are lopsided, you have taken the other

party's points of view, you could very well end up losing your source the next time around. They knew how to get at you by planting the story with your rivals, and that was [the competing reporter] at the [LGID]. So, for me it was very important that when somebody comes to me, I gain their confidence that they are comfortable telling me things knowing the story will be presented properly, and that's how I built my relationship with my sources over the years.

This reporter describes the importance of sourcing and competition in the day-to-day newsmaking routines of reporters. Because regular sources have come to understand the routines of reporters, and many public relations professionals are former journalists, they understand the importance of the scoop. When they are official sources, they are by definition more likely to have newsworthy information and are more likely to reward reporters who present their information fairly. This is another location where sources, often public relations professionals in some sense, are able to take advantage of the social organization of news and disproportionately circulate their ideas within public discourse. This ability is mainly due to the differential access they have to reporters based on the normative definition of news in journalism that deems their information more valuable in terms of both public good and revenue generation. Finally, a former LGID discussed a potential effect of competition among reporters at different publications in the composition of a similar story—specifically in terms of the ramifications of taking an uncommon angle on the story:

KH: And so, the danger of being an outlier is that you're going to be viewed as not having the complete story. Is that what I'm getting?

Yeah, perhaps. And, that you've missed the point or your story is not the agenda setting point. By not having something, or by having a different take, you run the risk of perhaps, you know, not getting the credibility that another story might.

This phenomenon, which this reporter called the "race to the middle," is motivated by a high level of competition among reporters, but also might influence a desire on the part of reporters to be collectively consistent in reporting a story. This movement to the middle could potentially magnify the problems of the use of official sourcing, in that it could marginalize alternative perspectives—though this reporter thought that more seasoned reporters would probably actively avoid it. This is the form of newsmaking Schudson (2003) calls "pack journalism." Though the former scholar describes it as partially a result of the camaraderie that develops among reporters on a similar beat—covering similar stories regularly—because they interact regularly, it simply occurs when reporters "tend to emphasize the same angle and adopt the same viewpoint" (139). Juntunen (2008) also found this effect of competition, which may in part explain the homogeneity of RSE news.

So, not only does competition drive reporters to seek out new stories, it also may keep them from straying too far from the interpretations of other reporters writing about the same story. In the latter case the shared nature of the normative definition of news may also explain this phenomenon, in that the perceived news value of events themselves will draw reporters to cover them for similar reasons. Further, the potential for competition to reproduce hegemonic energy messages is increased when it involves competition for valuable sources, but because the Internet allows access to so many potential sources and stories it also offers significant potential for marginal sources and ideas to garner coverage. Importantly however, this latter potential is muted by the normative definition of news, which will give reporters purpose to exclude a number of unofficial (and thus, un-newsworthy) sources in the newsgathering process.

EFFECTS ON NEWSGATHERING

Providing an account of the work of journalists is critical to understanding the ways in which reporters negotiate the emergent strictures of their work—specifically because these reporters feel a strong sense of autonomy in their work (Sachsman, et al. 2010; Yang 2004). Indeed, the ability to work autonomously in an increasingly constraining environment, all while

producing "good copy," seems to be a skill that selects people into the profession. A focus on the autonomy of journalists can inform the literature because, as Jacobs, et al. (2008), following Schudson (2005) maintain: "from an analytical point of view, media sociology has largely disregarded journalistic agency in favor of organizational and institutional levels of analysis" (3). This is important because the process of newsmaking continues to change, and discovering emergent techniques used by reporters in addressing this changing environment is crucial. These techniques continually present new opportunities for resisting the increasing (though pre-existing) hegemonic influence in news. This section will detail some ways reporters and news organizations negotiate the traditional and emergent routines in newsgathering, including the various use of sources, newswires, and the Internet, as well as the changing environment of editing. Fundamentally, these aspects of the newsgathering process, along with many parts of the newswriting process, channel RSE news toward a simplistic, homogenous, elite-focused, inaccurate, and incomplete state.

Sourcing

The influence of sources in the process of newsgathering and newsmaking is wideranging and deep. In the process of newsgathering, their impact is primarily felt in the processes of generating story ideas, and providing and validating background information. Most important in these processes are the roles of regular sources. Reporters often maintain relationships with these sources, who are usually in influential positions in business or politics in order to get story ideas, scoops, and interpretations of stories and background information. These sources may be anonymous, which considering their social positions and influence in the newsmaking process, is a direct vector for hegemonic influence in news. However, reporters are generally very reflexive about these relationships and the potential problems they pose, and often actively deflect the efforts of sources in passing their messages along.

This does not mean however, that they are always fully successful in this pursuit. Considering that the vast majority of RSE stories are focused on the legislation and economics of these technologies, and that reporters have significant relationships with these types of stakeholders, the relationship between sourcing and news output is undeniable. Because these sources both represent and have access to the news, these types of systematized relationships should be expected. Finally, considering the increased workload of reporters and increased speed of news, and that these sources offer access to newsworthy information in an expeditious fashion, it makes increasing sense for reporters to seek them out and maintain the relationships. This relationship is another location at which reporters are tasked with maintaining the integrity of news in changing productive conditions, but ultimately their relationships with sources facilitate the transmission of hegemonic energy discourse that is incomplete and elite-focused. This process begins in the process of generating story ideas.

Story ideas come from a number of different places. They may come from phone or faceto-face conversations with regular sources—the "source base"—or from non-regular sources. Reporters are also deluged with emails every day from people seeking news coverage. These groups include public relations firms, governmental and nongovernmental organizations, and other stakeholders. Time constraints can lead reporters to seek out reliable, official sources, and do so over email because these sources and this practice add predictability to the newsgathering process and save the reporter time.

For a reporter the primary purpose of maintaining a reliable, well-placed source base is the access they provide to what the reporters define as "news." These experts are often

government employees, high-ranking company officials, and investors, and the information they provide is often privileged, and thus, newsworthy. One reporter explains the value of these sources:

That's the way I get to find out what's really going on. You can't do it on the phone so much, and New York is a great place to be because everybody comes here to talk money with the bankers. That one-on-one contact is really important for me to get close to a source, and have them feel comfortable talking to me when we're over the phone, and it just helps a lot, so you're not just getting regurgitated lines that they're telling to Reuters, and *The New York Times, The Wall Street Journal.* The last thing I want to do is the same story they're telling. I want them to be telling my stories, not the other way around.

Also, as this reporter alludes to, the prevalence of, and access to, sources depends to some degree on location. Places where there is a developed infrastructure in an arena of renewables, whether based in technological development (public or private), investment, business, policy, or deployment, there seems to be more news coverage, and thus, a wider availability of experts for use as regular sources needed to sustain the volume of coverage required. In general, this represents the "complex variation in the state-level socio-political context" found by Wilson and Stephens (2009).

As Schudson (2003) points out, sociologists who study news frequently make the connection between the reliance on regular sources and the bureaucratic needs of reporting in their work. I also found this linkage crucial. Not only do regular sources often provide access to "newsworthy" information, they are also people the reporter does not have to go searching for. Any time saved during the process of newsgathering in a profession that requires high levels of output is valuable, especially considering the increased workrates of many reporters. Finally, though Schudson (2008:150) says "there is little doubt that the center of news generation is the link between reporter and official," I am led to believe that the crucial piece that is missing from the arguments of those who hold fast to deterministic descriptions of source-reporter

relationships is the place of the journalist's normative definition of news. Going to regular sources makes perfect sense in this environment, and it doesn't mean that there is a direct pass through of ideas from source to story. Removing the agency of reporters from consideration simplifies the logic of these arguments, though this relationship is more likely in timeconstrained newsmaking environments.

Generating story ideas: Email. A reporter's email inbox is likely to contain emails from a few different places. First, from regular sources, from organizations such as PR firms seeking coverage in the paper, and finally, from list serves the reporters have signed up for. Reporters typically check their email before anything else, and they often do it quickly. Because there are so many groups seeking coverage, and reporters' work is increasingly time constrained, many interviewees described the speed at which they had to go through their email when seeking story ideas. Many reporters will simply scan their email inboxes for recognizable names, ideas, and organizations, to save time. This speed can lead them to selecting recognizable topics or sources, such as The National Renewable Energy Laboratory (NREL) in Golden, Colorado.

Scientists and spokespeople from NREL ended up being among the most frequent sources in my article sample. This is likely a result of their organization and its scientists being defined as "authorized knowers" (Yang 2004). They are both knowledgeable and official, and thus are ideal sources of RSE knowledge for reporters. Further, official sources like NREL's personnel are the logical sources to go to because "news" is partially defined based upon the source of the information itself, and because RSE has been constructed as a technical matter and one primarily discussed and legitimated by government sources (Carvalho 2007). Reporters hear from many sources via email, and this reporter describes one technique for handling emails from unknown sources:

Delete--delete--delete--delete. No, I look at them. I know instantly whether its something I can use or not. Anyone pitching a company I haven't heard of, or something. Something obscure I didn't know about, I might take a second glance, but most of them, no. I've gotten to the point where most of the PR people who are making pitches know that what they need to do is get their CEO or their analyst, or their investment banker in front of my face, or I'm not going to pay attention.

Again, the competition inherent in reporting leads this reporter to seek out the stories most likely to lead to a scoop. Scoops are most often from unique or powerful sources, are quick responses to something novel, or are result of a deductive process facilitated by experience on a beat. However, as it is used, email serves as a critical location for potential story ideas early in the day. This quote also hints at the importance of official sources in gathering "news." It is this normative definition of news, as it is bound up with the source of information itself, that drives reporters to seek out these sources that have information of impact—in an energy market, in politics, in the corporate sector, or elsewhere. It is not necessarily the case that reporters seek out these sources simply out of habit, but also of necessity. Discursive practices such as official sourcing can support hegemonic definitions of reality by excluding marginal outside groups, as shown in Anderson, et al. (2005) and Takahashi (2010). In this way, peripheral RSE organizations are also largely excluded from news discourse, and their messages marginalized.

Though emails are an important way for reporters to get stories and maintain contact with sources, sorting through them and managing these emails can be burdensome. There simply isn't enough time to read hundreds of emails in a day dictated by deadlines, so some reporters also use functions within Gmail (Google's email client) to sort through email. Users are able to mark priority emails, and based on an algorithm derived from the user's patterns of use, Gmail will prioritize emails in the users inbox such that the emails deemed most appropriate will be at the top of the list. This represents another technique that is used to filter sources. It systematically

provides privileged access to RSE discourse for official, culturally legitimated, or recognizable sources. Because these sources are often government officials, corporate leaders, or scientists, the information is formally sanctioned and reflects a narrow, often self-interested worldview. However, there is a measure of convenience to source selection I noticed in interviews—those most available for input may often get used as sources. As Gans (1979) points out, this is due to organizational dictates that require efficiency, such as deadlines, and with resources and employees tasked to maintain relationships with newsworkers, these sources are able to disparately access reporters. So, it is crucial, as a source, to understand the news production process and make yourself available to reporters if you are concerned about getting play in an article. By making themselves available, sources often seek to become "regular."

Generating story ideas: Meetings and regular sources. For reporters at newswires and larger news organizations, meetings with sources are relatively common. These may occur over lunch, coffee, or something similar, and are usually with regular sources (but may be with intermittent or new ones as well). During these meetings, sources are generally looking to either "pitch" or "plant" a story—that is, get the reporter to write an article on an issue of interest to them. These are two different ways of attempting to convince the reporter to write the story the source would like. The "pitch" is an obvious, up-front suggestion, and a "plant" seems to be a less direct and more veiled way to make a suggestion. In either case, the reporters are clear about the purpose of the meeting for the source. As one environment reporter describes, "There's a lot of commercial interest in driving the news cycle. I'm besieged by public relations people. Look at the smart grid for example. There's terrific public relations efforts to try to get stories about the smart grid into media." For reporters however, these meetings and phone calls serve two primary purposes. First, these sources may serve as "sounding boards" for a reporter's story idea. Second,

by maintaining contact with the "right" sources—the most influential—a reporter is able to keep her/his "fingers on the pulse" of the issue, and generate story ideas from sources of newsworthy information.

As sources are attempting to sell stories, reporters are seeking input from them about story ideas that they have generated in another way. Though reporters pride themselves on understanding the newsworthiness of a story idea, using sources as sounding boards can provide a quick affirmation or disaffirmation of this newsworthiness. The opinion of a source is more crucial based on how relevant this source is within the reporter's beat. That is, if the source is a "major player" within the solar industry, a story idea about solar technology would be a good thing for the reporter to bring up in a meeting. A long time energy reporter at a newswire described her/his conversations at meetings this way:

We talk, we get to know each other. Talk each other's history—"Oh, what's your background," that sort of thing. And then they'll wanna have some kind of pitch to me—"This is the story we want to tell." I'll go "Uh huh, okay, yeah, uh huh." And hopefully that will be over, and then I can ask them some questions—drop some names, drop some hints about things that I think are going on and see how they respond. Are they in agreement? Do they disagree? "Is polysortin going to drop next month? Are inventories piling up at anyone's factories? What's going to happen when tax credits expire in December?"...All these things that affect their bottom line.

Through this process, sources have access to another route through which to exert influence on coverage, in addition to providing story ideas to reporters. Because so many sources are experienced professionals or former journalists, they understand when reporters pursue this strategy. By providing opinions on story ideas, whether truthful, accurate, or otherwise, regular sources exert control in the newsmaking process in potentially influencing coverage in this interaction. However, when pitching a story of their own, regular sources have a vested interest in communicating their message clearly and directly.

The other function these meetings serve for reporters is that they offer a location to generate story ideas, and they help a reporter keep in touch with a source. Both of these can help assure that this reporter gets a story before another reporter that the source might be in contact with gets it. These sources are important because their information is more likely to be newsworthy than information from other sources for three reasons. First, because they are often "players" in the industry, they are more likely to have information that will be important to the industry. Secondly, it is likely to be about prominent and familiar—and thus, newsworthy—people, organizations, or companies. Finally, these sources are also more likely to have information that other people in the industry do not, which makes contact with them more important because novel information is more newsworthy. A former LGID reporter said this about his relationships with regular sources:

Well, I'll call up a source, somebody I know well. I knew a lot of regulators inside of EPA and the state health department, and I would call them and I'd say "What's up?" Over the years you develop trust, and since they talked to you and they noticed you're not burning them in the paper, they start to feel comfortable and they start to tell you stuff that maybe they shouldn't, but they do, because they know that you have discretion.

These relationships can lead to "scoops" and expedites the newsgathering process, but this former LGID reporter called relationships with regular sources "a complicated little dance." Through this process and regular relationships, marginal organizations, people, and ideas are less likely to be covered, especially those who are relatively resource-poor (Schudson 2003:151). Both parties directly involved in the relationship, as well as the news organization, benefit from it. Sources get access to news, reporters get access to privileged information, and the organization get efficient and cost-effective work from their employees (Fishman 1980). This is a discursive practice overtly built upon power exchange: the reporters are positioned to grant organizations a legitimate place in the public sphere, and in return the sources grant access to "news." However, this exchange can become inimical at times, and sources know how to use their power to their advantage. One energy reporter at a newswire explained that in providing information, sources may "do it on a very personal basis—they try to reward their friends and punish their enemies in the press." More specifically, as a former energy reporter at a LGID described earlier, sources "knew how to get at you by planting the story with your rivals."

Most reporters who discussed this relationship were quick to point out that fairness in an article is treated respectfully by many sources, even if their portrayal in the article was not as favorable as they would like. Reponses to negative coverage can be varied—it isn't always negative, but is part of the "complicated little dance." If the response is negative however, one reporter said "That makes it 9:30 in the morning and you go about the rest of your day. It happens frequently." Many reporters who discussed this relationship said that the crucial part of this relationship, and avoiding negative reactions is that the stories must be "fair." Because the relationship is symbiotic, it is not in the interest of either party to burn bridges. In negotiating this relationship, reporters rely upon their ethical standards: they must not misrepresent the group, or misrepresent the issue in a way that discredits the group.

Fishman (1980) roots the discussion about the transmission of ideas from source to reporter in the intentions of the sources themselves. That is, what purpose does the source have in providing the information? This line of thought misses the point. Reporters are skeptical of all accounts, and see them all as promotions. The real issue revolves around how suspicious the reporter is of the sources' intentions, how questionable (or reasonable) the account is, and how much time the reporter has to figure this out. This is an especially important negotiation if the sources are anonymous.

Background and anonymous sourcing. Sources are involved in background work in two primary ways. First, sources can be crucial places to gather privileged background information, but there are rules that govern this relationship. These sources trust the reporters, and are often "off the record." A PPLGID reporter told me:

If they say, "I'm telling you this but you can't quote me," you have to honor that. You've established ground rules about what can be for attribution, what's on background, what's on the record, what's off the record. You really have to honor that. You can't go back on your word. I think that's all really important.

These sources can be valuable sources of newsworthy information, so reporters must be careful to manage the relationship properly, as to avoid missing out on potential scoops in the future. These anonymous sources are extremely common in the article data, and because they are unnamed, take little risk in confiding in the reporter because they are able to avoid public scrutiny. Secondly, the use of sources also may make difficult background research easier:

I read a lot of papers and then I e-mailed [a scientist] at [federal research laboratory] and I got sources who I know are friendly and who can give me a synoptic view of a field, and then I can say "look, what is the most we can say right now in the connection between La Niña and El Niño and climate change? You know, what is a good summarizing statement about the status of research in this field?"

The use of sources this way helps the reporter save time doing background research, and may get them a quote for the story. Further, these sources don't simply summarize a field—they may help a reporter get an appropriate perspective and context on an issue. Sjolander, et al. (2010) found that some reporters become dependent on certain types of sources. This "expert dependency" is interwoven in the news routine with the reporters' definition of "news," and can affect the frequency with which an issue is framed in certain ways, as Castello (2010) demonstrated. Further, the reliance on regular sources in that case led reporters to tend "to publish positive reports on the industry and adopt its vocabulary and frames" (477). Though the ability of some sources to stay "off the record" and still provide crucial information to the reporter is potentially problematic, it also can play a crucial public service function if they provide the reporter with information that challenges dominant institutions in some way. In the article sample, there were many hundreds of uses of terms such as "experts," "opponents," "officials," and other anonymous status terms. Respectively, I coded these terms 194, 97, and 503 times in the article sample. An example of this usage is seen in a *Los Angeles Times* article from 2001:

Officials hope to avoid making frequent, massive appropriations for power purchases—the bill for 90 days' worth could top \$5.4 billion, some experts say—by quickly signing fixed-cost contracts at prices cheaper than those the state water department pays by buying an hour to a day in advance (Ingram and Vogel 2001).

Anonymous sourcing is a potentially powerful tool for sources to use in maintaining their particular worldview or advocating for a particular course of action within RSE news discourse, as seen above. Less anonymity may have positive effects on the reception of news, however, as Bennett (2010:139) neatly describes: "A message that contains an unambiguous identification of the source – i.e., *source attribution* – is more likely to be viewed as legitimate, and hence improve audience receptivity. A message expressing an opinion by unnamed sources typically will have less influence than a message containing a named source" (*italics original*). Clearly, not all "experts," are anonymous because they wish to be so. Introducing sources in stories can take up valuable word space, as one reporter told me. When you only have 500 words, it can be hard to justify spending twenty of those words introducing someone whom they may see as a nonessential source. However, these sources also increase the degree of transparency of insular, inaccessible institutions such as governments or corporations. This insularity began to erode, however, as the Internet became ubiquitous, and the public increasingly expected "electronic" transparency.

Sources, space, and hegemony. Questions that reporters raise in stories need source support, but with less time and space, there may be fewer sources in stories. Because the observation and interpretation of events is inherently subjective, seeking out as many interpretations as possible is crucial for a reader to have a comprehensive understanding of a given issue. A former reporter describes the writing of a story as something produced under constraints—something that will inherently have limitations, and potentially, fewer sources. I asked this reporter why this could be a problem:

The truth is in some way relative, right? You have 20 different people watching an event; they will all describe it 20 different ways. So the more people you interview, the richer sense of the event—and if you have time to interview only one, it's going to be pretty two-dimensional.

Though I found very few news stories with only one source, this quote demonstrates the potentially crucial influence time and staff pressures could have on stories. Contacting sources takes time for reporters. Many told me that once they have a story idea, the first thing they do is contact sources. Because they cannot control which sources will get back to them, or how long this may take, they usually will call sources before doing anything else. This unpredictability makes reliable, recurrent sources desirable, and as long as the reporter does not compromise the story by relying upon potentially biased regular sources, reporters see the relationship as relatively benign—and indeed beneficial because of the sources' function in streamlining the newsgathering process. Reporters don't see an inherent ethical problem with getting story ideas from regular sources, again, because they are often sources of formally legitimated information. The real ethical test in their relationships with sources is that of passing the source's information uncritically to the public; this negotiation manifests in the degree of "fairness" the story embodies.

Under space constraints, and the constraints of a continuous news cycle, this may mean that reporters may only have time and space to contact the most essential, legitimate sources those with authority to speak about the story's topic. In RSE stories these required sources are most often government officials and scientists, and large RSE trade groups. This fact reflects a longstanding finding in news studies about the reliance of newsworkers on official sources (Herman and Chomsky 2002). This reality alone, as Schudson (2003:141) succinctly notes, is "solid ground for criticism of a progovernment or statist bias in the press."

It is not simply that reporters go to these sources simply because they provide information in an expedient fashion, but that this information satisfies the normative definition of news, and makes perfect sense in this context. The personal and ethical drive reporters have to report fair, high-quality stories is an effective buffer against the hegemonic potential embodied in relationships with official sources, and often leads them to seek out as many countervailing sides as possible, given the relevant strictures of the particular story. The issue of fairness gets murky, however, when the countervailing opinions are also official sources—which they most often are. It gets even more complicated considering cultural and economic pressure toward shorter stories and tighter deadlines. Ultimately, the close relationships between reporters and sources present frequent opportunities for the transmission of hegemonic energy messages, which are characterized by incomplete content, and a corporate and or political focus.

Newswires

Most news holes have shrunk—especially those in print publications. There is simply less print space to fill, though there are no practical limitations on the amount of news a website can hold. There are limits to what the organization can produce in-house, however, and to what the public will actually read, both in terms of article length and topics. Newswires offer an economic

way to fill news holes, and a huge amount and variety of publications use newswire stories. An energy reporter at a large newswire described the ubiquity of his/her work:

As soon as we hit the button on a story it shows up on the websites of the newspapers across the country. So, instantly it's on thousands of newspaper websites. My stuff is up on Forbes now as an [newswire] writer. It shows up on BusinessWeek, Yahoo news, Google News—all these places subscribe to it.

In addition to the Associated Press (AP), other newswires that primarily focused on business clients in the past, such as Bloomberg and Reuters, offer large and growing general interest reporting. Newswire organizations provide subscribers with content that may be used in a variety of ways. If, for instance, a reporter at Reuters writes an 800 word story, subscribing organizations may run the article in its entirety or cut parts of it to fit into their print editions, depending on space constraints. Talking about this ability of subscribing organizations to cut articles in such a variety of ways with a newswire reporter. I noted how frustrating it must be to see the stories she/he worked on so hard meet this fate. The reporter replied, "Tell me about it. I did a story about–a long story about gasoline demand, and one paper ran on the front page, but it only ran four paragraphs of it." This practice has the potential to throw a story out of "balance"—that is, to affect its overall treatment of the various sides of the issue. This practice also has the potential to be particularly problematic with energy stories, because these stories in many cases require a significant amount of background information and context to be of reasonable comprehensibility and news value. This is especially true with renewable energy stories because a large majority of these stories are focused on the business, politics, policy, or technology of renewables—all of which are fairly complex and often require lengthy background and context.

Further, newspapers' use of newswires seems to be on the rise, and according to a recent Pew study, the wire service sector is one of the few exceptions to the downsizing trend in print

publications (Edmonds, et al. 2012). Antilla (2005:350) found that newswires were becoming a dominant source of climate science news, while noting that a potential problem with newswire stories is that incorrect information in the original article, given that the large—and growing—number of subscribers to newswires, could cause "the exponential spread of misinformation." This is a situation that may become more common because, as one long-time environment reporter at a PPLGID says of his/her paper now, "there's no question they rely a little more on wires." On the other hand, newswire specialty reporters seem to be stable and deeply embedded within their beats, and thus more likely to produce higher quality stories than would be currently possible a large majority of general interest dailies, because of the general lack of environment or energy reporters. As cash-strapped papers increasingly rely on newswires, they may end up getting better news than they could have produced on their own, but also risk amplifying the spread of incorrect information and the voices of newswire reporters and sources, while contributing to the increasing homogeneity of RSE reporting more generally.

Internet Use

The Internet is the most critical tool in the reporter's arsenal, next to the phone. It allows them immediate access to information and sources quickly, and allows for more deeply sourced and reported stories. Because of this, the advent of the Internet fundamentally changed reporting, as one longtime energy reporter explained:

Generally, it's expected that you're going to be able to gather information, and be an expert in your area, and quickly assess on your own, or through your sources, what the importance, what the context of an issue is. The Internet is probably just taken that whole dynamic and put it on steroids. It's sped up the amount of the time required to gather information. It's sort of turned everybody to be a sort of mini-expert in a short amount of time. The effect on information gathering is dramatic, since, say, the mid to early 90s. It is much, much easier to A) find sources, and B) gather background data, and points you in a direction where you can really get information. As this reporter explains, not only has the Internet expanded the reach of reporters in their newsgathering efforts, it has also increased expectations to some degree among editors. Reporters now not only need to report a story quickly, but need to do so better than colleagues in years past might. This is beneficial to the reading public, but also places additional strain on reporters who are already under increasing pressure to get this higher quality news out faster, and in less space. Due to this pressure, reporters have turned to social networks (primarily Twitter) and new software platforms to help them improve their stories, find sources and story ideas, and disseminate their work.

Reporters have a wide array of sources from which they gather stories. Many reporters are using Gmail, as described earlier, to sort through emails. This practice ends up privileging regular sources, and the common use of Gmail's "news alerts" custom filters the day's news to the reporter's specifications. This allows them to find this news very quickly, as opposed to searching a number of individual news organization websites. Once they see a story of interest, they might adapt it to their region or locale, shift its focus, or adjust it in another fundamental way. This particular technique of seeking stories, as a discursive practice, has the potential to either recreate hegemonic messages, or amplify marginal ones by recycling the perspective of the original article. Because reporters are busier than in the past, this technique of story selection is likely to become more common because it adds predictability to the newsmaking process. As with many shifts in discursive practices brought about by various effects of macrosocial change, this practice saves time while extending the potential of hegemonic reach by recreating old stories; this also may contribute to the homogeneity of RSE news discourse.

Social networks also play a varied role in the process of story production. They can be sources of story ideas, a way to solicit help with background research, recruit sources for

interviews, cover events "live," and most commonly, to disseminate stories. Though it was probably the least common form of social network use, Facebook can be useful for those looking for a local story. A few reporters discussed recruiting sources for stories via social networks as well, specifically Facebook and Twitter, though the latter was more common. The reporters in these cases are typically seeking input from local, non-expert stakeholders—people who have installed solar photovoltaic panels on their roofs, for example, for a story on maintenance problems the panels might have.

Most importantly, bringing the public into newsmaking to this degree can be beneficial for reporters. It allows for the gathering of novel information and turns media coverage into a collaborative project, which may save the reporter time because they spent less time gathering background information and searching for the scoop that these collaborative stories can provide. In this way, these types of stories can blunt the effect of downsizing to some degree, and in some important ways, simultaneously improve the news product by providing coverage of stories that would not have been covered otherwise. In general, it can be used to improve the news and democratize the news gathering process at large news organizations. For this veteran environment reporter, who works for an online news service, this mode of contact and source of ideas is very valuable:

A lot of times stories are generated by readers who send us a note. And that in many ways has revolutionized our work...how else would somebody, who's living near a toxic landfill in Alabama, contact me and give me a story lead? That happens pretty frequently.

This story may not have emerged from any official sources, so this variant of "crowdsourcing" the outsourcing of tasks to an anonymous public—is an invaluable technique for generating stories, and is likely to become increasingly frequent as print publications continue to close, and online news organizations such as *The Huffington Post* continue to grow and proliferate. Some

reporters who have embraced this form of communication with the reading public have benefitted by getting scoops on stories and telling stories that would have been functionally off their radar otherwise. This trend represents a potentially new direction for reporters to begin recovering the "on the ground" stories that were more prevalent during more prosperous times in the industry, and is a promising avenue, as discussed earlier, through which to integrate marginal energy discourses into mainstream news. So, the use of social networks in newsgathering presents, as does the use of the Internet more generally, opportunities for both the reification and challenging of hegemony in news, and represents a contested discursive space described by Laclau and Mouffe (1985).

Editing

Almost all reporters told me that their editors have minimal input on their story ideas, which is slightly different from the wider spread influence of editors in Gans's (1979) results. I found influence from editors on story ideas and story content, but not in a dictatorial sense; in general, editors are simply too busy to spend time feeding reporters stories. Reporters go to their editors to talk through story ideas, and for the most part are expected to know the "news" of their beat and to generate and produce stories on their own. When editors do suggest stories, it is most often either a suggestion from an editor higher up, or one of their own, and may be used as a way to keep a reporter on a slow beat busy. Because editors' workloads have also increased, reporters simply rely less on their editors for editing. This ultimately puts the burden of editing on reporters themselves or their colleagues and may result in a story simply being more likely to be inaccurate or incomplete.

Though editors may suggest ideas for stories, they more often used as sounding boards. This is especially true when a reporter wants to get a sense of how good an idea will sound in the

morning budget meetings—how likely it is to be an "A1" candidate—and thus, how likely it is that it will require more reporting (because it will be given more space). A PPLGID reporter said this about generating story ideas:

[They] definitely come from sources, or my own observations about what's going on. Its quite rare that an editor tells you what to write, although there certainly are times, and one of the ways I use my editor is to consult with them, and kind of get their take on which stories maybe I should prioritize. But in terms of coming up with the original ideas for the stories, that comes from my own reporting.

Shoemaker and Reese (1996:162) note, editors "cannot be too heavy-handed" in the newsroom, and that reporters may start writing with them in mind, giving them "de facto control" over the process of writing generally. Some reporters did admit to writing with their editors in mind, but not necessarily in terms of story ideas or coverage more generally, but comparatively trivial things. Reporters often hold editors and their skill set in very high regard, and look at the editing process as a way to improve their stories. In general, editors do have influence in the process of newsmaking, but this influence is muted by the expectation that reporters should seek out their own stories, and by the increased workrate editors are experiencing.

In order to save time, reporters often learn to anticipate their editor's critiques, and write with them in mind. One reporter would ask herself/himself before turning in stories in if they were "going to pass muster." I asked another reporter specifically about his/her relationship with her/his editor, and he/she were unequivocally positive, while acknowledging, again, the problem of time:

I wish that we had more time and that they could edit my stuff more, because your stuff is always better after it's been thoroughly edited. It's always going to be better on the second draft. It's always going to be better when someone says: "A little bit more color here. Can you describe that person?" And we don't have that luxury of time.

This "back-and-forth" relationship is something else that has suffered as staff reductions have taken place. These conversations simply lead to better stories.

Once a story has been written and has gone through an initial edit, it will get copy (line) edited. Assigning editors may do some of this, but they are generally more focused on content, and typically there is a copy desk that does the line editing. Traditionally, this desk was also where fact checking would happen. These desks are less common now with budget cuts in the industry, and this is another example of a task that used to be covered, industry-wide, by a designated set of employees. Reporters find themselves doing much fact-checking on their own, and will also edit each other's stories. Coupling these new tasks with the increased workload that reporters currently manage, it seems clear that many publications are benefitting from the "typical" reporter's work ethic and dedication. Not only has their story output generally increased, reporters are expected to varying degrees to learn and utilize news software and hardware technologies, and they also have adopted some of the work of editors—all in an environment that is already fast paced and highly competitive. A reporter at a newspaper that publishes on multiple platforms explained her/his editor's workload this way, which seems to imply that he/she is doing more of her/his own editing, when possible:

I would say that right now what's happening in newsrooms is that the assigning editors are really crushed by the workload. If you think about it, every reporter is filing to the web, the iPad, and to the paper. All of that copy is being moved by the assigning editors, and so I feel like there's a real limit to their time. A lot of times, they have no choice, they have to move an enormous amount of copy, and they're juggling more than just a—you know my editor has 4 other reporters that he's responsible for. So a lot of times for my column—I'll say "Do you have a second to chat?" He'll be like: "I can't, I have three other stories I'm in the middle of moving." So, you'd need to be cognizant of the fact that you're not the only reporter that they're managing. They're kind of managing the workloads of several people.

Many reporters also expressed empathy for their editors in these situations, who have seemingly had their workload increased more than reporters have. This phenomenon was explained by an increase in workload caused by staff downsizing, and an increase in management duties for multiple platform publication. Editors have multiple and varied obligations, and this veteran reporter cited that as the reason they aren't too heavy handed in their story editing duties; they simply don't have the time:

They've got other obligations. They have to run the paper, they have issues of staffing, they have broader issues of overall coverage: "Well, how do we make our platform better?" I mean they're dealing with all this other stuff without physically running the newspaper.

The pace of the newsroom environments that Gans (1979), Tuchman (1978), and Fishman (1980) described has only quickened. To adapt to the increased workload resulting from the increased pace, reporters and editors have adopted different discursive practices in response to the effects of the increased workrate. Editors are turning to newswire stories at a higher rate than in the past, and reporters have begun to absorb additional tasks into their work routines out of necessity. This practice further extends the advantage reporters' employers take of them in this time of tight budgets in the news industry, which potentially compromises the quality and breadth of their work, delegitimizes the RSE industry, and misinforms the public.

Summary of effects on newsgathering

The conditions created by macrosocial change have had on newsmaking are wide ranging. Primarily, the exacerbation of time and deadline pressures has affected the way reporters collectively define news, relate to their sources, gather news, and get their work edited. There are numerous spaces in these processes wherein the traits of the typical reporter are invaluable in limiting the negative effects of increased constraints in reporting because ultimately, the degree to which the macrosocial changes have negative effects on news

production is mediated by the degree to which reporters absorb the additional workload and pressures of this increasingly constrained environment. The newsroom environment and pressures reporters are able to deal with help them accomplish this. Further, the use and shifting of the normative definition of news is of utmost importance in considering source use and story selection. Considering this definition of news is also crucial in comprehending the constitution of RSE news products. As products of the constrained environment of newsmaking, RSE news is hegemonic in its homogeneity and marginalization of alternative discourses. These characteristics of RSE news result in coverage that is driven toward simplicity, shallowness, incompleteness, and an elite-focus.

EFFECTS ON NEWS WRITING

These four characteristics are a result of existing relationships in newswriting, as well as new relationships brought about by changes in the industry. Primarily, changes in newswriting that themselves stem from shifts in the ecology of newsmaking are the issue of "balance," (or as many reporters preferred, "fairness"), and the shortening of stories and its resulting effects—a reduction in sourcing, less background, and the need for "writing around." The latter of these describes a need to avoid mentioning context or facts because they require more space to properly contextualize than the reporter may have. Considered together with the increasingly constrained environment of newsgathering, the processes described in this section produce a RSE news discourse that serves hegemonic interests in its focus on the elite discourses of policy and economics and its marginalization and exclusion of alternative narratives. This section will close with a further description regarding the interface of RSE and contemporary newsmaking. *Shorter stories* Another way publications have dealt with a shrinking amount of physical space has simply been to shorten the stories they print. It is unclear whether this is purely a result of the physical constraints, or whether there are cultural conditions—real or perceived—that precipitated the change. A long-time reporter at a PPLGID said:

If you look at clippings on a given subject, and you look at stories from the 80s, the 90s, the 00s, and now, you'll see that many of them have gotten steadily shorter over the period. A news development that we might have once dedicated 1000 words to, we will now do in 650. The possibilities are that people's attention span is getting shorter, or our estimate of people's attention span has gotten shorter. Our idea of what the optimum length is for a given story has gotten shorter. We don't expect people to spend as much time on the subject as we used to think they wanted to spend.

In this quote, the reporter describes another explanation for the shortening of stories: that it has roots in consumer culture and that the ability and need to hold readers' attention is more difficult to do at length. This practice is also part of the logic of the production of online news. Following this reporter's logic, had the Internet come of age earlier, in the period of modernity (that is, prior to 1968; see Best and Kellner 1997), the stories on news websites would likely have been longer. It seems then, based on the shortening of stories and this reporter's thoughts, that the shift into postmodernity and the concomitant consumerist discourse manifests itself in the news production process as shorter stories. Kelly (2009:42), in describing Fairclough's (1989) and Garvey's (1995) assessments of consumerism as a discourse, notes that "the dominance of capitalist values on an institutional level has led to the hegemonic 'colonization' of other discourses by the 'discourse of consumption." The fair production of news, according to these dictates of consumerist discourse and material necessity, is in danger. Specifically, there is less space to introduce multiple sides or sources into a story, or to socially or historically contextualize the topic in reasonable detail and depth. Again, in this instance, the macrosocial conditions have created a space within the news production process from which challenges to dominant ideology,

within the news itself, are less likely to emerge because of one particular discursive practice: "writing around" background information, sources, and context.

"Writing around." Reporters often told me that they know when a story is ready for publication when "all the reporting is done." That is, as one interviewee put it, it's ready when she/he "can't raise any questions that aren't answered." As this suggests, reporters raise questions concerning context issues they deem most crucial for the reader to know and are potentially the least complex, and will then answer these questions in the story. However, there are also questions that are excluded from consideration. The practice of not mentioning background facts about a given issue is called "writing around" them. One reporter told me about not raising questions you cannot answer in the story:

Yeah, you could write around those—even sometimes you try to write around them, people will say "wait a minute." I just read a story that we [the paper] wrote, this woman from India, about solar in India. The whole story talks about how these people get to—with these solar panels—get to have lights on at night. There's no mention of batteries. I'd like to know how that works. You know what I mean?

In this case, the question the reporter "wrote around" was a crucial one, and perhaps this reporter did not understand how crucial the question is to understanding the use of solar power at night. What was missing was an explanation of how users were storing electricity for use at night, and since the storage of RSE is an increasingly important part of RSE discourse generally, it is a rather large question to write around. In the past, as another reporter discussed, it was more frequent for reporters to write around questions in stories because they simply didn't have access to the requisite information in time for the story to go to press. Now, however, because so much information is so readily accessible on the Internet, this is much less of an issue. Things are "written around" now because of space and time constraints—exacerbated by decreased news budgets and continuous news cycle—rather than constraints of information accessibility.

Another reporter told me that she/he thought that because of the increased accessibility to information, science reporting has become much more factually dense—a trend that is also noted by Schudson (2003:107). In any case, the judgments of which questions and issues not to bring up is still up to the reporter and the editor, though as some reporters told me, many editors don't have the knowledge base to ask nuanced questions about renewable energy. Quite clearly, the editor who reviewed the story above fits this description. Further, considering the everdecreasing number of environment and energy reporters, the issues that get written around are more likely to be crucial, and reporters and editors are decreasingly likely to catch missing questions and context. Reporters did not describe the specifics of what they wrote around, but there are indeed patterns in what content is present and what is not present. The discursive process of "writing around" (rooted in social processes of cost reduction) necessarily excludes certain ideas because RSE stories, like science and climate stories more generally, can be potentially complex—both scientifically and socially—so including all relevant information in a story is not possible. Reporters are typically under time and space constraints, and have a typical writing process, all of which systematically excludes pertinent information. This conclusion seems to be borne out in the RSE articles themselves, and is discussed in chapter 5. An important implication of this is that the public is less likely to be aware of information that is excluded if it is done so in a systematic fashion; more simply, if issues are not ever covered, people will not know that they are missing, and in terms of sourcing, will not hear from certain stakeholders.

Background. Background information gives context to stories. One reporter describes it as "why it's important, what happened last quarter, what people were expecting to happen, that sort of thing." The inclusion of additional background information will help the reporter write a

better, more accurate, and more nuanced story. A veteran reporter at a PPLGID said this about the importance of background information:

You have to bear in mind that you're writing it [the story] for somebody who may have hardly any prior knowledge, that you need to provide all necessary antecedents, and all necessary background. Some of the background will be previous developments, previous statements, et cetera.

So, background information is both the information that gives the reader a baseline understanding of the topic as well as the context that gives the particular story meaning. The central question of background, as this quote alludes to, is defining what the "necessary" background is for a story on a given topic of a given length that is due in a given amount of time, and thus, what can be written around. Because of these limitations, often background information uses incomplete, overgeneralized, or inaccurate comparisons to communicate the background of RSE, and contributes to both the limited scope of RSE news discourse generally, and the composition of RSE frames specifically. The latter is exemplified in the cultural feasibility frame, which relies upon background information in news articles about RSE aesthetics for much of its structure, including all of its frame elements. To some degree, the state of this background information can be explained by reporters' adherence to norms of balance.

Balance

The concept of fairness is tied up with that of balance, as reporters conceptualize it. Research on balanced reporting of climate change demonstrated the importance of this journalistic norm in reporting climate, and it has often been shown to have an adverse effect on climate reporting (Antilla, et al. 2005; Boykoff and Boykoff 2004, 2007; Boykoff and Mansfield 2008). Often the quest for balance is much more than giving both sides a quote in a story, and in terms of RSE stories, balance is often not straightforward–for a number of reasons my interviewees discussed. How a reporter builds a balanced story will depend on the frame, the

topic, their experience on their beat, how they decide which organizations and views to include and how diverse their sources are, and to what degree the story is breaking (in some cases). Balance is also a matter of scale—there may be imbalance within a single story, within a single edition, within the publication itself, and within the industry generally. Like many other elements of reporting, how reporters understand and make use of the idea of balance (or as some said, "fairness") is subjective. As one reporter said, channeling former Supreme Court Justice Potter Stewart: "Balance is kind of one of those questions like 'I know it when I see it." Crucially, balance as a normative practice also underlies three characteristics of RSE news making more generally: the use of the problem frame, the "competition with fossil fuels" theme that emerged from my article sample, as well a practice called "lumping," wherein fossil fuel and RSE energy sources are grouped and compared against each other. This practice, though it saves space, fundamentally misrepresents RSE.

Frame and topic dependence. First, balance is not something that can be applied the same way to different topics. As the reporter below notes, there is a difference in how a reporter will build balance into a story if it is a political, scientific, or other type of story, and further, what the topic of each story is. This veteran reporter, who is freelance now, sums up the issue:

Balance means different things for different kinds of stories. So what's appropriate balance in a political story is not at all necessarily appropriate balance for a scientific story. Would we give equal space in every story about evolution to the people who believe in intelligent design? Intelligent design is not even science. Why would we even have it in a science story? But if we were doing a story about a measure before the school board, to introduce intelligent design or creationism you'd have to give space for the views of the people who are pushing it because they're pushing this thing, and why are they pushing it? You need to give space to people who are saying, "This is a really bad idea because it's not science." And then if you're a really good reporter and you know a little something about science, I think it's totally appropriate to say something about how evolution is the accepted, well-tested paradigm of how species change, and intelligent design is not at all accepted in the scientific community.

In this quote the reporter describes the complexity of the issue of balance, especially as it concerns technical or scientific issues, as RSE stories are likely to be. She/He also hints at the importance of the amount of beat knowledge a reporter has. Beat knowledge is crucial because it allows reporters to write a more balanced story, but also allows them to be critical of a source's information in a more nuanced way. This is especially important in reporting RSE stories, given their policy and scientific complexity. From a reporter without experience covering this topic, one might expect mistakes, omissions, and misleading information in an RSE article; this certainly characterizes a large number of articles in my sample. For example, reporters frequently positioned RSE against fossil fuels in an uncritical way, using the "competition with fossil fuels" theme, which is seen in this excerpt from a 2005 *Los Angeles Times* article:

The spread of renewable-energy standards—particularly in Europe—propelled by the treaty, along with a surge in oil and gas prices, has triggered a boom in business for solar and wind energy companies (Iritani 2005).

Not only do these excerpts misrepresent the relationship between fossil fuels and RSE, but the use of this theme also underlies the formation of framing devices and cultural resonances in the RSE frames; specifically, the above excerpt communicates these elements of the "funding" frame. Considering the reduction of beat reporters covering energy and environment, this hints at a troubling direction for RSE news.

Beat Knowledge. Another reporter gives an example of the importance of experience and knowledge of the field, which is a crucial aspect of renewable energy reporting. Because RSE is a complicated topic, it is easy to understand the importance reporters placed on having extra time to keep up on the academic literature on their beat in order to write a "balanced" story. As this concerns climate and renewable energy specifically, one reporter said:

As a science writer, climate is science. Our understanding of the climate is scientific. Climate is physical. And that's where experience is really important.

Based on your experience, based on who you talk to, and the critics may have something interesting to say. Sometimes there is, sometimes there's not two sides to the story. Sometimes people that are telling you one thing are just not being accurate about it, and renewable energy is not immune to it, I mean the cost side—the liability of it. You need to put in the fact that solar is not baseload right now. Once we get central station molten salt going large-scale, then sure... I think you have to rely on your experience, and that's where being inexperienced is risky because you really kind of only do "he said, she said" stories, and that's where climate reporting has gotten awful.

In reporting such as this, where complex issues are simplified into two sided "he said, she said" stories, a great deal of complexity and context are lost (Anderson 1997; Boykoff 2009; Tierney, et al. 2006; Yang 2004). Further, the use of the problem frame (Altheide 1997) creates conflict (and thus readability), with the appearance of being "balanced." The problem frame describes the building of a problem in media portrayals of an issue, along with the implied need to solve this problem. Typically, according to Altheide (1997:653) the problem frame is rooted in conflict, fear or danger and

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is an important innovation that satisfies the entertainment dimension of news. It is an organizational solution to the practical problem: How can we make real problems seem interesting? Or, more to the practical side of news, how can we produce reports compatible with entertainment formats?

This frame is discussed in various framing studies (Koenig 2006), and is an example of what reporters often called "he said, she said" stories. Not only do these presentations portray RSE as a contentious, enigmatic issue, they also provide the foundation for the general and inaccurate comparisons that exist in the RSE news discourse. The "problem frame" is used in this excerpt, from a September 2005 article from *The Los Angeles Times*:

Representatives from PPM Energy, a subsidiary of Scottish Power, have met informally with local officials and residents over the last year to discuss their plans. The wind farm proposal, however, has met resistance by some locals, who complain that the massive turbines would obstruct views of the reserve and mar the landscape (Covarrubias 2005). This excerpt communicates this RSE deployment as a conflict, and considering its positioning at the top of this article, conveys it as the central theme of the article. Further, the use of the "problem frame" also explains the formation of frames, as it influences the use of framing devices, cultural resonances, and frame sponsors. In this excerpt, the framing devices, cultural resonances, and sponsors of the politics and policy frame are conveyed. In general, these portrayals homogenize RSE technologies, deployments, and policies, and fundamentally misrepresent the details that actually represent divergent facets of RSE. For example, I call the practice of grouping energy technologies into two categories "lumping." An example of this is seen in this *New York Times* article from October 2000:

Both sides agree that, despite high-tech windmills and solar cells that would have dazzled disco-era researchers, only a sustained research program will put nonfossil energy into the same league as oil, coal, and natural gas (Glanz 2000).

Making comparisons like this misrepresents the various technical, geographic, market, and political environments that are actually used to determine RSE feasibility in a given context. These comparisons also construct a conflict between RSE and fossil fuels that does not actually exist in energy generation. Additionally, the frame elements that "lumping" communicates are conveyed in this excerpt; specifically, the cultural resonance of the cultural "feasibility" frame, as well as the framing and reasoning devices of the "funding" frame.

Anderson, et al. (2005) found that one reason papers simplified complex issues in this fashion was to clarify and highlight the different positions sources took, and thus, highlight the conflict between them. According to the authors, this building of conflict heightens the news value of the story (Anderson, et al. 2005:216). The drive to write balanced, or objective, stories can "end up producing stories that implicitly support the existing order" (Soloski 1997:152). Further, as Lewis (2000:268) found, being balanced or objective in writing a "he said, she said"

story can also mask the conceptual debates that are driving the disparate opinions, and so the "spectrum of representation is very narrow." In a general sense, these three practices that are a result of the use of the balance norm help to shape RSE discourse into a homogenous, simple, and inaccurate state.

... Within a reasonable and productive window. Interestingly, the spectrum metaphor represents exactly how some reporters conceive of balance and fairness. Space constraints prevent reporters from including all aspects or sources relevant to a story. A few interviewees talked about balance in terms of a section of the middle of the spectrum of opinion on the issue. Some reporters pursue this by always seeking an "outside voice," or "independent voice"—a common discursive strategy used in pursuing "fairness." Another reporter spoke in visual terms about what "the middle" is:

You go to the Union of Concerned Scientists and see what they have to say. Before you make the call you have to have some idea what you're talking about, otherwise you're wasting their time. So you are not calling cold, so much as you're bouncing around to sort of see where the center may lie. You've done this enough times before with this topic that you kind of know where it lies anyway. You may be surprised, but the tail is not that long—it's a bell curve, it's a rather tall one in the middle, where probably the truth is. There is a very low probability that it is out here [on the tails] somewhere.

This conceptualization of balance necessarily excludes marginal discourses, and on the surface is highly problematic. However, giving voice to these discourses can be problematic itself, as it can lead to "false balance," a situation characterized by some climate change coverage in the news, wherein "climate deniers" are given coverage equal to climate scientists, thus fundamentally misrepresenting the scientific consensus of climate change science (Boykoff and Boykoff 2007).

Balance is also an issue of source diversity, so the judgment about which sources to include, and to what level they are a "diverse" group depends on the judgment of the reporter. Though Schudson (2008) assesses newsroom studies as "the story of the interaction of reporters and government officials," the issue of source use in practice is more complex. Even when the scientific evidence is clear in an area, reporters still must be "fair" to those whose position is in conflict with this evidence. This is an important consideration for reporters in building balance into their stories, and working to avoid being an advocate for any of the stakeholders, as one reporter described: "I really feel like my job is: 'I'm not on your side, but I'm also not *not* on your side'—and I'm not on anyone else's side either." A former LGID reporter elaborated on the reasoning for pursuing "the middle"—because it is the most likely to be objective: "This stuff is so complicated, you really want to go to the middle. You want to get the guy who studies it, as opposed to the people who have a stake in either outcome." Balance is somewhat of a misnomer in most cases as well, because there is often more than "two sides to a story." A former energy reporter at an LGID explains:

You take sources from all sides, not just two sides—there can be five sides to the story you know? So you make sure that you've captured the five sides, you know in your mind, to make a complete package, a complete story, [where] none of the stakeholders call up and say, "Hey, this is not accurate from our point of view." So, you keep working the phones in trying to get as many sources in the story, as many interpretations of the story, or context of the story as you can.

Under ideal circumstances, reporters certainly pursue this strategy. However, because time and space constraints so effectively permeate virtually all aspects of newsmaking, having this many sides in a news story is not frequently the case, but it does represent the goal many reporters have in pursuing a "fair" story: it also involves an effort to be "thorough."

When a reporter writes a story that is both "fair" and "thorough," balance can be a product of that effort. Because of space and time constraints and the seeking out of legitimate sources, reporters seek to describe renewables in a fair, reasonable window somewhat in the middle of the spectrum of opinion in as thorough of fashion as possible. Though they all seem to seek it out, finding the middle isn't always desirable, or a possibility (though van Alphen, et al.

2007 found balanced accounts of CCS carbon capture and sequestration technology in the Netherlands). Some reporters can have problems getting more than two sources or positions within a story simply because of space or time constraints. Further, if reporters are not knowledgeable enough about a topic, or adhere too rigidly to journalistic norms of balance, the stories might end up producing a falsely balanced story or marginalizing reasonable stakeholders or discourses.

Position. Finally, balance is also a matter of position. Where source quotes are put in reference to each other in a single story can be thought of as balance. A story's position in the paper can also be a source of bias, as can a certain publication's historical patterns of story production—what gets written and what doesn't. This is also true at the level of the industry; context and balance within stories may be getting lost in the rush to get stories out quickly across newsmaking organizations. A number of reporters described the importance of considering story position when they are putting quotes into stories. A quote high in the story, and especially in the nut graf, or grafs, can afford that source more credibility than one positioned lower. Often, the official sources get more favorable play in this sense because of their status, in effect delegitimizing the opinion of the local stakeholder. This discursive technique both draws readers into the story and reifies the legitimacy of the official source. Often, it takes officials with a status similar to the President's to get an RSE story on the front page; to many reporters, RSE stories are at a systematic disadvantage in this sense, simply because RSE stories are not often deemed newsworthy without the inclusion of a member of a prominent political, economic, or cultural elite group.

Because the shape of the paper is in flux for most of the day, where renewable stories end up getting placed in the paper or on the publication's website could be an indicator of bias on the

part of the publication. This is not simply about position; stories in the back of the paper are more likely to be shorter than those further up, and will be characterized by shallower coverage. Again, in my article sample, only 41 of 980 articles were front-page stories. Because it is not often newsworthy enough to garner coverage, RSE is systematically denied prominent coverage.

Finally, reporters discussed potential industry-wide bias as a function of the cultural, technological, and economic conditions of the past half-century. One reporter tied this potential bias back to the "continuous news cycle:"

The quickness of news today I think...a lot of the stuff we talked about makes it difficult to report accurate, rich, interesting, contextualized stories. It would be hard for me to jump back in to that landscape where you're getting stuff out so quickly that you don't have time to do all the work that you think is necessary to back things up.

The continuous news cycle has roots in the recent cultural and technological changes that have affected larger society and culture. This has changed the way news is reported, and in the case of RSE news in particular, the continuous news cycle requires reporters to produce politically, technologically, and socially complex stories very rapidly. Given this speed and complexity, balance should be a constant concern.

Reporters conceptualize balance on more than one scale. There are issues of source diversity, balance as a function of where positions are represented within a story, how stories are positioned in the paper, and the general amount of coverage something gets on a publication scale. With so many things that may need to be balanced within the story, it now seems clear that conclusions in research on balance in the media must carefully operationalize that which is to be measured. It seems insufficient to say, for example, that a renewable energy story is balanced or unbalanced. The better conclusion would be that the story is unbalanced in terms of its discussion of the reliability of solar photovoltaic panels, that is well balanced in terms of the

potential amount of electricity to be delivered by a new project, or that it is well balanced in terms of sourcing. If three or four different aspects of the project are discussed in the article, then according to this logic, the discussion of each of those three or four aspects would have to "balanced." Achieving balance on a topic such as RSE that is complex is difficult, especially given the time, space, and experienced-constrained news environment. Further, the conceptual muddiness of the term "renewable" could complicate research on balance in RSE news in a way that is not applicable to media studies of balance in the reporting of climate change. *Writing About Renewable Energy and Climate Change*.

As described in a number of examples in this chapter, the ways in which the changing newsmaking milieu interacts with the issue of RSE is unique in a number of ways. Because of its technical complexity and its ubiquity in U.S. politics and culture, newswriting on RSE can be a challenging endeavor. First, writing a balanced (that is, fair and thorough) story on RSE is challenging because of this complexity—the implications of which are more serious as environmental desks close and space constraints remain influential. Secondly, because it does not translate well into the news format, simply getting RSE into the news can be challenging in a way that is not applicable to many other topics. These challenges manifest themselves in a few ways in the news production process: space constraints limit the amount of background reporters can put into a potentially complex RSE story, the ambiguity of the term "renewable" allows it to be used imprecisely, the role climate and carbon play in RSE articles and the role of reporter agency in determining its usage, the use of news "pegs" that focus coverage on single aspects of RSE, and the role experience on an energy or environment beat might play in RSE coverage. One benefit of beat experience is learning to use the appropriate background information, given space constraints.

Space constraints. When there are tight space constraints with a story, the amount of background information a reporter can provide is limited. Depending on the story, this can be differentially problematic. If a particular renewable energy topic is complex—whether technical, political, policy-oriented, or otherwise—a baseline amount of news space is needed to provide background information adequate for readers to grasp the story at a basic level. A former science and environment reporter sums up the tension between space and background information:

You don't want to do much more than 650 words. You didn't want to do too much less either because the challenge with these stories—and you've heard this before—is you can't boil them down too far because there's so much background that you have to explain before they are meaningful at all. Solar panel efficiency, well "A new panel is 20% efficient, wow!," and people are like: "Is that good?" So, somewhere in there you need to tell them that a leaf is 3% efficient, and the first panels were 6 or 7, and the ones in space are 23, and whatever. You need to give them context. That takes words. So suddenly you've got an editor wants a 350 word or 400-word story and you've just spent 75 or 80 of them on background that if it were a car crash, you wouldn't have to explain.

One could argue that this is true of virtually all stories—that they are all complex, and all need detailed contextualization. This may be true to some degree, but there are still stories that require more background than others, and often, renewable energy stories do because these power sources are technically complex and are the focus of long-term policy fights on many different governmental levels. The lack of adequate background can lead to the "episodic" framing of RSE that deemphasizes the historical and cultural context by focusing on a single RSE feature or event (Anderson 1997; Boykoff 2009; Yang 2004).

"Renewable." The technologies reporters most often described as renewable were, predictably, solar (both solar photovoltaics and solar concentrating technology) and wind. Geothermal and biomass also came up, not quite as often. Least common were tidal, landfill gas, and other niche approaches. Responses to how *"renewable"* was different from clean, green, or alternative energy were diverse as well. To some reporters, *"clean"* and *"green"* are seen as synonymous with "renewable," though "clean" was more ambiguous in its use in articles as well as in its definition by reporters. "Clean" is a term used by both Presidents Bush and Obama to describe carbon reducing or non-carbon producing technologies, and often nuclear, natural gas, and "clean coal" technologies were included in discussions of "clean" energy. As Boykoff (2007b:486) contends, a lack of clarity such as this opens discursive space for policy actors to "defray responsibility and delay action." In this case, the ambiguous terminology allowed these Presidents to describe the pursuit of "clean" or "alternative" energy policies that were sometimes only marginally concerned with RSE itself.

"Alternative" was recognized by reporters as something completely different, and as a term that reporters, renewable industries, and government were moving away from in describing renewables. In writing renewables up, importantly, some reporters told me that they defer to the issue or people they are covering for this definition:

Natural gas often gets lumped in with alternative energy, even though it is fossil fuel based. So, it partially depends on who's talking—whether you're talking about a politician, or who's using that term. But "alternative" usually is the broadest term that often means anything besides coal and oil. In other words, when you talk about renewables—essentially hydropower, biomass, wind, solar, can kind of fit any of these definitions.

The symbolic ambiguity of "renewable" and its conflation with clean and green allow sources to use the latter terms to describe non-renewable technologies, while taking advantage of the symbolic currency embedded within the term "renewable." Also, sources' lack of clarity in definition of "renewable" passes through reporters because altering these accounts would be considered editorializing—a professionally unethical thing to do. There is a large amount of confusion about what "renewable" is, and this confusion in part is caused by the ambiguous use of it in the news. Though few reporters mentioned it, ethanol comes up often in articles about RSE, and it is sometimes difficult to disentangle discussions about the two. Through the

mobilization of this discursive practice by reporters, an imprecise and malleable definition of renewables is used by sources in making RSE policy promises, investments, and deployments, when the "renewable" nature of the relevant energy source is questionable. This ends up legitimating mainstream or fossil based energy generation, marginalizing RSE development, and misleading the public into believing that there is more RSE deployment in the policy pipeline than there actually is.

Carbon, climate, and reporter agency. Whether or not climate gets mentioned in renewable energy stories is a matter of context to reporters. The decisive question is: does it qualify as space-worthy background material? The interpretation of this answer depends on the reporter, and how time and space-constrained they are. Some think it is always a relevant part of the context, while most others think that it is article and topic dependent, and not necessary to mention in every article:

It just depends. It just depends on what the essence of the story is. There are various types of renewable stories, but if it is a policy story obviously, because it's—climate change is a big part of why renewable goals are enacted. But if it is an investment related story, then I don't know to what extent you can deviate into policy aspects of it. At the end of the day, it's also what kind of space you are given—what's the positioning of the story. If it's an A1 story, then sure, as much context as possible, but if it is buried in D10 and I'm given 5 inches to write about it, there's really very little you can do with it.

This reporter, importantly, describes space and placement as a constraint when deciding whether or not to mention climate in an RSE story. Space constraints, enforced as discursive practices, and enacted in this particular way through the normative definition of news, limit the type and character of portrayals of RSE as a climate change mitigation technology. It is only sometimes part of the relevant context, and if included, may be cut if the story gets "buried." One reporter discussed the importance of carbon policy being part of the context of renewables as an explanation for including climate change in a renewable energy story. When asked whether climate was part of his/her RSE stories, another reporter said, "Yes, because fuel choices have carbon dioxide implications." In general, understanding the article context is important for understanding the inclusion or exclusion of climate change information in an RSE article. In addition to carbon policy being appropriate context in an RSE story for mentioning climate change, carbon credits and other financial incentives that explain the action of investors in RSE articles (when these credits were considered a feasible investment) also seems to be considered appropriate context for mentioning climate change in RSE articles. This excerpt from an April 2006 article in *The Washington Post* exemplifies this tendency:

AES Corp. yesterday said it would invest approximately \$1 billion over the next three years to expand the company's alternative energy business and develop projects to reduce or offset greenhouse gas emissions (Mufson 2006).

Articles of this type were common in from 2006-2008, when climate change had gained widespread cultural salience. After the economic crash of 2008, RSE coverage decreased as climate change discourse itself decreased; this occurrence highlights the importance of considering climate as a "peg" for RSE news.

"Pegs." The above quote demonstrates, first, the crucial part reporter agency plays in the construction of news. Though the normative structure of journalism and newsmaking is quite stable, there are many spaces wherein reporter agency is crucial. Further, this reporter provides an explanation for trends existent in the article data. As climate coverage increased in news (see Boykoff 2007a, 2007b, 2008), RSE coverage mirrored this increase. The climate change debate spurred policy discussions about renewables, which gave reporters a "hook" (or "peg," from Gitlin (1980)) on which to "hang" RSE stories. Crucially, Gitlin found that these "pegs" can be problematic for multifaceted events. As reporters seek to "hang" stories on the most prominent peg, other dimensions of issues go relatively uncovered. This helps to explain trends in RSE

coverage, both in terms of volume (which increased during times when climate and/or carbon was on political agendas) as well as story construction.

Stories often relied on similar metaphors, and discussed similar problems with RSE, such as aesthetic concerns. These "pegs" can also render longitudinal stories simple—specifically as this concerns social problems that exist in public arenas. Richardson (2007) calls this episodic framing of events "symptoms not causes." RSE coverage certainly has been framed this way, save its positioning in the media as an alternative to "oil dependence" (though, as one energy reporter told me, this is a false comparison) and carbon-intensive fuels. Further, coverage of RSE focuses on political disputes, claims about RSE's feasibility, and economic concerns. Mentions of rates of energy demand and other contextual information is largely left out, though this depends to some degree on the type of story it is (which is often a function of the desk it came from—e.g. the business desk).

Staffing changes. This is one particular location wherein the decrease of environment beats and reporters has had an effect on RSE reporting: a growing proportion of RSE stories are being reported from beats where background information is less likely to be "environmental" in nature. Further, this type of background information, as the following quote indicates, might be considered editorializing in many newsrooms. This reporter discussed an example of this logic as potential reason for not including discussion of climate change in renewable energy stories:

Yeah, so if you're doing a story on thin-film solar and how cool the new technology is, the context was always in the—that context may just be in renewable energy. Every single story on solar wouldn't say, "and this is a less climate damaging form of fuel." That would begin to—that could creep into bias I suppose in some cases.

In this case, the reporter would be less likely to mention climate in a story because it may come across as bias if it doesn't fit into the article as centrally relevant background. For the most part,

this sentiment reflects the content of articles in my sample. Climate doesn't often come up outside of policy and politics, except in articles wherein the central frame deals with the feasibility of RSE. In these cases, its character as a climate change mitigating technology is presented often as an asset—a "pro" set against a long list of "cons."

Another issue to consider when a potentially complex renewable story comes up is that it is important to have experience on the beat, and to have space and time to report as much of the relevant context as possible. Simply because an issue is complex may result in an editor and reporter missing an important part of the context, especially under significant time pressure. Discussing the ethanol debate as an example, one journalist told me:

That's a tricky story to cover now, and I don't know how people do it well. There are issues where it gets very tricky very quickly, where if you don't have the context, and the sourcing, and the knowledge, you could easily report a biased story.

The scientific, technological, or political complexity inherent in many RSE article framings requires reporters to condense and translate this information into stories comprehensible "at a seventh grade level." This can be quite difficult for many reporters, but is likely more difficult for reporters not on environmental beats.

Summary of Effects on News Writing

The shifting macrosocial newsmaking milieu has varied effects on RSE newsmaking that are particularly problematic. Writing well-balanced, well-sourced stories of adequate contextual detail is increasingly difficult due to the increasing complexity of RSE as a news item and its problematic symbolic interface with the normative definition of news, the symbolic ambiguity of RSE's referencing terms, the loss of experienced energy reporters, shortened deadlines, and stricter space constraints. The RSE news produced from this news writing environment is necessarily oversimplified, shallow, incomplete, homogenous, and elite-focused, and influences the formation of RSE frames.

CHAPTER CONCLUSION

This chapter described the discursive practices of RSE newsmaking, given pre-existing strictures and conditions, focusing on those ultimately altered or produced by cultural change, technological change, and economic change in the news industry. This chapter is a segue from the previous chapter's discussion of the newsmaking milieu, into the subsequent chapter, which focuses on the news products of the discursive processes and practices described in this chapter and chapter 3.

By placing reporters and process at the center of the analysis of this chapter, I contribute to research into newswork from a social constructionist perspective, pioneered by Tuchman (1978) and Fishman (1980), while contributing to research into the production of news as a hegemonic exercise (Gitlin 1980). More specifically, approaching newsmaking as a contested hegemonic space, I apply Laclau and Mouffe's (1985) theoretic approach to RSE news. This approach and contribution is appropriate because of the shifting nature of newsmaking, given that the various impacts of macrosocial change in the industry expose opportunities for discursive challenges in a newsmaking process that was previously more rigidly bureaucratic and less open to change. Further, I contribute to literatures that examine the relationship between reporters and news organizations by emphasizing the hegemonic domination of reporters that has been required to stem the negative effects of changes in news. I hope to spur more research into this critical aspect of newsmaking because future cost-cutting measures in the industry may well exacerbate this relationship. Additionally, I contribute to literatures exploring the journalistic pressures such as professionalism and competition, describing the importance of "gut" interpretations of newsworthiness as it is related to decreasing numbers of environment and energy beat reporters. I highlighted the importance of the normative definition of news in organizing the newsmaking process and described how this definition facilitates the filtering of news that privileges official sources and facilitates hegemonic messaging in RSE news production. Much research into newsmaking refers to the definition of news and use it their analyses, but I hope to contribute to work that puts this definition and its utilization as the center of explanations of patterned news output. I have done this here by describing the importance of this definition in the social organization of RSE news discourse.

I also offer contextual detail of the conditions and discursive practices that shape RSE news discourse (Stephens, et al. 2009). This detail adds some needed background to RSE newsworthiness and newsmaking, as environmental reporters' practices are the closest empirical work on the subject (Friedman 2004; Sachsman, et al. 2010), and because this detailed discussion privileges the effects of macrosocial changes, which have exposed shifts in newsmaking procedure and thus, suggest new avenues for research. This includes the potential significance of Google software in story and source selection. As budgets at newspapers tighten and staff reductions continue, news organizations and newsworkers will both continue seeking out strategies to save time and make newsmaking more efficient. Google software may play an important role in that, and may further marginalize already excluded groups and messages in a similar fashion as it currently does—by automating the existing news filtering process in increasingly sophisticated ways. Though reporters have adapted well to technological change as it relates to their work (as their fluency with Google software indicates), with continued

downsizing, the need for reporters to have diverse technological competency is an increasingly important. This need to be "multi-skilled" will only increase as layoffs continue, work rates increase, and new software platforms continue to emerge (Lee-Wright and Phillips 2012).

Further, this chapter contributes to research into the nature and conceptualization of balance as it applies to RSE news discourse (especially as RSE is conceptualized as an approach to climate change mitigation), and is an increasingly critical avenue of research, especially as the environmental importance, and cultural and political salience of RSE grows (Boykoff 2007). How to create "balanced" RSE coverage is complex, and is not limited to story-level patterns. Further clarifying the ways in which reporters conceptualize and use balance in practice, as well as how they put stories together, should provide more detailed explanations for the existence of patterns in balance in RSE coverage. This should meaningfully inform research into the nature and character of balance in energy and science reporting more generally.

At the same time they are limited by an environment that has put increased expectations on them, reporters adapt by working long hours. They also adapt by making efficient use of sources, emergent technologies, and the bureaucratic structures of their workplaces for story generation, reporting, and writing. News organizations are fortunate that the reporters that are selected into the profession are hard working, driven, and idealistic. In general, the ways reporters and organizations have adapted to the increased demand and speed of news have exacerbated the marginalizing discursive processes already present in newsmaking. So, it will be likely that the news will continue to be "captured in a large-meshed net, designed to catch big fish and let minnows slip through" (Schoenfeld, et al. 1979:54). Google news is an example of this, as is the decreasing frequency of enterprise stories, and the shortening of stories in a shrinking print newshole.

The shortening of stories in particular is potentially very problematic. Further space and time constraints in print news may lead reporters to omit more source descriptions, further anonymizing news that is already characterized by a plentiful amount of unattributed comments and perspectives. If this comes to pass, news will be an even more important tool of hegemonic power. However, if reporters are able to maintain or increase the number of self-generated or crowdsourced stories they produce, these stories, unanchored to regular sources and comparatively less connected to the political-economic structure of contemporary newsmaking, may be one of the last checks to a news system increasingly creative and facilitative of dominant RSE news discourse. Fundamentally, aspects of the newsgathering process, and many parts of the newswriting process, channel RSE news collectively toward a simplistic, homogenous, elitefocused, and inaccurate or incomplete state.

CHAPTER 5

NEWS OUTPUT: RSE NEWS DISCOURSE

In this chapter, I detail the structure and relevance of the four primary frames I found in my sample of news articles. These four frames are: "energy security," "policy and politics," "feasibility," and "funding." These frames are the product of the discursive practices and social processes discussed in chapters three and four. Collectively, they constitute an ideological product, representing the illusion of the relationship individuals have to the authentic conditions of RSE (Althusser 1972). These frames remake and embody the journalistic practices and processes that produce them, and all of these components operate together as a "regime of truth" (Foucault 1980) to reproduce newsmaking's hegemonic potential. These processes and practices have been built into newsmaking as a profession, and some have also emerged as a result of the changes in newsmaking, as described in chapter 4, which were brought about by the large-scale shifts in the economic, cultural, and technical ecology of newsmaking described in chapter 3. Collectively, the existing and emergent processes and practices in newsmaking interact with RSE as a news topic in a way that produces a simple, homogenous, incomplete, and elite-focused RSE news discourse. To a large degree, these characteristics represent the RSE news frames that emerged from the data.

In the first section of this chapter, I begin with a summary of each of the frames. Each summary contains a description of each frame's constituent parts: the frame itself, keywords that serve to illustrate it (Reese 2010:20), framing devices that communicate it (Gamson and Modigliani 1989:3-4), reasoning devices that embody "core framing tasks" (Benford and Snow 2000), cultural resonances (which include "master narratives": Reese 2010:24) that allow the frames to persist and persevere through time (Gamson and Modigliani 1989:5), and finally, the

sponsors associated with each. In a general sense, each of these frame components can be traced back to at least one of the three components of the normative definition of news which is used by newsworkers as a rubric that organizes which occurrences are chosen as "news" and how the ensuing article is written up. Further, the use of some framing devices, cultural resonances, and frame sponsors in RSE news may be traced back to some degree to the use of the balance norm and its consequents (discussed in chapter 4) the problem frame, the "competition with fossil fuels" theme, and the "lumping" that tends to occur in RSE news.

Specifically, the frame topics themselves and their indicative keywords are a function of all three traits of the normative definition of news. This is a predictable result, but has important implications. The way in which stories are judged "new" and "important" are increasingly a product of reporters inexperienced writing about energy issues. Though reporters are able to become highly knowledgeable about a topic in a short time using internet research, their news judgment is still potentially problematic. They are more likely to rely on easily accessible official sources in exercising this judgment, and more likely to miss important contextual and historical background in the articles themselves. This, in combination with the increased production of interesting, "page turning" news; the multiple ways space and deadline constraints affect newsmaking and newswriting; and the use of the balance norm in news that encourages the inclusion of conflict and false polarity all construct RSE news discourse into a variously oversimplified, homogenous, incomplete, and elite-focused hegemonic message. These traits all have effects on frame elements.

The framing devices and cultural resonances that partially constitute each frame are variously a function of the "page turning" requirement of news. These two components of frames are closely related. The terms that constitute them are used by both reporters and their sources,

and are typically rich metaphors and examples that situate the frame in cultural context. These are terms such as "foreign oil," "hippies," and "picking winners," and ideas like "independence," "conflict," and "the free market." These terms carry substantial cultural weight, but also communicate complex ideas very concisely and make the stories more interesting to readers. When sources use terminology like this, reporters cannot change it (so as to not "editorialize"), but will also use it on their own and seek it out in quotes that help communicate the "nut" of the story in a more interesting and efficient fashion. Further, these two frames elements are also a result of the use of the balance norm and its primary corollarial practices: the use of the conflict frame, the competition with fossil fuels theme, and the practice of "lumping." These three practices are closely related and functionally construct virtually all RSE issues into conflicts, often in the pursuit of being "fair" to all parties in the story. Similarly, reporters seek out sources that can offer a contrary or alternative interpretation of the news event, which may also be traced back to the conflict frame in many cases.

Sources also are chosen based on their level of authority and relevance in the article. As noted in previous chapters, the people or institutions involved are deeply tied to how reporters define "important" news. As a result of this, prestigious sources are more likely to appear high up in the story and to have their views communicated in news. In terms of frame elements, these views are often the reasoning devices used to justify a particular policy perspective or action. The news value of these views is based on the import of the sources themselves, and in terms of RSE is often characterized by a pessimism that is functionally beneficial to hegemonic institutions such as banks, investment companies, fossil fuel companies, and politicians because of its exclusion of other viewpoints. Collectively then, the frames as "packages" (Gamson and Modigliani 1989) communicate and reflect a relatively narrow hegemonic construction of RSE.

Taken together, their major themes, rhetoric, and sources transmit a homogenous, and thus marginalizing, RSE reality to the public. Op-Ed articles often reflect these frames in a condensed and straightforward form and are almost always written by an agent of a hegemonic institution. Because of this origin and content, there are a number of excerpts in this chapter that have been drawn from Op-Eds to highlight frame composition. Though these pieces are not written by reporters, and are thus not a result of the writing processes described at the end of chapter 4, they are certainly a result of the newsgathering practices described earlier in that chapter. More specifically, they are a product of editorial selection and are wound tightly to the normative definition of news and the hegemonic character and construction of news that are all central to this project. Further, the quantity of excerpts from Op-Eds in this chapter should not be taken as a reflection of their relative proportion in the article sample, but should be taken as condensed reflections of the character of the article sample and RSE frames more broadly.

The second section of the chapter is devoted to the chronological telling of the narrative of RSE news discourse, from 2000-2010. The frames, collectively, shape, and for the most part, encompass the narrative of renewable energy in the news. This section tracks the frames, their changes (and any associated triggering events), and their interrelationships. These shifts and linkages are characterized by three factors: first, central to all four frames is the underlying questioning of RSE's feasibility. Second, each of these frames embodies a larger "competition with fossil fuels" theme. Though this theme manifests itself differently in each frame, it is pervasive. Often, renewables are compared against fossil fuels in a way such as "versus coal, natural gas and oil," a technique I described as "lumping." The homogeneity facilitated by this discursive practice serves to obscure and confuse the relationship between RSE and the fossil fuels it competes with, because oil is not in direct competition with RSE as coal and natural gas

are (though the way this competition manifests itself depends on each electricity market, and the availability and price of both fossil and renewable sources of electric power). Third, each of the four frames is also characterized by an underlying conflict that is continually referenced. Altheide (1997) calls this the "problem frame," discussed in chapter 4. Stories rooted in conflict were present throughout the entire time period and are a fundamental characteristic of newsmaking, rooted to some degree in reporters' reliance on the balance norm.

The time period studied, from January 2000 through December 2010, was characterized by a number of events with repercussions relevant to the social construction and utilization of RSE. I include these events because, as Sjolander (2010) has shown, historic and cultural contextuality may drive framing processes. These "triggering events" (Downs 1972) caused the frames to re-emerge or shift in character, but the four primary frames themselves were ubiquitous throughout the sample period. Often, during times of crisis (the attacks of 9/11, Hurricane Katrina, the Deepwater Horizon explosion and spill, and military conflicts) and political campaigns, the energy security frame would re-emerge strongly, and in cases wherein other nations were involved (e.g. Iraq, China) this frame would shift toward the inclusion of protectionist metaphors and logics. California's energy crisis in 2000-2003 and the resultant disputes over climate change and renewable energy policy, as well as policy disputes over George W. Bush's 2005 and 2007 energy bills predictably brought about the periodic reemergence of the policy and politics frame. Unstable and rising fossil fuel prices would sometimes trigger the energy security frame, but most predictably these conditions brought about the rise of the market feasibility and funding frames, as the rise of climate change discourse did upon the release of An Inconvenient Truth in 2006.

The release of this film also brought about a precipitous increase in RSE coverage due to the linking of climate change and RSE in all of the frames. The recession and economic crash of 2007-2008 caused a dropoff in RSE coverage in general, and also caused a note of pessimism in coverage as massive disinvestment challenged the industry. However, coverage in general was buoyed in this period by the coverage of the presidential campaign, in which there was much dispute about the place of RSE in the American energy infrastructure. More specifically, the Obama campaign mobilized the energy security frame in the "green economy" portion of its platform.

All of the above events had effects on RSE discourse, sometimes directly, and sometimes via climate change and fossil fuel discourses. After a brief explanation of the particular constitution of each of the four frames, also seen in figure 4 below, this chapter describes RSE news discourse from 2000-2010 in two distinct phases: the first from 2000-2005, and the second from 2006-2010. Multiple events in 2005 and early 2006 brought about a precipitous increase in RSE coverage and important shifts in RSE discourse, and thus defined the second period. The chapter concludes with an assessment of the state of RSE news frames and discourse from the entire period, and includes discussion of the frames' relationships to the changing newsmaking industry and their hegemonic character.

Frame	Keywords	Framing Device(s)	Reasoning Device(s)	Cultural Resonance(s)	Major sponsor(s)
Energy Security	Dependence, security, domestic	"foreign oil," 1970s, China, (B/C) "green economy"	Domestic energy production is solution to economic difficulty	Independence, xenophobia, patriotism, "war on terror"	Politicians, RSE proponents
Policy and Politics	Regulation, mandate, RPS, tax breaks	"Fight," winners/losers (B/C)	RSE needs government intervention	Conflict, social assistance	Politicians, RSE Industry Groups
Feasibility (Technological)	Intermittent, reliability (problems)	"wind isn't blowing," "sun isn't shining"	RSE can't meet energy needs; Needs technological breakthrough	Ingenuity	Utilities, Republicans, scientists
Feasibility (Cultural)	Loud, environmental, transmission, clean	"hippies," "quixotic," "eyesore," "Cuisinart"	RSE has too many problems to be viable	1970s, energy crises, versus environmentalists	Environmental groups, local stakeholders
Feasibility (Market)	Expensive, dependent	"picking winners," RSE expensive	RSE is too expensive, but getting cheaper; RSE can generate revenue	Competition, free market, conflict	Financial analysts, Op-Ed writers, politicians
Funding	Tax credits, PTC, investment, subsidies	Old PTCs, European policies, RSE expensive, "bubble"	RSE needs subsidies to compete with fossil fuels	Self- determination, free market	Politicians, utilities, government agencies, RSE industry groups

FRAME 1: ENERGY SECURITY

The "energy security" frame is characterized by its heavy reliance on metaphor and was primarily indicated by keywords such as "dependence," "security," and "domestic." Though the energy security frame existed beforehand, it rose to prominence primarily after the events of September 11, 2001, and was frequently historically linked to the oil crises of the 1970s. This fact establishes an important rhetorical linkage between the two periods and between energy and war, and this helps explain the frame's longevity. The most prominent theme in this frame is centered on the concept of "foreign oil." Not only does this term help justify the various conflicts in the Middle East, as the conflicts and their preceding events are seen as potential hazards of reliance on external sources of energy, it also embodies a xenophobia that was an important part of the frame as it shifted to one about the "green economy" during the Obama presidential campaign and the subsequent "battle" with China for RSE dominance.

Various sponsors used the energy security frame during California's energy crisis (as seen most commonly in *The Los Angeles Times*), as well as in national energy discourse—especially as the wars in Afghanistan and Iraq began in 2001 and 2003, respectively. Primarily these sponsors were politicians, RSE proponents, and proponents of domestic oil looking to take advantage of the violence in the Middle East and the instability in the petroleum market by mobilizing this frame and its characteristic elements of patriotism, nationalism, independence, and xenophobia. Energy security has also been found in previous research on energy issues (Wright and Reid 2010, as "national security" connected to biofuels; Fletcher 2009, as "energy security" linked to climate change).

Though I only coded the "energy security" 21 times in the corpus of articles, it emerged clearly as its own news-generating and news-structuring frame. The code family I generated for

this frame had 35 associated codes and was rife with metaphorical associations and cultural references—specifically those of a patriotic or nationalistic nature. This frame, deeply rooted in historic American culture, was pervasive throughout the data. Its nature shifted in the wake of September 11th, as domestic political, economic, and energy realities changed. In a December, 2001 Op-Ed in *The Los Angeles Times*, Senator John Kerry mobilized a number of this frame's

elements:

...Under the guise of national security and economic stimulus, some want to scare Americans into drilling for oil in the Arctic National Wildlife Refuge. Destroying a wildlife refuge won't make the U.S. any safer.

Now is a time to summon our nation's hopes and strengths. It is not a time to play on its fears to pass bad public policy, including the energy proposals scheduled for a procedural vote today in the Senate.

What's needed in a debate too often characterized by an instinct for the symbolic is truth. The nation does face serious energy challenges. Our dependence on oil makes us susceptible to price spikes, entangles us in distant disputes and puts our military in harm's way. And oil money surely funds terrorism...

...Our only long-term answer is to promote true energy independence- -and to do so requires innovation. In World War II, the U.S. printed a poster with the banner "Invent for Victory." The nation must again be challenged to make innovation a weapon in our national defense, investing in a "Manhattan Project" that accelerates the development of breakthrough technologies—such as hydrogen fuel cells--that hold the greatest promise to revolutionize our energy system. Fuel cell technology to power cars, trucks, buses, ships and trains exists today. The challenge is making the cells affordable and deploying them throughout the economy.

The nation can create more jobs by investing in efficient and renewable energy technologies than by investing in oil. The Tellus Institute estimates that 900,000 jobs can be created from investments in efficient transportation. The Energy and Resources Group at the University of California estimates that generating 10% of our electricity from renewable energy sources would create more than 2 million jobs in designing, machining, manufacturing, distributing, building and maintaining a domestic energy system...

...Just as the war on terrorism tests American resolve, so too must we be prepared for a sustained effort in changing our energy policy.

It's time to call on America's strength, ingenuity, creativity and invention to open a new front in the war on terrorism--and to support it with a national effort that rivals President Kennedy's challenge to put a man on the moon. Rather than put false hopes in largely symbolic acts like drilling in the ANWR, a real marketplace for renewable energy must be created to reduce our dependence on foreign oil and prepare us for a different—and far less predictable—geopolitical landscape.

In this excerpt, Senator Kerry draws on a number of framing devices, including many historic metaphors and allusions, in an effort to delegitimize Republican assertions about the value of drilling for oil in the protected, and at that time, highly contested landscape of ANWR. Also evident are the cultural resonances related to those metaphors: references to energy "independence," patriotism, and the "war on terrorism." Reasoning devices include the idea that domestic energy production is desirable and is the solution to economic difficulty. Interestingly, the excerpt above is also compatible with the approaches of both pro-renewable and prodomestic oil parties, as both groups used the "energy security" frame to support their positions for expanding deployment of their respective energy sources. Further, as Wright and Reid (2010:1390) found, this frame was constructed primarily by its situation "within a larger political and economic context to gain public legitimacy." More specifically, this frame was frequently juxtaposed near or intervoven with the feasibility and policy and politics frames. The energy security frame's cultural resonances, framing devices, and reasoning devices were referenced in arguments supportive of domestic energy investment and policy-whether renewable or fossilfuel-based.

FRAME 2: POLICY AND POLITICS

The second frame consists of a number of elements that relate to RSE policymaking and were indicated by keywords such as "regulation," "mandate," "RPS," and "tax breaks." Much research in the past has highlighted the crucial influence politics have in framing public debates (Boykoff 2007a; Carvalho 2005; Gitlin 1980). In general, political process, policy debates, discussions of regulation and mandates, and associated themes constitute this frame. This policy

and politics perspective is the nexus of much RSE coverage, especially at *The Washington Post* and *The Los Angeles Times*. Like the energy security frame, the "policy and politics" frame is present throughout the time period and shifts in focus and intensity, as described earlier. The primary cultural resonance in this frame is that of conflict and contention (Altheide 1997), as seen in this exemplar of the frame, from a 2007 article in *The New York Times*, during that year's

energy bill debates:

The Senate passed a broad energy bill late Thursday that would, among other things, require the first big increase in fuel mileage requirements for passenger cars in more than two decades.

The vote, 65 to 27, was a major defeat for car manufacturers, which had fought for a much smaller increase in fuel economy standards and is expected to keep fighting as the House takes up the issue.

But Senate Democrats also fell short of their own goals. In a victory for the oil industry, Republican lawmakers successfully blocked a crucial component of the Democratic plan that would have raised taxes on oil companies by about \$32 billion and used the money on tax breaks for wind power, solar power, ethanol and other renewable fuels.

Republicans also blocked a provision of the legislation that would have required electric utilities to greatly increase the share of power they get from renewable sources of energy (Andrews 2007).

There are few stories that use this frame that do not rely on conflict in some way. For the most part, this frame is relatively lightly used until late 2001, when California's energy debate intensified and its energy crisis worsened (though much of this coverage related to the financial aspects and causes of the blackouts). Also, after George W. Bush's election win in November 2000, reporters began writing stories about the new president's energy policy in mid-2001 and into 2002. Events in these two political milieus drove political and policy coverage of RSE: energy bills emerged and fell in Washington, California's leaders debated the amount and location of new RSE generation the state should pursue, and climate meetings and policy discussions in both Washington and in international forums became more common. The primary reasoning device that characterized this frame was that RSE was not going to expand without the help of government intervention, in the form of tax credits, subsidies and mandates. Frame sponsors on both sides of the issue used this device, though their use of prognostic and motivational devices differed greatly. For those opposed to RSE, the extra expense was not justified, and for proponents (often RSE industry trade groups such as AWEA), it was deemed critical. This frame's use of the "problem frame" resonates strongly with American culture, and is something that increasingly helps reporters define newsworthiness. Devices used to communicate this frame were varied, but predictably highlighted and played up the policy work as contests or "fights," with winners and losers. Quite often the positions taken in political conflicts over RSE were over some manner of RSE's feasibility and thus indicate another linkage between frames that helps them cohere as a logical system.

FRAME 3: FEASIBILITY

The "feasibility" frame, the broadest and most ubiquitous frame of the four, took several different forms. Whether or not RSE is a feasible choice to meet U.S. energy demand is an implicit concern in a majority of the articles. This frame is present throughout the data, and manifests itself in thematically specific forms that include technological, cultural, and market feasibility. Altheide (1996:31, *italics original*) says this about the relationship between themes and frames:

Themes are the recurring typical theses that run through a lot of the reports. *Frames* are the focus, a parameter or boundary, for discussing a particular event. Frames focus on what will be discussed, how it will be discussed, and above all, how it will not be discussed. Certain themes become appropriate if particular frames are adopted.

Once the feasibility of RSE comes into question, the possibility for one of the themes arises. Questions of RSE feasibility typically focused on the technological problems, environmental and aesthetic issues, or the performance of RSE in the financial markets, respectively.

When reporters are looking for news about RSE, often these stories, if not driven by political events, or market events for business reporters, are driven by new events in RSE technology, utilization, or deployment. Often the underlying themes in these latter stories are either novel technology or deployments of RSE, or conflicts in planning or deployment (such as the proposed Cape Wind development in Nantucket Sound) and are a result of the normative definition of news wherein these developments are characterized as "new" and "interesting," but ultimately may trivialize and mischaracterize the issues in order to make stories more interesting by focusing on novelty or conflict, and by mobilizing culturally rich metaphors such as "hippie."

At points, there is heavy overlap with the use of this frame and the energy security frame, as the latter is taken as a justification to bolster the case for the market feasibility of RSE to meet future energy needs. These overlaps are represented by the sharing of frame elements across frames, and may be seen in figure 1. Reporters and frame sponsors deploy a variety of framing and reasoning devices for this frame as well. In the case of the cultural theme, reporters' use of framing devices such as "hippie" and "quixotic" are fairly common to describe RSE proponents, especially those who favor distributed generation; often this use also involves the use of cultural resonances that reminded readers of the "1970s" and the "energy crises." These metaphors, which communicate the cultural theme in this frame, delegitimize and patronize RSE proponents. This parallels Gitlin's (1980) finding that mainstream media framings of the SDS movement marginalized that group and trivialized their activity. Ultimately, the above concerns are typically positioned in articles as part of a list of cultural, environmental, or aesthetic problems

with RSE, from which a reasoning device emerges that organizes these concerns in a manner that casts significant doubts on RSE's general feasibility.

The keywords that indicated this frame referenced how "clean" RSE is, conflicts with "environmentalists," aesthetic concerns ("loud"), and "transmission" problems. The latter of these is also a technological and policy problem, but was often used to frame disputes between conservationists and RSE proponents. This conflict is novel, but was often played up to exaggerate differences between the groups and to position their dispute as intractable. Typically, these groups were the most common sources in this frame, along with local stakeholders in various Not-In-My-Backyard (NIMBY) debates, as seen in a 2001 article in *The Washington Post*:

Gary Kelderman, one of 100 farmers growing switchgrass for the plant, located near the Missouri border 80 miles southeast of Des Moines, says more is at stake than money.

"It's all about preservation of clean air and self-sufficiency and providing green energy and local energy," he said (Pitt 2001).

Descriptors of RSE generation landscapes also rely somewhat on the use of dramatic metaphors within the cultural theme, the most vivid of these depict wind turbines as "Cuisinarts" for local bird populations or as "eyesores." Thompson (2005:259) found that these aesthetic concerns were overplayed in news coverage of Cape Wind, which he attributes to the ease with which readers cognitively process these concerns. The excerpt below condenses the cultural feasibility issue, specifically exemplifying the reframing of RSE technologies as aesthetically pleasing (which itself being "novel," is an effective news hook), as seen in this *Wall Street Journal* article:

To many people, electricity-producing wind farms are loud, money-wasting eyesores that destroy the views of coasts and countryside. But to a devoted and growing number of Don Quixotes, they are poetry in motion (Spikes 2002).

This excerpt illustrates all of the cultural feasibility frame's constituent parts—keywords, framing devices, reasoning devices, cultural resonances, and sponsors, and does so in a fashion that, while being concise and dense, is ultimately trivializing to RSE proponents because of its metaphorical reference to the fictional hero.

In terms of technical and market feasibility, RSE technologies are often described as "expensive," "dependent," "intermittent," and as having "reliability" problems. The general reasoning devices employed infer that RSE as it exists is technologically and financially unable to meet the U.S.'s energy needs, though in times of economic optimism in the RSE industry (roughly 2006-2008), reasoning devices communicated this optimism in a continued drop in RSE pricing and its ability to generate returns on investment. The latter of these plays on the familiar "jobs versus environment" trope in American culture that holds that any pro-environmental work will ultimately be economically harmful, and by challenging this assumption in an article, the issue is news in that it is "interesting." This maybe seen in this 2009 article from *The New York Times*:

'The choice we face is not between saving our environment and saving our economy,' Mr. Obama said. 'The choice we face is between prosperity and decline. We can remain the world's leading importer of oil, or we can become the world's leading exporter of clean energy' (Stolberg 2009).

The president references not only the trope described above, but he also positions oil versus "clean" energy. This is indicative of the misleading "competition with fossil fuels" theme, and also takes advantage of the symbolic ambiguity of the term "clean" to infer the increased use of RSE without specifically naming any RSE technologies. This rhetorical hedge allows the president to avoid future criticism (in the case that this strategy failed) and to include as many energy solutions as possible—as "clean" coal and natural gas could ostensibly be included.

Reporters also found value in recycling common arguments about RSE (in the framing devices) as a way to create interest and draw readers into articles. These included common phrases to illustrate RSE's intermittency. It was taken as common sense in the vast majority of articles that these technologies do not generate electricity when the "sun isn't shining" or the "wind isn't blowing." Though this may be true for a single wind turbine or solar panel, the problems posed by intermittency are well understood and have been dealt with in many RSE deployments, so such reports again misrepresent RSE technology. In terms of RSE's market feasibility, opponents (often Republican politicians or fossil-fuel-interested corporations) often drew on a well-worn anti-subsidy rhetorical ploy, saying that the government should not be "picking winners" in the energy market. However, it was the very rare case that reporters mentioned the numerous historical and contemporary subsidies fossil fuel industries draw. Often these sponsors described the importance of the "free market," while reporters played up the conflict and competition in the energy market. When RSE "became" generally competitive, the use of these resonances persisted, while often venerating the free market in which RSE had "finally" become competitive. For the most part, sponsors of the market feasibility frame were financial analysts, Op-Ed writers, and various politicians. The following quote from a Wall Street Journal Op-Ed illustrates the technological and market feasibility themes of this frame:

An excellent Frontline/Nova special that aired this week, "What's Up With the Weather?" got it right: Renewable power, as currently conceived, is simply not up to the task of powering the 21st century (Bailey 2000).

Quick summations like this one were common. It is an efficient statement of an issue background—that RSE is technologically and economically unviable—though it oversimplifies the feasibility of various RSE technologies in diverse policy contexts and natural environments. In terms of technological feasibility, sponsors most often were scientists, executives at electric utilities, and Republicans and were often the sources of oversimplified assessments of RSE feasibility. Further, these simple summary statements often were included in articles driven by the novelty of a cutting-edge RSE technology and the "ingenuity" of the scientist who is experimenting with it, which further delegitimizes RSE as a whole because this type of coverage is typically on technologies that are nowhere near deployment.

The feasibility frame was certainly the most pervasive, and importantly in the case of market and technological feasibility, was readily accepted by RSE proponents who offered little resistance to the central components of these frames. Namely, this includes the reasoning device that RSE is not cost competitive with other sources of electricity—though the truth behind this is questionable. Further, the market feasibility theme was frequently referenced near or within discussions about RSE funding, while at times sharing frame elements: sources, cultural resonances regarding the "free market," framing devices, and the reasoning device above. This rhetorical overlap again illustrates the continuity of the RSE frames as a discursive whole. FRAME 4: FUNDING

The "funding" frame describes the perspective of RSE as public or private investment. In terms of public (government) investment, this frame emphasizes the desirability and potential of RSE investment for public benefit. In doing so, it intersects and overlaps with the "policy and politics" frame in its sponsorship, cultural resonances regarding self-determination, and the reasoning devices used by sponsors and reporters alike that insist upon the dependence of RSE on subsidies for commercial success. In terms of private investment, this frame describes the potential for RSE stocks to make money, as well as the economic risks and benefits for homeowners who pursue distributed generation. This frame is defined by the central debate of the two primary groups of sponsors of this frame: those who believe that RSE should only

emerge when it is naturally competitive with fossil fuels on the open market, and those who believe that RSE is too important to wait for that to happen.

On both sides however, the primary reasoning device is that RSE needs subsidies to be successful in competitive energy markets, and this position is taken by a variety of sponsors: politicians, utilities, government agencies, and RSE industry groups. Because this debate often manifests itself politically and results in political compromises, an insecure investment environment for RSE is the norm, rooted in the short-term renewal of the Production Tax Credit (PTC; a federal tax credit that pays solar and/or wind electricity generators per kilowatt-hour generated). The "PTC," "tax credits," "investment," and "subsidies" were the most common keyword indicators of this frame. The PTC adds value and stability to RSE projects and makes them more appealing investments. When the PTC renewal lapses, RSE projects become risky, new construction drops off, and industry layoffs increase considerably. This reality leads both frame sponsors and reporters to depict RSE investment opportunities as risky. Not only is this coverage the "news" of RSE, as defined by reporters, but it also resonates with the dominant free market ideology that dominates economic discourse in the U.S. (Lewis 2000; Carvalho 2005; Wright and Reid 2010), as well as the concept of self-determination that underlies political disputes regarding the various systems of wealth redistribution (such as welfare) in the U.S. These resonances have allowed this frame to persist. In the following quote, emblematic of the frame, this Wall Street Journal reporter explains the relevance of the shift in political philosophy in the Danish government in February 2006:

Then in 2001, conservatives ousted Denmark's social democrats amid an economic slump. The new government began phasing out the contracts that guaranteed high income for producers of wind energy. It also ended tax credits and subsidies for solar panels and heating systems fueled by wood, straw and other organic "biomass."

"It was a shift in philosophy, a belief that the market will give more cost-effective solutions," says Ture Falbe-Hansen, a spokesman for the Danish Energy Authority (Jacoby 2006).

As demonstrated here, when this frame was mobilized in terms of public funding, political contests were often involved. Because of this, there was significant overlap with the "politics and policy" frame. Further, examples from energy subsidy programs were common referents in this frame, as were older iterations of the PTC. These were common framing devices, but the most common framing device is the expense of RSE and its ultimate dependence on subsidies and a favorable market for success. Finally the following excerpt from *The Los Angeles Times*, also representative of the general frame, describes the state of RSE investment as risky and dependent upon PTC renewal, while mobilizing portions of the "energy security frame":

The Senate also addresses one of the biggest failings of last year's energy bill. Wind and solar power installations are growing at a sizzling pace, but that growth is fueled by production tax credits that expire at the end of the year. An extension was stripped from the energy bill because of an unrelated dispute over taxing oil companies. The credits must be extended as quickly as possible because investors won't pump money into clean power if there's a danger of losing their tax incentives. Renewable energy reduces reliance on foreign oil while cutting greenhouse gases and other pollutants; green technology is also an extremely promising growth industry that could help make up for the loss of manufacturing jobs (Anonymous 2008).

While including portions of the feasibility and energy security frames, this excerpt demonstrates a common occurrence in the writing of RSE stories: the assumed intrinsic interdependence of government and private funding. This is the primary reason that these two variations of the funding frame are not separate themes: they often occurred together, and were logically and discursively intertwined.

In a larger sense, we should expect to see overlapping frames in these types of stories.

These overlaps lend stability and legitimacy to the regime of truth that comprises RSE news

production. The cross-validation and interdependency of frames and their embeddedness within the news production process itself give the frames weight, significance, and stability, and facilitates their continuity and persistence across time. Together, these frames tell a durable, cohesive story about RSE that—in being centered on policy, politics, economics, technology, and security—is focused on hegemonic interpretations of the value of RSE in American culture and society, and helps create a homogenous and exclusionary discourse of renewable energy in the U.S.

RSE NEWS, 2000-2010

The time period of 2000-2010 was marked by a number of occurrences that affected RSE, both in material and symbolic ways. Policy disputes, disasters, military interventions, technological advances, and symbolic interventions by high profile elites all had different effects, and a confluence of these forces precipitated a rise in RSE coverage in 2006 that also marked a qualitative shift in RSE news discourse. Most important of these was the rise in the salience of climate change in U.S. culture, spurred to a large degree by the release of *An Inconvenient Truth*. In the prior period, however, RSE coverage was relatively low, even considering significant policy disputes on multiple political levels and the invasions of Afghanistan and Iraq, and was generally characterized by the use of the "energy security" and "policy and politics" frames. *Phase 1: 2000-2005*

This time period begins amid the run-up to the elections of 2000. Al Gore was Vice President and the presumptive Democratic nominee for President, and Texas Governor George W. Bush and John McCain were the frontrunners for the Republican nomination. Energy was a hot campaign issue at the time. In particular, the debate over whether or not to open up the Arctic National Wildlife Reserve (ANWR) to massively increased oil drilling was a highly salient issue

in the news. Part of the Gore campaign's platform advocated for "clean" energy development to avoid dependency on "foreign oil." This was a critical component of energy discourse in the U.S., including RSE discourse, at the time. Republicans advocated for opening ANWR up to further drilling, using the same rationale. The "energy security" frame begins here, and is mobilized frequently until early 2004, after which it goes into a lull until early 2006. Though this frame was highly salient in political discourse at the time, not everyone agreed it was a relevant part of the discussion, as seen in this June 2000 article from *The Los Angeles Times*:

Gore's effort to reduce the country's dependence on imported oil struck Pietro S. Nivola, a senior fellow of government studies at the Brookings Institution, and others as a tired theme.

Although America imports about half of its oil, the country is 80% self-sufficient in terms of all energy sources.

"All this notion of energy independence is like deja vu," Nivola said. "It's amazing it's back on the agenda. I thought it'd been laid to rest (Harris 2000)."

In this quote, the Brookings fellow attempts to marginalize the rationale for energy independence (and Mr. Gore) by deflecting the issue. This issue under discussion is foreign *oil*, not foreign *energy*. The fact that 80% of the U.S. energy supply is from domestic sources is irrelevant in this context, yet the reporter—likely from inexperience covering energy issues—still chose to use it as background information. This allows a member of a prominent think tank to get media exposure, thereby legitimizing the think-tank's place in the news while deflecting the relevance of the issue under discussion and presenting a biased assessment of the situation.

Nevertheless, the issue of energy security remained on the agenda up until the elections in November 2000. At one point late in the campaign, Bush castigated the Clinton-Gore White House for not having a good enough relationship with Saudi Arabia to keep oil and gas prices down. This latter issue was primarily responsible for bringing ANWR onto the political agenda prior to those elections, and in actuality the President has very little control over gas prices. In California specifically, "energy security" was high on the agenda as residents endured blackouts and high prices in its energy crisis, brought about by the Enron scandal, which lasted throughout most of 2000 and 2001. Reporters at *The New York Times* and other papers began mobilizing metaphors that reminded Californians, and other Americans, of the problem of "foreign oil":

Not since the oil crisis of the 1970's have the words "solar power" been so popular. Not since the "small is beautiful" movement spawned the same decade has bragging about living simply been so in vogue (Nieves 2001).

Importantly, this quote demonstrates the tendency of reporters, politicians, and other sources to place RSE and oil in fundamental opposition, when in reality they have very little to do with each other. Though the reference to the oil crises provides an effective metaphor and may draw readers further into the story, it makes allusions that are factually inaccurate. The comparison does make sense in the case of ethanol, which could directly—but not completely—replace oil; it does not in the case of solar, wind, and other electricity-generating technologies. During that time, *The Los Angeles Times* also framed RSE as a crucial part of a stable energy supply:

There is some good energy news in Gov. Gray Davis' announcement that the state has agreed to buy about 8,900 megawatts of electric power over the next 10 years. That will provide one-fifth of the power the state needs each day, so this action should bring some badly needed stability to California's wild energy market.

But Davis and the Legislature need to quickly take more action or risk losing a critical source of energy that has been serving the state for years—the output of small and medium-size generators, including an extensive network of power plants that rely on renewable sources of fuel, such as solar and biomass (2001).

Though this use of "security" is made in reference to the issue of "stability," it is still an effective use of the frame because the relationship between security and stability is also drawn with reference to foreign oil in the article. In the latter instance however, stability is positioned as an end goal of security. Whatever the outcome of "insecurity," in this article the solution is RSE.

This framing of RSE as crucial to energy supplies and security would continue through the end of 2010. RSE proponents mobilized this frame as a justification for increased investment in RSE in times of political debate about the legitimacy of federal subsidies for renewables. Further, the energy security frame that emerged from this period echoed a general call for "security" in the U.S. in the aftermath of the 9/11 attacks. Interestingly, the way the new Bush administration positioned the way to achieve "security" was based on activating war metaphors in the media and assuring Americans that the security they desired could be obtained through wars in Afghanistan and Iraq, and on al-Qaida. By mobilizing the war metaphor in responding to the attacks of 9/11, the administration ensured that non-retaliation for the attacks was rendered a nonsensical option. With this metaphor actively circulating in American culture, proponents of renewable energy seized an opportunity to position these energy sources as "secure" and desirable in that sense: that they were not oil, which, because a significant proportion of American supply comes from the Middle East, was "insecure." The mobilization of the "security" metaphor and calls for less "dependence" on foreign oil seemed to resonate strongly in American culture and in many different provinces of civil society. Indeed, many RSE proponent websites still discuss "energy security" as a primary benefit of these technologies. Also, as Fletcher (2009:808) describes, with respect to the issue of climate change, "in addition to prioritizing two of the most powerful institutions in the USA – defence and intelligence – a security frame also provides centrist Republicans and Democrats with a platform for cooperation on climate change mitigation legislation." Though climate change legislation never came to pass, the energy security frame was mobilized by both sides, and was indeed something they could both agree on. Their proposed solution to energy "insecurity," however, differed greatly.

The same article that used the metaphor of the 1970s above also mobilized a critical part of the "feasibility" frame: that of expense. The emergence of RSE as a potential solution to energy security problems was hampered by consistent coverage of policy stalemates in

California, President Bush's derision of RSE technologies, and news stories that consistently mentioned how expensive and otherwise problematic RSE was. Often, the problems reporters mention in stories are part of the context or "background"—an effort to give "balance" to an otherwise optimistic RSE article. As an example, this 2001 article from *The New York Times* comments on RSE's market feasibility:

Advertisements for solar-panel suppliers are plastered all over the state's Sunday newspapers. While far less complicated and expensive than they were 30 years ago, though, solar energy systems can be pricey (Nieves 2001).

By activating metaphors about RSE's expense in an effort to offer a thorough, concise vision of RSE, reporters call its feasibility into question by writing in generalities. The issue of feasibility is the central discursive battlefield of RSE news and is a result of both journalistic norms, as seen above, as well as that of source use. This is one of many examples of the norms of the newsmaking process facilitating oversimplified and misleading assessments of RSE, and because the result is ultimately marginalizing, journalistic practice may be traced directly to the maintenance of hegemonic energy discourse. Further, the hegemonic nature of this discourse is represented in the nature of the discursive battle being centered on the justification and approval of RSE subsidies—more specifically, the domain of politics and finance.

The feasibility frame manifested itself differently, depending on the article. Often, as seen below, a frame sponsor uses the growth of RSE generating potential in an attempt to legitimate energy policy that pursues increased RSE development. In later manifestations of this frame, comparisons of wind potential in the plains and solar potential in the southwest are made to the petroleum potential of the Middle East, for example in the claim that "Arizona can be the Saudi Arabia of solar." Here a corporate frame sponsor discusses the potential of wind, using a slightly different metaphor:

GE Wind Energy President and CEO Steve Zwolinski figures that wind power will grow from supplying roughly 1% of U.S. electricity today to 5% by 2020. "Theoretically, there's enough wind power in the Midwest wind belt to power the entire U.S.," he says (Healey 2002).

Through the use of this metaphor, the reporter activates memories of the Midwest as the "grain

belt" of the U.S., which was said to be able to feed the entirety of the nation. This metaphor

reflects optimism about RSE that became increasingly common in all four frames as wind power

deployments began to rise throughout this period and into the next.

There was also a fair amount of optimism in the market at the time. The stock market was

on the rise, even after the downtick it experienced after 9/11. However, there were widespread

doubts about the feasibility of RSE in general. An April 2002 Wall Street Journal article titled

"Florida Utility Finds It's Not Easy Even Trying to Be Green --- JEA Discovers Energy Sources

Are Costly, Unproven or Draw Ire of Environmentalists" said:

Four years ago, officials of the city-owned utility here plucked a number out of the air in an effort to placate local environmental groups: They promised that 7.5% of the utility's electricity production would come from "green" energy sources within two decades.

Now the utility, JEA, is finding out how difficult it is to deliver on that pledge. Some environmentally friendly renewable energy sources are expensive to tap; others are technologically unproven. And still others draw opposition from environmentalists themselves, who find certain "green" power sources nearly as problematic as the high-polluting oil and coal they seek to supplant (Fialka 2002).

In this article, the reporter condenses the feasibility frame nicely by quickly summarizing, in a rather condescending tone, the potential problems of RSE deployment. The potential barriers to feasibility—price, technology, and broadly, culture—capture most of the topical areas reporters chose to discuss in articles throughout the sampling frame. Further, by noting the opposition of traditional environmentalists, perhaps in a search for novelty, such reports delegitimize RSE proponents by highlighting the problematic nature of their membership within in the already-marginal environmental movement.

A study of renewable coverage in British newspapers found a linkage between "ideological alignment" and RSE coverage. "Right wing" papers covered the topic in a more negative tone than did other papers (PIRC 2010). I found a similar relationship in these data. Articles in *The Wall Street Journal* were consistently more negative and condescending in terms of their tone of RSE coverage. These articles frequently used dramatic wording and metaphors that create negative images of RSE and that invite the reader to conceive of RSE as generally undesirable or infeasible. Importantly, this tone was also reflected in the headlines of *Journal* articles, exemplified in the title of the excerpt above. The vast majority of RSE article titles in other publications were comparatively modest or neutral in tone. Bennett (2010:139) observes that "often, message tone is used to gain audience attention by emphasizing sensational aspects of the information." Purposefully using a negative tone in news stories is ethically off-limits for reporters, but this negative tone was especially prevalent in the Editorials and Op-Ed pieces that *The Journal* ran, and was also present in the news articles more generally as well.

As was typical in the sample of articles, the use of the mandate for growing RSE is positioned as the central problem in the above article. Because the constructed reality of renewables both then and now generally centers on the expense of RSE and the requirement of mandates, the issue of market feasibility is primary. As mandates and tax credits brought RSE prices down to competitive levels, RSE began to gain traction as an attractive investment. Here the reporter has assumed this to be the general reality of the investment environment at the time, August 2002: "Windmill electricity, no longer just a fad or ecological statement, has become a moneymaker" (Healey 2002). It bears mentioning that, even though the reporter has positioned wind power as favorable, he/she still uses the term "windmill." Beyond this term's inaccuracy, it reminds readers of less technical, and in its allusion to Don Quixote, less practical solutions to

energy needs. Metaphors like these, though effective rhetorically, misrepresent RSE. As a result of the use of the balance norm, the use of the competition with fossil fuel theme misrepresents RSE as well, as seen in this 2002 article from *The New York Times*:

"The prices of renewables still have to fall significantly for their use to become widespread, especially as long as oil and natural gas are relatively cheap," said Dr. Thomas Drennen, a professor of economics and director of environmental studies at the colleges (Banerjee 2002).

Crucially, the large majority of reporters and sources they used refer to the feasibility of RSE in terms of its price relationship to oil and gas, which is a false comparison. Roughly depending on price, oil accounts for less than one percent of electricity generation in the U.S. However, in some cases reporters correctly positioned RSE in competition with other electricity generating fuels such as natural gas, coal, and nuclear power. While that was true, the majority of discussions regarding the market feasibility of RSE were made in comparing it to oil prices. This was one of the most confounding issues that came up in the data: Why are RSE technologies compared to oil, an energy source from which the U.S. gets so little electricity?

I spoke with a long-time energy reporter at a newswire, who made two key points about this issue. First, the connection between oil and RSE does not exist in a material sense (they compete very little as generation) or in a market sense (they operate in two different energy markets). Second, however, the reporter noted that the relationship does exist as a socially constructed reality within the discourse of financial markets. That is, traders react to oil price increases with RSE company stock purchases, and vice versa. Though why and how this could be the case warrants further research, what is important currently is that this "false" reality is recreated by reporters when they talk to and quote investors and relay this information in news. When oil is grouped with natural gas and coal as competition for RSE, this juxtaposition causes readers to fundamentally misunderstand the competitive environment in which RSE exists, and thus misperceive its feasibility.

This is an example of the process of grouping and conflation of energy technologies I call "lumping." Not only is this discursive practice rooted in misconceptions about oil's existence as a source of electricity, but it is also a result of reporters' practice of simplifying complex issues—often imposing a problem frame to increase the news value of the story—and seeking balance in stories. This practice, as discussed earlier, may also be traced back to the inexperience of non-specialist reporters writing on energy issues, as well as the time constraints that prevent more thoroughly researched articles. Lumping is problematic because it homogenizes the technical, political, economic, and environmental issues that affect RSE deployment and pose them in opposition to false "competition": oil. As Lockie (2006) says, these condensed (and false) binaries result in their own homogenized and incomplete discourses. Put simply, the construction of a false binary spawns the creation of discourses that internalize the binaries, and are themselves internally invalid. Invalid discourses have been promulgated in RSE discourse based on the "lumping" of both RSE technologies and fossil fuels, and their being placed in direct opposition.

This process masks both benefits of and problems with RSE. For example, simply saying "renewable energy is more expensive than fossil fuels" is only true in certain sociopolitical, environmental, and market situations. By treating a statement like this as a virtual truism, reporters misrepresent RSE by implying that it is more expensive than "fossil fuels" in all situations, which becomes less true with every passing year. Lockie (2006:322), however, correctly observes that, though lumping is problematic in many ways, it is also beneficial because it can create a "holistic signifier" that is conceptually neater and easier for people to

grasp. These simplified significations, when internalized by frames, destabilize the frames themselves, as well as the news's claim to legitimacy in general. This can certainly be said of the feasibility frame, as it is relies upon numerous false dichotomies and partial truths in order to be concise, digestible, and meaningful to readers.

The market "feasibility" frame overlaps with both the "politics and policy" and "funding" frames. The crucial difference is that these frames address different aspects of the relationship between government RSE mandates and funding: "politics and policy" focuses on the political process involved in making RSE mandate policy and its outcomes, while "funding" is concerned with mandates versus open market competition as the most desirable economic route to increased RSE deployment. The politics and policy frame was quite common at points in 2000-2002, due to the development of climate and RSE policy in California and the initial attempts by the new Bush administration to get its fossil-fuel focused energy bill through Congress, the latter of which didn't happen until August of 2005. A crucial element of the politics and policy frame is the use of conflict metaphors to describe the process of making RSE legislation, as seen this excerpt from September 2003, during another contentious stage in the negotiations of the energy bill, in *The Washington Post*:

Rejecting an eleventh-hour plea by 53 senators, Republicans drafting a farreaching energy bill have decided not to require most large utilities to increase the amount of electricity they generate from wind, solar, hydro, geothermal and other renewable sources.

Such a far-reaching mandate, which is a top priority of environmental organizations and the country's burgeoning renewable power industry, was included in the energy bill passed in July by the Senate. But the House has never approved a similar provision, and GOP aides said it would not be part of the compromise energy package being worked out by Sen. Pete V. Domenici (R-N.M.) and Rep. W.J. "Billy" Tauzin (R-La.).

The Senate bill -- originally written a year ago by Democrats when they were in power -- would require retail electricity suppliers other than small cooperatives and municipal power companies to increase their use of renewable fuels to meet an annual target, known as a Renewable Portfolio Standard (RPS). Starting with a

minimum of 1 percent in 2005, the mandatory amount would rise to 10 percent in 2019. Utilities that fell short could buy credits from others that exceeded the target (Morgan and Behr 2003).

Metaphors like "plea," "power," and "compromise" describe a situation of disagreement, as the story itself does—that Republicans decided to reject a compromise and not reach agreement. This is a prototypical way of describing these policy confrontations in the news. Typically the metaphors described more pointed, acrimonious debates, rather than cooperative policy environments. Because conflict typifies the center of many articles on RSE politics and because politics is such a ubiquitous topic in news generally, due to patterns of coverage such as this, Americans might come to believe that there is much less public consensus about RSE than there actually is. Again, misrepresentation is the result of the everyday work of journalists and the normative definition of news that has dictated that news be "interesting."

The two primary strategies legislators used to pursue increased RSE deployment were mandates (which many states had adopted by 2003) and tax credits. The latter were crucial for many projects to attract investors. Again, these credits, like the mandates above, were discussed as an essential component of RSE growth. Here growth is linked to the PTC (Production Tax Credit) in a *USA Today* article from August 2002:

More capacity is underway, but it probably won't match last year, when power suppliers rushed to take advantage of a federal tax credit that expired Dec. 31. The tax credit, renewed earlier this year through '03, is 1.8 cents a kilowatt hour for 10 years, which is about half a wind- turbine's lifetime. The effect is to cut the cost of wind energy to roughly 4 cents a kilowatt hour vs. 3 cents for power from a generator that burns natural gas, the cheap way to add power (Healey 2002).

This excerpt is emblematic of RSE coverage in the policy and politics frame. It describes RSE as subsidy-dependent and expensive. Though this represents the reality of the situation in a general sense, there are numerous contexts where these prices will differ. More consistent and higher velocity winds in a particular area will make this type of development more financially feasible

than in others: Across the central U.S. and off ocean shores this is the case, but in the American southeast the wind potential is not adequate to financially justify large-scale wind projects. This generalized type of reporting on energy price leads the public to believe that wind power is more expensive than natural gas and other fuels in all situations, which is untrue. Importantly though, this reporting saves space and keeps potentially complex statements simple and comprehensible.

Even in the face of this discursive environment, the American public has consistently supported increased government RSE investment. The conflict that often underlies the policy and politics frame regarding the desirability of *mandated* RSE can be seen again in an acerbic excerpt from *The Wall Street Journal* from April 2005:

Still, neither PURPA nor the multibillion-dollar federal subsidies established to further assist the development of renewable energy have made any real difference. Renewables advocate Amory Lovins represented the liberal consensus at the time when he predicted in 1976 that 30% of America's total energy consumption would be delivered by "soft" energy (winds, solar, biomass, biogas, etc.) by 2000. The actual figure, depending upon how elastic you wish to define "soft energy," is somewhere south of 3% (Taylor and Van Doren 2005).

This quote, another generalization, can also be faulted as a form of "episodic" framing. This story, and RSE stories generally, do not mention that fossil fuels both historically and currently receive a higher amount of public funding than RSE. This exclusion may be traced back to what reporters' interpretation of appropriate background for inclusion is. Comparing fossil and RSE energy subsidies would likely be construed as "editorializing"—unless the article's "nut" dealt specifically with the comparison. This is another concrete example from which readers get incomplete information from news that is not based in any type of purposive bias, but that is simply based in the normative structure of newsmaking itself.

When this type of subsidy information does come to light, however, the conservative response is that RSE receives "more subsidies per kilowatt generated." This is only the case

because coal and natural gas have been able to bring production prices down because of their long histories as recipients of federal subsidies. It also overlooks the fact that coal and natural gas were also comparatively expensive in the early stages of their development. Further, from a mathematical standpoint, a statement like this is a simple truism: holding the subsidy amount constant, subsidies per kilowatt generated for coal will be much lower simply because coal has so much more generating capacity. This being true however, it is an oft-repeated talking point in Republican policy and media circles as an argument against RSE subsidization.

Proponents cite a number of economic benefits of RSE to help counter arguments that mandates and tax breaks are ultimately a net loss for ratepayers and investors. They cite benefits such as job creation and energy price stability to do so, and in some cases are able to claim that electric bills would decrease with RSE implementation. Increasingly, this is becoming the case especially for wind power.

"Cape Wind," the U.S.'s first offshore wind farm that was proposed in July 2001, finally won federal approval from the Obama administration in April 2010 after a contentious battle that crossed political party lines. Throughout the decade the debate was frequently in the news, both in terms of the events directly concerning the project and in its use as a reference case for considering aesthetic issues with wind installations. The late democratic Senator Edward Kennedy, a part-time resident of the area near Nantucket Sound (the site of Cape Wind), as well as many anti-RSE Republicans opposed the project. It is certainly not the only project to experience NIMBY opposition from local residents, but it was by far the most salient one in the media—due in no small part to Senator Kennedy's and other celebrities' sponsorship of the cultural feasibility frame.

The three primary concerns stakeholders voiced in opposition to the installation of RSE, whether industrial scale or distributed generation, were environmental, economic, and aesthetic (reflecting the three themes of the feasibility frame). Opponents of Cape Wind used all three of these rationales in their opposition. In August 2003, this *New York Times* reporter discusses a smaller scale wind installation, noting similar concerns:

Even in Princeton, which has been home to eight wind turbines since 1984, some residents oppose the installation of the two larger machines. "The ones they're proposing to put up there are massive," said John Bomba, who since 1988 has owned a restaurant and banquet center that are within sight of the existing windmills. "It's going to impact my business, which is mostly high-end weddings. It will change the atmosphere."

Mr. Bomba, like the opponents of the Cape Wind Project, emphasized that he was "for renewable energy, but we think there are appropriate locations and sites for it." The Princeton windmill farm is situated just outside a state nature reserve (Kirsner 2003).

As this quote illustrates, the Cape Wind fight had become emblematic of fights around the country, as they drew on similar aesthetic arguments: wind turbines are unsightly, loud, and are better sited elsewhere. Importantly, the "hook" this statement is relying upon was a new twist in the debate over RSE aesthetics: that aesthetic issues had economic, and therefore legitimate, implications. This reinforces the primacy of economic considerations of RSE as hegemonic, and because "news" is a finite resource, excludes a story dealing with more marginal issues.

Coverage of RSE in *The Wall Street Journal* continued to be dismissive of the potential of RSE, save a period of time where the investments in this sector were making stockholders good returns and the regulatory environment looked favorable. Again, what is most striking about the paper's coverage is that there is such a clear difference in its tone in discussing RSE compared to other papers. Consider the tone in an Op-Ed by *Journal* writer George Melloan, from August 2003:

Millions of Naderites are trying to peddle windmill farms, even though these inefficient H.G. Wells monsters already are destroying the scenic beauty of places like Palm Springs and the Dutch coast.

This kind of tone was uncommon in other papers, though *The Los Angeles Times* did publish a few articles that were similar in tone, though nothing approaching that of the *Journal*. This tone was reflected as well by some sources with a vested interest in downplaying the relevance and potential of renewables, some of which were oil companies. Though oil is responsible for very little electric power generation in the U.S., oil companies still have two reasons to delegitimize the sector generally. First, as of 2009, oil accounted for 5.1% of electric power generation on a global scale—a sizable market (Organization for Economic Co-operation and Development 2011). Second, to the degree to which ethanol is considered renewable, oil companies have a financial interest in destabilizing the symbolic capital of RSE and downplaying the significance of the RSE sector more generally. However, most large oil companies have renewable energy investments and companies, and seem to be hedging risk in their portfolios by investing in that sector—with one notable exception, described in *The New York Times*:

None of the big solar players claim to be profitable and some former participants remain dismissive about the potential. "Even if it grows at 20 percent annually, it will contribute less than 1.5 percent to global energy needs by 2020," said Tom Cirigliano, a spokesman for Exxon Mobil, which has estimated that it invested more than half a billion dollars in solar energy, going back to the 1970's, before withdrawing (Feder 2004).

Although this source is pessimistic about the financial potential of solar, many of his colleagues' companies are pursuing RSE investments. Solar itself may be a net financial loser, but the symbolic currency gained by investing in renewables—and advertising that investment—as BP has done by rebranding themselves (from British Petroleum to Beyond Petroleum) may far outweigh any financial losses, as it may offer invested companies a favorable strategic position at the point where oil becomes an unfavorable investment. This environment may be decades

away, but RSE technology is improving and deployments are increasing rapidly, so proponents are able to make a stronger case.

Because critical technological leaps are somewhat uncommon, reporters seeking out

novel information on RSE almost always cover them. However, because these technologies are

often far from market, the reporters lend support to arguments of opponents that sponsor frames

disputing RSE feasibility. One example from 2004 in The Wall Street Journal discusses a new

solar technology:

There is no hiding a house that draws energy from the sun, with the large solar panels calling attention to themselves on the roof.

But researchers are experimenting with different materials to convert the sun's rays to electricity. Someday, a solar-powered home might be indistinguishable from any other and solar cells might find their way into new places, like laptop computers, soldiers' uniforms and army tents.

One such effort is under way at Konarka Technologies Inc., of Lowell, Mass., where the research team has fashioned energy-conducting solar strips made of lightweight, malleable plastic that can be rolled, folded, cut into different sizes and shapes or connected in a grid. The strips can be produced in colors to blend in with whatever they are attached to (Byrt 2004).

Because novelty is an important criterion upon which newsworthiness is judged, reporters seek out various ways in which this might manifest itself when covering RSE. Again however, because these new technologies are so "far from market," the opinions of sources who are skeptics hold more weight—and rightly so—because the technology is unproven. In this way, reporters covering novel technologies, driven by the normative definition of news, may do a disservice to RSE proponents by covering RSE that actually *is* infeasible. In doing so, they also legitimate dominant discourses that position all RSE as trivial and infeasible. This also occurs when reporters cover novel deployments of RSE technologies. In this example, the reporter from *The Washington Post* is actually covering a small vintner who has made use of RSE in its operation, and when comparing this small operation to a larger one, writes:

But ecologically conscious enthusiasm must be balanced with economic costs, said Patrick Healy, environmental manager at Fetzer Vineyards in Hopland, Calif., which produces 3.7 million cases of wine a year (Kay 2003).

This author references and legitimates the "economy versus the environment" trope that has been historically used in a wide variety of public spheres to marginalize environmentalists. One famous example of this was the debate in the 1990s in U.S.'s Pacific Northwest over the listing of the Spotted Owl on the Endangered Species List. Politicians at various levels mobilized the "jobs versus the environment" argument as concern rose over the economic effects of the owl's listing on the logging industry. In RSE news discourse, environmental problems such as wildlife deaths, large footprints, and transmission line corridors through protected lands are frequently mentioned. These articles often position the "pro-energy" environmentalist against the "pro-ecology" environmentalist, further destabilizing the legitimacy of RSE and RSE proponents and once again pitting conservation-minded environmentalists against commercial (energy) interests.

Though RSE's environmental problems are frequently mentioned in articles as background, there are relatively few stories that discuss these problems themselves. A majority of those stories that did cover environmental issues were from *The Los Angeles Times*, and dealt with wind power and bird death, solar farms on critical animal habitats or otherwise protected lands, and transmission lines through protected areas. One such article from 2005 in the *Times* describes the controversy on Altamont Pass, a wind farm south of San Francisco, which is notorious for high amounts of bird deaths:

Environmental groups, fans in principle of "green" power, are caught in the middle. "We've been really clear all along, we absolutely support wind energy as long as facilities are appropriately sited," says Jeff Miller, Bay Area wildlands coordinator for the Center for Biological Diversity, which took 12 companies to court (Ritter 2005).

Wind turbines are a rather serious problem for some bird populations. The damage done to local

bird populations will vary, but the best estimates put the number of bird fatalities between 150,000 and 200,000 annually. This number, while large, is dwarfed by other anthropogenic causes of bird death, such as collisions with cars and buildings (National Wind Coordinating Collaborative 2010). In this way the wind industry is demonized in a comparatively unfair way. The issue continued to garner coverage because Altamont Pass is home to some of the earliest and most poorly planned wind farms in the U.S., and because the two "news hooks" were effective: the conflict between conservationists and RSE proponents, and the bird deaths themselves.

California is a unique environmental and sociopolitical context in this respect. Debates about bird deaths, municipal policy, transmission lines, and state climate and RSE policy are relatively unique. No other papers covered these issues in the detail and frequency that *The Los Angeles Times* did. Stephens (2009) and Wilson and Stephens (2009) find similar regional contextual effects, while Liebler (1999) found that physical distance and economic connections were predictors of coverage of the conflict over spotted owls. What this means is that news judgment will vary by geographic location and newsroom, but will fundamentally rest on what is new, interesting, and important.

Recap: 2000-2005. As the 2000-2005 period drew to a close, one of its most important pieces of federal energy legislation, The Energy Policy Act of 2005, was signed into law. The Act was the realization of the Bush administration's goal of increasing domestic energy production. Though it was heavily fossil-fuel-focused, the bill did contain research money for RSE. Democratic legislators fought to include tax credits and mandates for renewables, but mandates did not end up being included in the final draft of the bill. Interestingly, one *New York Times* reporter included explicit mention of the public health of benefits of RSE in 2005, which

was rather uncommon background information.

Heading toward a collision with the House and White House, the Senate sought Thursday to put an environmentally friendly stamp on its energy legislation as lawmakers and President Bush struggle to agree on an elusive national power policy.

In an effort to strengthen their hand in looming negotiations with the House, senators voted 52 to 48 to require power companies to use more renewable fuels like wind and solar power to generate electricity. At the same time, the Finance Committee approved a \$14 billion tax incentive package that rewards alternative fuels and energy efficiency.

"Renewable energy will power our homes and businesses without polluting the air we breathe or the water we drink," said Senator Harry Reid of Nevada, the Democratic leader (Hulse 2005).

Senator Reid's use of this justification for increasing RSE utilization is notable in its general absence from the RSE debate, and is indicative of the absence of meaningful comparisons in RSE news between RSE and competing fossil fuels—namely coal. For example, coverage of disputes over RSE's aesthetics were taken for granted enough to be included in the background information of many RSE articles, but the negative aesthetics of coal production are never mentioned. Comparisons of the health impacts of fossil fuels and RSE are functionally impossible in news because the inclusion of this background, especially considering the increased import and ubiquity of space constraints, would generally be considered editorializing, and is ethically prohibited.

This excerpt also represents the end of a protracted process on Capitol Hill, continuously represented as a "battles" in RSE news, which is not an accurate reflection of the state of public opinion on the issue. According to a survey released in 2006, Pew found that 82% of Americans were in favor of increasing funding for "wind, solar, and hydrogen" power (Dimlock 2006). The above excerpt also illustrates the growing optimism diverse stakeholders had about the potential of RSE, which was also reflected in the technological and cultural feasibility frames. The

economy was improving, oil prices were rising, and RSE investment began growing. This was reflected in the market feasibility and funding frames, but even in this optimistic environment the skepticism regarding RSE's ability to compete on the "open market" persisted.

This optimism was also tempered with growing anxiety about China's activity in the RSE industry. The Chinese government announced a 10% Renewable Energy Standard, and their pursuit of this goal began to turn reporter's (and many stakeholders') heads in 2006. This development brought about a shift in the "energy security" frame that drew on similar xenophobic rhetoric that had most blithely been expressed as the problem of "foreign oil." Further, as the U.S. became more deeply involved in Afghanistan and Iraq militarily, calls for energy independence remained on the public agenda and increased in breadth, frequency, and volume. This issue became even more relevant as natural gas prices spiked in October 2006 and climate change gained momentum as a salient public issue, which was due in part to President Bush admitting to the reality of anthropogenic climate change. The concomitant increase in the salience of RSE was later reflected in more intense coverage appearing between 2006 and 2011, and gave proponents an expanded avenue through which to advocate for the long-term financial stability and legitimacy of RSE, specifically in the form of increased coverage of carbon taxes and RECs (Renewable Energy Credits). All of these trends emerged strongly in 2006-spurred by the release of Vice President Gore's An Inconvenient Truth.

Phase 2: 2006-2010

Carbon was primed to emerge as a salient public issue when *An Inconvenient Truth* premiered in May 2006. Just about this time, discussions of carbon taxes began appearing in public and political discourse in a way that RSE advocates understood could help fund RSE projects and help them become more competitive versus fossil fuel. The early stages of this

period also witnessed the release of the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (4AR) in 2007, and in general were characterized by strong economic growth and optimism—until the bottom dropped out of a slumping economy (and of oil and natural gas prices) in late 2008. The economic feasibility frame changed to mirror this shift: it had increasingly been a space of consensus as the economy prospered, but changed rapidly as the economy declined and RSE investment declined rapidly.

Finally, it is worth noting that the distribution of my article sample also roughly followed the same trends as the economy. RSE story volume increased as the economy prospered, paralleling growth in investments in renewables, climate change discourse, and the Dow Jones Industrial Average (DJIA). All of these things dropped noticeably as the DJIA plunged. I expect this is due to a reduced amount of spending on RSE (and thus, fewer newsworthy stories), reporters having to abandon RSE stories to cover stories related to the crash and recession, and a general decrease in sheer news production capacity, as the recession forced publications to downsize or close. During these closings, reporters who had already absorbed the increased workload from earlier layoffs were forced to deal with further increased workloads and institutional reorganizations as news organizations further cut costs and staffing. This further decreased the number of environmental and energy beat reporters, further intensified time and deadline constraints, and amplified the negative effects on coverage caused by the increased workload.

The salience of carbon and climate issues helped spur growth in climate-friendly companies and technologies, especially in the wake of President Bush's acknowledgement of the human role in climate change. Because of the increase in RSE climate news that accompanied the expansion of climate in energy discourse more generally, a more varied and inexperienced

set of reporters had reason to write on RSE. RSE as a climate change mitigation strategy gave advocates another tool with which they could fight for the policies they championed, and gave reporters an increasingly useful news hook (from which advocates benefitted) in the form of increased coverage of the (climate) benefits of RSE. With what was perceived as inevitable carbon legislation looming in 2006, many companies of varying types sought to position themselves so they could benefit from the soon-to-come carbon credits or RECs, as this excerpt from an April 2006 article in *The Washington Post* illustrates:

AES Corp. yesterday said it would invest approximately \$1 billion over the next three years to expand the company's alternative energy business and develop projects to reduce or offset greenhouse gas emissions.

About half that amount would go to enlarging the Arlington-based company's existing wind-power business. AES, a global power company, purchased the wind-generation company called SeaWest last year, and it operates facilities with 600 megawatts of capacity. AES said it expects to add 500 megawatts of capacity over the next two years and plans to triple its investment in wind generation over the next three years (Mufson 2006).

Investments in RSE like these were framed as favorable and desirable for a number of reasons

beyond politics, as RSE was increasingly viewed as market-feasible, as seen in this 2006 Wall

Street Journal article:

For Stephan Dolezalek, investing in clean technology used to be a lonely job.

After all, when VantagePoint Venture Partners started looking at the area in 2001, only a few venture capitalists were chasing that market.

Fast-forward a few years, add rising commodity prices, advances in technology and increased corporate interest in the space to the mix, and Mr. Dolezalek isn't feeling so alone (Fuscaldo 2006).

The optimism displayed in this excerpt was in part fueled by the steady increase in oil prices that

characterized 2006-2008, and along with increasingly competitive RSE prices, amplified an

already pervasive theme: the comparison of oil prices and renewable energy prices. As noted

earlier, reporters seemed to write about this relationship rather loosely by categorizing both

renewables and fossil fuels themselves loosely. The following is an example of this conceptual murkiness, which employs an even muddier conceptual term in comparison to fossil fuels: "cleantech." This category of green technology was more or less birthed by the growing relevance of RSE and carbon in this period, seen here in a *Wall Street Journal* excerpt from 2007:

Technology companies have seen their share of booms and busts. Clean-tech investments also could implode -- especially if oil prices were to plummet and take away some of the financial incentives of switching to alternative energy (Carlton 2007).

"Clean tech" became increasingly synonymous with renewables, but technologies categorized as "clean tech" are also fossil-based in some cases, so the comparison in this excerpt is technically inaccurate. Similar statements comparing RSE and fossil fuels were common, and juxtaposing these technologies with fossil fuels in discussions of RSE further clouded the conceptual waters RSE proponents were attempting to clear at the time in distancing RSE from "alternative" energy—the latter itself having some overlap with fossil fuel technologies.

The optimism about RSE lasted through 2007 and into 2008, even given growing economic decline. One reporter's lede from August 2007 encapsulates this optimism nicely: "The planet isn't the only thing heating up because of climate change. Some renewable-energy stocks have been pretty hot, too" (Mufson 2007). This period saw strong economic growth, though rising oil and gas prices made some investors and economists nervous, as illustrated in the above quote about cleantech. There was also another reason to be skeptical: a transmission infrastructure that needed updating.

The blackouts in California in 2000-2002 as well as those in the Northeastern U.S. and Canada in the summer of 2003, sporadically clued reporters into this crucial, but often overlooked issue. This *Los Angeles Times* reporter covered transmission after the blackouts in

California in 2006, while hinting at another common theme in coverage of Californian RSE: the apparently inherent problematic nature of the bureaucratic structures of energy development:

Utility spending to upgrade and maintain the system has steadily declined since the 1970s. The effects go far beyond July's outages. In February, Cal-ISO contended that a new high-voltage transmission line from gas-turbine generators in the Palo Verde area west of Phoenix would deliver enough electricity to enhance reliability, lower bills and encourage the development of renewable energy. Tellingly, this project, approved in the 1980s, has languished in the planning stages for 20 years (Erie 2006).

This excerpt not only references failed RSE policies in the 1970s, but also demonstrates a common theme in *The Los Angeles Times* ' coverage of RSE: the potentially fatal problems transmission issues pose for RSE projects. Another one of the more prominent bureaucratic obstacles for transmission, and for RSE itself, is that of environmental concerns. This latter theme, part of the cultural feasibility frame, continued to be highly salient in coverage of RSE issues. To this point in 2007, most environmental concerns about RSE deployment centered on landscape and wildlife disputes. The citing of transmission lines emerged as a crucial consideration, especially because California continued to serve as a test case for RSE advocates in anticipating potential opposition nationwide. This excerpt from an April 2007 *Los Angeles Times* article is illustrative of coverage of Californian RSE transmission issues at the time:

According to the Los Angeles Department of Water and Power, the 85-mile-long "Green Path" energy corridor designed to bring solar, geothermal and nuclear power from southeastern California and Arizona would slice across the Big Morongo Wildlife Preserve north of Palm Springs, Pioneertown near Yucca Valley, Pipes Canyon Wilderness Preserve and a corner of the San Bernardino National Forest before crossing over the Cajon Pass and connecting with existing power lines in Hesperia (Wilson 2007).

Transmission issues were often framed as intractable political disputes (using the "politics and policy," and problem frames), again serving to delegitimize and challenge the feasibility of RSE development and lend legitimacy to those who challenged the industrial-scale deployment of

RSE by mobilizing the environmental topic within the cultural feasibility frame. The large majority of coverage of RSE is based to some degree in conflict—especially in terms of utility-scale deployments, and this theme of the feasibility frame is no exception.

Extremely rare were stories covering the acceptance of large-scale RSE deployments or transmission in communities or cities. For example, sources in stories about transmission disputes were usually government bureaucrats or politicians and were frequently positioned in conflict with local stakeholders. This, along with the absence of coverage of favorable local reactions to large-scale deployments, implies to some degree that these deployments are "politician versus citizen" disputes. This distorts the reality of public opinion of RSE in the U.S. , as according to a 2009 Gallup poll, 73% of Americans favor funding increases for "alternative" energy (Jones 2009).

NIMBY opposition is much more likely to be covered by reporters than acceptance of RSE deployments, though the widespread desire for increased RSE deployment is rarely mentioned. This represents a fundamental and highly problematic aspect of RSE news: the privileging of conflict over consensus. Considering the high level of public support for RSE investment, this discursive disconnect is among the most misleading aspects of RSE news and is rooted in a changing definition of news that increasingly privileges "interesting" drama over "important" substance.

As RSE news became more ubiquitous, the quest for a novel news hook for RSE stories became more intense and reporters began to give more voice to RSE proponents who had a different interpretation of the nature of RSE aesthetics. This *New York Times* excerpt from November 2007 is one of these infrequent but noticeable exceptions to the seeming consensus among reporters that the issue of RSE aesthetics was only an effective tool for opponents:

A 30-mile-an-hour wind was twirling the fingerlike blades of a turbine 380 feet above his head. Around him, a field of turbines rotated in a synchronized ballet that, when fully connected to an electrical grid, would generate enough power to light 60,000 nearby houses (Landler 2007).

Favorable metaphorical constructions, including quotes describing turbines as pleasant or aesthetically desirable, were quite rare. The attempted reframing or reclaiming by RSE proponents of the aesthetic concerns that characterized RSE news discourse never came to fruition, as influential political figures continued to come down on the side of RSE opponents. At one point, there was discussion about placing turbines in the Smoky Mountains of Tennessee. That state's longtime Senator, Lamar Alexander, came out strongly opposed to these proposals, primarily citing aesthetic concerns.

As RSE continued to gain market legitimacy in 2007-2008, investors quoted in stories increasingly portrayed these investments as desirable in the long term. Reporters also frequently used metaphors from the 1970s, a time of unsuccessful RSE efforts and marginal proponents, as referents:

Investors have toyed with solar technology since the 1970s, but he high cost of manufacturing solar-energy panels, and insufficient government support to help offset these costs, prevented the technology from becoming a commercial success (*Wall Street Journal* 2006).

The use of these metaphors mutes the legitimacy of RSE by tying current RSE trends to the failed attempts of the past. The growth in RSE investment and optimism, along with the increased ubiquity of the funding frame, continued through to the end of the summer in 2008, when fossil fuels prices neared their record highs and RSE technology prospects improved. Some saw this as a reason to reject legislative intervention, as seen in this 2008 excerpt from *The Washington Post*:

Two factors are driving this sea change. First, the price of our traditional fuels --

oil, gas and coal -- has risen dramatically. Second, the silent and inexorable march of technology has dramatically reduced the costs of clean alternative energy sources such as wind turbines and photovoltaics, which converts sunlight into electricity. The result will be a dramatic reduction in the emission of greenhouse gases -- without politicians passing a single additional piece of legislation (Tisch 2008).

Soon after this was written, the stock market would crash and the recession would worsen significantly. The plunge motivated many investors to disinvest in RSE stocks and seek safer investments. Because a majority of private investments in RSE at the time were still venture capital, these high-risk investors got burned as stocks plummeted, thus eliminating a large and crucial arm of RSE investment.

The plunge also led many investors, analysts, and reporters to resurrect the "burst bubble" metaphor that gained cultural potency from the "dot com" disinvestments and crash of the late 1990s. Other metaphors also appeared sporadically in this time of RSE investment decreases. These often referred to "frozen" credit markets or the "credit crunch" to describe the unwillingness of lenders to invest in increasingly risky RSE ventures. This excerpt from *The Wall Street Journal* is illustrative of this metaphor's use, and of the shift in the "funding" frame in late 2008, from optimism to defeatism:

Traditionally, one of the biggest drivers of renewable energy in the U.S. had come from small companies, which develop wind or solar projects and then sell the output to big utilities. The projects were attractive investments because many qualify for tax credits. But many investors who had been seeking tax breaks have disappeared as the stock market tanked and the credit markets froze (Smith 2008).

As the RSE market declined, reporters continued to describe the dependence of RSE on subsidies, and because these investments became undesirable so quickly because of the referenced investment pattern that characterizes a large portion of RSE, their economic feasibility is again called into question. Though this description accurately characterized the investment environment itself at the time, reporters chose to mobilize dramatic, historical metaphors in the desire to manufacture "interesting" news from a relatively banal event.

In the lead-up to the market crash, political RSE coverage was organized by debates about President Bush's energy bill in 2007 and the Presidential campaigns in 2008, in which energy security again was a crucial issue. In terms of the energy bill, Democrats repeatedly attempted to reverse tax cuts to oil companies and to use this capital to fund RSE and other renewable energy projects. The design of these bills reified the false dichotomy constructed in the media that positioned oil in competition with RSE. It also introduced unnecessary contention into the bill in an attempt to take advantage of increasingly negative public opinion about oil. Ultimately, in the final draft of the Energy Bill in June of 2007 this strategy failed, as Democrats did not get the "victory" they sought, as seen in this *New York Times* excerpt:

But Senate Democrats also fell short of their own goals. In a victory for the oil industry, Republican lawmakers successfully blocked a crucial component of the Democratic plan that would have raised taxes on oil companies by about \$32 billion and used the money on tax breaks for wind power, solar power, ethanol and other renewable fuels.

Republicans also blocked a provision of the legislation that would have required electric utilities to greatly increase the share of power they get from renewable sources of energy (Andrews 2007).

Coverage of energy bill debates resurrected the policy and politics frame and its most important element: conflict. As Richardson (2007:36) notes, Gramsci would suggest that this contentious political dynamic has been taught to the public and accepted as an inherent component of the American political system. So, while RSE policy was being used as a futile political tool for Democrats in a political "battle," the portrayal of the latter resonated in the news because it is an accepted part of American politics and culture more generally. This use of the "problem frame" in news to describe a contentious political system functionally legitimates the validity of that political dynamic and affirms the place of journalistic practices as facilitative of hegemony.

Further, the acceptance of oil lobbyists in this "battle," as problematic as it is, is also an accepted part of this hegemonic dynamic. Utility interest groups and the API (American Petroleum Institute) aggressively lobbied Republican senators to reject the tax provisions in the energy bill. As John Broder (2007) reported about the API's involvement: "We made sure that everybody knew our point of view — the White House, the House, the Senate,' said James Ford, director of government affairs at the American Petroleum Institute 'We told our story and told it thoroughly." Tellingly, the compromised bill passed 86-8.

Not soon after this bill passed, the presidential campaigns began to ramp up. Both sides were again espousing the value of "domestic energy" and "energy security" in the news, though with different solutions. T. Boone Pickens, the famous financier turned wind magnate, began in this period resurrecting the energy security frame for his own reasons: to start a movement that would lead to a wind power and natural gas energy infrastructure that would financially benefit him greatly. A July 2008 *New York Times* article illustrates this rekindled frame and describes its sponsor:

He also considers it absolute madness -- financially and in terms of national security -- to be spending \$700 billion every year on imported oil produced in volatile and in some cases hostile countries.

His answer is to develop wind power in states with steady, forceful winds (like Texas) and use it instead of natural gas to produce electricity (natural gas now generates about one-fifth of the power in the United States). He would then use the natural gas saved to fuel cars and trucks. He predicts that oil imports would drop by 40 percent and the country would save \$300 billion a year (*New York Times* 2008).

Pickens was able to get coverage in most news outlets, as well as a meeting with President Bush. His ability to get coverage hinged upon two things: his actions to rejuvenate and reactivate the "foreign oil" and "energy independence" metaphors, and his celebrity status, which acted as an effective "peg," that drew readers into the story (Anderson 2005). However, his efforts were in vain, and the market crash that was soon to follow would cost Pickens about \$2 billion. Since high and unstable fossil fuel prices were cited often as a precursor to the crash, the issue of "foreign oil" was back on the agenda, thanks in part to Mr. Pickens and his influence. Thomas Friedman, a columnist for *The New York Times*, picked up on the re-emergence of this metaphor, and the energy security frame, in August 2008, describing a visit to Europe:

In the last 10 years, Denmark's exports of energy efficiency products have tripled. Energy technology exports rose 8 percent in 2007 to more than \$10.5 billion in 2006, compared with a 2 percent rise in 2007 for Danish exports as a whole.

"It is one of our fastest-growing export areas," said Hedegaard. It is one reason that unemployment in Denmark today is 1.6 percent. In 1973, said Hedegaard, "We got 99 percent of our energy from the Middle East. Today it is zero."

Frankly, when you compare how America has responded to the 1973 oil shock and how Denmark has responded, we look pathetic (Friedman 2008).

Friedman mobilizes the "1970s" metaphor to communicate the U.S. dependence on oil and "unstable" or "unfriendly" governments or "regimes." In the use of the fear embedded in this "problem frame," Friedman, politicians, and others with agendas, provide "dramatic scripts and news media pronouncements of remedies to 'make us safe'" (Altheide 1997:665, from Gusfield 1989).

In this case, increased RSE investment was the way to mute the danger implied in the emergent xenophobia in Friedman's and many other Op-Ed columnists' work. However, the energy security frame began to meaningfully shift in this era toward a more optimistic version during the Obama campaign. Once he had won the election, President Obama continued to use strong language in his attempts to shift the energy security frame to one that would justify his economic policy goals—that of a "green economy," or "green energy future," as seen in *The Washington Post* in March 2009:

President Obama yesterday outlined plans to spend about \$59 billion in economic stimulus funds and \$150 billion from the federal budget to promote what he calls America's "clean-energy future."

"We will attack the problems that have held us back for too long," including dependence on foreign oil, Obama told a gathering of clean-energy entrepreneurs and leading researchers at the Eisenhower Executive Office Building.

He said his plan to invest \$59 billion from the economic stimulus package in clean-energy projects and tax incentives would ultimately help create more than 300,000 jobs and double the nation's supply of renewable energy (Branigin 2009).

This metaphor served a crucial purpose in the Obama campaign because it was an example of his

campaign's mantra "Hope," in that it was a vision of the future that sought to fix past mistakes.

The first sponsor of this frame in the news was Van Jones, who was featured in an article by

Friedman in October 2007. Jones ended up becoming an environmental advisor on Obama's staff,

and the frame ended up being picked up by another columnist at The New York Times, Bob

Herbert in 2009:

You want new industry in the United States, with astonishing technological advances, new mass production techniques and jobs, jobs, jobs? Try energy....

...As oil defined the 20th century, new forms of energy will define the 21st. The U.S. has the opportunity, the intellectual resources and the expertise to lead the world in the development of clean energy. What we've lacked so far has been the courage, the will, to make it happen (Herbert 2009).

The notions of "the future" and "possibility" were effective for the Obama campaign. It could be argued as well that Obama's use of "green" rhetoric was an attempt to tap into the nascent but "strong positive undercurrent of sentiment toward nature in American culture" (Podeschi 2007:327). With the help of Friedman and Herbert, as well as many other reporters, this modified frame gained traction quickly and became a reliable asset and talking point for Obama. Owing to this newfound caché, the outgoing Bush administration attempted to mobilize this frame to seal its legacy with the "environmental" legislation in the energy bill, as seen here in Jon Wellinghoff's, Commissioner of the Federal Energy Regulatory Commission, Op-Ed in *The Washington Post* in late 2007:

The energy bill sets the foundation to support and expand these actions. It offers standards to set commitment levels for national energy efficiency and renewable

energy resources as a proportion of our total electric energy mix. That is clearly preferable to continuing to place our faith -- and our tax dollars -- in our ability to increase domestic oil production through federal funds supporting new technologies to enhance oil production at a time when even the Energy Information Administration projects that oil production in this country will remain relatively flat.

Former CIA director R. James Woolsey Jr. recently wrote, "We must become independent -- not just of imported oil, but of oil itself."

That is the national security path down which the pending energy legislation in Congress can lead us (*The Washington Post* 2007).

As the election took place and Obama took office, political and market concerns about the

recession became the predominant themes in RSE discourse. Though the economic problems

began toward the end of the Bush administration, it was Obama who was tasked to deal with the

escalating recession.

His primary solution to this was the "economic stimulus" plan, and one focus of this plan

was the pursuit of a "clean energy economy." However, the "bailout" bill of October 2008

included funds to help the RSE industry as well, as described in The Washington Post:

Last night was the tenth time since June 2007 that an extension of wind and solar tax credits have gone to the floor of the Senate. Seven times they have been stuck in bills that have gone to the floor of the House of Representatives.

And they're still not law.

Solar and wind industry executives hope that the tax credits will finally be adopted as part of the rescue plan for the U.S. financial industry -- though environmentalists are lamenting that the package also includes \$894 million of tax breaks for oil refineries using tar sands or coal-to-liquids technology (Mufson 2008).

As the financial crisis deepened and investments dried up, tax credits became increasingly essential for the growth of RSE industries. Perennially an object of political "compromise" however, these credits often are renewed for short periods and lapse periodically. Again, this is accepted by the American public as a necessary function of a hegemonic political system that compromises the public interest in rewarding the lobbying of fossil fuel industry groups. Though Democratic politicians pursued RSE mandates aggressively, the recession was taking its toll on private funding in the U.S. and Europe. Further, attempts by the administration to get a carbon "cap and trade" bill passed through Congress ultimately failed, and this was a blow to RSE proponents who were expecting some sort of climate legislation in the first few years of the Obama presidency. There had been corporate buy-in to carbon legislation in 2007, but that legislation never happened. Once again, coverage framed the obstacles as a political contest—this time, however, as a conflict between Democrats, and Democrats with fossil-fuel-dependent districts. This example is from *The Wall Street Journal* in February 2010:

In his State of the Union speech last week, Mr. Obama pushed for "a comprehensive energy and climate bill with incentives that will finally make clean energy the profitable kind of energy in America." The climate bill in the Senate is opposed by legislators from both parties whose local economies rely on fossil fuels, and smokestack industries like steel mills and coal-fired utilities. These lawmakers worry a cap-and-trade system will burden these industries with new costs. Mr. Obama's comments on Tuesday came amid new signs of resistance by some fellow Democrats to his administration's efforts to combat climate change. On Tuesday, two senior House Democrats -- Reps. Ike Skelton of Missouri, chairman of the House Armed Services Committee, and Collin Peterson of Minnesota, chairman of the House Agriculture Committee -- introduced legislation to prohibit the Environmental Protection Agency from regulating greenhouse-gas emissions under the Clean Air Act. In a written statement, Mr. Skelton called for setting aside legislation already passed by the House to cap greenhouse-gas emissions, and instead passing "scaled-back energy legislation" that could command greater support in both parties.

"We cannot tolerate turning over the regulation of greenhouse-gas emissions to unelected bureaucrats at EPA," Mr. Skelton said (Williamson 2010).

This excerpt is richly illustrative of numerous trends in the data. It is centered on conflict, it pits

"the economy versus the environment," and it elucidates the President's "clean energy" platform.

The President was still attempting to utilize the energy security frame and position RSE as

financially feasible and beneficial in the midst of the recession, but because opponents were able

to effectively mobilize the constructed divergence of environmental and economic concerns in a

political conflict, the cap-and-trade proposals failed. Further, the fact that Democrats crossed party lines to support fossil fuel industries reflects the dominance of this energy source in American politics and everyday life.

The problem frame that was being drawn upon in connection with the politics and policy frame in Washington D.C. was also gaining momentum in California. *The Los Angeles Times* covered Mayor Antonio Villaraigosa's controversial and relentless campaign for a strong RSE mandate with great attention. American politics were rife with conflict over climate and RSE policy at this time, and climate legislation was also a matter of significant conflict in California.

Proposition 23 was a referendum financed primarily financed by out-of-state oil companies that refined in California. It was designed to undo the legislation of AB 32, a bill previously passed by voters in California designed to reduce that state's carbon dioxide output and drastically increase the proportion of RSE in the state's portfolio. At the time, California had an unemployment rate above 10%, and the Proposition 23 stipulated that AB32 could not be enacted until this rate dropped below 5.5% for four consecutive quarters. Because a drop below this rate was highly unlikely, given historical trends and contemporary economic realities, the primary financiers were attempting to functionally kill AB32. As reflected in the design of the ballot measure, proponents of Proposition 23 imposed a "jobs versus the environment" theme in this political conflict within the market feasibility frame. This is illustrated in an October 2010 Op-Ed in *The Los Angeles Times* by Jack M. Stewart, then president of the California Manufacturers & Technology Association, when he wrote about Proposition 23—which proponents deceptively labeled the "California Jobs Initiative:"

The bottom line is that AB 32 gets more credit for moving California forward on energy and climate policy than it deserves. Our decades of investment and policy development in this area will preserve and maintain our leadership position. By delaying the measure's most harmful regulations, Proposition 23 would reduce

energy costs, help California manufacturers and businesses compete, and save jobs. That is very good news (Stewart 2010).

Primarily, this op-ed challenges the market feasibility of RSE through statements about its expense. In addition to the job losses that AB32 would purportedly spur, proponents of Proposition 23 noted that electricity prices were expected to rise as the state implemented AB32 and integrated more RSE into the state's portfolio. Though it labeled AB32 economically unfeasible and a "job killer," Proposition 23 was ultimately defeated by more than a 20% margin.

As the defeat of this referendum illustrates, it was not all bad for RSE proponents during that time of economic recession. Though the high expectations of the Obama administration were not coming to fruition, the solar industry nonetheless began to flourish in this environment. However, with the recession came a drop in demand for RSE technologies and subsequent oversupply. This was especially true in the solar industry, where prices had already experienced downward momentum, owing to China's emerging domination of the industry via a cut in manufacturing costs and a significant supply glut.

These developments threatened Obama's fledgling American "clean energy economy," and the protectionist version of the energy security frame began to deal centrally with China's dominance and the U.S.'s relative weakening in the solar sector. This version of the energy security frame's protectionist discourse emerged strongly as Obama's stimulus package came under fire from Republicans, as seen in a November 2010 *Wall Street Journal* article:

The Republican campaign committee claims it has identified 11 U.S. wind farms that used stimulus grants to buy wind turbines, with 695 of the 982 total coming from overseas suppliers. The Republican group is calling for more stringent "Buy American" provisions throughout the stimulus package.

The American Wind Energy Association disputed the findings, saying only three of the 33,000 wind turbines in the U.S. were made in China and that the vast majority of foreign suppliers produce turbines for the U.S. market in facilities here (Glader 2010).

It is important to note that RSE industries were not the only Chinese industries being cited at the time as problematic for American business. Because of China's unique economic and political structure, manufacturing costs for a variety of goods were below many other industrialized nations. There was also a sentiment within the industry that there were illicit "technology transfers" going on in partnerships between American and Chinese companies, wherein technological copyrights were not being honored by Chinese companies, as often designated in the partnership contracts. Further, the Obama administration sided with American steelworkers in 2010 who claimed in a trade complaint that Chinese steel for wind turbines, among other RSE technologies, was produced with the benefit of "protectionist" manufacturing policies. This frame continues to be potent and resonant, especially during the 2012 election. The Obama administration recently voided the contract of a Chinese company seeking ownership of four wind farms in Oregon, having deemed them a national security concern, which some see as a response to Governor Mitt Romney's accusations that the Obama White House is too "soft" on China. In seeking to make the U.S. more competitive, the stimulus package provided funds for RSE development.

Though the stimulus package dedicated \$90 billion for "clean energy," the consensus among investors at the time was that the U.S. had a comparatively unfavorable and unpredictable regulatory environment for RSE development, and that this would drive RSE business overseas anyway. This is illustrated in a September 2010 article in *The Los Angeles Times*:

As they wait for a resolution, solar, wind and other alternative power companies say they have been unable to lay out business plans, court investors or attract customers. Many said they were considering focusing their efforts in other states or abroad, where clean-tech policies are more comprehensive.

"We're competing against international companies that have strong policies in their home markets that give them a huge advantage now that they're exporting into other markets," said Kevin Smith, chief executive of SolarReserve, which develops renewable energy plants. "We find ourselves behind the curve compared to Europe and China (Hsu 2010)."

These excerpts illustrate a theme that was present throughout the period: that of increasing insecurity among RSE proponents that the U.S. was going to lose the RSE / "green economy" "race" because of political conflict and ineffective, unpredictable regulatory environments. *Recap 2006-2010*

In general, the frames were consistent over the entire 2000-2010 period. Feasibility was consistently an overriding debate, though this feasibility debate was primarily centered on the market viability of renewables in a regulatory and economic environment that was alternately favorable and unfavorable. This shifting was moderated by economic expansion and subsequent recession, as well as the growing prominence of carbon in RSE legislation proposals and U.S. culture more broadly. Technical and cultural debates regarding the feasibility frame remained relatively unchanged from the first six years. Political and financial concerns were predominant in the latter part of the period, amid optimism in these two areas and the subsequent pessimism and drawbacks brought on by the financial crisis. The energy security frame also manifested itself in this era. Though Obama's presidential campaign brought about a more optimistic and forward-looking version of the frame, it did retain its protectionist and xenophobic center.

This period began very optimistically for RSE advocates. The rise of climate change in culture and politics presented an opportunity for advocates to position renewables as a solution to climate change, as well as to the lingering issue of "foreign oil" that had been percolating since 2001. Though optimism generally characterized this era of increased RSE investment, deployment, relevance, and acceptance, some patterns of earlier RSE coverage lingered. Most problematically, reporters still used false comparisons with oil to cover RSE while also using recycled metaphors with negative connotations about RSE expense, aesthetics, and policy

conflict as background in the drastically increased volume of RSE reporting. As Barack Obama completed a successful run for the Presidency and the discourse of energy security shifted to a more positive tone, the economy shifted downward and RSE ultimately lost the momentum gained in the previous two years—both in terms of deployment and constructive news coverage. The economic downturn significantly affected the volume of RSE reporting, and in particular, coverage of the market driven frames. In general, this seems to reflect the basic premise that RSE coverage is fundamentally hegemonic and will reflect discourses that benefit elites.

CHAPTER CONCLUSION

This chapter described the character of the four frames I found in the data, as well as the narrative that bound and organized their use in the news. Conceptualized as the material output of RSE news discourse—as rooted in the structures and practices of the newsmaking milieu and process, and a unique regime of truth—the frames are productive of a body of information that systematically distorts material realities of RSE development and deployment, and misinforms the public about them. Further, as has been shown, RSE frames tend to deal centrally with the economic features of RSE, reflecting a definition of news that reifies the power of official sources (Sachsman, et al. 2005). These two fact marks the process of RSE newsmaking as an ideological one, supportive of the hegemonic order.

By linking the factors involved in RSE newsmaking to those of RSE frames, I contribute to literatures that seek to understand the relationship between journalistic practices and portrayals of energy and climate issues. I also contribute to literatures on the framing of environmental issues and energy issues, as well as those that integrate critical perspectives into their interpretations of, and explanations for, particular frames and framing processes. Finally, in tracing frames and their constituent parts back to macrosocial processes and the changes in the

news industry, this chapter contributes to a growing literature seeking to understand the ways in which these large-scale changes interact with changing newsroom practices, and how this collectively alters the production of news.

The systematic delegitimizing of RSE in the news, in effect, reestablishes the necessity of fossil fuels in modern life. The interaction of news routine and RSE rhetoric create marginalizing RSE news discourse. Not only is RSE heavily tied to conflicts (rooted in the use of the "problem frame") of all types, the routines reporters use and the constraints under which they produce RSE news trivializes, oversimplifies, and homogenizes RSE deployment, contexts, and contests. By internalizing and echoing misleading generalizations about RSE being unattractive, infeasible, and expensive as background information, reporters are unwittingly aiding RSE opponents in marginalizing these technologies (Reese and Lewis 2009), and reaffirming and justifying the centrality of fossil fuels in (post)modern life.

Given its constructed legitimacy and centrality in American life, fossil fuel electricity production continues unchallenged in RSE news. One reason that questions about RSE's fossil fuel competition don't come up is this simple lack of meaningful discussion of coal, the coal industry, or coal markets in any story featuring renewables. Primarily due to the norms of making news, coal is virtually invisible in RSE news discourse. When present, it is shallowly discussed as "cheaper," or sometimes "dirtier." Meaningful, direct comparisons, such as those based in the aesthetics of the competing sources are virtually non-existent in RSE news articles.

Finally, Americans are continually told that there is a huge supply of coal, and that this energy source is "secure," and "cheap." When RSE technologies are framed by both proponents and opponents as expensive and "subsidy dependent," the subsidies that fossil fuels receive from the federal government, which are substantially higher than RSE's (Environmental Law Institute

2009), go unnoticed. When this fact is considered alongside oil's problematic juxtaposition as competition to RSE, the information the public gets about RSE's true chances of becoming a viable energy source is understandably incomprehensible. This is especially troublesome considering that American coal production projections for the coming decades show the majority of growth coming from a massive increase in coal projections for one region: The Powder River Basin in Wyoming. The coal primarily produced in this region is the dirtiest and most carbondense type of coal (lignite), and thus, if carbon tax legislation is enacted, will be expensive to burn and will also raise U.S. carbon dioxide emission significantly. Whether this will create market pressure and facilitate a transition to lower carbon energy sources remains to be seen.

CHAPTER 6

CONCLUSIONS: THE BEAT GOES ON

Climate change continues unabated. In 2011, a record amount of carbon dioxide was released into the Earth's atmosphere, and in that year, the United States produced 42% of its electricity from coal. As climate science and RSE technology progress and increase in complexity, newspapers continue to shed staff and cut costs in other ways, further threatening the outlook for quality environment and energy reporting in the future. In May 2012, *The New* Orleans Times-Picayune, that city's largest newspaper, announced that it was reducing production of its print editions to three per week in the fall of 2012. With the economic conditions as they are, little that has been discussed in this dissertation is likely to change in the near term. I have described the social processes, discursive practices, and media output associated with RSE mass media news, and examined the ways in which the changing newsmaking milieu is likely to leave intact some hegemonic newsmaking processes and practices, exacerbate others, and create new opportunities for domination. However, this changing milieu also presents numerous opportunities for positive change, wherein reporters and the reading public alike are offered opportunities to make news that is more thorough, inclusive, and focused on marginal groups and ideas. These conditions imply that this is a critical opportunity for environment reporting to become a more relevant part of policy discussions at all levels.

This research revealed the importance of considering the effects of newsmaking procedure and milieu on the reporting of specific topics. Though considering general effects can be beneficial, research that attempts to understand the details of these effects on specific topics is important not only for the creation of knowledge, but also for their increased pertinence of

nuanced findings in applied settings. With this project, I have pursued this in terms of RSE in order to clarify locations wherein the production of news both hinders and enables the production of hegemonic articulations of RSE. In critical ways, the reporters themselves and the definition of news that they use to ground and organize their work are the two primary conceptual hubs from which the potential effects of the social and discursive processes in newsmaking are realized—whether positive or negative. Further, this project explored how space and time constraints manifest themselves in the workdays of reporters, especially as this concerns writing about RSE, itself a highly complex, diverse issue that presents unique challenges to reporters. This uniqueness is also true in my investigation of how RSE is "balanced" in news, as it draws out the use of specific techniques by reporters that are designed to make balanced RSE news "interesting" and digestible to readers. Finally, my particular methodological elaboration of frame building is unique in its detail, character, and topical focus. There are to date no frame analyses of this detail specifically designed to investigate RSE.

The next section of this chapter summarizes the findings and conclusions of this project by roughly retracing the general trajectory of the analysis: from shifting social processes to discursive practices, and finally to the nature of RSE discourse and how this manifests itself in RSE frames. Following this, the final section will cover the implications of the study in two broad sections. The first addresses the future of RSE and energy production, energy news and discourse, and climate change. The second discusses this study's findings in broader terms of hegemony, democracy, and a deliberative energy policy (Hajer and Wagenaar 2003).

SUMMARY: NEWS IN TRANSITION

The findings of this study of RSE news framing have resulted in a number of general conclusions about the RSE newsmaking process and its product. First, the economic constraints

in the news industry have had drastic effects on news generally and RSE news specifically. Second, the normative definition of news that reporters use in their day-to-day work deserves more recognition as central to the entire enterprise of newsmaking. Third, newsmaking is fundamentally a hegemonic exercise. There are numerous processes and practices within newsmaking that make this so, due to their capacity to narrow, simplify, and homogenize RSE news. Finally, reporter agency and the changing environment of newsmaking provide some opportunities for the development of counterhegemonic routines and increased access to newsmaking for marginal sources and information.

Constrained News

The effect of the changing economic, cultural, and technological milieu on newsmaking cannot be overstated. These effects include reporter layoffs, the quickening of the news, and the shortening of stories, and are without question the most vital. In essence, layoffs and the closing of many environment desks have reduced the number of environment and energy reporters drastically. Indeed, a number of my interviewees had either been laid off or had switched industries because of the cutbacks. In short, I found that there are fewer energy and environment reporters writing more stories, faster, and in less space. This constrained environment can affect story quality, sourcing, balance, and background. Further, the increased speed of news has changed the normative definition of news—or taken advantage of it—and has resulted in a drastic increase in the creation of "page turning" news. The making of this news drives readership and is an important economic strategy at many papers, but is generally detrimental to the social function of news as understood within the industry. The increase in shallow storytelling is especially problematic for RSE news because, considering the normative definition of news. This constrained the normative definition of news are specially problematic for RSE news because, considering the normative definition of news.

means that RSE coverage is scant, to say the least—and is likely to become increasingly so. When covered, it most often is driven by a political, economic, or sensational news hook, which will filter RSE coverage accordingly. Reflecting on this finding, I discovered that this fact has made me seek out RSE news much less than I would otherwise. Whether this is true for casual consumers of energy news is an important question and warrants further research. In doing so, researchers should investigate the routes through which reporters learn and negotiate what news satisfies their normative definition of news *outside* the newsroom, and how news consumers play an interactional role in this—in addition to their new digital roles as commenters, photographers, or otherwise unpaid contributors. Finally, more research should focus on how this issue relates to reporters' personal visions of their readers as a real public, rather than "imagined public."

The Definition of News

The primary tool with which reporters make sense of and shape their work routine is the normative definition of "news." It organizes the way in which they decide which stories to pursue, the way in which stories are constructed (e.g. the location of quotes within the story and the inclusion and exclusion of certain sources and information), and consequently, some of the longitudinal patterns in content. Within this operative definition defined by my data, which dictates that stories be interesting, new, or important, reporters have professional and symbolic motivations to justify the production of stories whose selection is based in these standards that are inherently exclusionary and subjective. This is not to say that reporters are right or wrong in selecting the stories they do, or are to blame for the longitudinal patterns existent in RSE news; these patterns rely upon a historical, discursive construct that underlies the way in which reporters' work is organized, and that justifies and embodies the ethics of the profession as a

whole (Foucault 1980). What is more important to understand are the ways in which the normative definition of news is tied up with the other elements of newsmaking.

For example, this definition resonates with the value system of reporters in its insistence upon the "important." Reporters, as a group, fundamentally see themselves as public servants. It is this judgment of public import that not only separates "news" from tabloid journalism, but reporters from bloggers and paparazzi. Further, the characteristic these two broad types of journalism share is the need to attract readers, and this necessity infects all three aspects of news judgment. According to the operative definition above, the judging of importance leads to the frequent reporting of news that hinges upon various aspects of hegemonic culture—and thus, its legitimation. Marginal events or groups are more likely to be covered as they relate to the other two criteria of "news"—that is, how new or interesting they are judged to be. In being so classified, RSE is trivialized, sensationalized, and misrepresented. So, the normative definition of news is deeply implicated in how reporters see themselves and negotiate and justify RSE story selection; in turn, this helps reproduce the hegemonic definitions of the social world that news has been shown to do (Fishman 1980). Here, this includes the legitimation of fossil fuels. *Remaking Hegemony*

This reproduction not only occurs as a result of the normative definition of news and time constraints on their own, but also as a result of a number of standards and routines in the everyday work of reporting news. As described in chapters 3 and 4, these effects are ultimately sourced in varying degrees in organizational, cultural, or political-economic conditions. Patterns in seeking out and relying upon regular sources, the ways stories are written (e.g. with "balance," the choice of background information and avoiding bias), and the use of new technologies are all fundamental to the filtering of RSE news and are increasingly reproductive of hegemony. This

news, manifested as RSE frames, is predictably inscribed with the relationships characteristic of its productive process. This process has resulted in a relatively shallow, oversimplified, incomplete, and elite-focused RSE discourse; these characteristics are well represented in the frames themselves and are deeply rooted in sourcing patterns in newsmaking.

As foundational and contemporary research in journalism has shown, sourcing is a primary way through which hegemonic messaging is maintained in news, and this relationship revealed itself in a number of ways in this project. Predictably, as evidenced by both interviews and the article analysis, official sources are central to virtually all news stories. A basic explanation for this is that the status of the official as an "authorized knower" (Yang 2004) legitimates this inclusion. As I have shown, this is the case with RSE as well, though a more nuanced explanation is appropriate. The selection of sources hinges upon these sources being defined as "newsworthy" themselves, based on the normative definition reporters use, before they have done or said anything. This capacity for power is imbued upon institutional actors along with their titles, and this symbolic currency grants them access to news with no agency required; it is built into the fabric of newsmaking. There is no "news" without official sources.

As news writing is concerned, balance, background, and the avoidance of "editorializing" were found to be critical in this research. Balance is complex—both conceptually and practically. As several interviewees explained, what balance is in one article is imbalance in the next. RSE is a multifaceted phenomenon. To deal with this complexity under time and space constraint, simplification is a logical response. Further, reporters are driven by the need to create comprehensible work. Often, when discussing this, interviewees would tell me that they thought of relatives when trying to write up complex work: "Would my grandmother understand this?" If not, simplification is in order. This applies to balancing RSE articles as well. I found that

reporters employed three discursive techniques, rooted in the balance norm, when writing up RSE articles to make them more comprehensible and "interesting." First, by the use of the problem frame, which often involves creating drama and conflict, in order to make stories interesting. I propose in this project that this is a reliable technique because it does two things: first, it gives an uninteresting, and thus unmarketable story, value; second, in often positioning "one against the other," it adheres to the balance norm and appears "fair." The second and third techniques are closely related: the use of the "competition with fossil fuels" theme and "lumping." The mobilization of both of these techniques is also rooted in the balance norm and is highly problematic for the accurate reporting of RSE discourse. When seeking something to "balance out" an RSE story or quote, reporters often relied on the false comparison of fossil fuels and oil to RSE to achieve this, and would often do so by "lumping" technologies together in making this comparison. Lumping also occurred on its own in such ways as "renewable energies such as solar, wind, and biomass are becoming cheaper." The homogeneity that emerges from this categorization is highly misleading, and in this misinformation lies hegemony.

In an effort to communicate as efficiently as possible, reporters employ these techniques of balance. To this end, they also will do their best to summarize background information quickly. As I showed, this frequently resulted in the use of summary statements that referenced often contextually irrelevant aesthetic, financial, or cultural concerns. Recycling these messages as background may lead people to construe these issues as inherent to RSE generally, as opposed to considering their contextual and technological specificity. Finally, reporters are reflexive in their effort to avoid bias in considering what background information to include. Their active avoidance of excessive tangential background information—thus avoiding appearing biased—in each article may lead to biased coverage on a larger material and temporal scale. This is

especially true when considering the negative valence of this background to start with. Generally, reporters actively avoid RSE comparisons with coal unless it is part of the "nut" of the story. Their ethical desire to avoid being unfair to coal prevents them, as do space constraints, from making direct comparisons of, for example, the aesthetic concerns of RSE and coal-fired power plants. Further, this ethical concern often prevents reporters from questioning the terminology used by sources. If a source deliberately attempts to obfuscate his or her position on RSE by using terms such as "clean" or "alternative," this ethic may prevent reporters from questioning them on it, as to not introduce bias to the story. These are, as is the incorrect and misleading information conveyed through standard journalistic writing practice, hegemonic to the degree that they present citizens with a false relationship to the material conditions and reality of RSE.

RSE frames are also hegemonic. The simplistic, shallow, homogeneous, incomplete, inaccurate, and elite-focused discourse presents readers with a narrowly defined view of RSE. In various ways throughout the news production process, reporters are encouraged to produce news that resonates with the political and financial features of RSE, thus leaving other stories untold. Further, as the analysis in chapter 5 demonstrated, all four frames are deeply rooted in the American cultural and sociohistorical memory that refers to times of independence, conflict, and oil crises. These references, while catchy to readers (which is the point), ultimately inhibit and marginalize RSE and keep the frames longitudinally compelling—and longitudinally oppressive (Gamson and Modigliani 1989). Finally, the frames' inter-relatedness, co-dependency, and rootedness in culture and practice indicate that, as a discursive formation, these frames have long-term viability.

Lastly, the emergent import of Google in organizing the reporters' workdays is in need of more study and highlights the importance of keeping tabs on the rapidly changing discursive milieu of newsmaking as it is affected by technological change. This project, as well as Lee-Wright, et al. (2012), cover the use of Google and its associated software. However, as this company and others rapidly produce new software platforms and applications, media scholars must pay attention to the way reporters might use them in their day-to-day work. Each new addition to the rapidly expanding environment of information software can have unique effects on news production routines, but media scholars should perhaps be most aware of those that are likely to save reporters time—the most critical commodity in news. Further, both emergent routines and the way in which old routines change offer opportunities for the establishment of new routines and practices less wedded to, and embedded within, the power relationships that have traditionally characterized news production.

Reporter Agency and Opportunities for Subversion

The degree and character of the reproduction of existent power relations is dynamic, and increasingly so, as the milieu of newsmaking changes. Getting the input of reporters about these changes is crucial, because as Witschge (2012b:133) says, "...there is an ongoing process of change in the news field, and journalists 'live out in their everyday practices a tension between tradition and change" (from Mitchelstein and Boczkowski 2009:575). Not only do we get rich descriptions of how the changes affect reporters (and thus, news) with this type of research, but these interviews also provide researchers with cross-sectional snapshots of news production that will be useful in charting and describing the changes in the industry and how reporters have negotiated this tension between "tradition and change." These studies are especially important because of the hegemonic nature of the changes itself shifts.

In this study, numerous discursive practices and social processes of news production were found to function as hegemonic and ideological. However, the shifting media landscape also presents reporters and citizens with the opportunities to resist the hegemonic nature and production of mass media news. The increased use of multimedia news presentations can reinvigorate a public that is uninterested in much RSE news by offering alternative types of information. Many news organizations are integrating Twitter and videos into stories and potentially engaging a new public. However, the reporters producing this content are already overworked and time constrained. Increased access to information and sources via the Internet's many arms can lead reporters to new stories, and competition for these stories may also increase the breadth and depth of coverage. These activities may also help reporters track down more sources, non-official sources, and more background information.

For the most part, the degree to which these subversive forces are able to take root, improve news, and displace hegemonic communication in the news will hinge on two things: the reporters themselves and the effects of time constraints. Up to this point, the reporters have safeguarded the integrity and quality of news simply through their collective dedication and work ethic. While their respective employers were likely floundering in tempestuous economic waters, the work of their reporters was helping them stay afloat *and* stay legitimate. Usher (2012:13) echoes this sentiment, pushing for the recognition of the potential of reporter agency moving forward:

Agency is much more present than previously accounted for in much of the past literature on organizational practice...If we make the normative assessment that news could, in fact, be improved, then news organizations need to find some way to give agents more power than to just reflect upon their structures, but to actually act to make newsgathering different. Reporters' capacity for productively dealing with change is proven. They continually integrate new technologies, ideas, and other requirements into their work while producing news in an environment characterized by constraint and unpredictability. As the author above indicates, a more central role for reporters in the organizational design of newsgathering in this time of flux could have positive impacts on news. Finally, the degree to which researchers posit relationships in the changing media landscape will have to take the crucial nature of reporter agency into account. Failure to do so may render research invalid and anachronistic in a quickly changing environment.

IMPLICATIONS: NEWSMAKING, RSE DISCOURSE, ENERGY, AND CLIMATE

The state of RSE newsmaking is at a critical point. Newsmaking itself is in constant flux, the PTC is in legislative limbo, presidential campaigns are in full swing, and climate change is a continually pressing ecological concern: fully understanding the relationship between RSE, newsmaking, and hegemony could not be at a more crucial juncture. This section moves forward with this basic premise in mind—that climate needs to be seriously addressed by politicians and the American public and that RSE news needs to change to facilitate this informed shift toward a low carbon energy infrastructure. I begin by discussing the problems that the symbolic ambiguity of RSE in the media my present, first dealing with the relationship between carbon and RSE. I then move into a discussion about the potential problems with this relationship among issues of balance, RSE and fossil fuels. Following this, I discuss the importance of discursive "silences" in RSE and the role they play in perpetuating the hegemony of a fossil fuel-based energy infrastructure. Finally, this section closes with a discussion of the implications of the changing nature of newsmakers and newsmaking for RSE news, and a discussion of Gans' (1980) vision of an institutional design that moves toward a more inclusive, thorough system of newsmaking.

Symbolic Ambiguity

In terms of RSE coverage, the problems and opportunities described above also involve the complex symbolic nature of renewable energy. Because RSE itself is a multifaceted issue, it can be a difficult topic for reporters to cover, especially under deadline and space constraints. Whether the issue is a particular renewable energy technology (such as concentrated solar) or policy approach, covering these issues in appropriate depth is as difficult as covering climate change accurately. A critical problem concerning the symbolic complexity of RSE as it intersects with normative newsmaking procedure is the ability of sources to willfully obfuscate their positions on RSE. Because so many technologies have been (and are) included in RSE as a category, references to RSE in news can often be unclear if details are not clearly explicated in the article. Reporters can be unwilling to contradict sources that use the term "renewable," "alternative," or "green" in order to imply renewable, while actually making reference to sources typically not included in the category "renewable," such as waste incineration, nuclear power, or landfill methane. Even considering coverage of these marginal sources, the amount of coverage of RSE over the time period studied here was negligible. As described in Chapter 5, there were only 41 articles in the sample that were on the front page of the given paper. This illustrates what reporters often told me considering the newsworthiness of RSE issues—simply that it is an issue of comparatively little interest to readers. Further, from 2000-2005, there were only 4 articles in the sample that garnered A1 coverage. In this way the public is also significantly under-informed about RSE. Considering this, along with a lack of clarity about what sources even qualify as renewable, it is somewhat remarkable that a majority of Americans still desire an increase in RSE funding.

As many media scholars have observed, climate often does not get the depth of coverage it deserves, if the goal is to thoroughly inform the public. This dearth will not likely be remedied by coverage of RSE. My interviewees often told me that including background information on carbon in an RSE would likely stray into "editorializing" if carbon was not part of the "nut" of the story. This is also indicated by the distribution of the article sample, as RSE coverage increased as climate change became more culturally ubiquitous and policy discussion became more common. In sum, the climate-RSE connection in news is a generally just a climate policy linkage, wherein including scientific descriptions of RSE's climate-abating potential would likely be considered extraneous. It is likely safe to say that a majority of people understand the "carbon connection" between RSE and climate change. When this relationship is systematically conveyed as a policy-based relationship, technocratic, large-scale solutions to climate change become the preferred solution—as opposed to solutions based in localized contexts or those addressing consumptive habits. Though there are a variety of ways to convey RSE, it is no wonder that the preferred way to cover it in terms of its climate abatement potential would reflect hegemonic discourses in politics and economics. Further, because RSE politics are often contentious, large-scale policy solutions are always unpredictable (e.g. the PTC renewal "battle") and RSE itself is at the mercy of institutions rooted deeply in conflict.

In many stories, reporters would describe renewable energy as something such as "solar, wind, or biomass." These three forms, along with geothermal, are the most commonly covered in news. Problematically, these were often positioned in opposition to "fossil fuel" sources, or, even worse, "coal, oil, and natural gas." This tendency to group sources together, which I describe as "lumping" in chapter 4, is another way in which the public is misinformed about renewables. Oil provides less than 1% of the electricity consumed in the U.S., and offers virtually no generation

or market competition for RSE. The large majority of reporters and the sources they use refer to the feasibility of RSE in terms of its price relationship to oil and natural gas. This happened in two types of discussions about RSE—general feasibility, and market feasibility. When reporters covered issues having to do with more explicitly "on the ground" issue, such as the closing of a nuclear plant, they correctly positioned RSE in competition with other electricity-generating fuels: natural gas, coal, nuclear power, and various others. However, the majority of discussions regarding the market feasibility of RSE were made in comparing them to oil prices, or fossil fuel more generally. This is important because many energy reporters cover the investment angle of renewables, and often talk to investment bankers and other financial stakeholders; this is one possible way that the false parallel gets recreated in news. Further, in RSE articles, there is typically no detailed coverage of competing fuels, save general comparisons of national price differences or levels of "cleanliness."

"Lumping" is problematic for two reasons. First, the lack of meaningful comparisons obfuscates the differences that are likely to make a difference to interested readers. For example, cases are rare wherein carbon dioxide emission comparisons between fuel sources are made. These comparisons are often made in much more palatable terms, such as that seen above: how "clean" the fuels are, comparatively. This lack of detail hides the material differences between fuel sources. Reporters seem to fall back on bland generalizations like "lumping" quite often, ostensibly to make articles comprehensible at a 7th grade level—a rubric I heard about from a few interviewees.

Another reason generalization is problematic concerns another common trend in RSE coverage: the recycling of old information. To save space while providing context, reporters will describe broad, national context as background. This practice is harmful to RSE coverage

because the accuracy of these generalities decreases with each passing year. Articles very frequently mention that renewable energy is expensive, compared to conventional sources, that many RSE technologies can have their own environmental problems, and that RSE is not feasible yet because of the inherently intermittent nature of many renewable sources, such as solar or wind—which only work "when the wind blows and the sun is shining." These types of "problems" are not new, and have been successfully addressed in many ways. However, because space, time, and knowledge constraints prevent the ever-increasing number of non-specialist reporters from reporting accurate stories, these metaphors and old arguments get recycled—directly to the benefit of RSE's competitor fuels: coal and natural gas, which typically evade the scrutiny RSE is subject to. Collectively, this discussion reflects the importance of understanding topical nuance when studying energy issues in the news, as the variety of influences on a symbolically complex topic may render underspecified research models invalid.

Silences

Richardson (2007) calls the lack of historical context in news the "symptoms not causes" orientation. This is a long identified trend wherein news articles omit contextual detail in the interest of space saving or the inclusion of current context. Importantly, many of the articles in my sample could be classified this way; RSE news discourse is characterized by a noticeable lack of historical detail in terms of policy, technology, economic, or cultural issues. One way to better understand these silences is to approach future research in a way Kellner (2009:95) describes as "critical media industries studies," in which researchers would "need to combine history, social theory, political economy, and media/cultural studies in order to properly contextualize, analyze, interpret, and criticize products of the media industries." This study is a step in this direction, as it has privileged the import of these contextual details, and grounds

causal explanations of multiple frame characteristics in these diverse trends. Future framing research would benefit from pursuing similar detail and rigor in frame design, as such detailed frame explication facilitates the linking of frame elements across topics and disciplines, and would be a significant benefit for research that also conceptualizes frames as critical discursive expressions. This would allow researchers to theorize conceptual linkages across these topics and thus make stronger cases for cultural hegemony in news. For example, the "energy security" frame in RSE news could be linked to research on media coverage of the U.S.'s "war on terror."

Additionally, using Kellner's (2009) approach, future research into newsmaking should incorporate the academic literatures of public relations and marketing. Given the structure and import of professional sourcing in contemporary news, this would give researchers greater insight into the power dynamics existent within and between organizations and institutions of professional news sourcing, including those dynamics that cause particular discursive silences.

In *The History of Sexuality* Foucault describes the importance of silences in discourse. He notes that silence is "an integral part of the strategies that underlie and permeate discourses" (Foucault 1984:310). Whether purposive or not, these silences in RSE news production, as well as those described above, provide an incomplete image of RSE and function ideologically. In this case, the misrepresentation has reinforced political apathy to some degree regarding climate change—an issue many scientists see as the fundamental crisis of the contemporary age.

Coal, a primary competitor of RSE, is rarely mentioned in RSE articles, beyond imprecise and occasional comparisons dealing with price or cleanliness. The ability of coal interests to avoid scrutiny and direct comparisons with RSE prevent the public from making informed decisions about how they would like their electricity generated. It is difficult for reporters to provide this type of detailed background, given space constraints and constraints

rooted in their quest to provide "fair" news. Bringing detailed coverage of coal into a 500-word article on a proposed wind farm could prevent the reporter from including the requisite details about the wind farm itself, and could also be seen as editorializing. In these ways, the normative definition of news, journalistic ethics, and the economic strain many news organizations are dealing with manifest themselves in RSE coverage that is comparatively shallow and misleading—this is especially problematic if readers are expecting a fully thorough story on which to base personal political decisions. Technical information is almost completely lacking in RSE stories as well. Complex issues are understandably avoided, but terms fundamental to understanding electricity and electricity supply are rare. Terms such as "baseload," "capacity factor," "transmission loss," and "per capita consumption" are all missing, but are all crucial to understanding electricity use and the rationale for renewable energy investment, deployment, technology, and policy. In the end, these trends in coverage prevent readers from comprehending the true value of RSE, and may thus mute the existent political will that is moving slowly toward more aggressive RSE deployment.

Changing Newsmakers, Changing News

One interviewee told me that he/she thought that one of the most crucial changes in news revolved around the changing public role of the reporter. In the past, and to a large degree in the present, the role of the reporter is that of the impartial conveyer of important public knowledge. To her/him, this role of "gatekeeping" has become more important because there is simply so much information out there that is potentially news. As a reporter, what it means to exercise "news judgment" has fundamentally become both more difficult and more important. As an example, reporting on renewable energy before the advent of the Internet meant making phone calls, reading the trade journals and magazines, or going out into the field to find news. With less information available, the number of possible news stories was comparatively small; simply, there was less filtering going on, but also less exposure to marginal sources. Now, an energy reporter is able to track the latest developments in any technology, at any company, of any CEO at any time, from virtually anywhere. Though contemporary reporters are exposed to more information, it means that they are filtering more of this information, using a growing number of techniques. In this latter scenario, there are opportunities for marginal sources, energy technologies, and ideas to make their way into mainstream news that didn't exist even 20 years ago. In general, pulling "news" from this deluge of information is an arduous and complex task. Media researchers need to focus on the changing speed and nature of information exchange in investigating how reporters normatively define "news," and how this definition affects newsgathering and newsmaking practices going forward. As I have shown in this project, the normative definition of news has changed, based to some degree in macrosocial changes. These changes are likely to continue to influence how reporters and the public define "news."

In discussing the ways in which Twitter is changing the practice and role of the journalist, Hermida (2010:304) notes that because Twitter is so "noisy," one role journalists might play in the future is that of "sense-maker." In this role, the journalist would filter, organize, and interpret the clatter that Twitter can become. In many ways, journalists do much of this already. "Sensemaking," however, implies a level of interpretation that would be deemed inappropriate according to contemporary ethical standards. In the case of RSE however, this approach holds much promise simply because one of the primary inhibitors of clear, thorough RSE news is the news judgment and normative structure of today's journalist community. According to Fahy and Nisbet (2011), the role of the elite science journalist is changing in this respect. Having gathered interview data, they conclude that beyond being bound to traditional journalistic roles, these

reporters were increasingly taking on the roles of "public intellectual and civic educator," among others (789). In short, these reporters are taking the opportunity to converse *with* the public, and not just report *to* them. This allows the public to discover a wider range of information through conversation with the reporters, than would be possible according to the one-directional dictates of traditional journalism. A problem with this research, as the authors note, is that their interviewees are from the "elite media," and thus have resources that many organizations do not. Perhaps, even more fundamentally problematic to the dissemination of this practice to other topics and beats is simple: time constraints. It is difficult to produce multimedia news, converse with readers, and write daily stories if your organization cannot afford the reporters' time to do so.

The ideological content present in RSE news, as I described in Chapter 3, is rooted in many ways in the downsizing that has characterized the news industry in roughly the last five to ten years. With fewer environment reporters, there are fewer educated professionals serving as filters to catch misleading or inaccurate information before this makes it into the news. The filtering role is much more difficult to play for non-specialist reporters, especially considering the increased workloads reporters are forced to handle. Technological advances in online news have helped alleviate these pressures, and even though many in the industry decry the relentless advance of online news and the associated uptick in news delivery speed, as Phillips (2012:96) describes: "the use of technology does not have to be about doing things faster. It can provide opportunities for doing things better." Some interviewees also talked about the potential of internet news to expand and democratize news production, but ultimately the impetus for learning and integrating these technologies into the news falls on reporters who are already doing much more than they were in 2002.

Beyond laying off workers, changing economic conditions also have forced news organizations to find news ways to generate revenue. One technique organizations are pursuing are various types of paid access models. While being critical for the survival of many news organizations (*The Los Angeles Times* adopted a fee-based model in Spring 2012), paid access to news presents a problem for readers seeking out multiple sources of news, or who are simply unwilling to pay for news (Mitchelstein and Boczkowski 2009). As more organizations adopt this model, their coverage is likely to filter news (Sachsman, et al. 2010:187) and shift to coverage of news that will interest a particular demographic: those with more income. Alternatively, readers unwilling to pay for news will be driven toward news outlets that provide free content, but are funded by advertiser revenue. News sites that rely on advertising often generate revenue based in part on how many page views and original readers they have (this is part of the algorithm with which advertising fees are set). As described in chapter 3, this may lead to shallower content, as my interviewees noted. This trend is also damaging to the democratic functions of news that drive many journalists' personal ethical approaches to their work, and may result in some shallower, "tabloid" coverage. Because of this, media researchers should also pay special attention shifting normative value systems in reporting, as macrosocial changes in the industry are likely to be realized and normalized in diverse ways across news organizations. These differences will bear themselves out in newsmaking practice, as they have already begun to do. This is evidenced by the stark difference in tone described in this study that articles in *The Wall Street Journal* have from other papers.

The way in which paid access to online news splinters audiences will likely be reminiscent of print coverage—people will end up paying for news that resonates with their own value systems, and researchers must be wary of the resultant selection bias this may produce.

This trend will thus solidify these organizations' function as "echo chambers" wherein true debate is stifled by members recycling the same arguments and not seeking out novel solutions to problems (Sunstein 2001). Where there is divergence in internet news from trends in print news, however, is related again to downsizing; Lee-Wright, et. al (2012:151) sum the dilemma nicely: "The internet provides access to more data but most people are still informed of that data by a shrinking number of conventional news organizations." In short, research methods and theory must accurately problematize the speed, context, nature, and implications of change in the industry.

Multiperspectival news. Considering all of the changes in news, I am not convinced that news can play the role it is purported to play as informer of a democracy's public. It inherently gives incomplete answers to complex questions—now more than ever. It is incumbent upon those who wish to be more fully informed to seek out multiple sources of information. This does not only mean that other news stories should be sought out, but because of the crossorganizational trends that exist in short deadline news, people need to seek out more detailed information from other organizations-whether journalistic, governmental, or otherwise. This may come in the form of enterprise stories from mainstream news organizations, policy reports done by governmental organizations, academic scholarship, or other stakeholders' work. Whatever the source may be, it is clear that a fully functional democratic society needs more than mainstream news organizations to fully inform its public. Gans (1980) describes a twotiered model called "multiperspectival news" to address the hegemonic tendencies he saw in news coverage at the time. This model requires more national news (which would unhinge the federal government-centered conception of "national" and cover groups from various locales), a "bottom-up" perspective, more "output" news to address the results of policy pursuits and

programs, more representative news (more diverse groups getting coverage), and news with a goal of "service"—that is, news that is useful to more people. *The Huffington Post* has moved toward this model—in form—after the merger with AOL, as it folded the latter's "Patch" network into its newsgathering and newsmaking structure. Patch is a network of local news organizations that supplement the national coverage of the larger organization.

Gans designed a model that would address the shortcomings he saw in news at the time: it relied on official sources too much, it was not fulfilling its job as a check to government power, and was not useful in the everyday lives of readers. To solve these problems as Gans prescribed was (as he noted) practically infeasible. Not only are these remedies expensive, they would require a redefinition and renegotiation of what "news" really is. Reporters would have to redefine the value of their work for themselves, as well as change the way they do their jobs.

If I were to add to this model, I would design it to allow for more enterprise story writing. It is these stories wherein reporters see the manifestation of the true value of their work, and it is these stories from which readers are able to get a much more thorough summation of a topic than regular short-deadline news usually allows. I would also, ideally, increase federal funding for public radio by collecting money from the non-discretionary budget, thus not placing this funding at the mercy of shifts in political tides.

HEGEMONY, DEMOCRACY, AND A DELIBERATIVE ENERGY POLICY

What we call things, the themes and discourse we employ, and how we frame and allude to experience is crucial for what we take for granted and assume to be true. Simultaneously, we experience, reflect on that experience, and direct future experience. When language changes and new or revised frameworks of meaning become part of the public domain and are routinely used, then social life has been changed, even in a small way. This is why the topic of *discourse*—or the kinds of framing, inclusion, and exclusion of certain points of view—are important." (Altheide 1995:69)

This nicely summarizes the everyday importance of RSE discourse. Simply put, people use the information they learn in the news to help organize the huge variety and quantity of information they take in on a daily basis. This implies, as critical theorists and discourse analysts have been describing for decades, that influence over mass communication can alter cultures and societies. In the systematic control of media outlets and other power-laden institutions, hegemony reveals itself in the homogeneity of the output of these institutions. In functioning ideologically, these hegemonic institutions create the cultural and social conditions that facilitate their persistence (Althusser 1972). As I have shown, both newsmaking in general and RSE news in particular recreate the conditions for the continued domination of fossil fuel interests in modern life. This is accomplished via the practice of journalism itself that, among other things, homogenizes and excludes an unknown quantity of unofficial sources and marginal ideas. I have also shown, as Gitlin (1980:272) observed, that "journalists' values are anchored in routines that are at once *steady* enough to sustain hegemonic principles and *flexible* enough to absorb many new facts."

To this observation, I would add "and practices." Ultimately, because they are required either formally or informally—to take on additional tasks, journalists today must absorb new practices into their routines to keep their workload manageable and their news acceptable to ethical and editorial standards. When reporters must locate sources and write stories quickly, this benefits official sources. While this isn't a relationship wherein reporters uncritically accept their sources' point of view, the fact that the two are speaking regularly in the first place is indicative of hegemonic influence in news. This is most obviously a result of the symbolic authority these sources bring to the table, as it defines news itself, but it is also strongly indicated by the startling ubiquity with which RSE is covered on their terms—as politically or economically driven

framings of RSE dominate coverage. These relationships are highly problematic for the development of democratic discursive public spheres. Perhaps for this reason, much has been made of the democratizing potential of the Internet as a public sphere, where blogs, news commenting, and other virtual communities offer spaces for citizens to come together for political deliberation.

There are a number of skeptics regarding the democratizing potential of the web. Mitchelstein and Boczowksi (2009) assert that this is a problematic assumption in the first place, because access to the Internet is limited and it doesn't always serve as an arena for thoughtful public deliberation. Dean (2010:95) takes this logic a step further, asserting that the Internet is fundamentally ideological, and this ideology amounts to "an ideology of publicity in the service of communicative capitalism." As a critique, the author describes the capitalist technological revolution—that was heralded as the great liberator of the oppressed—as simply a new tool with which to subjugate them. There is much to be said for this argument, especially as it relates to journalism and its technological revolution. Vujnovic (2011:151) observes that "the potential remains for 'participatory journalism' to promise more than in delivers in democratic terms, even to slide into civic irrelevance" in the environment of communicative capitalism. Certainly, one could make the case that this has been happening in a more general sense to RSE discourse and proponents, and that the Internet has simply created new modes of oppression. Again, this could be true, but wariness of universalist interpretations of social forces and phenomena in rapidly changing discursive fields is called for. Coming back to Laclau and Mouffe (1985), it makes more sense to simply conceptualize hegemonic domination not as a given, but as a fluid and disputed process and set of territories—especially as this concerns newsmaking. Specifically,

this study emphasized the importance of conceptualizing the virtual spaces created by emergent technologies and software platforms as potential landscapes of expanded hegemonic influence.

There are a plethora of locations in newsmaking wherein domination may be challenged, however. But in considering the relationship between democracy and journalism more broadly, I always come back to Schattschneider's (1975:137) description of the relationship between democracy and policy: "Above everything, the people are powerless if the political enterprise is not competitive. It is the competition of political organizations that provides the people with the opportunity to make a choice. Without this opportunity popular sovereignty amounts to nothing." To the author, this is true because a group of a single mind cannot be thought of as a democracy. As this concerns the journalistic practices I have described in this research, the next question would be whether or not these practices produce a single subjectivity in the public. Perhaps this is too simple of application, but the concept of the "mass public" has deep sociological roots and certainly has a plethora of supporting theory and evidence. At the heart of Schattschneider's formulation, however, is the fundamental question of how true "competition" is to be defined, and what that competition would look like in practice. Is true competition simply a fight between Republicans and Democrats, between fossil fuels and renewables, between the rich and the poor? Or, in the sense of journalism, is it the degrees to which marginal discourses have the opportunity to insert themselves into the newsmaking process? This seems the most apropos because there cannot be competition if there is no access for competitors.

"Participatory journalism" (Singer, et al. 2011) is one way to think about this access. The Internet has undoubtedly afforded access to newsmaking in an unprecedented way, but of course the ultimate practical delimiters of the potential of this process are organizational budget restraints, overworked reporters, and time constraints. One way of evaluating the potential for

this participation to affect policy change comes from proponents of "post-positivist" policy studies.

Hajer and Wagenaar (2003) propose that the explosion of discursive spaces that Laclau and Mouffe (1985) suggest exists requires a new form of policy scholarship called deliberative policy analysis (DPA). To the former scholars, there is a disconnect between old forms of democracy and the explosion of political spaces, and this requires a consideration of the place and discourses of these spaces in traditional democratic governance. This approach is built to a large degree on Warren's (1992) notion of "expansive democracy," which is characterized by an increase in political spaces and the associated linkages between these spaces and citizens; roughly a postmodern theoretic adaptation to culturally outmoded modernist notions of governance.

From this perspective, "policymaking, based on strategically crafted arguments, is thus reconceived as a constant struggle over the very ideas that guide the ways citizens and policy analysts think and behave, the boundaries of political categories, and the criteria of classification" (Fischer 2003a:223). In this way, the production of news in this project is conceived of as a *policy process* where the inclusion of alternative voices and the control of meaning-making is contested. Conceiving of news as a policy institution, and of news documents as policy documents, expands the conceptual and theoretic reach of DPA beyond traditional policy institutions (Torgerson 2003). Considering the foundational import of "expansive democracy" in DPA theoretic structure, this conceptual expansion makes sense, as long as the emergent institutional linkages are adequately conceptualized. In a more general sense, conceptualizing newsmaking as a policy process would add needed detail to policy science

literature that typically underspecifies both the institutional linkages between media and politics, and the consequences of these linkages.

Crucially, in this field, Schoen and Rein (1994) explicitly link the importance of frames to policymaking, emphasizing the importance frames (as interpretive packages) have in influencing the worldview, decisions, and conflicts of policymakers. This work sought common ground in divergent frames from which policy compromises could proceed. But as the number of political spaces and groups explodes on the Internet, the critical point at which the potential for change must be evaluated is "how far the tension between actually existing and creatively emerging citizenships plays out" (Coleman 2012: 170).

As Gans (1980) pointed out, revolutionary models of journalism (which involve considerations of citizenship) require radical reinterpretations of journalistic professionalism, budgetary priorities at news organizations, and of "news" itself. Seeing the depth of the entrenchment of the normative definition of news in this study, radical change seems unlikely in the near term. In this context, professional journalists and researchers seeking opportunities for change in the field must place an emphasis on remaining observant and reflexive in their assessments and practices, especially considering the rapid transformations the industry continues to endure.

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