# **UC San Diego**

## **UC San Diego Electronic Theses and Dissertations**

#### **Title**

Algorithms and the Organization of Independent Journalism

#### **Permalink**

https://escholarship.org/uc/item/3030f5nv

#### **Author**

Headley, Lyn Adams

## **Publication Date**

2014

Peer reviewed|Thesis/dissertation

## UNIVERSITY OF CALIFORNIA, SAN DIEGO

## Algorithms and the Organization of Independent Journalism

A dissertation submitted in partial satisfaction of the requirements for the degree

Doctor of Philosophy

in

Communication (Science Studies)

by

Lyn Adams Headley

## Committee in Charge:

Professor Chandra Mukerji, Chair Professor Morana Alac Professor Robert Horwitz Professor Andrew Lakoff Professor Robert Westman

Copyright

Lyn Adams Headley, 2014

All rights reserved.

The Dissertation of Lyn Adams Headley is approved, and it is acceptab	le
in quality and form for publication on microfilm and electronically:	
Chair	

University of California, San Diego

2014

## **Table of Contents**

Signature Page	iii
Table of Contents	iv
Acknowledgements	Vi
Vita	vii
Abstract of the Dissertation	viii
Introduction	1
Chapter 1: Independence and Evaluation in News Organizations	49
Chapter 2: News Departments and the Corporate Organization of	
Independence	91
Chapter 3: Google Search as an Organization of Independent Media	
Producers	137
Chapter 4: An Experimental, Algorithmic News Organization	166
Chapter 5: Experimental Results	192
Chapter 6: Conclusions	231
Appendix A: Newskraft.org as Interface	237
Appendix B: The Rapid News Awards Algorithm Specification	245

for Newskraft.org	Appendix C: Interview Ques
253	Works Cited

## **Acknowledgements**

I want to thank my advisor Chandra Mukerji for patiently steering me through the research process. For some reason, Chandra never wavered in the faith that I could take a private, and rather odd language, and make it public. Without her guidance this work would not exist. I am equally indebted to Steve Farrell, with whom I co-invented The Hourly Press one Autumn in Boston, in an atmosphere of great fun and intense intellectual excitement (Steve also supported me financially during this time). Robert Horwitz provided detailed and extremely helpful comments on an early draft. My dear wife, Dr. Adrianne Lona, was a source of unlimited support and much helpful feedback on the work itself. Finally, I want to thank the journalists I interviewed, and the participants in newskraft.org, for the generous gift of their time.

This work is dedicated to my parents.

## Vita

1998 Bachelor of Arts, University of Chicago

1998-2003 Software Engineer

2005-2009 Teaching Assistant, Department of Communication, University of California, San Diego

2007 Master of Arts, University of California, San Diego

2014 Doctor of Philosophy, University of California, San Diego

#### ABSTRACT OF THE DISSERTATION

Algorithms and the Organization of Independent Journalism

by

Lyn Adams Headley

Doctor of Philosophy in Communication (Science Studies)

University of California, San Diego, 2014

Professor Chandra Mukerji, Chair

Against a background of fundamental change in American journalism, I argue in this dissertation that journalism as an independent, distinctive practice is produced by news organizations. I begin by situating this topic within a historical

context. I describe recent changes in the normative, economic, and technological bases of American journalism through an organizational lens. In particular, I relate the decline of the traditional normative basis of American journalism with its declining organization and independence. Given this decline, I argue that recently developed forms of organization offer suggestive matter for the study of the organization of independent journalists. In particular, I show that algorithmic forms of organizing the production and distribution of communication media are compelled to deal with questions of independence and distinction. I argue that this fact makes these forms of organization relevant to journalism scholars. In order to treat these disparate forms of organization in a unified fashion, I develop a theoretical framework to treat both traditional, corporate forms of organization as well as algorithmic forms. In chapter one I outline this framework and support it using interview data collected from contemporary journalists. In chapter two I describe the organization of independent journalists in its traditional, corporate American setting. In chapter three I describe the Google search engine as an organization of independent media producers, and relate it to the news department. In chapters four and five I describe newskraft.org: an experimental news aggregator developed in the course of this dissertation research and deployed with the help of 25 participants. I argue that algorithms like newskraft.org help us see and understand that existing forms of organization are not inevitable or natural outcomes, but are contingent on specific values and choices. I therefore argue that algorithm design may be consciously employed as a method of social science research, as in this case it has been.

#### Introduction

The origins of this dissertation lie in the changing character of American journalism in the new media economy. Over the last several decades, American journalism has gradually been transformed from a relatively powerful and unified cultural arbiter into a weaker and increasingly polarized field of practice. These changes are fundamentally related to epochal shifts in the society outside of journalism, such as globalization, the internet, and the financial crisis of 2008. They are also strongly influenced by deep currents of political polarization and the transformation of cultural values. Despite these powerful external currents, this work is focused at a smaller scale in which journalists have some power to affect their own destinies. In this dissertation I am interested in news organizations.

The focus of a news organization is *news*. That is to say, the dissertation is concerned with organizations that practice journalism rather than some other practice. Although journalism is undergoing profound changes, at an even deeper level the traditions, concepts, and symbols of journalism remains with us. Although subject to much interpretation, Michael Schudson's definition of journalism still holds up rather well today:

Journalism is the business or practice of producing and disseminating information about contemporary affairs of general public interest and importance. It is the business of a set of institutions that publicizes periodically (usually daily) information and commentary on contemporary affairs, normally presented as

true and sincere, to a dispersed and anonymous audience so as to publicly include the audience in a discourse taken to be publicly important.

This definition contains many elements which are subjects of active controversy in contemporary American society, perhaps foremost among them the concepts of "public," "audience," and "truth." But rather than dissolving them completely, controversy draws attention to them and underscores their importance. New concepts of truth in journalism are being seriously and regularly debated, but truth itself, or rather *some understanding* of truth remains a basic part of the journalistic outlook. The same goes for the other key concepts.

Although they too are changing, they retain a measure of continuity with their former incarnations. This dissertation is concerned with a set of fundamental changes American journalism is undergoing. Nevertheless, I intend to consider these changes against a historical and conceptual backdrop that provides a measure of stability and helps to set limits on the research. Schudson's definition provides not a rigid formula but a useful touchstone for doing this.

Despite the tenacity of its traditions, journalism's distinctive shape and outline are becoming harder to discern. As new forms of media continue to proliferate, the lines between journalism and other fields are increasingly blurred. As TV news magazines and cable news were joined by talk radio, and web sites and blogs were joined by social media, journalism increasingly blended with the fields of entertainment, commerce, and partisan politics. Newspapers and network newscasts have gradually adapted themselves to these currents by imitating them and competing for their audiences. As a result, journalism is a less

independent field. It is, perhaps, less autonomous and differentiated from other fields of social practice than at any time since the Second World War.<sup>1</sup>

The question I ask in this dissertation is: How can journalism be distinguished as an independent field of practice in the contemporary United States? Although the question can be approached from many angles, I consider it from an organizational one. The general hypothesis I advance is that journalistic distinction is produced by news organizations. I argue that journalists deploy and maintain organizations in order to strengthen and clarify specifically journalistic norms and values, and that progress toward this aim can sometimes be attributed to organizational structure. More specifically, I argue that both traditional, hierarchical news organizations and new, algorithmic media organizations demonstrate ways of organizing journalism for autonomy, and therefore suggest potential means of developing and maintaining journalistic independence and distinction, despite the continued loss of funding for traditional news organizations.<sup>2</sup> Finally, I follow these suggestions by developing and deploying an experimental, algorithmic news organization with the cooperation of 25 participants.

<sup>&</sup>lt;sup>1</sup> Daniel C. Hallin, "The Passing of the 'High Modernism" of American Journalism Revisited," *Political Communication Report,* International Communication Association & American Political Science Association, Vol. 16 No. 1, Winter 2006.

<sup>&</sup>lt;sup>2</sup> As Michael Schudson argues, journalistic independence is not an absolute value, and journalism may become excessively isolated from the wider society in ways that are harmful to democracy. I am not arguing that journalism *should* be more autonomous, but rather investigating ways in which its autonomy and distinction *could* be developed and furthered under contemporary conditions. See Michael Schudson, "Autonomy from What?" in Rodney Benson and Erik Neveu, eds, *Bourdieu and the Journalistic Field*, Polity Press, 2005, pp. 214-223

This dissertation is structured as follows. The first chapter lays out a theoretical framework, based on evidence from interviews with journalists, in which the general hypothesis is given flesh with reference to the work of these journalists. The next two chapters consist of 1) a case study of a form of organization that predates the internet, namely the hierarchical corporate news department, and 2) a case study of an exemplary algorithmic media organization, namely the Google search engine. The following two chapters describe an experimental journalism algorithm and organization developed in the course of this research, as a test of the research hypotheses. The final chapter summarizes the research and considers future work.

The question this dissertation pursues initially arose in the context of deep structural changes occurring in contemporary American journalism. These changes have a historical basis which I will now explore through a consideration of both the meaning and the organizational basis of independent journalism in American history, and how it is changing. This historical framing not only serves as a useful peg on which to hang the dissertation's major concerns, it also motivates the research by placing it in the stream of American history. In the course of this narrative, I describe in more detail the contents of the dissertation chapters, the case studies undertaken, and the experimental journalism organization launched as part of the research.

#### Objectivity and Independence in American Journalism

Previous scholarship on the topic of journalistic independence has largely been concerned with journalism as a profession or field. This choice of subject matter locates journalism at a macroscopic level, namely the level of the state and of the culture of that state. From this perspective, the unit of independence is the profession; it is the profession as a whole which acquires a distinctive and somewhat autonomous identity relative to other large, macro-level groups such as the government or the business community. A journalism profession is conceived as a distinctive occupational group or set of groups, with fluid but not indeterminate boundaries, who share compatible (but also contested) normative orientations to their work. I begin therefore with the American journalism profession.

The profession emerged as a coherent field in tandem with the objectivity norm. This movement occurred gradually during the late nineteenth and early twentieth centuries. In this period journalists assumed an increased autonomy vis-a-vis the social forces which had previously governed them. These late nineteenth century journalists gained increased occupational authority relative to their publishers, while developing their own allegiances, associations, and work practices. During the twentieth century this process continued: journalists adopted a more critical and detached standpoint toward the major political

<sup>&</sup>lt;sup>3</sup> In the words of Danel C. Hallin and Paolo Mancini, "the autonomy we are talking about here is not necessarily the autonomy of *individual* journalists, but of the *corps* of journalists taken as a whole." Daniel C. Hallin and Paolo Mancini, *Comparing Media Systems: Three Models of Media and Politics*, Cambridge University Press, 2004, Kindle Edition, Location 500.

parties; the objectivity norm was elaborated as a moral good by prominent journalists influenced by the prestige of modern science, and the profession closed ranks against its antithesis, the public relations agent. By the 1920's objectivity had emerged as a full-fledged moral code; it had become a recognizable project and program for the improvement of journalism and the consolidation of a distinctive profession. As the century progressed, objectivity became a widely adopted touchstone for detecting journalistic competence, authority, and belonging. Although never without critics, the norm helped the profession consolidate and sustain a degree of power and legitimacy that have managed to persist to this day.

This profession has so far been the country's most successful realization of journalism as a deep and abiding ideal. Although explanations of the profession's rise have included factors such as power and profit, allegiance to the specific norm of objectivity is widely accepted as a major factor in the profession's rise. News organizations, in contrast, have been treated much more in terms of power and hierarchy than in terms of norms and values. Journalism scholars, that is, have tended to treat specifically journalistic norms and values as inhering in a journalism profession rather than in news organizations. They have employed the adjective "professional" in contrast to "organizational"

<sup>&</sup>lt;sup>4</sup> Michael Schudson, "The Objectivity Norm in American Journalism," *Journalism* 2(2) August, 2001, pp. 149-170. I share with Schudson the understanding of a "norm" as "a moral prescription for social behavior." As Schudson argues, this prescription may be highly formalized or largely tacit, associated with different groups of people, and backed by different kinds of sanctions, from mere expressions of disapproval to punishment by the state. I will occasionally use the term "standard" as a synonym of "norm," whereas the term "value" will not imply such social pressures, but will be used to mean something taken as good or preferred, whether in general or in a specific case.

considerations and commitments, thereby relegating organizations to a more particularistic normative status.<sup>5</sup>

In this dissertation I avoid this practice for several reasons. First, the American journalism profession is itself dedicated to a particular normative orientation toward journalism rather than a universal one, as Hallin and Mancini have shown. Thus a reference to "professional norms" is ambiguous – does it refer to a specific profession or to journalism in general? Second, organizations and individuals are capable of holding direct allegiance to the practice of journalism without going through a profession. That is, there is nothing *inherently* more particularistic about an individual or an organization than a profession. Third, the term "professional" implies payment, whereas a crucial consideration in today's media environment is the status of voluntary work and its capacity to maintain journalistic independence and distinction. Fourth and finally, a profession is a macro-level phenomenon existing in interaction with a state, whereas journalistic independence and distinction are visible at lower levels as well as higher levels.

Alongside its normative foundations, the profession described above developed a specific economic and organizational structure based on private media corporations. At the time the profession emerged and began to cohere, these firms were owned by many different publishers and families. Over the

<sup>&</sup>lt;sup>5</sup> For example, Herbert Gans states that "television and magazine journalists…need to believe that someone is certain about news judgments—and perhaps more important, that there are professional considerations which transcend those of individual news organizations and firms." Herbert J. Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time*, pp. 180-1.

course of the twentieth century however, the firms increasingly merged into each other, and their size increased. 6 This was a time of winner-take-all competition between urban daily newspapers, marked by frequent mergers and acquisitions. Market dynamics exacerbated inequalities between media companies, until most cities were dominated by a single newspaper. Consolidation occurred rapidly as independent newspapers were acquired by corporate chains which extracted great profits from their investments while nevertheless funneling significant resources toward journalism. Whether large or small, family owned or conglomerates, these firms were privately owned, and the vast majority was for profit.

Whatever its ownership, such a firm's journalistic heart is located in an internal corporate unit specifically dedicated to journalism. The unit is distinguished from other units, such as advertising or human resources, by the fact that it practices journalism rather than some other practice. Responsible for the firm's journalistic output, such a unit adheres to, honors, and prioritizes specifically journalistic norms and values to a greater degree than other units. In this dissertation I follow Herbert Gans in referring to these internal units as news organizations.8 A news organization then, is an organization dedicated to the practice of journalism rather than some other practice. I depart from Gans however, in my attempt to define these corporate units as merely one kind of

<sup>6</sup> Michael Schudson, *The Sociology of News*, W.W. Norton and Company, 2003, p. 121.

<sup>&</sup>lt;sup>7</sup> Benjamin M. Compaine, "The Newspaper Industry," in Benjamin M. Compaine and Douglas Gomery, eds. Who Owns the Media? Competition and Concentration in the Mass Media Industry, Third Edition, pp. 7-9.

8 Gans, op. cit., p. 93.

news organization among others. In what follows therefore, I will refer to these corporate news organizations as "news departments," reserving the more general term "news organization" for theoretical usage.

I will use the term "news organization" to mean a distinctive and coherent pattern of newswork structured by a balance of power between individuals. 9 This definition aims to cover both traditional news departments and other kinds of news organizations such as the algorithmic one I describe below. It recognizes that journalism involves a degree of independence, in which individuals carry on their work and make decisions without requiring approval from others. It also recognizes that journalists cannot remain isolated forever: they eventually expose their work to evaluation by colleagues, supervisors, audiences, and others who decide the work's public reception. This provides an opportunity for individuals to influence each other: an opportunity to exercise power. At the same time, it provides opportunities for autonomy to be negotiated, as influence is often attenuated in various ways. The interplay of independence and evaluation, then, both reflects and reconstructs the balance of power in a journalism organization. Organized journalism involves a constant negotiation between the factors of independence and evaluation; self and other; autonomy and accountability. I

<sup>&</sup>lt;sup>9</sup> The term "newswork" should be understood in the broad sense defined by Schudson at the opening of this introduction. I have avoided introducing elaborate notions of structure at this point, in part because journalism has traditionally been only lightly structured, and in part because organizations can be structured in so many ways. Compare the work of Lawrence and Lorsch, who focus on differentiation and integration of "subsystems:" "An *organization* is defined as a system of interrelated behaviors of people who are performing a task that has been differentiated into several distinct subsystems, each subsystem performing a portion of the task, and the effects of each being integrated to achieve effective performance of the system." Paul R Lawrence and Jay W. Lorsch, "Differentiation and Integration in Complex Organizations," *Administrative Science Quarterly* 12(1), June, 1967, pp. 1-47.

argue that newswork is organized when it achieves a stable, yet evolving balance between such factors. Such an evolving balance distinguishes itself as a coherent entity, while distinguishing journalism as a practice from other endeavors.<sup>10</sup>

The evaluation by one person of another's work brings both norms and power into play. With regard to power, I argue that evaluation by others plays an organizational role in part because evaluators are able to help or hinder the individual whose work is evaluated. The influence of an editor over a reporter is not merely due to her years of journalistic experience and skill, but is given extra weight by her power over work assignments and compensation. In addition to power, however, evaluations construct, frame and transmit normative visions of how journalism should be done. Thus the editor's journalistic skill and commitment receives its due as well. In this concept of organization then, norms and power interact and reinforce each other: the normative aspect of organization shapes evaluations according to standards that envision journalism as something to accomplish and improve. The power component increases the likelihood that norms are taken seriously by those whose work is evaluated, and contributes to organizational stability even in the face of disagreement. To

<sup>&</sup>lt;sup>10</sup> This concept of a news organization also resembles Bourdieu's "field" concept. In particular, it attempts to do justice both to autonomy and also to power. The primary difference between the two is that Bourdieu's "field" is situated at a more macro, inter-organizational scale: what Rodney Benson calls a "mezzo" level. This dissertation considers independence at a more micro level, in the context of organizational relationships. On Bourdieu and journalism, see Rodney Benson and Erik Neveu, *Bourdieu and the Journalistic Field*, Polity Press, 2005.

express this mix of norms and power, I will say that news organizations shape newswork through evaluations from "others who matter."

When an evaluation of work is delivered to the person who produced the work, I will say that the producer receives "feedback" from the evaluator. 11 Study of this process provides a window onto the negotiation of autonomy in the organization of independent journalists. I argue that feedback from an evaluator with a clear normative perspective and an appreciable base of power is likely to matter more to the work's producer than feedback from a less grounded, less powerful evaluator. Thus, as I will argue in detail, feedback can exert influence over (subsequent acts of) production. Nevertheless, feedback is often resisted, downplayed or disregarded; it can also be obscured by such factors as communication difficulties and the impossibility of perfectly predicting another's evaluation in advance. 12 Thus, I argue that the processes of evaluation and its

<sup>&</sup>lt;sup>11</sup> The term "producer" simply refers to a person who is attributed responsibility for some piece of work, regardless of medium or type of work. In much of what follows, the "producer" can usefully be seen as the "self" who is subject to influence and evaluation by "others."

but with a twist: the incumbents of the "cause" and "effect" roles are reversed. Thus, in a case of feedback the "cause" is what I have called the "other who matters" and is traditionally called "audience" or "receiver," whereas the "effect" is an adjustment by the *producer* to account for the other's preferences in the future. One benefit of reversing the causal flow in this way is that it provides a specific context for the "effect," namely, the context established by the producer's original message. Traditional effects studies, in contrast, have difficulty pinning down contexts in which reception and hence effects occur. See Jack M. McLeod and Garrett J. O'Keefe Jr., "The Socialization Perspective and Communication Behavior," in F. Gerald Kline and Philip J. Tichenor, eds, *Current Perspectives in Mass Communication Research*, Sage Publications, 1972, pp. 121-6. On the audience as cause, see James S. Ettema and D. Charles Whitney, eds, *Audiencemaking: How the Media Create the Audience*, Sage Publications, 1994. Ettema and Whitney's term "institutionally effective audience" cuts across some of the terrain covered by my "others who matter," but does not seem to include editors, for example.

delivery as feedback are fundamental means, both of organizing journalists and maintaining their autonomy. 13

A news organization as a whole exhibits a distinctive identity and therefore a kind of independence from others. By this I mean that a news organization can be treated as an individual, as when an action is attributed to "The New York Times" as an entity, even though when analyzed, the action is seen to be composed of the efforts of many individuals. When an organization takes on an identity at this level, it is distinguished from others by its own unique character. Because it can act as a kind of individual, a news organization can project a coherent identity over time; it can also be praised or critiqued for acting in certain ways. And if the praise or critique is vigorous and clear, it stands a chance of impacting the organization's behavior. <sup>14</sup> In these respects the notion of independence is quite applicable to an organization, for even though the organization when analyzed "is" a group, it is often experienced as an individual. <sup>15</sup>

But independence is also seen at the level of the individuals who make it up. Every news organization needs to handle the fact that each of these

<sup>&</sup>lt;sup>13</sup> Put differently, "organizational influence upon the individual may then be interpreted not as determination by the organization of the decisions of the individual, but as determination for him of *some* of the premises upon which his decisions are based." Herbert A. Simon, *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations*, Free Press, 1997, p. 177, italics in original text.

<sup>&</sup>lt;sup>14</sup> For examples see Arthur S. Hayes, *Press Critics are the Fifth Estate: Media Watchdogs in America*, Praeger, 2008, and Edward S. Herman and Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, Pantheon Books, 2002, pp. 26-28.

<sup>&</sup>lt;sup>15</sup> On the notion of "the independence of the corps of journalists as a whole," see Daniel C. Hallin and Paolo Mancini, *Comparing Media Systems: Three Models of Media and Politics*, Cambridge University Press, 2004, Kindle Edition, Location 500.

individuals brings an increment of diversity, autonomy, and distinctiveness to the organization itself. No organization can expect the individuals who make it up to entirely sacrifice their individuality to an overriding group identity. <sup>16</sup> This deeply affects a news organization's character, for when an individual journalist is able to inject her own sense of self, her own values and passions into her work, journalism itself comes to reflect that sensibility. The public that is served by the journalist increases in diversity as journalistic individuality is given fuller play. <sup>17</sup> This is the second concern of this dissertation with independence: the degree to which the *individual people* who make up an organization are able to exercise and develop their own unique capacities and interests.

During most of the twentieth century, the organizational form I call a "news department" provided some support for journalistic autonomy and distinction in the United States. A news department is a managerial hierarchy composed of relationships between supervisors and their subordinates. I argue in this dissertation that managerial hierarchies have been employed for the support and expression of journalistic distinction and autonomy. As organizational structures, managerial hierarchies can provide individual journalists with significant autonomy vis-à-vis their colleagues inside the organization. They also possess structural mechanisms that encourage group cohesion through the evaluation of work by individuals with varying degrees of power. These characteristics

<sup>17</sup> Michael Schudson, *The Sociology of News*, W.W. Norton and Company, 2003, pp. 45-47.

<sup>&</sup>lt;sup>16</sup> Charles Perrow, *Complex Organizations: A Critical Essay*, Third Edition, Random House, 1986, p. 4.

contributed to the rise of objectivity in American journalism. They provided a space for journalists to develop individual commitments to the norm of objectivity while at the same time providing structures suitable for maintaining a balance of power and hence organizational coherence and consistency.

At the same time however, managerial hierarchies are problematic in two ways. First, they are vulnerable to penetration from outside interests. Because it centralizes power at the top, a news department can be strongly influenced by anyone with access to and power over the individual at the apex of the hierarchy. When an outsider can exert pressure over this individual, then the organization as a whole can be modified to conform to outside interests. Second, a managerial hierarchy may subsume individual diversity under the dominant authority of the individual at the top. Thus, the leader of a news department may limit and focus the news agenda in ways that exclude other legitimate interests from the same organization. <sup>18</sup>

As the objectivity norm took root in American journalism, news departments provided a home for this normative orientation and a set of mechanisms for sustaining it. These mechanisms, which I will explore in chapter two, were used to balance the independence of the department's journalists with the evaluations of influential colleagues. They helped maintain the news department as a distinctive pattern of activity capable of being distinguished from

<sup>&</sup>lt;sup>18</sup> Warren Breed, "Social Control in the Newsroom: A Functional Analysis," Social Forces 33(4), May 1955, pp. 326-35. See also Todd Gitlin, *The Whole World is Watching: Mass Media in the Making & Unmaking of the New Left*, Second Edition, University of California Press, 2003, pp. 37-40.

others and treated as an individual. They provided organizational machinery for supporting the norm of objectivity and a base of power for enforcing it. Objectivity thrived in American journalism in part because of its adoption by news departments.

In the wake of World War II however, as the United States consolidated its position as the world's foremost economic and military power, serious threats to the objectivity norm emerged. Although objectivity was never without critics, the character of this criticism intensified with the cultural ferment of the 1960's, when political activists seeking radical reforms became convinced that the objectivity norm was not only a façade but a charade: Journalists were perceived as part of a corrupt system which was based on oppression and lies. From this perspective, attempts by journalists to shore up their own accounts by citing other powerful figures, such as government officials, were misguided from the start. Because officials and other representatives of "the establishment" were complicit in the systemic oppression of the weak and marginal, they could not be trusted to tell the truth about public affairs. Objectivity was at best a form of blindness and at worst a deliberate complicity in immoral acts.

A similar process of critique was launched at this time from a conservative perspective. Spiro Agnew attacked the news media as a bunch of "nattering nabobs of negativism" in 1969, and since then a persistent strain of conservative opinion has aimed to pin a deep liberal bias on journalists. Supported by research on the voting habits and social opinions of journalists, conservatives

charged that an elite cultural and intellectual minority, out of touch with average Americans, was distracting them from seeing the real truth about public affairs. Although journalists claimed to publish facts rather than opinions, and to seek out and report contrasting views, these gestures were seen as an unconvincing cover for fundamentally liberal positions that reinforced a politics out of step with the country's true values.

In the 1970's the critique of objectivity took root in the academy. Previous studies of mass media tended to emphasize the "limited effects" generally produced by mass communication on audiences, thereby displacing attention from the study of the news production process itself. <sup>20</sup> At this juncture however, the urge toward radical reform was transplanted into a new context, where it was deepened and combined with the empirical methods and theoretical frameworks of the social sciences. During the following decade a wave of research would concentrate attention on the work of producing journalism. The explicit thrust of much of this research was not only to critique but *explain* objectivity, not as a legitimate method of verification, but rather as a means for coping with the social and political environment in which journalism had to function.

-

<sup>&</sup>lt;sup>19</sup> Schudson, The Sociology of News, p. 42.

<sup>&</sup>lt;sup>20</sup> Stephen D. Reese and Jane Ballinger, "The Roots of a Sociology of News: Remembering Mr. Gates and Social Control in the Newsroom." The authors show how the "effects" paradigm dampened and absorbed the potentially critical thrust of two now classic articles from the 1950's, both of which focused on actual newswork. These articles are: David Manning White, "The Gatekeeper: A Case Study in the Selection of News," *Journalism Quarterly* 27 (1950), pp. 383-96; and Warren Breed, "Social Control in the Newsroom: A Functional Analysis," Social Forces 33(4), May 1955, pp. 326-35.

Gaye Tuchman was among the first to apply a sociological lens to the critical study of newswork. In her article "Objectivity as Strategic Ritual: An Examination of Newsmen's Notions of Objectivity," Tuchman argued that objectivity was a strategy employed by journalists for warding off danger from others who might criticize and attack them. The sources of such danger included not only litigious news consumers but also a journalist's own editors, while the means of protection included the search for supplementary evidence, the presentation of conflicting opinions, and the use of quotation marks. The objectivity thus described was not a rational means of accomplishing anything, but rather "a routine procedure which has relatively little or only tangential relevance to the end sought." For Tuchman, journalistic objectivity was a ritual in the same sense as "the eighteenth-century practice of bleeding patients to 'cure' fever." In fact, Tuchman argued that objectivity as a *strategy* provided cover for introducing what it claimed to fend off: the "selective perceptions" and "opinions" of publishers, editors and reporters.<sup>21</sup>

Over the course of the next decade, a stream of research investigated journalism as a purposeful activity. By focusing on journalism as kind of work shaped by specific routines and pressures, these studies exposed the limits of journalism as an empirical discipline. By examining the limitations imposed by deadline pressures, organizational routines, and the influence of powerful outsiders, they showed how journalists routinely ignored stories that could

<sup>&</sup>lt;sup>21</sup> Gaye Tuchman, "Objectivity as Strategic Ritual: An Examination of Newsmen's Notions of Objectivity." *American Journal of sociology* 77(4), 1972, p. 676.

arguably be seen as newsworthy. By showing the arbitrary nature of the selections they made, they undermined journalism's claim to rationality, their claim to reflect reality rather than shape it. In short, they provided hard evidence that showed how journalism in the style of objectivity fell short of providing its audiences with a true and adequate picture of public affairs.<sup>22</sup>

During the next several decades, these critical currents gained steam. Both left and conservative orientations saw something corrupt in American society, and considered the journalism of objectivity to be a part of the problem. Academic research and academic critiques deepened and extended their analyses of objectivity as at best a highly limited empirical discipline and at worst a form of denial and dishonesty. The political system on which this style of journalism was based became weaker every year, as the electorate increasingly regarded all politicians with suspicion. This attitude reflected on the credibility of journalists who depended on politicians for the claims in their stories. These currents carried on throughout the 1980's and 1990's.

During this time new economic and technological pressures led to changes in television journalism. All three of the news networks were taken over and saddled with debt, resulting in increased pressures toward commercialization. Local news, a major training ground for national journalists, became a highly profitable endeavor mixing elements of information and

<sup>&</sup>lt;sup>22</sup> Edward Jay Epstein, *News From Nowhere: Television and the News*, Vintage Books, 1974; Harvey Molotch and Marilyn Lester, "News as Purposive Behavior: On the Strategic Use of Routine Events, Accidents, and Scandals," American Sociological Review, 39(1), February, 1974, pp. 101-112. Gans, *op. cit*.

dramatic emotion. The Federal Government adopted a hands-off stance toward regulating public affairs programming, which decreased pressures toward impartiality and balance. New tabloid-style programs such as "Hard Copy" and "A Current Affair" further blurred the lines between news and entertainment. By the early nineties the networks were well on their way to achieving a symbiosis with the style and values of commercialized entertainment. <sup>23</sup>

With the rise of the internet and World Wide Web, many observers were struck by the distinctive communication practices this medium seemed uniquely suited to supporting. The practice of blogging, for example, connected individuals as producers of news and commentary to audiences and peers, relying on a combination of loose networks and computer algorithms rather than formal organizational hierarchies to coordinate their activity. The freshness and novelty of this practice encouraged comparisons with and criticisms of traditional news media, and many were forthcoming. A culture of critique evolved in tandem with the new medium, stressing blogging's personal and committed style in contrast to a detached and circumspect approach to news and commentary. The rise of blogging reflected negatively on the tradition of objectivity.<sup>24</sup>

As a climax of this gradual normative and economic attrition, the first decade of the new millennium culminated in a serious crisis in the economic

<sup>&</sup>lt;sup>23</sup> Daniel C. Hallin, "The Passing of the 'High Modernism' of American Journalism," in Daniel C. Hallin, *We Keep America on Top of The World: Television Journalism and the Public Sphere*, 'Routledge, 1994, pp. 170-180.

<sup>&</sup>lt;sup>24</sup> See Scott Rosenberg, *Say Everything: How Blogging Began, What it's Becoming, And Why it Matters*, New York: Crown Publishers, 2009, p. 270; Aaron Barlow, *The Rise of the Blogosphere*, Westport, Ct: Praeger Publishers, 2007.

model of the strongholds of objectivity: urban daily newspapers. <sup>25</sup> As news consumers moved online, an environment developed where news was available for free and digital competitors could easily republish the inner cores of scoops, thus attracting viewers to summaries and commentaries rather than reporting. But major revenue losses really began in 2005, as classified advertising shifted from newspapers to online media such as craigslist, taking large bites out of newspaper revenue. When the 2008 financial crisis and recession led to sharp drops in advertising spending, the bottom dropped out. Newspapers as a whole lost about half their revenue base in only four years. <sup>26</sup>

The decline of the normative and economic foundations of the American journalism profession raises the question of journalism's identity as a distinctive field of practice. Because the profession has traditionally been rooted in these foundations, their ongoing decline has tended to obscure its distinctive character, while drawing journalism closer to other fields. The neighboring fields of politics, commerce, and entertainment in particular have expanded at journalism's expense. The situation has advanced to the point that we can ask: To what extent is journalism as a field losing its distinctive identity and being absorbed

<sup>&</sup>lt;sup>25</sup> For a critical analysis of the "crisis" frame, see Ignacio Siles and Pablo J. Boczkowski. "Making sense of the newspaper crisis: A critical assessment of existing research and an agenda for future work." New Media & Society 14(8), 2012, pp. 1375-1394.

<sup>&</sup>lt;sup>26</sup> Alan D. Mutter, "The Daunting Reality Facing Newspapers," 2009. <a href="http://newsosaur.blogspot.com/2009/12/daunting-reality-facing-newspapers.html">http://newsosaur.blogspot.com/2009/12/daunting-reality-facing-newspapers.html</a> Accessed November 18th, 2013.

into other fields? In Daniel Hallin and Paolo Mancini's terms, we can ask to what extent journalism is being "instrumentalized." 27

It seems likely that objectivity will continue to decline as the primary norm underlying journalistic independence in the US. This may not imply a continued slide and absorption into neighboring fields, however. As Hallin and Mancini demonstrate, independence need not imply objectivity: Some European media systems have a high degree of professionalism – independence at the level of the field – without high objectivity. Recent developments in the US therefore open a space for the exploration of independence without objectivity: they suggest the possibility of treating journalistic independence apart from the particular norm that has historically supported it in the American context.

For these reasons, the framework employed by this dissertation treats news organizations in isolation from the objectivity norm. Abstracting from objectivity leaves a blank space that can be filled with different norms according to the specific organization under study. In other words, the framework treats normative orientation as a variable. Although it will be applied to journalism as significantly structured by objectivity, it is also applicable to other normative orientations of journalism, and even to non-journalistic media. I argue that this promiscuity is actually a strength of my analysis. By treating American journalism in abstraction from the particular norm that has historically conditioned it, the

<sup>&</sup>lt;sup>27</sup> Daniel C. Hallin and Paolo Mancini, *Comparing Media Systems: Three Models of Media and Politics*, Cambridge University Press, 2004.

<sup>&</sup>lt;sup>28</sup> Hallin and Mancini, *op cit.* See also C.W. Anderson and Michael Schudson, "Objectivity, Professionalism, and Truth Seeking in Journalism," in Karin Wahl-Jorgensen and Thomas Hanitzsch, eds, *Handbook of Journalism Studies*, Routledge, 2009.

dissertation opens journalism to influences from other quarters. At the same time, it focuses attention on mechanisms of independence and distinction that may be used to maintain journalism's specificity.

Although scholars understand that independence admits of various normative supports, they know less about organizational variety. What kinds of organization are suited to structuring journalistic independence? This question has so far received little attention in the literature. One of the striking things about the new media economy, however, is the organizational flexibility it exhibits. Many observers have been impressed by the opportunities for collaboration and the production of new kinds of organization in the era of the internet. Economic and cultural production and distribution have increasingly coalesced around shared projects through novel coordination mechanisms, as demonstrated by the rise of distributed work teams, open source software, and collaborative editing projects like Wikipedia. These and many other examples demonstrate a range of potential for organizing the production and distribution of information and culture.

The recent increase in organizational flexibility can be traced to a combination of political, economic, and technological factors which have transformed the production and distribution of information and culture over the past several decades. This period witnessed the rise of a "new economy" which recast traditional social relationships in the economic sphere. Throughout this time working arrangements have become more "flexible" as long-term, stable employment relationships have declined, and short-term contracts have

increased. Information and culture-producing organizations have shifted many of the traditional responsibilities of supporting and training the individuals who work for them onto the individuals themselves, rendering this work riskier. And technologies of networked computing have made the means of publication and distribution of information and culture available on a much wider scale. These changes have been framed and legitimated through lenses including entrepreneurial capitalism, network theory, and self-realization through countercultural lifestyles.<sup>29</sup>

Alongside these flexible networks, there has recently arisen a new breed of what I will call "algorithmic organizations." Unlike flexible, network forms of organization, these algorithmic organizations are highly formalized, consisting of explicit divisions of labor coordinated through a combination of code and social meanings and values. Recent scholarship has been impressed by the burgeoning success of these ways of organizing media production and distribution. As Philip Napoli puts it, "Algorithms are widely recognized as playing an increasingly influential role in the political, economic, and cultural spheres."

<sup>&</sup>lt;sup>29</sup> On the shifting of risk to individuals and its legitimation as entrepreneurship, see Gina Neff, *Venture Labor. Work and the Burden of Risk in Innovative Industries*, MIT Press, 2012. On Silicon Valley's countercultural roots see Fred Turner, *From Counterculture to Cyberculture: Stuart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, University of Chicago Press, 2008. For influential network-theoretic accounts of the impact of new media technologies on social relationships and organizations, see Manuell Castells, *The Rise of the Network Society*, Wiley-Blackwell, 2000, and Clay Shirky, *Here Comes Everybody: The Power of Organizing without Organizations*, Penguin Books, 2008.

<sup>&</sup>lt;sup>30</sup> Philip Napoli, "The Algorithm as Institution: Toward a Theoretical Framework for Automated Media Production and Consumption," Paper presented at the Media in Transition Conference, Massachusetts Institute of Technology, Cambridge, MA, May, 2013. On algorithms and journalism audiences, see C.W. Anderson, "Deliberative, agonistic, and algorithmic audiences: Journalism's vision of its public in an age of audience transparency." International Journal of Communication 5, 2011.

This dissertation is centrally concerned with the organizational basis of this increasing influence and its relevance to contemporary journalism. In the next sections I will describe what I take to be the role played by algorithms in organizing media production and distribution, and relate this role to the study of journalism.

#### Algorithms as Technology

Recent work on the social study of algorithms has brought communication studies into closer contact with work in Science and Technology Studies, as well as with work on the study of organizations.<sup>31</sup> In this section I will attempt to situate the dissertation among these fields of study. My goal is to describe the concept of an "algorithmic organization" which is used in this dissertation, and relate it to the relevant scholarly literature. This discussion will draw primarily on STS literature for its description of algorithms as technology, whereas it will draw on the literature of organizations and transaction cost economics for its description of organizations.

As I will use the term, an "algorithm" is a process of sociotechnical development. As a first approximation, we may say that an algorithm arises when a computer program is developed, and then distributed to users, who use it to accomplish tasks. This simple model introduces the central facts of development and use. As a description however, such a linear procedure is too simple,

<sup>&</sup>lt;sup>31</sup> Taina Bucher, "Want to be on the top? Algorithmic power and the threat of invisibility on Facebook," New Media & Society 14(7), 2012, pp. 1164-1180. Philip Napoli, "The Algorithm as Institution," *op. cit.*; C.W. Anderson, "Deliberative, agonistic, and algorithmic audiences," *op. cit.* 

because algorithms are not straight-line progressions between discrete phases.<sup>32</sup> Development of an algorithm does not proceed in a linear fashion, in which a period of programming begins and ends, is followed by distribution, and finally is used. Instead, algorithms are historical processes characterized by repeated cycles of development and usage. During these cycles, algorithms are modified and used in an ongoing process of technological change. Furthermore, a single algorithm can be seen in historical terms as a cumulative process in which its code and usage are mutually adjusted to each other over time.<sup>33</sup> I will therefore say that an algorithm is a process of technological change comprised of two distinct but coordinated activities, which I will call "development" and "usage." As a process of technological change, an algorithm is socially constructed in that both what is developed and how it is used are contingent on the perceptions, values and choices of socially situated individuals.<sup>34</sup>

Although these activities are embedded in social relations such as corporate units, university departments, or homes, and although they are strongly

<sup>&</sup>lt;sup>32</sup> On the "iterative process" in which "technologies and markets are simultaneously constructed in interaction with each other," see Nelly Oudshoorn and Trevor Pinch, "User-Technology Relationships: Some Recent Developments," in Edward J. Hackett, Olga Amsterdamska, Michael Lynch, and Judy Wajcman, eds, *The Handbook of Science and Technology Studies*, Third Edition, MIT Press, 2008, p. 542. Oudshoorn and Pinch review the work of Eric von Hippel in these terms.

<sup>&</sup>lt;sup>33</sup> As Neil Pollock and Robin Williams argue, technical artifacts have "biographies" that extend beyond particular moments of implementation. See Neil Pollock and Robin Williams, *Software and Organizations: The biography of the enterprise-wide system or how SAP conquered the world*, Routledge, 2009, *p.* 38.

<sup>&</sup>lt;sup>34</sup> Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," in Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Anniversary Edition, MIT Press, 2012, pp. 33-7; Ronald Kline and Trevor Pinch, "The social construction of technology," in Donald MacKenzie and Judy Wajcman, *The Social Shaping of Technology*, Second Edition Open University Press, 1999, *pp.* 113-15.

influenced by these wider milieus, development and usage are distinguishable as specific types of activities. As recent work in STS makes clear, the line between "users" and "developers" of technologies is easily blurred, in particular because "users" may possess deep insights into how technologies may be modified, and because users may themselves acquire the skills to intervene in development processes.<sup>35</sup> Furthermore, it is clear that developers test and therefore "use" the artifacts they design and build. Thus the two processes are inextricably linked, as actors step in and out of particular roles during the life cycle of a technology. In the context of a specific algorithm, however, the distinction between development and usage may be discerned, not by distinguishing people as either users or developers, but by distinguishing and relating the activities of development and usage. As I understand it, these activities are both distinguished and related through a back and forth process. On the one hand, developers use abstract symbols I will call "code" to guide the production of a physical and cultural artifact I will call an "interface." On the other hand, users evaluate, test, and negotiate their relationship with this interface within a rich and variegated context of relationships, values, and things. An algorithm evolves and changes over time through a back-and-forth movement between these two activities, which mutually regard and influence each other.

In order for a user to encounter and engage an algorithm, the abstract relations described by code must be embedded and concretized within a rich context of relationships. To this end, both the user and the environment in which

<sup>&</sup>lt;sup>35</sup> Oudshoorn and Pinch, "User-Technology Relationships," op. cit.

usage will occur are prepared and readied. For example, a computer and operating system may be acquired, the code of an algorithm may be installed in this computer, and hands may be placed on a keyboard. Usage may then begin, proceed, and end in fairly specific and clearly delimited ways: it is started and stopped by pressing specific keys or buttons, for example. Despite this structure however, the activity which takes place during usage is unpredictable and unique. Although the interface provides a modicum of structure to the activity, this structure is not only limited and delimited by the interface, but surrounded by a richer context.<sup>36</sup>

The term "interface" then, describes the ways in which an algorithm's code is related to its usage context. An interface is thus a kind of border or boundary between the region of activity structured by code and the wider usage context. <sup>37</sup> On one side of this border, activity may be understood as, and structured by code. <sup>38</sup> On the other side, activity is understood as situated within a richer context. In addition to this boundary marking, an interface also has a temporal

<sup>&</sup>lt;sup>36</sup> Lucy A Suchman, *Plans and Situated Actions: The Problem of Human-Machine Communication*, Cambridge University Press, 1987.

<sup>&</sup>lt;sup>37</sup> An interface thus has the properties of what Susan Leigh Star and James R. Griesemer call a "boundary object:" "Boundary objects are objects which are both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use, and become strongly structured in individual-site use. They may be abstract or concrete. They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation. The creation and management of boundary objects is key in developing and maintaining coherence across intersecting social worlds." Susan Leigh Star and James R. Griesemer, "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." Social studies of science 19(3), 1989, pp. 387-420.

<sup>38</sup> Donald A. Norman, "Cognitive Artifacts," in *Designing Interaction: Psychology at the* 

<sup>&</sup>lt;sup>38</sup> Donald A. Norman, "Cognitive Artifacts," in *Designing Interaction: Psychology at the Human-Computer Interface*, edited by John M. Carroll, Cambridge University Press, 1991, pp. 25-6.

dimension, for it signals the start and end of usage, as when a key is pressed; and it may accompany the user for the duration of usage, alternately popping into view and fading into the background.<sup>39</sup>

When I say that development "structures" usage, I mean that during the time when an interface is employed, activity becomes a *case* of usage of the algorithm: that is, it comes to exemplify the algorithm's abstract relations *in specific and limited respects*. This means that when usage occurs, it manifests and conforms to the abstract relations of code, which determine it *in specific and limited respects*. In this sense, development "structures" usage. By this same token, development not only makes predictions about limited aspects of the course of usage, but also conducts historical inquiries about past cases of usage, within the limited and specific terrain of usage delimited by the interface. We may say then that development "knows" usage in these respects.

When thinking with code then, development may attain a reliable knowledge of limited structures. It cannot, however, attain this same kind of knowledge over the whole context of usage. As far as development can reliably determine by thinking with code, usage begins and ends with key strokes, mouse movements, network packets, and other specific and constrained events. As such, even fingers and bodies tend to be beyond the reach of code, not to mention intentions and choices. Although development can predict and control

<sup>&</sup>lt;sup>39</sup> On spatial and temporal "brackets" in "the organization of experience," see Erving Goffman, *Frame Analysis*: *An Essay on the Organization of Experience*, Northeastern University Press, 1986.

the order of those few events that occur during usage as specified by the interface, it cannot predict and control the context in which usage is situated.

Nevertheless, the *people* who engage in development cannot help themselves: they must engage the wider usage context; after all, they must not only install and test their code within it but also motivate usage. Therefore, they imagine and examine the context of usage in various ways. They also try to influence and even structure that context; but they do so not in their capacity as developers, but in some other capacity such as designer, entrepreneur, advocate, or even, perhaps, as a social scientist. In such a capacity the context in which usage will occur is noted, imagined, and studied. And this context is used in deciding how to develop code: by observing and imagining usage in various contexts, development is motivated to structure activity so as to fit with the context imagined.

In this way we come full circle: *code* is now structured by apprehending the *context* in which it is, or may be used. By situating an activity in its rich social and physical context, many people, from "developers" to "lead users" to anyone with a perspective on a usage context, may participate in making decisions about how code should be written. To employ the language of social construction, these people may interpret usage as members of a "relevant social group," who share a meaning of the algorithm. <sup>40</sup> Because the context of usage is both rich in meaning and highly consequential for an algorithm's prospects, it attracts

<sup>&</sup>lt;sup>40</sup> Pinch and Bijker, "Social Construction," op. cit.

attention not only from technology developers but also from social scientists, advocates, and other actors.

Because an algorithm can reliably structure a limited and specific range of events, it can play a supporting role in, but not determine, the course of usage. Sometimes this supporting role can be extensive. As this work will demonstrate, an algorithm can coordinate complex activities featuring multiple kinds of tasks and multiple participants, so long as its interface stimulates continued engagement. Insofar as a physical and cultural fit between code and its context is achieved then, algorithms can lend extensive structure to activity. Nevertheless, because not only the context but also the code are subject to ongoing reinterpretation, resistance, and change, this fit is contingent on the specific circumstances in which it is attained.

## The Structure of Organizations

I turn now to the concept of organization, in order to lay further groundwork for the concept of the algorithmic organization as used in this work. The approach to the concept of organization taken in this dissertation can be usefully compared with the work of Oliver Williamson and Douglas North, proponents of an approach to organization that stresses "transaction costs." Inspired by the work of Ronald H. Coase, practitioners of Transaction Cost Economics question the traditionally sharp distinction between firms and markets. Instead of this distinction, they prefer to see both firms and markets in terms of "governance structures" lying along a continuum between firms and

markets.<sup>41</sup> Their approach thus uses a single theoretical framework to see all kinds of economic organizations in the same terms.

According to Transaction Cost Economics, economic organizations arise when different parties construct contracts to structure their joint activity. Although the parties behave rationally in this process, their rationality is "bounded" by circumstances outside their control. 42 In addition, parties are not purely altruistic but are subject to bouts of "opportunism," in which they seize advantages at the expense of their transactional associates. Thus, not only are many future contingencies unforeseeable, but parties to contracts are subject to motivations that undermine the contract itself. For both of these reasons, differences are likely to arise between the parties regarding what to do in the face of unforeseen contingencies. As a result, transactions require governance structures: that is, as part of the contracting process, the parties establish structures and procedures whereby future differences of opinion may be resolved. Importantly, these governance structures may be largely private in nature; mechanisms such as corporate hierarchies and arbitration may exercise governance without calling in courts or other state actors. Markets and hierarchies, then, use different kinds of contracts involving a range of public and private actors to structure different ways of both organizing and governing economic activity.

<sup>&</sup>lt;sup>41</sup> Oliver Williamson, *The Economic Institutions of Capitalism,* Free Press, 1985, pp 41-2. Douglas North and Barry Weingast have applied this type of analysis to political institutions. See Douglass C. North and Barry R. Weingast. "Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England." The journal of economic history 49(4), 1989, pp. 803-832.

<sup>&</sup>lt;sup>42</sup> In this respect Transaction Cost Economics draws on the work of Herbert Simon. See Herbert A. Simon, *Administrative Behavior*, *op. cit.* 

From this perspective, markets and hierarchies are not fundamentally different, but rather the same kinds of things: They are ways of using contracts to assign transactions to governance structures. Whether a transaction takes place within a firm or between two firms, a transaction is a transaction. The choice of market, firm, or hierarchy depends on the attributes of the transactions to be governed: "Transaction cost economies are realized," argues Williamson, "by assigning transactions...to governance structures...in a discriminating way." <sup>43</sup> By helping us to see that the same kind of phenomenon is occurring both within and outside of the firm, and by alerting us to the flexibility with which transactions may be structured and governed through private contracts, Transaction Cost Economics yields insights into the nature of organization which are relevant to the concerns of this dissertation.

Like Transaction Cost Economics, I am concerned with the structure of organizations and the way that organizations emerge in response to particular needs. The main difference however is my focus on algorithms rather than contracts. I argue that algorithms can play much of the role that contracts have played, by guiding shared activity and focusing attention on the structure of that activity. This includes governance structures: ways of managing differences between individuals in the interest of continued organizational existence.

Although I will not be concerned with markets, a major interest of this dissertation is in the question of how journalism is organized, using what governance structures, from hierarchical to non-hierarchical forms.

43 Oliver Williamson, *Economic Institutions*, op. cit., p. 41

A second point of contact with Transaction Cost Economics is with regard to the question of opportunism. Transaction Cost economists have focused attention on contractual means whereby parties prevent each other from taking undue advantage of each other. If we consider a journalism organization in these terms, we might say that the problem of opportunism arises whenever an individual has both power and incentive to influence journalistic work on a basis other than its journalistic merit. For example, if a person employed as a journalist fabricates a story in order to win fame, then she has taken advantage of her structural position within a news organization to bring attention to a work whose value is not journalistic. She utilizes her position for opportunistic purposes. Likewise, when a publisher "kills" a story that might compromise a business investment, she has acted contrary to journalistic norms and hence, from the perspective of this dissertation, she has acted opportunistically.

From this perspective, the historical development of journalistic professionalism is in part the development of mechanisms for lessening the possibility and impact of opportunism on journalism organizations. In particular, the development of the news department as a bounded structure within which journalistic norms and values are given priority over others has protected journalists somewhat from opportunistic behavior by publishers, who must work through editors in order to impact processes of story selection and arrangement in all but the most exceptional cases. Likewise, the opportunism of marketing

departments and advertising concerns are limited somewhat by this structure. As we will see, the same concerns arise in algorithmic contexts.

## **Algorithms as Organizational Structure**

As I will use the term, an "algorithmic organization" is an organization which uses algorithms to provide some of the structure traditionally provided by contracts. In particular, algorithmic organizations typically use algorithms to divide tasks into different pieces, assign those tasks to different kinds of participants, and coordinate the activity of many different participants. Although all organizations must handle these details somehow, many organizations rely on contracts to structure them. An algorithmic organization, in contrast, shifts some of the burden of planning, coordination and governance from a process of contracting to a process of sociotechnical change. Whether, or in what respects this mode of structuring an organization is better or worse than the contractual mode is beyond the scope of this dissertation. Nor do I argue that organizations are structured in only one way, either through algorithms *or* through contracts. The argument here is only that this mode of structuring organization is a distinctive one.

I argue in this dissertation that algorithmic organizations can structure the production and distribution of media and journalism. Given the decline of American journalism's traditional normative and economic foundations, and the

<sup>&</sup>lt;sup>44</sup> In using engineering to construct forms of governance, sometimes in spectacular ways, algorithmic organizations partake of a form of power Chandra Mukerji calls "impersonal rule," visible as far back as the early modern period. See Chandra Mukerji, *Impossible Engineering: Technology and Territoriality on the Canal du Midi*, Princeton University Press, 2009.

rise of algorithmic forms of organization, the question arises of whether any hints or cues may be taken from existing algorithmic organizations and then applied in the construction of independence-preserving news organizations. I pursue this line of inquiry in chapter three.

In chapter three I consider an example of a highly successful algorithmic organization whose developers were strongly influenced by journalistic traditions of independence: the Google search engine. I argue that Google Search is deeply congruent with journalism as traditionally practiced, precisely because it has struggled to foster an independent web in the face of enormous pressures toward commercialization. Its efforts have resulted in the construction of the independent realm of "organic search" as explicitly distinguished from the commercial sector of "paid search." Google search thus answers the question of whether *any* kind of organized independence is possible in a new media environment characterized by loose-knit network relationships rather than managerial hierarchies. It also demonstrates in empirical detail the construction and maintenance of a particular kind of organized independence in the new media economy. In both respects, I argue that Google Search represents a potential source of cues for the production of journalistic distinction.

I argue that Google search is an organization of independent media producers which is structurally congruent with a news department. This organization has been employed for the support and expression of a specific kind of distinction and autonomy. As an organization, Google search supports

individual media producers in their autonomy vis-à-vis other producers. It also possesses structural mechanisms that encourage group cohesion through the evaluation of work by individuals with varying degrees of power. These characteristics provide a space for producers to develop individual commitments to the informational norms of Google while at the same time providing structures suitable for maintaining a balance of power and hence organizational coherence and consistency. In these respects Google as an organization is structurally congruent with a news department.

The reference to Google Search in this dissertation may seem odd, given that the search engine is not primarily a journalistic organization. However, such reference serves a specific analytic purpose: namely, it demonstrates the capacity of algorithms to structure an organization of independence as distinct from other social fields. The organizational basis of Google search is not managerial hierarchy structured by contracts but a network of links structured by an algorithm. Nevertheless, the organization supports a balance of power within a specific and non-market normative context. This empirical fact suggests, but does not prove, that a harnessing of algorithms may be utilized by journalism in order to shore up its own independence as a distinctive field in the United States. Attention to Google serves the purpose of demonstrating an organization of independent producers in an algorithmic context and clarifying its mode of operation. At the same time, Google serves as a cautionary tale for those who seek to bolster journalistic independence. For as I will argue, Google's corporate

structure and the secrecy of its algorithms raise questions about how algorithmic organizations should be governed. <sup>45</sup> In this respect Google provides not only suggestions, but caveats to those who intend to build independent journalism organizations in the new media economy.

The result of this excursus is a suggestion that algorithms may be available for sustaining specifically journalistic independence. Because news departments structured by employment contracts are decreasingly available for this purpose, investigation of other, available forms of organization may yield insights into the current conditions of journalistic independence. If a reservoir of power exists in the form of individual journalists and citizens, and if new technologies can facilitate the construction of flexible and scalable organizations, then perhaps this power can be harnessed and organized for the purposes of journalistic independence.

The argument I make in this work should be distinguished from one with which it has some overlap. I refer to Yochai Benkler's argument that the ascendant information networks of the new media economy provide many of the goods of journalism as a consequence of their structure. According to this argument, new media encourage individual autonomy and participation through radical decentralization of the means of producing and distributing information. At the same time, they increase the robustness and independence of the realm of

<sup>&</sup>lt;sup>45</sup> As Lucy Suchman says, "The inscription of formal representations of action in technical systems transforms the debate more clearly into a contest over how our relations to each other are ordered and by whom." Lucy Suchman, "Do Categories Have Politics? The Language/Action Perspective Reconsidered. *Computer Supported Cooperative Work (CSCW)* 2, 1994, pp. 177-90.

social production by depriving influence seekers of prominent hierarchies through which to exert their control. Information in this environment is transmitted between network nodes on the basis of the intense interest it excites, rather than by attracting a large, passive audience to mildly interesting materials. When a topic excites enough interest, it is transmitted beyond its core constituencies and reaches a broader audience. This structure can satisfy core journalistic functions, namely promulgating verified information to a general audience, and serving a watchdog function that checks the exercise of arbitrary power. 46

This argument intersects with my concerns in this dissertation at several points. First, it makes an argument about the technical and organizational bases of individual autonomy: namely that individual autonomy is furthered by network forms of organization in contrast to hierarchical, mass media forms. Second, it describes an independent realm of production separate from the market and also from managerial hierarchy: namely the realm of social production. Benkler's concerns with individual autonomy and the independence of realms of production mirror the concerns of this dissertation with the independence of journalists and their organizations.

Benkler's argument differs from mine in several respects, however. First, it is concerned with differentiating the sphere of social production from the market and from managerial hierarchies. In contrast, this dissertation is primarily concerned with the organizational means by which individuals and groups affirm

<sup>&</sup>lt;sup>46</sup> Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom,* Yale University Press, 2006.

their own specific criteria of what journalism is and can be. Second, Benkler's practical orientation is toward the enactment of policy and law, whereas I bracket these concerns and orient toward the implementation of organizations and technologies. Third, Benkler's field-level concept of independence is not internally constituted by power. Social production is said to be distinctive precisely because it does not admit of "external" motivations such as monetary rewards and other expressions of influence from others who matter, being instead constituted by a combination of intrinsic interest and social norms; whereas my conception of organizational autonomy is dependent on the intra-organizational exercise of power in the name of organizational coherence and distinction. Finally, Benkler emphasizes the coercive force of hierarchy while downplaying its spaces of autonomy; and emphasizes the autonomy-preserving function of networks while downplaying their coercive aspects. In contrast, I show and stress the autonomy inherent in hierarchy and the coercion inherent in networks, in addition to those aspects stressed by Benkler. 47

Besides its role in structuring organic search as an independent field of practice, Google is of interest because it has played a major role in promulgating the concept of algorithms. With the rise of Google, the World Wide Web, and more recent social technologies, the term "algorithm" has been lifted out of the arcane realm of computational mathematics onto the stage of culture. In addition to its traditional meaning of a sequence of instructions for describing a

<sup>&</sup>lt;sup>47</sup> Manuel Castells also argues that networks operate as sources of power and exclusion as well as connectivity. See Castells, *op. cit.* p. 187.

computation, the term has become freighted with meanings involving power and authority. 48 Much of the impetus for this rise to public consciousness is due to the self-presentation and astonishing success of Google: the company bolstered its own legitimacy by referencing the algorithms it built as sources of reliability and even a kind of objectivity, in contrast to the inherent biases and limitations of "human editors."

These pretensions have not passed unnoticed by scholars. Indeed, recent scholarship on search engines shows remarkable parallels with the classic works on the study of journalistic objectivity: Scholars and cultural critics have resisted Google's attempts to position their technology as a reflection of external reality rather than a series of conscious choices. Suspicious of Google's legitimacy claims, these observers have sought and found the activity of selection behind the mask of passive reflection, and exposed the fact of bias behind the rhetoric of objectivity. 49 Resisting any imputation of naturalness or inevitableness, they have instead seen algorithms as contingent and constructed. In short, they have cast a critical gaze on forms of authority rooted in algorithms.

Algorithms have so far, however, resisted scholarly attention, for the simple fact that scholars are unable to observe them in operation. Whereas the ethnographers of the 1970's were admitted to newsrooms, companies protect their algorithms as both intellectual property and strategic editorial resources.

<sup>&</sup>lt;sup>48</sup> Clay Shirky, "A Speculative Post on the Idea of Algorithmic Authority," http://www.shirky.com/weblog/2009/11/a-speculative-post-on-the-idea-of-algorithmic-authority/ accessed December 1, 2013.

49 Lucas D. Introna and Helen Nissenbaum, "Shaping the Web: Why the Politics of

Search Engines Matter," The Information Society, 16(3), pp. 1-17, 2000.

"We can't disclose our algorithms," they have said, "because they might be exploited to bring unfair advantage to those who don't deserve it." If an outsider gets hold of the algorithm, they can use it to spam people with bad results, the argument goes. Even beyond their technical inscrutability then, algorithms are kept secret for strategic reasons, rendering them difficult to expose and critique. And some scholars are starting to see this inscrutability as very nearly an accomplished fact. Tarleton Gillespie concludes a recent overview of the topic of algorithms with the following reflection:

In many ways, algorithms remain outside our grasp, and they are designed to be. This is not to say that we should not aspire to illuminate their workings and impact. We should. But we may also need to prepare ourselves for more and more encounters with the unexpected and ineffable associations they will sometimes draw for us, the fundamental uncertainty about who we are speaking to or hearing, and the palpable but opaque undercurrents that move quietly beneath knowledge when it is managed by algorithms.

In this dissertation I join the conversation around the transparency and legitimacy of algorithms, by developing and deploying an experimental, algorithmic journalism organization. This experiment aims to explore the prospects for algorithmically supporting journalistic independence. In support of this aim I developed a fully transparent, algorithmic news aggregator that features a combination of organizational features drawn from both traditional news departments and algorithms like Google search.<sup>51</sup> The algorithm is designed to structure and support an organization that balances the

<sup>&</sup>lt;sup>50</sup> See for example Marissa Mayer, "Do Not Neutralize the Web's Endless Search," Financial Times, July 14<sup>th</sup>, 2010.

<sup>&</sup>lt;sup>51</sup> The algorithm is based on work done with Steve Farrell on two previous aggregators, *Payyattention* and *The Hourly Press*.

independence of its members with a power structure that encourages the maintenance of a coherent journalistic identity. It is designed to permit the adoption of different normative orientations toward journalism and does not presume the objectivity norm. It is also designed to support the exercise of various kinds of non-managerial power, which I will detail below.

The algorithmic news organization I describe is "experimental" for two reasons. First, it is an enterprise whose aims, techniques and conclusions are tentatively advanced and subject to reconsideration in light of new evidence. In this sense the term "experiment" names an attitude. Second, the algorithm was designed to yield knowledge by generating data to test a specific hypothesis. This is an epistemological sense of the term "experiment." Third, the data is generated by actually organizing journalists and observing their actual journalistic work. The term "experiment" here stresses the productive agency involved in this type of research.

Chapters four and five therefore describes the design and deployment of newskraft.org, an experimental news aggregator. Newskraft.org is designed to call attention to, and distribute funding toward, meritorious works of journalism. To this end it regularly publishes hyperlinks to recently published works of journalism, and arranges them so that more significant stories are featured more prominently than less significant ones. It also allocates funding for these stories from a pool of hypothetical donations. Newskraft.org features a unique sociotechnical structure of roles and relationships designed to structure a balance

between independent agency and evaluations by others who matter. It is inspired by and inherits structure from not only the Google search engine but also from the news department. Newskraft.org was operational during July and August of 2011 and involved 25 participants.

Because this portion of the dissertation deals with an algorithm that I developed, it raises reflexive and methodological questions. I will therefore briefly describe the context in which my research came to involve algorithms, and use that context to anchor a set of reflections on methodology. The research that led to this dissertation started in 2009, in the context of a moral panic among American journalists stemming from the rapidly deteriorating condition of newspapers. Within that context, I studied existing scholarship on journalism, and I co-invented an algorithm which seemed to suggest something about the practice of journalism. From that point on, I saw journalism through a perspective shaped by the algorithms I was developing. I used algorithms, not to model or simulate journalism, but as a lens through which to perceive its history and organization. Nevertheless, I found it hard to organize and communicate my thoughts about what the algorithm was suggesting.

This perspective led me in two directions. First, I studied existing and past organizations of journalism and media production, in order to ground myself in empirical reality, and to elaborate and test the organizational structure I thought I perceived. I read widely in the journalism literature and conducted interviews with

 <sup>&</sup>lt;sup>52</sup> Ignacio Siles and Pablo J. Boczkowski, "Making sense of the newspaper crisis," *op. cit.* <sup>53</sup> The algorithm, called The Hourly Press, was co-invented with Steve Farrell.

journalists and other media producers. On the basis of this work the unfocused perspective suggested by the algorithm was gradually elaborated into a theoretical framework supported by empirical evidence: a contribution to social science.

Second, as I conducted historical and qualitative research, I built and tested the algorithm which was guiding it. This resulted in a painful bifurcation of my energies. On the one hand, I sought to elaborate and empirically test a theory of journalistic organization. On the other hand, I sought to practice journalism by building an organization of independent journalists. In this second capacity, I hoped to spark an enthusiastic appreciation for the nascent organizational form with which I had lived and worked. Unfortunately, these two goals seemed to conflict with each other. A journalism organization requires dedication, commitment, risk-taking, and trust. But I was neither inclined to demand these qualities nor socially situated to produce them. By positioning the organization as an experiment, I cut it off from many powerful sources of engagement and commitment, such as social belonging, professional advancement, and self promotion. What was left was only curiosity and an abstract commitment to experimentation with new forms of journalism. Despite this seemingly weak motivational basis, I needed some level of participation in order to produce a phenomenon which yielded data.

It is important to realize that at this point I did not have a clear language to describe what I was studying. I had an algorithm which drew my attention to

questions of hierarchy, decentralization, and feedback. The concept of the "organization of independent journalists" had not yet occurred to me. I found myself in a position which I suspect is common in interpretive social science research: I was exploring something empirically at the same time as I was developing a language for describing it. I "knew" what I was doing in an intuitive and private sense, but I could not adequately describe what I was doing to other investigators. At one point, for example, I conceived of my research in terms of the "effects" various "audiences" could have on producers. Eventually, however, this framing was abandoned in favor of something slightly broader, and subsumed into the research under another heading.

The initial test of the algorithm was characterized by low levels of participant engagement. My first reaction to this outcome was disappointment. Because I saw value in this form of organization, I was disappointed that the participants did not spontaneously organize around it. Worse, engagement seemed so tepid that I was concerned I would have nothing to write about. Nevertheless, I conducted follow-up interviews. What I found was surprising.

First, although the participants were very busy with more pressing concerns, and although the algorithm was perceived as somewhat complex, we had in fact come quite close to sparking something. Various organizational transactions were accomplished, one of them involving five different kinds of participants and fulfilling the basic task for which the organization was designed: channeling funding from donors to producers. This points to something

potentially distinctive about algorithms as a form of organization: they may play a role in coordinating activity despite an arms-length engagement with and cursory understanding of them. In addition, however, it shows the promise of mere curiosity and the abstract commitment to experiment as motivators of participation in social science research employing algorithmic organizations. For the interviews revealed several very concrete and straightforward ways to increase the engagement of participants with future versions of the algorithm, even without requiring full commitment from them. In other words, the algorithm holds promise, not as a full-fledged journalism organization, but as a method of researching the organization of journalism and the role of algorithms in journalism, two topics of central importance to the field of journalism studies.

Second, I found that not only the experience of participating in the experiment but the interview process itself articulated links between the algorithm, the empirical data I had gathered, and the theoretical framework I was constructing, while also revealing questions and opportunities for further research. Participants gave reports of how they experienced the algorithmic organization, and reflected on how they were motivated to use it further, thereby relating their experiences to the other case studies of the dissertation. Similarly, they reflected on specific aspects of the algorithm and imagined them in operation. Finally, they gave evidence of a cultural environment in which key terms employed by the algorithm and its presentation materials were received and how it was understood. They compared the algorithm to other initiatives and

thereby helped to draw connections and distinctions which clarified the relationships between the algorithm, the theory it exemplifies, and other phenomena.

Second, I found that the algorithm itself, as a sociotechnical fact, had acquired a degree of independent existence. A series of decisions had been made about what to build and how to communicate what was built. The decisions were then carried into practice by constructing an interface complete with many specific cues and capabilities, organized around a vision of who the users were and how they would behave. This gave a concrete, empirically thick structure to the algorithm and its interface. Although it is at an early stage of existence and far from obdurate, the algorithm has been rigorously tested in development, and physically and socially taken up and used to organize both collective activity and reflection about that activity by its participants. It is therefore not a mere sketch or design, much less a theory, but an empirical phenomenon, existing both in the minds of its participants and in the social and material world. As such it has enough coherence, consistency, and independent existence to be useful as a source of insight into the very phenomena on which it was modeled. Study of this algorithm sheds light on the organization of journalism.

Thus, I argue that algorithmic organizations provide social scientists with a unique method of studying social phenomena. This argument can be compared with one made by Michel Callon. Callon has argued that engineers are akin to sociologists because they "construct hypotheses and forms of argument that pull

these participants into the field of sociological analysis."54 But what is the value of such hypotheses beyond guiding the committed activity of the engineers or providing suggestive hints to sociologists? As I have learned, there is a vast distance between constructing a rough theory of the society you are hoping to enact and using technology development as part of a self-conscious method of social science research. The difference, as I discovered, is precisely in the notion of "success." Callon's engineers "failed" to create their society of the future, just as I have "failed" to do interesting journalism. But unlike Callon's engineers, I accomplished what I actually set out to do. Callon's engineers did not themselves generate any research results because they did not attempt to. My research, however, has directly or indirectly generated substantial empirical data relevant to the concerns of social scientists, and promises more. Furthermore, I have shaped this data into relations with existing social science literature, and thereby exposed it to the community of social scientists. There is a vast difference between the engineer as a latent social scientist and as an actual one.

Thus, insofar as this dissertation makes a contribution to the study of journalism and its organization, it also represents a methodological contribution. The method involves the simultaneous elaboration of algorithmic and social structure using historical, ethnographic, and qualitative research methods. As an act of journalism, newskraft.org was a failure. As a research method, however, it was a success, and this dissertation is its fruit.

<sup>&</sup>lt;sup>54</sup> Michel Callon, "Society in the Making: The Study of Technology as a Tool of Sociological Analysis," in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology,* anniversary edition, MIT Press, 2012, pp. 77-97.

## **Chapter 1: Independence and Evaluation in News Organizations**

When Jim Nelson first pitched his eventually award-winning story about a local munitions plant to his editor at the *Baraboo News Republic*, the response blew hot and cold. "Oh yeah," she replied, "Go ahead and go do that, and by the way, where are your pictures from the football game last night?" This brief exchange, and the story it grew out of, introduce the topic of this chapter: the organization of independent journalists. Let us look first at independence, and then its organization.

Nelson's interest in the Badger Army Ammunition Plant was kindled during his commute to work. "I drove by it practically every day, and I just said, 'What is that?' It went on for miles," he told me. He was struck by the size of the old, mothballed factory, as well as its setting within "a giant piece of real estate outside of town, in a very important and beautiful natural area near a state park." The structure was intriguing as well, with its multiple "square miles of factory buildings" with plenty of space between them. The buildings were intended for "making propellant and gunpowder, and if one of them blew up, or if there was an accident, they didn't want the whole place to go up." Nelson asked around the

<sup>55</sup> Interview with Jim Nelson, February 8, 2013. Nelson is not quoting his editor literally but paraphrasing her reply.

newsroom and found out that his colleagues had never written about the place. In fact, they didn't know much about it at all.<sup>56</sup>

These details illustrate one prong of the concept of independence that I will develop in this chapter, and which I will call "sensibility." By this term I mean to include any kind of peculiar attachment that a journalist may form to the materials of a story. As the anecdote above illustrates, Nelson was so intrigued by the plant's unique qualities that he decided to pitch a story based on them, specifically "an enterprise or background story with a history tilt." The connection between Nelson and these materials was unique, insofar as nobody else at his paper had previously written about them. Despite having lain mute before so many others, the plant spoke to Nelson and beckoned him towards it.

Recognizing its distinctive character in a way others did not, he formed a bond with this material that distinguished him from other journalists. I will argue that sensibility, a distinctive way of perceiving and handling journalistic materials, is a key component of independent work.

The second facet of independence that I will explore in this chapter is "distance." By this I mean any factor that separates or screens a journalist from those who evaluate her work. Take the exchange between Nelson and his editor that opens this chapter. There are two ways in which distance is revealed by this exchange. First, although the editor allowed her reporter to pursue his story, she declined to get behind his efforts with any intensity. She replied with a brief and

<sup>&</sup>lt;sup>56</sup> Interview with Jim Nelson, February 8, 2013.

unspecified acquiescence, and then changed the subject. By declining to delve deeply into the subject of the story, she signaled a hands-off attitude toward the work and left its pursuit largely to Nelson. Second, she reminded Nelson that he needed to fit his work on the plant into an established routine with demands on his time and attention. By reminding him of his other duties, Nelson's editor sent a message that any work on the munitions plant could not come at their expense. She signaled that in order to report out his story he would have to find or create spaces in his existing routine, and fill those spaces with his own work. The exchange as a whole illustrates that the work was given to Nelson as his own, that his editor would not be deeply involved in it, and that Nelson would need to play an active role both in establishing and developing the story, and in finding time for it amid other work. In these ways the exchange established and ratified a distance between Nelson and his editor regarding the project.

Having explored the concept of independence as sensibility and distance, I will then discuss its organization. For independence is never total, but is managed and limited through collaboration. Indeed, the same exchange between Nelson and his editor that illustrates the concept of independence can also be used to show its limits. In this case, although the work was allocated to Nelson, Nelson's editor nevertheless played an important role in it. First and foremost, she approved the pitch and freed her reporter to work on it. Without her approval, Nelson would have had to put his working attention on other subjects.

Furthermore, she was the audience of his pitch, and thus partly determined it: In

order to secure her approval that is, Nelson needed to orient towards her and summarize his story by highlighting its interest and importance in a way that she would first evaluate, and then hopefully accept. Even though she would not be deeply involved in reporting the story, she thus established the initial social context in which some portions of it would be emphasized, and others deemphasized. From the earliest stages of his work then, Nelson was oriented towards another's evaluation in spite of her distance from "his" story.

This chapter describes what I will call the organization of independent journalists, and lays out a framework for understanding it. The analytical goal of this framework is to understand American journalism as a partially autonomous field of practice through the study of organizations that construct, maintain, and manage independence. To that end the framework starts with the basic building blocks of organizations, namely individuals and the relationships they have to others. In later chapters I will expand this focus to include coherent organizations consisting of specialized relationships.

A primary goal of this framework is to explore the possibility of organizing independent journalists without either presuming or rejecting the objectivity norm characteristic of traditional American journalism. To this end the framework is applied to examples taken from newspaper journalism and also new media, in which objectivity is less entrenched. The concepts of independence and its organization as developed in this chapter do not presume any specific norm such as objectivity. My goal in this chapter is to describe the basic building blocks of

the organization of independence while leaving room for a variety of normative orientations and attitudes toward objectivity. In subsequent chapters I will fill out this framework by applying it to specific cases of organization, both traditional and new, that feature specific kinds of structured relationships between individuals.

I begin this chapter with a discussion of independence as sensibility and distance. I argue that although independence is established and maintained in many ways, it is present in some form regardless of communication media and organizational context. Next I discuss the practices of evaluation and connection whereby independence is managed and delimited. Again, these practices vary by communication media and organizational context. Again however, they are present in some form across all of them.

## Independence as Sensibility and Distance

In order to work as an independent journalist, an individual requires a certain amount of distance from others whose evaluations matter to her. This condition separates her from these others, and provides her with opportunities for developing work according to her unique and distinctive sensibilities — opportunities, that is, for exercising independence and developing journalistic distinction. As I understand it, the concept of distance includes a variety of factors, whether physical, social, or technological, that separate a journalist from

these others and limit their involvement with her work.<sup>57</sup> The concept also applies to a variety of social relationships. As we shall see in this chapter, the distance which constitutes journalistic independence may be maintained *from* various others, such as colleagues, supervisors, audiences, and sources. The empirical evidence considered in this chapter thus demonstrates the range and variety of specific kinds of distance apparent in journalistic work. Future chapters will tame this variety somewhat by focusing on specific kinds of organizations and the kinds of distance that constitute them.

In my discussion of Jim Nelson's story about the munitions plant, I argued that distance is maintained by finding space for independent work within existing schedules and routines. This same phenomenon appears in other media as well. Bethany Swain is a former CNN photojournalist who regularly pitched her own stories to various shows and websites within CNN. Swain also found that she had to fit her pitches into existing routines, and find time to produce them wherever she could. "Even once you got a unit to approve [a pitch]," she said, "you still had to work out whatever assignments the desk needed, [such as] the press conferences and the 'must-covers." Like Nelson then, Swain had to actively make time for her work within a demanding routine that had to be satisfied at the same time. She had to construct a space within which her

<sup>&</sup>lt;sup>57</sup> This chapter has benefitted from Helen Nissenbaum's typology of theories of privacy. Thus my concept of distance may be seen in terms of limitations of "access" and "control" by others. It also has overlap with the notion of "spaces" in which activity is free from observation by others. See Helen Nissenbaum, *Privacy in Context*, Stanford University Press, 2010, pp. 67-102.

<sup>58</sup> Interview with Bethany Swain, February 18<sup>th</sup>, 2013.

photojournalistic work could take on its own character in temporary isolation from other routines.

As an extreme example of actively making time and space for one's own work, consider Neetzan Zimmerman's blog, The Daily What. When Zimmerman first started this blog, he devoted himself to filling it with content at all hours of the day and night. "That was for me the key thing," he says, "just to keep doing it all the time, 24 hours a day, as often as I could." He even made plenty of time to blog at work. When Zimmerman first started blogging, he was employed full time at a publishing company. He nevertheless managed to "sneak in blogging moments" while there, "and just [kept] doing what [he] was doing all day long." By blogging on the sly in this way he consciously set aside time to pursue his chosen work, even at the expense of his paying job: "If I do get fired I can always find another job," he thought, "but as long as I keep the blog going that is the most important thing for me."59 Eventually Zimmerman outgrew the constraints of that workplace: his blog was acquired by Pet Holdings and he went to work on it full time. By nurturing the blog in an alien work environment, Zimmerman made a choice to grow and develop it as an independent enterprise at the expense of his previous career.

Freelance journalism also partakes of the distance inherent in independent work. Take the process of writing "on spec," where a freelancer conceives and writes a story without the initial support of any editor, and then

<sup>&</sup>lt;sup>59</sup> Interview with Neetzan Zimmerman, March 10, 2013.

offers it for sale as a completed work. In moving forward without editorial approval, this procedure stretches distance almost to the point of isolation. When Eric Hansen made the choice to leave his job as an assistant editor at *Outside* Magazine, he pitched a story to his editors there, who declined to commit to his pitch. "You're just too green," they told him, but he went ahead and wrote the story anyway, on spec. <sup>60</sup> He took a step without any offers of support, and worked to develop and write the piece on his own. In doing so he demonstrated the relationship between distance and independence. Even here, however, Hansen eventually returned, and made contact with people whose approval he valued. In fact, he ended up selling the completed piece to the same editors who had previously refused him. Hansen's experience, then, shows that social contact with an evaluator of work can result in an initial rejection, a period of distance bordering on isolation, and another evaluation which issues finally in acceptance.

We see another example of this dynamic when a journalist's work is turned away from one outlet and accepted at another. When Bethany Swain first conceived her eventually award-winning story about George Washington's taste for hoecakes, she submitted it to CNN's *Eatocracy Blog*, who told her that, though they loved the idea, they were unable to produce it. She then stepped back and reworked her pitch for another department in CNN. After modifying the pitch by removing some of the web elements, she submitted it to CNN's affiliate services division (where she had previously worked), which accepted the piece.

<sup>&</sup>lt;sup>60</sup> Interview with Eric Hansen, March 22, 2013.

Finally, the *Eatocracy Blog* also ran the piece, web elements and all. Here we see an alternation of distance and evaluation between not one but two distinctive social contexts.

Freelancers in the early stages of their careers often undergo extended periods of isolation and distance. A typical day in the working life of an early-stage freelancer involves pitching stories to editors: sending them story ideas and waiting for them to reply. This can often involve going for long periods of time without receiving so much as an acknowledgement from the people pitched. As Dan Kois of *Slate* told me, "almost all your time is spent being either rejected or ignored." Such a life involves much solitary work, and much development of story ideas in isolation from others. The freelancer that manages to build a career out of this extreme isolation has learned to produce work in quantity at a great distance from others.

The ability to develop work at a distance from others is needed not only in writing stories and producing other discrete pieces of work, but in building whole careers. At the time he left his job as an editor at *Outside* Magazine to pursue a freelance writing career, Eric Hansen had no guarantees of continued support or success as a writer. Ahead of him lay not a promise of continued support, but a grueling process of finding fresh ideas and actively selling them to people who were not invested in them. This sparsely populated frontier is typical of a freelance career in its early stages. As Megan Greenwell describes the typical

<sup>&</sup>lt;sup>61</sup> Interview with Dan Kois, March 22<sup>nd</sup>, 2013.

trajectory, active pitching of self-generated ideas is required "until you get to a very high level," by which point freelancers are more likely to have editors come to them with story ideas. A freelance career in its early stages involves coming up with story ideas at a distance from editors and other evaluators of work, then breaking through any resistance of evaluators to supporting them. <sup>62</sup>

A journalist's distance from others can be not only social, but literal and physical. Tom Daykin constituted a one-man bureau for the Lexington *Herald-Leader* in the mid 1980's, and compared this experience with other periods of his career when he was located in a bustling newsroom. At the *Herald-Leader* his absence from the newsroom seemed to reduce the likelihood of being assigned random tasks, which tended to fall on "warm [bodies] in the newsroom." He suspects that this increased organizational slack "made it that much more important that I get off my butt and find things to write about." Because of his physical distance from the main newsroom then, Daykin felt extra pressure to maintain his personal productivity by generating story ideas on his own initiative.

Journalists can also maintain distance from readers. Like many news organizations, the Milwaukee *Journal-Sentinel* uses its home page to signal the importance of stories to readers. By according a story prominent placement on this page, the *Journal-Sentinel* publicly signals that it considers the story to be especially interesting or important. It also continually monitors how its audience is receiving the story (whether many people are viewing it or few, whether that

<sup>&</sup>lt;sup>62</sup> Interview with Megan Greenwell, March 22<sup>nd</sup>, 2013.

number is increasing rapidly or slowly, whether they are sharing it with others, and so forth). This information is used in deciding how to adjust a story's placement relative to others: If a story is receiving fairly sustained interest despite having a relatively weak placement far down the page, for example, then there is an incentive to place the story more prominently in order to increase total traffic to the story. Conversely, if a story is placed in a prominent position, yet fails to garner a significant reader reaction, there is an incentive to deemphasize the piece. Editors keep distance from their readers when they maintain a story's prominent placement despite readers' lack of response to it, or when they maintain a story's marginal placement despite readers' affinity with it. Editors at the *Journal-Sentinel* are willing to maintain this distance from their readers if they believe that readers are underrating a story's interest or importance.<sup>63</sup>

As the journalist develops her work, she sometimes considers whether to consult with others regarding it. When her decision is in the negative, she consciously maintains a distance between herself and the others she excludes from full cognizance of her work. This need not imply any animosity or disagreement between the journalist and the excluded others. For example, a reporter will sometimes exclude the editor who is directly supervising her from fully knowing her work. As Patrick Marley says, involving editors in a story can have negative consequences:

Sometimes you don't want to get an editor involved too early because you tell them "We think this is going to happen," and then

<sup>63</sup> Interview with Craig Nickels, March 4th, 2013.

he and other editors get all involved and they think they're going to rip up the front page, and then whatever you heard was coming doesn't come, and it can cause a sort of disruption, or this unnecessary expectation on the part of editors that this story's a definite one instead of [a] maybe, so you've got to time it right as to when to let them know.

A journalist can also keep distance from another in order to give *them* the space to develop their own independence, as when an editor delegates authority to someone below her in the corporate hierarchy. When Jim Nelson was promoted to assistant city editor at the *Milwaukee Journal Sentinel*, His new editor began to "defer a lot" to him, "especially on the news front." By stepping back and letting Nelson make more decisions, Nelson's manager excluded himself from an area of work and allowed Nelson to occupy it, thereby increasing the distance between the two. Nelson says this let him "assume responsibility," but it also "created some issues because some of the higher-up editors were thinking that I was trying to usurp my new boss." Thus there was a perception among some that Nelson's distance from his boss was too great, and his own responsibilities too ample.

The same kind of distance is exemplified by the exchange that opened this chapter. When Nelson's editor at the Baraboo News Republic responded to his pitch with bare approval, she consciously kept her distance from his work. By leaving both the initiative and the details of the work to Nelson, she became a partner less in the work itself than in establishing the distance at which Nelson would do it. Within this space, which Nelson could not have established alone, he was able to take on responsibility and receive credit. His editor's bare approval

helped position Nelson as personally responsible for the work that resulted. The exchange therefore demonstrates not only an example of delegation, but also the social and collaborative – the organized – nature of this kind of responsibility.

Distance can also take the form of resistance to a superior. When Lane DeGregory was a young reporter at the Norfolk Virginian-Pilot, her editor was fired for putting a bad headline on a story she wrote. She then received a call from the top editor of the newspaper, who told her she should go over her direct editor's head if such a situation arose in the future. This made her feel that she had value in the organization, that her opinion mattered even when in contrast to her superior's. She felt that she as an individual was trusted and respected enough to counterpose her judgment to that of others in the newsroom. She felt she "had a voice that someone's going to respect and at least listen to – if I pipe up I'm not going to get fired." In this kind of context a young reporter is authorized to maintain and foster her own separate opinions, and even to assert them in the face of her superior's manifestly opposed policy.

Although it may foster independence, distance can also be unsettling, especially for young journalists. At the *Washington Post*, Megan Greenwell started out as a young newspaper reporter thrust into a complex and challenging environment, and suffered through some periods of isolation. Some editors, she explains, are more involved than others in coaching and guiding the reporters they supervise; Greenwell had several editors during her early years at the *Post*,

<sup>&</sup>lt;sup>64</sup> Interview with Lane DeGregory, February 14<sup>th</sup>, 2013.

and during the periods when she worked with an editor whose feedback was only occasional, she missed the guidance feedback can provide.

I had worked at other papers as an intern before but never anything on this scale and never for more than 10 or 12 weeks at a time, and so when I didn't have that kind of feedback it was sort of like constant anxiety not knowing how I was doing...When I was 22-23 years old, working at a newspaper where I had some questions about whether I was actually qualified to be there, it was better for me to have constructive criticism and feedback of all kinds.

Many young journalists rely on older, more established colleagues to orient and advise them. Without a deep fund of experience that can be drawn on in new situations, and without steady guidance from a kindly mentor, the work environment can seem risky and uncertain. In such cases distance can be experienced, not as a buffer which supports creative output, but as an unwelcome alienation. Rather than merely celebrating distance as a component of independence then, we should see it as a crucial but limited factor in the organization of journalism.

I have thus far considered factors that distance journalists from other people, and provide a space for them to work in relative isolation from them. In addition to this factor of distance, however, independence means doing actual work in the space carved out. It means favoring some kinds of work and disfavoring others, being passionate about some topics and cold toward others, in short, it means exercising what I have called "sensibility." By exercising her sensibility, a journalist fills her work with the unique character traits that distinguish her. Sensibility and distance thus reinforce each other: By maintaining

her distance from others, a journalist acquires a space in which to exercise her sensibility with minimal adulteration by external influences. Alone in this space or at least equipped with discretion within it, she infuses work with her own unique character and the character of the materials she selects.

Rich Juzwiak of *Gawker* expresses the imperative of following his sensibilities in terms of "doing justice to the material and my opinion of it." Juzwiak has made several career moves based in large part on sensibility. Early in his career he started a blog because he needed "an outlet for [his] full creativity." His paid work was unsatisfying to him and the blog allowed him to express himself in ways he could not at work. This blog led to a full-time job with VH1, which turned out to be a "fun" job that paid what seemed "an astronomical amount." Thus, by developing his own sensibilities Juzwiak was empowered to work in a more rewarding job. Later in his career, Juzwiak experienced a disconnect between his sensibilities and the work he was doing. He ended up leaving a job at TV Guide because he was tired of "churning out content that [he] was not particularly proud of." Producing content there meant being a kind of "thesaurus" - rewriting news just enough to give it a veneer of originality, in order to post it online without committing plagiarism. Juzwiak disliked this work of "creating a different story for the sake of creating a different story that could live on our site." Repelled by the work, he left TV Guide for a job more in line with his sensibilities after only five months. 65

<sup>&</sup>lt;sup>65</sup> Interview with Rich Juzwiak, April 11th, 2013.

Sensibility is also manifest in a journalist's relationship with her sources. As scholars have long understood, journalists rely on others to provide the very marrow of their stories: the tips, quotes and information that make up the raw materials of news. When a reporter is deeply connected to the community she covers, she becomes intimately familiar with its contours and its rhythms. The evaluators to whom she is oriented, on the other hand, tend to be less familiar with them. This contrast establishes and maintains a distinction between the "well sourced" reporter and those to whom she reports, and thereby contributes to her independence from them. The reporter becomes uniquely attuned to the materials provided by her sources, and becomes distinguished from others in her working milieu by her specific relationship to them. <sup>66</sup>

One measure of the contribution made by depth of sourcing to journalistic independence is its impact on the pitch process. When a reporter is at home in her beat, pitches seem to arise naturally, as Patrick Marley explains:

I remember when I was in school, a professor said once "oh, once you start working a beat you'll have more ideas than you know what to do with," and that surprised me, because in school that was the hardest part for me, was coming up with story ideas, but I found that that was largely true, I mean you go and you start covering a county budget or you just go to a finance committee or a health committee meeting and all these issues come up, and it just seems very natural. <sup>67</sup>

Because of his continuous immersion in the communities he covers,

Marley finds them a fertile source of new ideas. Being in the presence of

<sup>&</sup>lt;sup>66</sup> Gans uses the term "source-related" to refer to journalists with this kind of close connection to their sources, and distinguishes them from "audience-related" journalists. Gans, *op. cit.* pp. 89-90.

<sup>&</sup>lt;sup>67</sup> Interview with Patrick Marley, Feb 25<sup>th</sup>, 2013.

newsmakers, learning their ways, and deepening one's connection to them yields a unique perspective on news events, and hence a steady stream of story ideas. As a result, Marley says, "I've always had the problem of having too many things that I feel need to be chased down [rather] than sitting around, drumming my fingers wondering what to do." Marley's steady stream of pitches comes from his close connection to his beat, and distinguishes him from those who are not ensconced in it with him. <sup>68</sup>

This kind of deep sourcing can increase the independence of even young journalists. Due to her experience as a college journalist, Lane DeGregory arrived at her first full-time newspaper job at the Charlottesville *Daily Progress* with many strong connections on her beat (The University of Virginia). As a result, she told me, "I probably pitched 75% of my stories because I knew the beat; I didn't have to figure that out." From this base of sensibility she projected a distinctive journalistic character, complete with the regular exercise of initiative, despite her youth. In this way strong sourcing can underpin significant independence even for young journalists.

For a freelancer, pitching a story often means formally expressing one's sensibility. In particular, a freelance pitch requires the freelancer to explain to her potential editor what makes her especially qualified to write a story. Putting these claims in written form is part of crafting a "pitch package," which thereby serves

<sup>&</sup>lt;sup>68</sup> Cf Jay Rosen, "I'm There, You're not, Let Me Tell You About It: A Brief Essay on the Origins of Authority in Journalism," *PressThink*, March 27<sup>th</sup>, 2012, <a href="http://pressthink.org/2012/03/im-there-youre-not-let-me-tell-you-about-it/">http://pressthink.org/2012/03/im-there-youre-not-let-me-tell-you-about-it/</a> accessed February 21<sup>st</sup>, 2014.

to formalize and make explicit the freelancer's sensibility. Unlike an employee with easy access to colleagues, a freelancer generally expresses her pitches and thus her distinction from others via these written, formal proposals. Megan Greenwell compares the practice of pitching as a staff reporter at the *Washington Post* with her time as a freelancer. At the *Post*,

Pitching to my editors meant going up to my editor and saying 'Hey, I think this is really interesting, maybe we should do a story about this,' and maybe we would talk more about that and maybe he would just say 'Oh yeah, that sounds interesting, look into it,' but when you're a freelancer you have to prepare a pitch package where it's well written and it says why you're the most qualified person to write it and why they should hire you. 69

The need to explain one's distinctive connection to work materials is here brought into the story generation process in an explicit way. In its earliest stages, a story is a pitch, consisting not only of the general outline of a final publication, but also the freelancer's distinctive way of perceiving and handling the story's sources and setting. By describing her sensibility, the freelancer distinguishes herself from others who might write a similar story.

## **Evaluation and the Management of Connection**

Having discussed the factor of independence as distance and sensibility, I turn now to its organization. I begin with an example to illustrate the process whereby independent work is organized. In her first job out of college, Carolina Miranda worked at *New York Newsday* as a research assistant for journalist

<sup>&</sup>lt;sup>69</sup> Interview with Megan Greenwell, March 22<sup>nd</sup>, 2013. Italics added.

Sydney Schanberg. Miranda worked directly for Schanberg and "reported mainly to him;" he was thus the primary person who evaluated her work. At *New York* Newsday, Miranda's work was organized by Schanberg. Both her work assignments and criteria of success came directly from him. 70

Miranda's understanding of her responsibilities developed over the course of her work with Schanberg. As a young researcher, Miranda did not arrive with the developed habits and research skills Schanberg required from an assistant. Nor could Schanberg simply "sit her down" and explain what the job entailed. Rather, by assigning her work and regularly evaluating its results, Schanberg communicated his expectations of what her work should be. These evaluations were regularly expressed via "constant dialog and exchange" during the course of the "day to day stuff" she was doing. When Miranda came to Schanberg with the results of her research.

He would always ask, 'Well, what about this?' And I would say 'well, I don't know,' and he would say 'Well you need to find out...You need to know everything about this.' It was almost like, 'How could you not know?'

As a result of these informal but regular evaluations, Miranda "understood very quickly...what [Schanberg] expected" from her. For example, Miranda learned that "it was never acceptable for him to ask you a question about something you had researched and for the answer to be like 'Oh, I don't know." By regularly evaluating her work and communicating his assessments of it, Schanberg effected a change in how Miranda went about her work. She acquired

<sup>&</sup>lt;sup>70</sup> Interview with Carolina Miranda, March 28<sup>th</sup>, 2013.

the habit of "anticipating any questions he might have," and seeking answers for them before her meetings with him. In case she was unable to answer a question she expected him to ask, she made sure to be armed with "reasons" for why she had been unable to acquire the relevant information. These habits were acquired as a result of Schanberg's ongoing evaluations of her work. Through his evaluations, Schanberg taught Miranda that "If you didn't know [something], you had to have a good reason for why you didn't know."

Miranda's work with Schanberg introduces my argument that independent journalism is organized through regular evaluations of work by people whose opinions matter to journalists. Her experience illustrates that periods of distance, in which independence is expressed, are punctuated by evaluations, in which independence is managed and directed. It also shows that evaluations take place in the context of a relationship; they presuppose the relationship and modify or maintain it. In what follows I will elaborate on these claims.

Journalists act deliberately to ensure a steady stream of evaluations in their working lives. A journalist is generally looking for news; she therefore seeks contact with a variety of others. She makes herself available to them, receives news from them, and helps them to publish it. At the same time, she is sought out by those who have news to relate but need assistance in promulgating it. This confluence of motives leads to both evaluation of work and also to connection: the formation of new relationships between journalists and sources;

<sup>&</sup>lt;sup>71</sup> Interview with Carolina Miranda, March 28<sup>th</sup>, 2013.

editors and the reporters and freelancers they supervise; and between consumers and producers more generally. This practice of what I will call "openness" demonstrates that the distance implied in independence is temporary, and purposefully managed. It shows that regular bridging of the gaps between independent parties is a part of the work of journalism. The practice of openness sets the stage for the evaluations and connections that underpin journalism as work.

Editors of freelancers exemplify the practice of openness. An editor like Megan Greenwell of *ESPN The Magazine* "takes a lot of pitches" from freelancers. This is not a passive process, but requires work on the part of the editor, as Dan Kois of *Slate* confirmed. Kois told me he "actively solicits unsolicited submissions" by regularly reminding potential contributors of his contact information and interests. Both Kois and Greenwell stay open, then, to receiving new suggestions from potential freelancers and collaborators. Always on the lookout for new talent, they cultivate an incoming stream of pitches, tips, and contacts with others, thereby ensuring, not only the ongoing availability of information and ideas, but also a body of relationships that can be tapped in the future.<sup>72</sup>

The same open demeanor is evident within a newsroom, where professionals from different beats keep themselves open to suggestions from others. As Mike Juley of the Milwaukee *Journal-Sentinel* described it,

<sup>&</sup>lt;sup>72</sup> Interview with Dan Kois, March 22<sup>nd</sup>, 2013.

Anyone who has a good story idea can go to anyone else in the newsroom and say "hey, I think this might be pretty interesting, what do you think?" A line editor from a different desk could come up to me and suggest a story, I could turn around the next day and suggest a story to them.

Juley described an environment in which each member of the newsroom is available for the others to approach, and open to receiving ideas from them. Despite their independence and the various forms of distance it entails, these journalists are open to news from many sources. By practicing openness, journalists partly bridge the isolation their independence requires.

Openness is not a blanket acceptance of all suggestions. Although editors of freelancers, for example, are always looking to receive new pitches and form new relationships, this openness does not imply an acceptance of everything they are offered. On the contrary, editors regularly reject, ignore, or downplay pitches, tips, and freelancers. Once a tip has been suggested or a relationship solicited, the editor must evaluate the incipient work and assess its prospects. Only on the basis of a positive evaluation will work proceed. As freelancer Eric Hansen describes the process from the point of view of the submitter, "you put [the work] in front of the hanging judge, and wait to hear the verdict." Openness involves hospitality toward exploring and assessing new ideas and relationships, not indiscriminate acceptance of all incoming prospects.

One way for openness to begin to develop into a fruitful connection is through the evaluation of a piece of work. Take the process of "cold pitching"

.

<sup>&</sup>lt;sup>73</sup> Interview with Eric Hansen, March 22, 2013.

through email, where a freelancer without a strong relationship with an editor emails that editor a pitch. According to Dan Kois, now an editor at *Slate*, the pitch email typically contains both an idea for a story and some background information about the writer. Kois normally reads the pitch email for clues it may provide about the kind of work the writer can be expected to produce. One such indicator is the references the writer provides to prior work, or "clips." Kois looks at these clips (often by clicking links in the body of an email) in order to quickly assess the writer's abilities and potential value as a colleague. "As a general rule I'll always click on at least one thing, and read at least a little of it, to get a sense of it," said Kois. By reading clips and getting a sense of them, Kois is better able to decide if he wants to assign work to the person who wrote them, thereby cultivating a relationship with her. Evaluation of work can transmute a short contact into a long-term relationship.<sup>74</sup>

Much of the evaluation of a "cold pitch" is done partially and obliquely. Kois usually selects portions of work to look at rather than an entire submission, for example. "I'll definitely look at something, but I won't look at everything usually," Kois explained. By "glancing at one or two" clips, Kois is able to form a gestalt opinion of the writer without investing too much time in reading. Other shorthands are also used, such as the place of prior publications. "To a large extent I'm also looking at, well, where are these clips?" By relying on the place of publication in this way Kois can let the evaluations of others stand in for his own: "If they send me a bunch of Times clips I am immediately going to take them

<sup>&</sup>lt;sup>74</sup> Interview with Dan Kois, March 22<sup>nd</sup>, 2013.

more seriously than if they send me a bunch of clips from some magazine that I think is really crappy." A third indicator relied on by Kois is the metacommunication expressed by the email's style and content. "The letter itself, the email itself is in a way a clip, because part of that communication is that you're telling that editor 'I'm not crazy, I have good ideas, and I will not make your life difficult if you assign a piece to me." This aspect of an email is "almost as important as the actual ideas contained within it." Thus by "glancing" at work, by relying on previous evaluations by others, and by gleaning evidence of character between the email's lines, Kois efficiently forms a preliminary judgment about whether he wants to assign a piece to a writer or not.

Another indirect way of evaluating work is by estimating its monetary cost to produce. In general, more expensive work is harder to commit to. Such considerations can stand in the way of developing connections, even when the potential connection is between two colleagues working at the same company, as Bethany Swain's experience at CNN shows. CNN uses what Swain calls a "funny money" system, in which programs and other corporate units approve pitches by "paying" for them with an internal currency. When a unit commits to a pitch in this way, the resources required to turn the pitch into a completed package are charged to its internal account. Once the piece has been produced, however, any department in the CNN network, such as a show, an affiliate, or cnn.com, can then use the piece free of charge. Swain explains that this makes the pitch process at CNN "really challenging," as the unit pitched must be

persuaded to make an explicit, up-front commitment of resources. "Trying to get that first person to say 'yes, we'll be the ones to say you can bill us,' that got to be very frustrating," she recalled. The "funny money" system made corporate units hesitant to support pitches because of the costs they entailed. As a factor in the evaluation of work, cost consciousness increased the difficulty of getting pitches approved, and connections cemented, at CNN.<sup>75</sup>

Evaluation often occurs at the beginning of new relationships and strongly contributes to their character. When Dan Kois was coming up as a freelancer, for example, he obtained a meeting with Meghan O'Rourke, the New York editor at *Slate*. For this meeting he prepared a long list of pitches, and then spent the interview running through them, presenting each one in turn to O'Rourke, who took the occasion to evaluate Kois's potential as evidenced by his pitches. One of these pitches she selected as potentially suitable for publication by *Slate*, thereby approving Kois as a promising candidate. By judging his work as potentially suitable, Kois's editor established a relationship with him that eventually led to further work and further relationships. Thus a single meeting became a long-term relationship based in part on the outcome of an evaluation of Kois's work.

The effect of an evaluation is strongly influenced by the relationship between the parties to it. A primary consideration in this context is whether the evaluator is in a position to reward the producer financially. The traditional

<sup>&</sup>lt;sup>75</sup> Similarly, work that will take longer to develop is also more difficult to approve. See Gans, *Deciding What's News*, p. 82.

<sup>&</sup>lt;sup>76</sup> Interview with Dan Kois, March 22<sup>nd</sup>, 2013.

authority of an editor to organize the work of a staff journalist derives in large part from this source. Some editors, however, do not pay their writers, yet continue to occupy the role of privileged evaluator and organizer of their work. They illustrate the centrality of evaluation to journalistic work, regardless of the medium of communication or value.

An editor of a sports journalism website illustrates the work of evaluation in an online context, while also showing the special limitations incumbent on someone who is unable to pay his writers. David Roth is the editor of *The Classical*, a website that was launched with the financial support of around 1200 backers through the funding site kickstarter.com. 77 Although originally there were some thoughts of paying contributors, plans to do so were quickly scuttled. Sixteen months after launch, Roth spoke to me about the work of an editor whose evaluative duties are performed without the ability to compensate contributors.

The difficulties inherent in evaluating others' work were brought home to Roth early in his tenure at *The Classical*, when a writer who had himself edited Roth in another context submitted a piece to him. This submission quickly became a problem for Roth, and eventually opened a rift between the two men. After receiving and evaluating the piece, Roth found himself unwilling to accept it as submitted. Instead of immediately notifying the writer of this, however, Roth

<sup>&</sup>lt;sup>77</sup> The kickstarter campaign promised "smart sportswriting for smart readers. No snark, no cheerleader slideshows, no aggregation: Just brainy sports journalism, every day." See "The Classical," <a href="http://www.kickstarter.com/projects/101341727/the-classical">http://www.kickstarter.com/projects/101341727/the-classical</a> accessed July 15th, 2013.

"put it off" for about a week, so that when he did eventually deliver his assessment, the writer was angry:

We were starting *The Classical* and he sent me a piece; at that point I hadn't figured out issues of workflow, and also I was overwhelmed, and I read it. I didn't think it was totally right, and I was doing an edit on it, but I had to tell him. I'd never done this before; I'd never written an email to somebody being like 'I'm not sure that this is going to work for us, here's my rewrite of it,' and whatever. And I put it off and put it off...I had hung out with him at that point, he had talked about wanting to help out with *The Classical*, and he's done a lot of editorial stuff, and so I considered him part of the team, I was just slow in getting back to him on this feature. And so I finally did, and he was very cross with me and very unhappy and was like 'You've got to learn to treat people better, this is not how you do it; I'm sure you're a nice guy but this is fucked up,' and whatever. I had sat on it for like a week.<sup>78</sup>

Among other things, this excerpt demonstrates that the evaluation of work takes place in the context of a relationship, and that evaluations and relationships jointly determine each other. The fact that Roth had "hung out with" the writer and considered him "a part of the team" colors this excerpt and lends the interaction a special poignancy. The incident also affected the relationship: "I apologized, and I haven't really been very much in touch with him since," Roth told me. A negative evaluation of work combined with the manner in which it was delivered weakened the social bond between two people who had previously had a collegial and social connection. Clearly then, evaluation of journalistic work is ensconced in relationships, affects them, and is affected by them.

<sup>&</sup>lt;sup>78</sup> This and the following materials are from an interview with David Roth, March 29<sup>th</sup>, 2013.

On evaluating the writer's submission, Roth detected a discrepancy between his own idea of what the site was about, and what was conveyed by the piece. "There's an idea that we had for the site about what it's going to be," Roth says. He uses this idea or "general aesthetic" to guide his evaluations of work: some pieces are close enough to it that they can be edited into a shape reflective of the site's values and standards. Others are simply too distant. "To the extent that I can steer a piece back towards our general aesthetic I'll try to do it, but some pieces are just not about what we're about." Thus evaluation of work means examining work to check its compatibility with certain general ideas or standards that the place of publication represents. On the outcome of this evaluation hinge the prospects for collaboration and connection between a writer and an editor.

Another factor here is that Roth's evaluation of another writer's work mattered to that writer. By this I mean that a positive evaluation from Roth would have been a boon to this writer, while a negative one was a problem and a blow of some kind. Roth understands the impact commanded by his evaluations as a kind of power, and so should we. Early in his tenure as editor of *The Classical*, he struggled with it: "It was weird to me: the power dynamic of being an editor was new because I had not been on that side of it...Really there's a lot more power and responsibility, even being an editor for a site that doesn't pay, than I was ready for." Even as an editor without money to distribute, Roth found that he

mattered to other writers because he had the power to affect them both positively and negatively.

Roth's power stems from two primary sources of non-monetary value that he is in a position to distribute. One source of value is the prospect of having one's name associated with *The Classical*. In part because Roth edits a popular and respected site, certain writers consider that publishing there will "help them professionally down the line." In addition to this increased visibility, Roth offers writers his own time, attention and care as an editor. Like any editor, he aims "to work with [writers] making the piece better, and hopefully if I work with them enough times, working with them as a writer, to actually make the stuff better that they're doing." Roth's editorial attention thus benefits writers by deepening their tradecraft. "The power that I have is to help," he summarizes.

In return for his time and imprimatur, Roth expects writers to be open to his edits. He asks them to "work...through as many drafts as I feel like is responsible to ask someone who's writing for free to write." This can be a delicate process, as not everyone accepts edits gracefully (and not all edits are acceptable). Sometimes a writer will go through several drafts and then "pull a piece back," which Roth finds annoying, though he feels he "has to be gracious about that." Presumably though, writers at least consider the benefits they will gain from publishing at *The Classical* when making the decision to accept an edit or not. It also seems likely that at least some writers acquiesce to edits they don't necessarily want, partly in order to get the benefits attached to publishing in *The* 

Classical. It is, after all, the ability to induce others to perform actions that they are not inclined to perform that leads us to use the term "power" at all. 79

In general though, Roth argues that his power is limited as editor of *The* Classical. First and foremost, He is not able to pay his writers, which weakens his position considerably. Second, Roth "needs" writers because "the site wouldn't exist without them...if they're not there then the site is not populated." As a result of these countervailing factors, Roth cannot give orders or curtly dismiss work. Rather, and in part because of his limited power, he goes out of his way to "prioritize [writers'] stuff" and to "be a good editor and a good collaborator." Even when he is obliged to reject work, he does so as tactfully as he can. "I can't afford to send the three word rejection that some editor at a bigger magazine or website could send, because they may not come back." By respecting his collaborators and benefiting them as writers, Roth attempts to show them that the effort required to publish at The Classical is worth their while. "That's the incentive for me to do a good job editing," he says. "There has to be a reason for them to want to do it for us instead of taking it someplace and maybe getting \$150 for it." Thus, Roth tries to make up for his lack of money by being especially helpful and respectful towards his writers. He cannot be short with them and he cannot order them around. In the end then, "there's still some of 'I am the editor and they are the writer,' but it's a lot closer to the bone in both ways, because how else is it

<sup>&</sup>lt;sup>79</sup> Interview with David Roth, March 29<sup>th</sup>, 2013.

going to be?" At bottom Roth is ambivalent about just how much power he wields. "Not a lot, really," he told me at one point. 80

Thus far I have considered cases in which evaluation was performed mainly by a single person working directly with another. The nature of journalistic work, however, is such that it is eventually seen by all kinds of unforeseen others. As journalist Stan Alcorn puts it, "one of the good things about media work in general is that your work product is out there for all to see."81 Journalistic work is continually received and evaluated by other people, not necessarily known to the journalistic producer, whose opinions and impressions can matter significantly for her future prospects. When Jim Nelson was hired at the Milwaukee Journal Sentinel, for example, the City Editor knew his byline, and "she knew it well."82 The dynamic can also be evident early in a journalist's career. Lane DeGregory landed her first full-time newspaper job based in part on her reputation as a college journalist. "For four years they'd seen my byline," she said. "The people who were covering the University of Virginia through the local paper already knew who I was."83

This is equally true online. After Rich Juzwiak had been running his blog for about a year, he was hired by VH1, based "entirely" on the evident quality of the work he did on that blog. "Someone emailed me and said, 'We like your blog.

<sup>&</sup>lt;sup>80</sup> Roth also relies on a kind of shared sensibility to smooth interaction and limit discord. "People are pretty well attuned to what we're trying to do," he says, in part because "it takes a self-selecting group of people to be pitching a free site in the first place."

<sup>81</sup> Interview with Stan Alcorn, April 11, 2013.

<sup>&</sup>lt;sup>82</sup> Interview with Jim Nelson, February 8<sup>th</sup>, 2013. <sup>83</sup> Interview with Lane DeGregory, February 14<sup>th</sup>, 2013.

We're starting a blog about our reality shows and we want you to do it,' Juzwiak told me. 84 Similarly, Neetzan Zimmerman gained admirers through publishing his blog The Daily What, which he eventually sold to a company (Pet Holdings) that then employed him full time to continue growing the blog. These writers built reputations online which they then used as stepping stones to professional advancement.85

Although Alcorn's comment signals the positive side of evaluation by unforeseen others, these evaluations can impact a career negatively as well. As Ron Smith of the Journal-Sentinel says, "Your reputation can precede you, and it can also impede you." Smith's comment draws attention to the potential risks involved in having others evaluate the work one does. "Editors tend to have very long memories," said Mark Johnson of the *Journal-Sentinel*. "I've seen it happen: people made one or two mistakes and never got out of the doghouse." Thus evaluation by others – whether foreseen or not – can damage a career as well as propel it along.

In between the two extremes of a single privileged evaluator and an undifferentiated public lies a whole range of configurations of relationships with evaluators. Mark Johnson of the *Journal-Sentinel*, for example, relies on people he calls "mentors" to obtain feedback in the fairly early stages of writing a piece, whereas he is unlikely to solicit feedback from an editor at this early stage. As Johnson says, "I never want to present an editor with something I have grave

<sup>84</sup> Interview with Rich Juzwiak, April 11<sup>th</sup>, 2013.
 <sup>85</sup> Interview with Neetzan Zimmerman, March 10, 2013.

doubts about." Johnson presents early-stage work to mentors instead, in the hopes that they will "save [him] from making a fool of [himself]" by ferreting out any "major holes" that Johnson has not yet detected in a story. The impact of these people's evaluations is thus *different* from that of an editor: Having a mentor find a major hole in a story is more acceptable to Johnson than having an editor find one. Part of being a journalist is stepping into and out of these different configurations of others who matter.<sup>86</sup>

Evaluation occurs whenever journalistic work is scrutinized for its potential value as news. This includes formal evaluations, as when an annual review process is instituted at a company. It also includes informal evaluations, as when an editor gives a pat on the back or says "good job." Ron Smith of the *Journal-Sentinel* demonstrated a flexible understanding of evaluation as potentially taking formal or informal garb. One of Smith's job responsibilities as a manager is giving reviews to the people he supervises. Having fallen behind in this work, Smith was notified by one of his team members that her review was still pending. "I haven't gotten a review," she said, to which Smith replied: "But you have gotten feedback. I haven't written down what we said but you have gotten three or four feedbacks from me." Smith's comment demonstrates that journalists understand evaluation as potentially taking on different forms and levels of formality.<sup>87</sup>

Smith's comment also introduces the notion of "feedback" as the actual delivery of an evaluation to the journalist whose work is evaluated. This is an

<sup>86</sup> Interview with Mark Johnson, April 8<sup>th</sup>, 2013

<sup>&</sup>lt;sup>87</sup> Interview with Ron Smith, February 15<sup>th</sup>, 2013.

important component of the organization of independent journalists. By delivering an evaluation as feedback, the evaluator completes the cycle, so to speak, and brings home to the journalist the results of the evaluation. When evaluation is delivered as feedback the journalist gets a chance to evaluate the evaluation, so to speak, and decide what to do with it. The journalist may accept the feedback as valid and modify her behavior to be in line with it. She may ignore the feedback, or partially accept it. As Ron Smith told me, "The other part of feedback is: What do you do with it." By referring to "feedback", we highlight this active delivery of an evaluation to a journalist, along with that journalist's response to the evaluation.

Some journalists take an active role in soliciting and obtaining feedback. Ron Smith, for example, told me that he has "always asked for feedback." "I've tended to be really assertive about that," he says, even to the point of requesting feedback from people that others in the newsroom regarded as hard to approach. Thus the delivery of feedback is not an automatic process, but an outcome that depends on the amount and quality of the listening done by the producer. In a later chapter I will argue that Demand Media, a new media content producer built around audience measurement algorithms, pushes this tendency to an extreme. The point here, however, is that for independence to become organized, evaluations must be delivered as feedback to one who is open to receiving them.

88 Ibid.

<sup>&</sup>lt;sup>89</sup> *Ibid.* 

After a while on the job, journalists understand that some people prefer certain kinds of work and reject others. This understanding is developed through the continued reception of feedback. As work is submitted to others who matter, whether they are peers, mentors, superiors or audiences, the work is evaluated and feedback is delivered. The feedback itself is then evaluated and either used or ignored. Over time this repeated feedback cycle modifies the journalist's habits of work. The journalist who has become familiar with receiving a certain kind of feedback from a certain quarter comes to anticipate evaluations before receiving them. This anticipation then guides and organizes her work. She integrates the expectation of evaluation into her working routine. She has become "socialized" by the repeated reception of feedback. 90 I will now discuss the anticipation of evaluation in terms of the organization of independence in journalism.

The anticipation of another's evaluation modifies work by including that other as a participant in it. Patrick Marley of the *Journal-Sentinel* says that as a story develops, he begins to have a sense of which editors will get involved with it early on. "You get a hunch usually," he said. "The bigger deal a story is, the more likely you're going to hear something from somebody higher up." Even if he doesn't hear from an editor he "knows he'll have their interest" if the story is a "bigger deal" story. <sup>91</sup> This sense of others being interested is then present during his work. Even though Marley has not talked to them or notified them of any developments, they are a factor in his work on the story. Even if Marley is far

Warren Breed, "Social Control in the Newsroom: A Functional Analysis," Social Forces 33(4), May 1955, pp. 326-35.
 Interview with Patrick Marley, February 25<sup>th</sup>, 2013.

from these editors, out of contact with them, and deliberately excluding them from full cognizance of the developing story, they are in a real sense present to him. This kind of presence through absence organizes work by including another in it.

As a story develops, the journalist not only senses the upcoming involvement of evaluators who matter, she plans this involvement and shapes her activity in expectation of it. For her part, freelance investigative journalist Teri Buhl considers potential places of publication early in the story development process. Upon first receiving a tip or discovering a potential story, she starts to think about what publications might eventually buy it from her, and she begins to weigh the pros and cons of bringing a story to one outlet rather than another. In deciding where to place the story, she considers various factors including the subject matter and tone of the story, how much money the story can bring her, how important it is that the story reach a broad audience, and where her source wants the piece to be published. All of these factors play into her conception of where she will publish the piece. Buhl told me that if she were not thinking in this way, early in the story development process, she would be "wasting [her] time." 92 Nor is this aspect of newswork limited to freelancers. Daily newspapers maintain a "news budget" comprising the stories being worked on for the next edition of the paper. Each entry in the budget represents a story by its most salient details, including the "lede" or summary sentence and the number of inches it is expected to occupy in the paper. Dan Egan of the Journal-Sentinel told me that

<sup>&</sup>lt;sup>92</sup> Interview with Teri Buhl, March 28<sup>th</sup>, 2013.

"inches" is "code" for placement and hence importance. In order to "send a message that it's a front page story," Egan said, "you estimate the length longer than it would be if it were on the local section because the local section can't run stories as long." In constructing the story's budget entry then, the reporter is judging the story's importance from the standpoint of the editors in charge of placement. Thus both freelancers and newspaper employees develop a story with an eye to the evaluators who will most influence its eventual disposition. <sup>93</sup>

In fact, the story itself takes shape in part based on the expected placement it will eventually attain. Certain edits and cuts, for example, can be traced to their being directed toward one evaluator rather than another. Teri Buhl describes how she sometimes takes parts of her stories that an editor chooses not to print, and places them at her own news site, teribuhl.com, thus removing them from that editor's oversight.

I would write more opinion on [teribuhl.com] too, stuff the editor wouldn't let me get in, and I speculate a lot more there, like "this has happened, this is what I reported, but here's what I'm thinking that I don't know." You know, "Joe just stole 5 billion from his hedge fund, but I don't know if his wife is involved," that kind of thing. When in reality I probably have a source that told me she is [involved], I just don't have enough to back it up to print that yet. So I'll write it as a speculative question, which I'm allowed to do.

Buhl's standards for publication at teribuhl.com thus differ from some of her editors. Another type of content some editors shy away from, and which Buhl includes at teribuhl.com, is what she calls the "human aspect" of stories, a rubric

<sup>&</sup>lt;sup>93</sup> Herbert Gans notes the impact on journalists of expected *audience* reactions: "Insofar as [the audience's] allegiance must be maintained, its viewing and reading behavior even affects, to some extent, the choice of sources by journalists." *Deciding What's News*, p. 81.

under which she includes marital infidelities and other "dirty details." Opinion, speculation, and the "human aspect" thus comprise a separate editorial realm of values and standards peculiar to teribuhl.com, making some stories suitable for publication there rather than elsewhere. In publishing there Buhl may extract certain parts of a story, originally directed toward one evaluator, and direct them instead toward a publication over which she herself exercises primary editorial oversight. Thus a single article is split in two, largely based on the divergent editorial ideas of two different evaluators. Clearly then the expected evaluator exercises a strong influence over the final content of the published work itself.

The initial assessment of the expected interest of other appraisers can have drastic consequences on the arc of a potential news story. Sometimes, Buhl said, she is forced to "pass" a story to a "staff reporter friend," even though she is convinced of its news value, because she cannot think of a publication to which she might sell it. "I hate to do it," she said, "but occasionally I will because it's important news and it needs to get out." Thus the lack of a foreseeable publication outlet for a story can render the story practically unwriteable by a particular journalist, despite its news value.

These cases demonstrate the impact of evaluation on the organization of independent journalists. When a journalist has received feedback on work from others who matter, she comes to shape her own work in expectation of their evaluations. Thus the evaluation of work by others who matter organizes the work of journalism, even in the case of a journalist working at a distance from

these evaluators. Because these evaluators will eventually receive her work, and because their evaluations matter to the journalist, they are anticipated and brought into the work itself. They thus organize the work despite its distance and despite their lack of direct involvement in it.

I have argued that a sense of impending evaluation by one or more others who matter organizes independent journalism as work. I should now stress, however, that this organizing factor can only be taken so far. No matter how much impending evaluation looms, it is only one factor in the mix determining the outcome of work. In particular, it must be reconciled with the independent journalist's own values and standards. No matter how socialized a journalist has become through the feedback of others who matter, she will still retain not only her own sensibilities but also her own values and standards which may conflict with those of others. Thus the outcome of journalistic work will always be internally diverse, reflecting the various individuals who have contributed to it.

Nevertheless, journalists often come to share values and standards with the others who regularly evaluate them. Dan Egan of the Milwaukee *Journal-Sentinel*, for one, expressed strong compatibility between his own evaluations and those of his editors. "You could have three people write the same story," said Egan, "and if it was a certain person, odds would be much better that that story's going to go on the front page, just because that person's probably better." Here Egan shows his understanding that editors reward work because the work adheres to values and standards that he himself prizes. In this view a work is

positively evaluated because editors see its good qualities, not because it was written by a certain person. Egan explicitly discounted the possibility that editors let social relationships prejudice their evaluations: "In some cases maybe it's favorites, but usually in my experience the favored reporters deliver and that's why they're favored." Egan argues that, in general, the reporters in his social environment are rewarded based on the quality of the work they do, and not for the relationships in which they stand to influential evaluators. He thereby shows the compatibility between his values and standards and those of his editors. <sup>94</sup>

## Conclusion

In this chapter I have put forward a framework purporting to show how independent journalists are organized. The framework consists of a notion of independence as well as a mechanism which organizes it. I have argued that independence consists of two components: first, of the distance which screens an individual journalist from those who evaluate her work; and second, of the sensibility which uniquely connects her to the materials of her work. I have argued that independence is organized in a particular manner, namely through the evaluation of work by others who matter, and the delivery of evaluations as feedback. I have argued that over time, journalists come to incorporate the results of such feedback into their production routines, so that their ongoing work becomes partially shaped and determined by their own expectations of the evaluations others will make of their work.

<sup>&</sup>lt;sup>94</sup> Interview with Dan Egan, April 12<sup>th</sup>, 2013.

I have tried to show in this chapter that even highly autonomous journalists incorporate contributions from others who are relatively uninvolved in producing their work. These contributions make an impact because the independent journalist is in a relationship with these others, who regularly evaluate the journalist's work from privileged positions of power. Insofar as the journalist anticipates evaluations from others who matter, her work takes on a form that reflects the contributions of these distant others, despite her lack of contact with them. In this way a work of journalism becomes a product that, while being primarily attributable to a single individual, nevertheless reflects a diversity of influences within it. When contributions from different parties hang together in this way, journalism is characterized by both organization and independence.

The tension between organization and independence is a constant one in journalism. Because journalism depends on communicating its products to others, the expectations these others have of what should be produced will always stymie somewhat the desires of individual journalists to produce work according to their inmost inclinations. This chapter has not sought to resolve this tension or discover a fixed point at which we can declare a work to have attained or lost its independence. Rather, the aim has been to establish a framework within which these questions can be raised and discussed in a common terminology.

This chapter has detailed the general factors that are found in an organization of independent journalists regardless of the medium of

communication and value. In the coming chapters I will specify and fill out the framework as I dwell at length on particular, larger scale forms of the organization of independent journalists and media producers, both algorithmic and traditional. In the next chapter I turn to the organization of independent journalists in the corporate, non-algorithmic context. I then consider Google Search as an algorithmic example of the organization of independent media producers.

## Chapter 2: News Departments and the Corporate Organization of Independence

In his work Deciding What's News, Herbert Gans describes a process he calls the "buying and selling" of the stories that make up a network news program on a given evening, or an issue of a news magazine. In this process, "story selectors" pick and choose among stories "offered" to them by "story suggesters." Because story selectors are awash in story ideas and because time and space are scarce, suggesters "highlight" the most "novel," "dramatic," "unusual," "important," "distinctive," in a word, the most "salient" aspects of the story being sold, in order to catch and hold the attention of selectors and eventually get a story published. A story's development from idea to publication proceeds in stages as it is passed between buyers and sellers: for example, a story may start with a source selling a reporter, who then sells a bureau chief, who sells a section head, who finally sells a top producer. Throughout this process, highlighting proceeds in "a spiraling manner," as each link in the chain refines and re-highlights an already highlighted story idea. The final news product then, is "often the highlights of highlights." 95

This description discloses the existence of a corporate hierarchy. In the process of story selection here described, each link in the chain from reporter to

91

<sup>&</sup>lt;sup>95</sup> Gans, *op. cit.,* pp. 90-3.

top editor is also an ascending step in a hierarchy of supervision. As the highlighting "spirals," stories travel up this chain, and are winnowed down to only a few selected characteristics. This process reflects the organized, ordered news judgment of a hierarchy, with final selections made by those few at the top among choices which have already been whittled down by previous layers of subordinates. Most cases of the relationship between a "story selector" and a "story suggester" are also cases of the relationship between a superior and a subordinate, while the role of "selection" itself is preeminently a managerial one rather than one carried out by staffers. Hierarchy is easily impressed into the service of guiding, shaping and prioritizing the selection and production of journalistic works.

It is a strength of Gans' description that it does not define story selection in terms of hierarchy, but rather as a series of transactions between buyers and sellers. For this broader, more flexible language allows us to transcend the bounds of any single hierarchy, and calls attention to a process that is shared by participants both inside and outside of it. Thus the first story suggester in the chain, namely the source, is not a member of the news organization's hierarchy at all, and superiors sometimes sell to subordinates. By using the language of buyers and sellers then, Gans helps us conceive of story selection and production as a process not strictly bounded by a single corporate hierarchy and capable of flowing outside of it, or between several different hierarchies.

By the same token however, Gans' description of the organization of story selection draws attention away from the specific relationship between hierarchy and the organization of independent story selectors and producers. Furthermore, although his work contains a careful description of the hierarchical structure of the news organizations he studied, and although much of this account is readily available for the study of the organizational factors of interest to this dissertation, some of it is less available, being either particular to those organizations or not about hierarchy at all. There is therefore value in attempting to isolate the structure and function of hierarchy from other considerations in the organization of story selection and production by independent journalists. My purpose here is not to take issue with Gans or other students of journalistic organization, but to build on their work, by adapting it to the study of the phenomena of interest to this dissertation, while supplementing it with my own findings.

The goal of this chapter is to isolate the role of managerial hierarchy in the organization of independent journalists. In this chapter I demonstrate the extent to which the specific features of managerial hierarchy are adaptable to selecting news and shaping its production, while maintaining a balance between organizational coherence and individual autonomy. Thus my focus in this chapter will be to explain the phenomena of journalistic selection and production not only in the terms of managerial hierarchy, but also as a result of it. At the same time, I recognize that such a hierarchy is merely one manifestation of the more general process whereby the organization of selection may be interleaved with the

production process. I will be covering other examples of this organization, which partake less of managerial hierarchy, in later chapters. My larger goal is to put these chapters in conversation with each other, so that the general organization of selection and production by independent media producers can be seen along with some of its specific variants. Thus, as I describe the role of managerial hierarchy, I try to prepare the reader to see other forms of organization which share the same broad structure and function.

This chapter develops the concepts introduced in chapter 1 by placing them in the context of the form of organization characteristic of twentieth century American journalism: the corporate news department. This brings the dissertation into closer contact with the stronghold of recent American journalism, namely large newsrooms professing allegiance to objectivity. At the same time, it demonstrates the value of treating organization and independence in isolation from objectivity. For although the corporate structure explored in this chapter is capable of supporting the objectivity norm, and although objectivity will be seen in operation in this chapter, the same form of organization is amenable to expressing and maintaining other normative commitments. The aim of this chapter will therefore be to elicit the corporate organization of independent journalists in general.

The question I ask in this chapter is: how does a managerial hierarchy organize independent journalists? The claim I defend is that it organizes journalists as a hierarchy of managers and staffers working together in what I will

call a "news department." I argue that a news department based on a managerial hierarchy is capable of supporting independence while also permitting coherent organization, and I describe the news department as a balance between these two factors. I begin the chapter with a discussion of the corporate context of a news department, and an examination of the role played by hiring and termination in the maintenance of journalistic independence and distinction. I then consider supervision, whereby some journalists direct the work of others. Finally, I consider the work of arranging the stories of a news report as an example of the hierarchical organization of independent journalists. I argue that together these practices constitute a particular way of organizing independent journalists while permitting the expression of journalistic distinction at the level of the organization as a whole. Throughout, I attend to the simultaneous presence of hierarchy and autonomy among members of news departments. I argue that this form of organization has shaped American journalism's understanding and practice of independence throughout the twentieth century, and remains with us today.

## The News Department as a Distinctive Hierarchy

Journalists in the United State have traditionally been organized in departments or divisions of corporations. In this form of journalism, what I will call a "news department" is a distinctive unit within a larger corporation. In a news department, one leader occupies the top position, and many others work under the leader. In other words, a news department is a hierarchy. However, its top

leader is not the leader of the corporation – is not its chief executive. Rather, its top leader also has a boss and is at least formally subordinated to that boss (whether called a "publisher," "chief executive," or other name). Thus a news department is an internal unit, a hierarchy within a hierarchy. Many terms have been used for the leader of a news department, including "editor" and "executive producer," but each of these presumes a particular medium. I will therefore use the term "top news manager" to refer to a leader in a news department. <sup>96</sup>

A news department is located inside a corporation. Such corporations vary widely in their ownership structure: some are public companies traded on public securities markets, while others are privately owned by founding families. There are also hybrid voting structures intended to permit families to exercise control despite being publicly owned. Finally, some are not-for-profit corporations.

Despite this variety, such corporations in the United States are created and sustained by private individuals using private funds. Although city, state and federal governments have many ways of influencing journalists, formal ownership and control of corporations by government at any level is historically alien to

responsible for a single publication only. Nevertheless, in this chapter I deal largely with single-

publication hierarchies, as Gans does.

<sup>96</sup> Herbert Gans uses the term "news organization" not to refer to a journalistic hierarchy

in general but to refer to a journalistic hierarchy that is directly responsible for the production of a specific news publication with a certain format and periodicity, such as a specific evening news program or a specific news magazine. Gans, *op. cit.*, p. 83. Thus, in the television news firms, the "top producer" leads a "news organization" but his boss, who presides over the network news division as a whole, does not. In my usage this is potentially a case of a news department within another news department. Likewise, in the case of a "converged" newsroom producing for say, a newspaper and a web site (such as the Milwaukee *Journal Sentinel*), a single news department may house multiple media. In general then, it should not be assumed that a top news manager is

American journalism. Following Gans, I will use the term "news firm" to mean a corporation containing one or more news departments. 97

News departments are hierarchies. By this I mean that every employee of a news department has a manager, while every manager has potentially many subordinates. The relationship between manager and subordinate occurs at every level of the news department (and of the corporation as a whole). At the lowest level, what I will call "first-level news managers" oversee "news staffers." One level above that begins "middle news management," in which news managers oversee other news managers. A news department might have any number of levels of middle management. Finally, at the top level of the news department is the "top news manager." This manager oversees the entire news department, and reports to someone outside of and above it. The form has a pyramid shape, whether tall or short, fat or thin, or somewhere in between. I will use the term "news employee" to refer to one of its occupants, at whatever level.

A news department is a way of organizing *journalism*. By this I mean that the news department as a whole is distinguished from other organizations by its dedication to the practice of journalism rather than some other practice. The members of a news department are aware, in varying degrees, of the distinctive character of their organization and consciously seek, in varying degrees, to maintain it. They share a normative orientation toward the proper way of practicing journalism, and reference this norm in maintaining their distinction from

<sup>&</sup>lt;sup>97</sup> Gans, *op. cit*, p. 83.

others. Although most American news departments have historically professed the objectivity norm, the news department as I define it is not necessarily dedicated to objectivity. It is, however, governed in part by *some* journalistic norm or broadly compatible cluster of norms. Of course, a news department's adherence to these norms is never total, and different members may perceive the norms differently or adhere to them with more or less intensity. Nevertheless, such norms will be found wherever a news department persists as a distinctive organization. By practicing a certain kind of journalism rooted in a vision of what journalism should be, a news department maintains a distinctive identity vis-à-vis other organizations, departments, and individuals.

Take the example of what is sometimes called an "independent" newspaper – one which is not under group or chain ownership. Such a corporation is headed by a publisher, the chief executive at the highest level of the corporate hierarchy. Below the publisher there is a second level of departments (advertising, circulation, and so on), each one of which is itself a hierarchy supervised by a single department head. Only one of these departments is explicitly dedicated to the practice of journalism. This is the 'news' or 'editorial' layer of the hierarchy – a news department. The situation is similar in a newspaper under group or chain ownership. Unlike an "independent" paper however, the publisher of a newspaper under group ownership is not the chief executive of the corporation, but rather a middle manager. Thus, family-owned and group newspapers are different kinds of corporations. Nevertheless, both

contain news departments: distinct, hierarchically structured corporate units dedicated to the practice of journalism.

A news department brings many individuals together into a coherent whole. It draws its employees together under a clear structure, and encourages contact between them. They conduct its daily operations and maintain its procedures, traditions, and values. They take responsibility for the continued operation of the organization, for the quality of its work, and for its continued dedication to journalism. In spending large portions of their waking lives in each other's company, a news department's journalists attain in some degree a shared identity that distinguishes them as members of one organization in particular.

## **Employment Transitions**

The journalists in a news department are bound together by employment contracts. When a journalist is hired by a news department, she becomes a member of it and starts to work for it. From that time on she is involved in relationships with other employees of the news department. These relationships continue for a period of time, and eventually come to an end. In this section I will consider how employment begins and ends, and its role in maintaining the news department as an organization dedicated to a distinctive perspective on the practice of journalism.

Employment begins with hiring. From the time an employee is hired, she works alongside the other employees of the news department. She takes her place inside a structured and pre-existing environment, and commits to working

in specified ways for the news department. She also agrees to follow the directions of her supervisors, within broad professional, ethical, and legal limits. <sup>98</sup> Within these limits, the employee's skills are placed at the disposal of her manager, who organizes and directs her work activities. <sup>99</sup> Hiring serves to orient the new employee within the hierarchy, and to introduce her to her position within it. It establishes shared expectations about what kind of work the new hire will be expected to perform, and about who will direct and organize it. In short, hiring a new employee begins a period of supervised work within a news department.

An employment relationship brings the news department an increased capacity for work throughout the period of employment. As a condition of her employment, the new employee offers an ability and willingness to do certain kinds of work. The new employee can then be put to use in those areas: she can be assigned to fill holes in coverage, or brought in to start a new initiative. She can take a position left vacant by an employee who has left the company or changed positions internally. She can also "fill in" by temporarily performing work normally handled by another when that other is unavailable. Or she can serve as an adjunct or assistant in ongoing work. In such ways hiring amplifies the news department's capacity for work.

.

<sup>98</sup> Cf Herbert Simon, *Aministrative Behavior, op. cit.*, p. 179.

<sup>&</sup>lt;sup>99</sup> Robert H. Giles, *Newsroom Management: A Guide to Theory and Practice*, Indianapolis: R.J. Berg and Company, 1987, pp. 124-6.

Internships are a special case here in which the new worker is less immediately useful, but may benefit the company in the future after receiving on the job training. Interns are also used for work requiring less experience and skill.

But this increased capacity comes at a cost, especially in terms of capital expended on salary and benefits, along with the time spent hiring and training the new employee. As much of this cost is ongoing, the investment tied up in the employee cannot be freed for other uses for the duration of the employment contract. Hiring is thus a commitment of resources which cannot be used for other purposes. Furthermore, as I will argue below, throughout this period the employee possesses some autonomy in shaping her work, for better or for worse, according to her own desires and judgments. To this extent the employee is destined to have an unpredictable and uncontrollable impact on the organization. These factors together render the employment relation both consequential and risky, a significant factor shaping the news department's future prospects. <sup>101</sup>

The decision to hire a news employee is therefore taken with care and consideration. The process takes an extended period of time and involves consultation with multiple stakeholders at different levels of the news department. In matching an employee to an open position, various parties evaluate and assess each other. Members of the news department (and sometimes others) inquire into the background, skills, and attitude of each prospective employee, while the prospective employee considers things like the output of the publication, its work environment, compensation, and prestige. 102 It can take

<sup>101</sup> For a recent study that finds employers emphasizing risk mitigation in hiring in the Australian context, see John Austin and John Cokley, "The Key Hiring Criteria Used by Journalism Employers" Australian Studies in Journalism, no. 17, December 2006, pp. 74-89.

<sup>102</sup> Interviews with Mark Johnson, Tom Daykin, and Mike Juley.

weeks to hire for a new position, and candidates are often subjected to long rounds of interviews and aptitude testing. Depending on the new hire's reputation and previous experience, concerned parties might also assess the potential impact of the new hire on their own positions inside the news department. 103 Hiring is thus a complex process often involving prolonged deliberation and negotiation among multiple stakeholders. 104

When we bring in someone like a reporter for instance who might be applying for an open position, we put them through [laughs], it's a day's worth of interviews with all sorts of different editors and reporters in the newsroom so that at the end of the day when they leave, in the coming days the managing editor would then bring you in, and he would have maybe seven or eight people giving him feedback on how this person was...they would get as many people involved in the hiring process as possible. 105

Because hiring is significant and consequential to a news department's capacity for work, it is centralized in the upper levels of the news department. At the Milwaukee Journal Sentinel, although many individuals are consulted about potential new hires, the final decision in news department hiring is taken by the editor and the managing editor. 106 Some departments, in contrast, may delegate the hiring decision to the news manager who will be directly supervising the new hire. 107 Regardless, in both cases hiring is performed by a news manager rather than a news staffer.

<sup>&</sup>lt;sup>103</sup> For insight into the kind of machinations that are involved in transferring an established journalist into a new position, see John F. Stacks, Scotty: James B. Reston and the Rise and Fall of American Journalism, Little, Brown and Company, 2003, pp. 89-90.

104 Isikoff pp. 96-7

Interview with Mike Juley, March 29<sup>th</sup>, 2013.

<sup>&</sup>lt;sup>106</sup> Interview with Mike Juley, March 29<sup>th</sup>, 2013.

<sup>&</sup>lt;sup>107</sup> Interview with Jim Nelson, February 8<sup>th</sup>, 2013.

The hiring process is a means used by news managers to shape the journalism of the news department. Insofar as news managers cannot exercise a constant and direct control over their subordinates' day-to-day activities, they must rely on intermittent and indirect means of control instead. 108 Hiring is one such indirect means. Once a new employee is hired, their autonomy will continue to impact the news organization for the duration of the term of employment. Therefore news managers seek to guide that future impact in a preferred direction by making informed hiring decisions. By studying and assessing a candidate, news managers believe they can more effectively predict an employee's future impact on the department. By making hiring decisions informed by accurate assessments of candidates, news managers aim to install employees who will use their own autonomy to behave in accordance with the expectations of the hiring news managers. In this way, news managers use hiring to increase the likelihood that newswork will be performed according to their expectations. 109

Hiring offers a news department a chance to distinguish itself from other organizations and individuals. News managers hire employees to practice journalism rather than some other occupation. They therefore select employees likely to behave in accord with the norms of journalism as they understand

108 Gaye Tuchman, *Making News: A Study in the Construction of Reality*, Free Press, 978 p. 56

<sup>1978,</sup> p.56

109 As Herbert Simon phrases the general issue: "When persons with particular educational qualifications are recruited for certain jobs, the organization is depending upon this pre-training as a principal means of assuring correct decisions in their work." Herbert A. Simon, *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations*, Free Press, 1997, p. 13

them. 110 These norms define the news department as a place in which journalism is practiced rather than some other occupation. Because the employee will have significant autonomy on the job, managers try to hire people who will use this autonomy to make choices compatible with journalism as they understand it. In making these hiring choices, managers maintain and develop the news department as an organization dedicated to a specific approach to journalism.

A good illustration of this function of hiring is given by Gans. The news departments studied by Gans shied away from hiring "ideologists." or people with "conscious and consistent political viewpoints." These people were not hired because editors expected them to be unwilling or unable to perform their work in the way editors wanted it performed. Specifically, they were expected to fail in properly applying what Gans calls "source and suitability considerations, especially balance." They were also expected to continually pursue the same kinds of stories, inducing boredom in colleagues and presumably in readers. It would therefore be "too much work to argue with...and edit" them. 111 Thus the hiring editors expected that the journalists they hired should behave in accord with the norms of journalism as they understood them, including the objectivity norm. 112 By excluding such individuals from working in a news department therefore, the editors maintained its specifically journalistic character.

<sup>&</sup>lt;sup>110</sup> Gans, *op. cit.*, p. 184.

Garle, op. 5td, p. 191.

Garle, op. 6td, p. 191.

Garle, op. 6td, p. 191.

A five country study conducted by Thomas Patterson, Wolfgang Donsbach, Paolo Mancini, Jay Blumler, and Kent Asp found that a plurality of American print and broadcast journalists consider objectivity to mean "fairness" or "balance," specifically: "expressing fairly the position of each side in a political dispute." Thomas E. Patterson, "Political Roles of the

An employment relationship might come to an end in various ways. The employee may quit or get fired; she may retire after years of distinguished service; or her employment may end in an ambiguous way. In between these moments of termination, an employment relation might be renegotiated several times. These transitions not only modify the terms of employment, they also express and delimit the character of the news department and the independence of the people who make it up.

Terminations are diverse; there are many ways to end an employment relationship. Two broad classes of termination are "quitting" and "firing," but terminations may also fall somewhere in between. I will begin my discussion of termination with firing, a dramatic act in which the employer unilaterally severs the employment relationship.

An employee is at risk of being fired when she behaves in a manner that management decides reflects poorly on the news organization. The offending behavior may involve a range of transgressions, from personal matters to more strictly professional conduct. Lane DeGregory's editor at the Norfolk Virginian-Pilot, for example, was fired for writing a headline which violated the objectivity norm. <sup>113</sup> Ron Smith on the other hand, once had to fire an employee whose drug

Journalist," in Doris Graber, Denis McQuail, and Pippa Norris, eds., *The Politics of News, The News of Politics*, Washington, D.C: CQ Press, 1998, p. 22.

<sup>113</sup> Interview with Lane DeGregory, February 14<sup>th</sup>, 2013. The headline asserted that a candidate for sheriff had accepted a bribe, even though the candidate did not use the word "bribe" to describe the transaction and denied that bribery had occurred. This headline thus violated objectivity by going beyond facts that could be attributed to others, to drawing conclusions and inferences from reporting. It also exposed the paper to a lawsuit from the candidate (which he in

use became a problem in the work environment. 114 In each case the firing expressed a disconnect between the norms of the news department and the behavior of the employee fired. It therefore served to clarify and express the news department's specific normative orientation towards journalism.

The exercise of firing power centralizes control in a news department. Rare as it is, firing constitutes an ever-present possibility for the news employee. Mark Johnson told me that he had "seen people fired at just about every job" he's had in his nearly three decades as a journalist. 115 In such a climate, management's preferences are given increased weight in contrast to staffers. This tends to ensure that news managers will play a privileged role in the evaluation of work by journalists, and increases the likelihood that feedback from a news manager to a news staffer will be accorded weight and influence over the staffer's work. Members of management matter to staff in part because they have the power to fire them.

Firing is used as a means of removing incompatible employees from the payroll, whether for ethical or other reasons. In addition to ridding the organization of a drain on its resources, firing an employee serves as an opportunity for news managers to declare and define their own understanding of proper journalism. It aims to distance the news department from any misconduct by the employee, and to demonstrate its continuing commitment to journalism in

fact threatened). On objectivity as facts attributed to others and its role in protection from libel suits, see Tuchman, "Objectivity as Strategic Ritual."

114 Interview with Ron Smith, February 15<sup>th</sup>, 2013.

115 Interview with Mark Johnson, April 8<sup>th</sup>, 2013.

contrast to the offender. A manager's right to fire an employee increases her control over that employee, because an employee who values her job will think twice before conducting herself in ways which endanger her position. The power to fire gives increased weight to the preferences of managers, and renders the employee a more pliant instrument for them, even in cases when the employee is not inclined to go along with management directives. In these ways firing is a tool which can affirm a news department's power and strengthen its authority. <sup>116</sup>

Hiring and firing are done by managers rather than staffers. Managers initiate the process of hiring, then organize and guide it. They set the terms of candidate searches and oversee the process of vetting. Hiring decisions are not made final without approval from a manager of some kind. Firing of course is an act performed by management upon subordinate employees – the notion that a staffer might fire her boss is absurd. Even managers who initiate a firing often involve their own managers, thereby demonstrating the tendency for firing to ascend the chain of command. In short, hiring and firing are exemplary managerial operations.

In sum, hiring, firing, and the modification of employment are means of maintaining journalistic independence as practiced by the news department.

Employment transitions are tools employed by management to establish long-term relationships with employees, or to sever ties with dangerous individuals or

union contracts may interfere with managerial authority over firing employees. To the extent that this authority is limited, the utility of firing as a tool of management control is limited.

Interview with Mike Juley, March 29<sup>th</sup>, 2013. Interview with Jim Nelson, February 8, 2013.

<sup>&</sup>lt;sup>118</sup> Interview with Karrie Allen, Jan 25<sup>th</sup>, 2013

those who are marginally committed to the practice of journalism as management interprets it. It establishes the terms of the relationship between superior and subordinate and sets expectations about what kind of work is to be performed. It cements the authority of the superior and reinforces her right to direct the conduct of her subordinate. It reinforces the understanding that more responsibility for organizational functioning lies with managers rather than staffers; at the same time it provides the staffer with a sphere of autonomous activity, a recognized identity, and a right to represent the organization as a whole.

# **Hierarchy and the Framing of Work**

I will use the term "managerial hierarchy" to mean a relationship between a superior and one or more subordinates. In this section and the following one I describe that relationship. The discussion is a general one, in two main respects. First, it applies to every level of a hierarchy, from the relationship between a line editor and a staffer, to that between a top editor and her assistants. In what follows, that is, each of these relationships is taken as a case of hierarchy. Second, although some of the evidence used to support this description is drawn from journalism, the definition is not specific to journalism or even to the field of media. It applies to any managerial hierarchy whose leader is not the chief executive of a corporation. The final section of this chapter, concerning the arrangement of a news report, is specific to a journalism hierarchy, which is considered as a specific case of managerial hierarchy in general.

The relationship between a superior and the subordinates she supervises is central to every news department. Under this relationship, one party directs and controls the work of the others. The superior is a boss. Whether barking orders or listening empathically, roughly altering copy at the last minute or coaxing performance through feedback, superiors structure and determine the work of subordinates. As I argue throughout this dissertation, there are many limits to this determinism. None of them, however, undermines the fact that management involves direction and control. Once a contract has been negotiated and an employment relationship established, the subordinate submits her work to direction – not her life or her self, but her work. She might chafe at this arrangement or come to grief through it, but she cannot deny it.

At each level of the corporate hierarchy, superiors "frame" the work of their subordinates. By this I mean that in her capacity as a superior, an individual tacitly adopts a set of principles that organize her perception of her subordinate's work. This framing leads her to focus on a few selected factors of each work that she supervises. Details, meaning all other factors of work that are not singled out by the superior, are left largely in the hands of subordinates. These selected factors are then used not only to perceive but also to direct the work of her subordinates. Thus, insofar as the superior exercises effective control over her subordinates, her framing determines the organization of their work, including

<sup>119</sup> Frames are "principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters." Todd Gitlin, *The Whole World is Watching: Mass Media and the Making and Unmaking of the New Left*,University of California Press, 2003. See also Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience*, Northeastern University Press, 1986.

its overall shape and areas of focus. When a superior decides that a factor of work is interesting, important, novel, in a word *salient*, the work of her subordinates increasingly comes to emphasize that factor, for better or for worse. 120

The notion of a frame as a set of tacit "principles" and "theories" clarifies the division of labor in a hierarchy. Specifically, it shows the division of work into general and specific factors. As a set of tacit principles and theories, a frame is something general that is applicable to many specific items of work. In adopting a frame then, the manager affirms and sharpens its tacit principles and theories, which remain available for repeated use in future situations (she also nudges those not selected toward desuetude). In doing so, she not only affirms the theories and principles themselves, but also affirms her own concern with selection and emphasis and her unconcern with details. Thus, in adopting a frame the manager assumes a trusteeship of the *general* factors of a work item while entrusting the care of its *particular* factors to the subordinate.

<sup>120</sup> The practice of live broadcasting presents a special problem for the division of labor between superiors and subordinates. Namely, it frequently hands over control of a news broadcast to a single individual who is often a nominal subordinate. This presents the risk of contradicting the organizational principle that selection and prioritization should ultimately be due to the judgment of superiors. For example, should a correspondent enunciate an opinion on an important topic that is strongly at odds with those of the newsroom's top editors, viewers might wrongly understand the opinion as representative of the newsroom rather than the correspondent. This threatens the newsroom as a consistent voice. The prospect has been dramatized in the film "Network." Even more frightening scenarios stressing the individual broadcaster's great power were employed by red baiters in the 1950's. See David Everitt, *A Shadow of Red: Communism and the Blacklist in Radio and Television*, Ivan. R Dee, 2007. At the networks studied by Gans, this problem was addressed by informally recognizing anchors as superior to top editors.

As the custodian of a work's particular factors, a subordinate is more responsible for the richness and diversity of a work than is her superior. Because of her proximity to the materials of work, she more directly experiences many features of the work that fall entirely outside her superior's purview. She is thus in a position to adopt a unique and distinctive perspective on these materials rather than a merely stereotypical one. Thus while a superior takes charge of broad and general strokes of selection and emphasis, the subordinate supplies both authenticity and distinction through her unique connection to the materials of her work, that is, through her sensibility.

One factor contributing to a superior's need for framing is that each superior oversees the work of many subordinates – so many that she cannot follow everything that they do. This is in part a matter of how much information each individual can reliably process: As the number of subordinates overseen by a superior increases, each subordinate attains a level of detailed comprehension of her own work that the superior cannot match. The superior's position, then, involves overseeing the work of multiple subordinates, each of whom possesses a more detailed understanding of her own work than the superior. In order to keep track of the work, a superior cannot rely on direct comprehension of the full subject matter of the work. She must instead pay attention to some of its aspects

while ignoring others. Framing enables the superior to follow and influence an item of work without comprehending its details. 121

A superior's involvement with the work of any individual subordinate tends to be occasional and intermittent. Because she herself must oversee multiple subordinates and report their activities to her superior, the amount of time she can spend understanding the work of any particular subordinate is limited. She normally takes part in the initial decision to carry out a work item, by establishing its basic aims and priorities; she checks in from time to time with each subordinate and extracts the significant features of her ongoing work; finally, she reviews and assesses the resulting work product. In between these times the subordinate develops the work product largely on her own. 122

As this description suggests, the subordinate possesses significant autonomy in the context of the news organization. Although she does not possess final authority over her own work activities, she spends some time away from the direct oversight of her superior. During these times, challenges arise that she is expected to handle without calling on her superior. Reporters, for example, must exercise discretion in determining whether an event is worth bringing to the attention of their editors, by determining for example if it is

Gans points out that "neither a top editor nor a producer can do everything; consequently he must delegate some story selection and editing decisions to assistants and section heads." Gans, *op. cit.*, p. 100. My point is that *no* superior, at any level of the hierarchy, can *comprehend* everything her subordinates do.

122 Gans points out that "news executives" intervene only intermittently in the work of their

Gans points out that "news executives" intervene only intermittently in the work of their subordinates, the "top editors and producers." Gans, *op. cit.*, p. 85. He also points out the intermittent role of top editors in the work of their own subordinates. Gans, *op. cit.*, p. 88. My point is the general one: that it is in the nature of supervision for the supervisor to participate only intermittently in the work of the subordinate.

currently happening or only about to happen. 123 They thus inhabit a region of autonomy in which their activities are carried out without managerial oversight. 124 The subordinate is empowered and expected to make a number of independent decisions in the course of her work, decisions which affect the shape of the resulting work product.

The subordinate is normally the primary resource available to the superior for following and organizing the work the subordinate does. As such, the subordinate provides accounts of ongoing work to the superior, so that she may organize them according to their significant factors. In this way the subordinate exercises some control over the information available to the superior. Through presenting her findings in a certain way, through emphasizing some factors and omitting others, the subordinate can to some extent manage her superior's perception of her work. 125 The superior's dependence on the subordinate is thus a source of autonomy for the subordinate. 126

Because she stands between her superior and the knowledge she needs. the subordinate is expected to become as transparent as possible. That is, she is expected to actively assist the superior in perceiving the salient aspects of each piece of ongoing work. It is not enough to cheerfully provide her superior with the information she explicitly requests. The subordinate also anticipates questions

123 Interview with Patrick Marley, Feb 25<sup>th</sup>, 2013.
 124 This autonomy is exploited by reporters who fabricate sources, scenes and

quotations.

125 For a case of a reporter who employed the techniques of objectivity to hide his political

Toblicativity as Strategic Ritual." p. 669. sympathies from his superiors, see Tuchman, "Objectivity as Strategic Ritual," p. 669. 126 Interview with Patrick Marley, Feb 25th, 2013.

from her superior and gathers just the data the superior will want to scrutinize. 127

If she fails to anticipate a question or a response her superior is likely to have,
her relationship with her superior is likely to come under strain. 128 Likewise, the
more the subordinate can anticipate the superior's questions and priorities, the
smoother will be the process of organizing her work in relation to her superior.

Regular contact between a superior and her subordinates thus clarifies the shared principles organizing their work. As problems and results are discussed between superior and subordinate, the principles at stake in each situation are highlighted and their significance affirmed. Over time these principles stand out with increasing clarity; work often proceeds smoothly, and only difficult cases need be explicitly discussed. There develops an expectation that the frame employed by the superior and those employed by the subordinate largely coincide. This expectation comes to pervade the work done by the subordinate, as she anticipates the editor whose voice "echoes in her head." 129

Despite her real autonomy then, the subordinate is guided by a superior even when the superior is neither present at the scene of the work, nor readily available to be contacted. Because oversight involves periodic communication, even the remotest, most isolated foreign correspondent is accompanied by her superior at all times. Every period of independent activity is followed by a

<sup>127</sup> The process of anticipation may begin very early in the relationship, as Gans shows with regard to incoming news executives. He quotes an editor about a new executive: "It is not what [the executive] will do or will veto, but what we expect that he will do or veto; that's his influence." Gans, *op. cit.* p. 94.

128 Interview with Carolina Miranda, March 28<sup>th</sup>, 2013.

Roy Peter Clark and Don Fry, Coaching Writers: The Essential Guide for Editors and Reporters, St. Martin's Press, 1992, p.26.

communication in which the subordinate accounts to the superior. The upcoming fact of accounting is therefore present to the subordinate as a looming reckoning throughout her "independent" periods of activity. Every decision is a potentially missed opportunity in the eyes of her superior; every result must be defensible in terms of the shared principles. The subordinate's obligation to achieve this parasitic sense of significance is an important part of her organizational role, and a brake on her autonomy.

The subordinate also influences the shared frame. On occasion that is, she brings up material that does not initially interest the superior, and has her selections supported by subsequent events. She takes a risk and stands up, asserting her own perspective as a journalist or an individual despite her subordinate status. 130 On other occasions the subordinate is unwilling or unable to adopt the viewpoint of the superior, even after protracted negotiation. This can threaten her position in the organization. 131 Even including these complicating factors, however, the supervision process tends to clarify over time the principles at stake in ongoing work.

<sup>&</sup>lt;sup>130</sup> This dynamic is institutionalized in the work of magazine researchers or fact checkers, who are expected to "override writers, and even editors, if they can supply sufficient convincing evidence of factual inaccuracy or lack of data to support an empirically based generalization and if they can summon up the courage to contradict their superiors." Gans, op. cit. p. 86. Note that even in a dispute governed by factual considerations, individuals may differ on which facts should be given weight and how much weight is required to establish a point. These same researchers may lose their jobs if they let bad information flow through their purview, placing them in the awkward position of being expected to contradict their superiors or face their superiors' wrath. Note also how hierarchy can be applied to a subordinate so as to indirectly regulate a superior.

131 Interview with Mark Johnson, April 8<sup>th</sup>, 2013.

Because of their common backgrounds and sensibilities, colleagues often agree about how their work should be framed. When they disagree, it is often over matters of emphasis rather than fundamental principles. In these cases consensus or at least acquiescence is reached with a minimum of conflict and debate. In these cases the hierarchy recedes into the background as the organization functions smoothly.

Other situations are less easily resolved. Stories may be complex; the principles they involve may be unclear; or different principles may come into tension with each other. In such cases framing them becomes more difficult. <sup>132</sup> In these situations, individuals within the newsroom, who not only share a strong commitment to journalism but also possess distinguished histories of dedicated service, may become arrayed on different sides of a debate which cannot be resolved by appeal to shared principles. At these moments a ruling by a superior is necessary to resolve the dispute and proceed with other work. The superior must decide *which* pieces of evidence and *which* principles of selection and arrangement should be favored in the situation at hand. At these moments the power of the hierarchy stands out clearly, and plays a fateful role in determining the collective significance accorded to a story. <sup>133</sup>

<sup>&</sup>lt;sup>132</sup> At the magazines studied by Gans, the "back-of-the-book" sections were more prone to this type of negotiation than the sections in the front of the book, "because fewer agreed-upon importance considerations apply to the back of the book." Gans, *op. cit.*, p. 154.

<sup>133</sup> As Gans puts it, "insofar as news judgment is filled with uncertainty, and top editors must, by virtue of their position, resolve uncertainty and decide what selection considerations have priority, they also set tones, and sometimes precedents, which then require conformity." Gans, *op. cit.*, p. 98. This statement exhibits tension with another: "At both print and electronic media, who makes the final story decisions has little impact on what decisions are actually

## **Upper Levels of Hierarchy and Highly Principled Perception**

The role played by distance in an organization depends on the size and shape of the organization. As an organization increases in size, the distance between its top and bottom levels is likely to increase. This makes more evident the role played by hierarchy. Gans writes that top news managers in smaller departments are "more accessible and less mysterious" than their counterparts in larger news organizations. This relative inaccessibility is characteristic of managerial hierarchy. In the terms of this dissertation, a larger organization is characterized by sizable distance between the manager at the top and the staffers at the bottom of the hierarchy. Such an organization will clearly display the tendency of hierarchy to shape and organize work.

Increasing distance is evident in the work of the first-level manager (and also in that of the middle manager). Recall that each superior in a news department herself has a superior. From this perspective, she is a subordinate. As a subordinate, she is accountable to her superior for the work she oversees. By attending to the most significant features of the work and ignoring the details, the middle manager seeks to attain a sufficient command of the work, not only to perceive and direct it, but also to account for its progress to

reached, for all abide by the considerations that govern news judgment. That someone rules the roost makes a difference, but who rules it does not. Although top editors and producers can affect the value judgments in major stories and determine the fate of lesser stories, they do not determine what actors and activities routinely become newsworthy." Gans, *op. cit.*, p. 100. Again, while Gans' point is limited to the role of the top editor or producer, mine concerns the general role of a superior arbitrating the disputes of subordinates.

Gans studied (smaller) national television and (larger) magazine news departments. Herbert J. Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time*, New York: Random House, 1980, p. 99.

<sup>&</sup>lt;sup>135</sup> Indeed, the majority of superiors play this dual role of subordinate and superior.

her superior. The middle manager therefore frames her subordinates' work not only in her capacity as a superior, but also in her capacity as a subordinate.

In addition to building her own frame, the manager navigates the frame adopted by her superior. She therefore regularly extracts the significant factors from the work that she supervises, modifies them, and transposes them into her superiors frame. In doing so she reduces their detail still further from the already summary status they possess as elements of her own frame. When the work is perceived through her superior's frame, it has now been subject to a *series* of selections and cuts, so that even more details are obscured or "buried," while even fewer stand out as highly significant. This is the organizational basis of Gans' process of "highlighting of highlights."

As a manager is promoted within a hierarchy, her attention to the stories she oversees becomes increasingly indirect and selective. Her attention becomes increasingly *indirect* in that the information she receives from her subordinates has been subjected to *increasingly many* selections and cuts. Her relationship becomes increasingly *selective* in that it attends to a *decreasing* proportion of the total factors attended to by her direct and indirect subordinates. By the time it reaches her, the information the high level manager receives about a given story is likely to have been both reconstructed and reduced by more than one member of the organization. <sup>136</sup> Thus the effects of distance are amplified by the number of links in the chain between a news manager and the news staffers

<sup>&</sup>lt;sup>136</sup> This is an explanation in terms of hierarchy of Gans statement that "news is thus often the highlights of highlights." Gans, *Deciding What's News*, p. 92.

she indirectly supervises. By the time a manager reaches the apex of a deep hierarchy then, we may say that her perception of the work she supervises is very indirect and very selective. Because both of these conditions are governed at every step by the process of framing, and because frames are essentially principles, I will say that the resultant organization of perception is "highly principled."

Despite their strategic positions then, top and middle managers are isolated from the rank and file whose work they coordinate. Because they are absent from the scene of much of the work performed, and because the reports they receive are subject to multiple layers of framing, they are unaware of some of the details of the works for which they are held responsible. They rely on selected and filtered information supplied by others for their picture of the news.

Connection is generally stronger and information more prevalent between an employee and her immediate superior than between an employee and a more distant superior. This relationship is maintained through more frequent contact and consultation about matters of importance as a story develops. In a daily newspaper for example, stories are assigned or pitched along with expectations of salient details to be encountered. As the reporting progresses and new information is brought to light, the immediate supervisor may be notified so that she and others working on the story can decide how the story should be presented. In comparison with the individuals at the top level of the hierarchy, an immediate supervisor has greater access to and more detailed knowledge of the

stories over whose development she presides. Stan Alcorn noticed this phenomenon while working as a researcher / production assistant at NPR's Marketplace. He was hired by David Brancaccio and often worked with a direct editor. In this situation, although others in the news organization were aware that Brancaccio had producers and assistants, they were "not necessarily aware of exactly what's what the way that our direct editor might be." 137 Thus Alcorn's distinctive work was quite visible to his editor, but less visible to others, who tended to see him as a somewhat indistinct appendage of Brancaccio. The supervision hierarchy manages distance by locating journalists closer to their immediate superiors than to the superiors more than one level above them.

As an example of this dynamic, consider the "page one meeting." Daily newspapers as a rule have a meeting every day to determine the roster and placement of stories in the upcoming edition of the newspaper. The meeting is normally attended by the top levels of the editorial hierarchy and their immediate subordinates, the middle and first-level news managers. 138 At this meeting, questions about the developing stories are posed to the first-level news managers, discussions ensue regarding the relative significance of stories, and final decisions about placement are made. In the course of this meeting a sense of the significance of the day's stories is diffused throughout the upper levels of the hierarchy.

 <sup>137</sup> Interview with Stan Alcorn, April 11, 2013.
 138 Interview with Mike Juley, March 29<sup>th</sup>, 2013.

The page one meeting reflects the factor of distance in the organizational hierarchy. In typical exchanges with others present at the meeting, the top news manager neither gets information first hand, from direct observation, nor second hand, from news sources, nor third hand, from reporters; instead, she gets information fourth hand, from the reporters' immediate supervisors. These (often brief) exchanges take place in terms of the most significant features of each story as determined by multiple levels of hierarchy. 139 The same dynamic exists outside of the page one meeting, as editors chat in offices and on the newsroom floor: distance is reflected as stories are represented in terms of their most significant features. Although the rank and file are needed to provide the significant features of the stories being produced, their participation is limited to providing the most significant information, perhaps along with advice, to the top level for its deliberations. News managers select certain aspects as more significant than others when considering what to feature more or less prominently; they ignore or deemphasize others. They therefore make decisions about emphasis on the basis of information filtered through multiple levels of hierarchy. In this way the arrangement of news stories in the final publication comes to reflect the structure of the news organization and the distance between the top and bottom levels of the hierarchy.

Managers see their role as setting priorities and coordinating others rather than directly producing stories. They make decisions which prioritize and structure the work whose details and specific content are delegated to others as

<sup>&</sup>lt;sup>139</sup> Interview with Mike Juley, March 29<sup>th</sup>, 2013.

beyond their purview. All of these activities become increasingly pronounced as an organization grows in size and in the distance between the top and bottom layers of the hierarchy. The top layers of the editorial hierarchy make the final, principled decisions, which determine the disposition and significance of many specific details.

## Hierarchy, Arrangement and Journalistic Independence

On August 5, 1964, the front page of the New York Times featured three stories about airstrikes ordered by President Lyndon Johnson against North Vietnam. Following standard conventions of objective journalism, the stories were based on official sources; they reported without question or commentary the administration's version of the events of the previous day: that American strikes had been ordered in response to unprovoked communist attacks on American destroyers in the Gulf of Tonkin, and that the United States was not seeking a wider war. 140 This version of events was misleading in general and false in many of its particulars. In fact, the Johnson administration had been planning a course of "graduated overt military pressures" against the North since March, and had already drafted a congressional resolution authorizing increased military involvement. 141 Johnson used the Gulf of Tonkin incident to publicly

<sup>&</sup>lt;sup>140</sup> Daniel C. Hallin, *The "Uncensored War:" The Media and Vietnam*, University of California Press, 1986, pp. 1-2, 70-75.

141 Hallin, *The "Uncensored War*," p. 18.

begin this process of escalation, which proceeded continuously from that point forward. 142

On September 29<sup>th</sup>, the *Times* ran four stories on Vietnam. Daniel C. Hallin argues that these stories were arranged in a kind of reverse inverted pyramid, in which the least important and least truthful factors of the situation in Vietnam were given the most emphasis or "play" while the most important, most truthful factors were given the least emphasis. A basic means used by the *Times* to express this emphasis was the arrangement of stories into positions that reflected their significance in the judgment of *The Times*. Thus, although the internal content of a piece by Hanson W. Baldwin contained important clues regarding the true motives for increasing U.S. involvement in Vietnam, it was placed on page 4 by the editors and hence de-emphasized by the *Times*. 143

In this section I argue that the practice of arrangement organizes the journalistic independence of news departments. I argue that it enunciates the principles of perception held by the news organization as a whole and thereby serves to delimit the distinctive journalistic character of that organization. I also argue that arrangement thereby serves to direct the behavior of the lower levels and thereby reinforces control of the organization by the few at the top of the hierarchy. At the same time however, arrangement contributes to the journalistic autonomy of staffers by maintaining distance between the top and bottom levels and limiting the degree of control.

Hallin, *The "Uncensored War*," pp. 18-19, pp. 59-63.
 Hallin, *The "Uncensored War*," pp. 78-79.

In the context of this dissertation, arrangement is of interest for two reasons. First, it exemplifies the role of large managerial hierarchies in maintaining the independence and distinction of journalism. Thus arrangement supports the argument of this chapter that the mechanisms of hierarchy in particular have contributed to the production of journalistic distinction and independence. Second, arrangement is a practice that is visible in other, nonhierarchical contexts, particularly in algorithmic ones. Thus this chapter, and this section in particular, lay some groundwork for the broader argument of this dissertation that there is a structural concordance between the independence-preserving mechanisms of the traditional news department and those of certain algorithmic forms of organization.

In a traditional publication such as a newspaper, news magazine, or nightly newscast, top news managers play a specific role in the production of every news report. I refer to the process of arranging the stories of each edition or program in relation to each other. Through these arrangements, top news managers declare the relative significance of the stories in each edition: they attribute more significance to some stories than others in the context of the news report, with one story usually being deemed the most significant of all. As they arrange the news report, the news managers publicly declare – and help to determine – the significance of the stories they publish. In making these decisions, top news managers continually affirm and develop the principles of

144 Gans, *Deciding What's News*, p. 85.

perception, both cognitive and normative, that define and distinguish the journalistic character of their news organizations.

When a reader opens a daily newspaper, the stories are contained in a number of sections, such as the business section, the sports section, and the section containing the front page. Within each of these sections, stories are arranged in relation to each other, some above or to the left of others on the same page, some on pages closer to the front page than others, and so on. Likewise, when a viewer tunes in to a nightly network news broadcast, the stories are presented in a certain temporal sequence, with some stories presented before others. In each case stories are arranged relative to other stories, so that the news report as a whole presents a specific arrangement of stories.

The arrangement of stories in a publication serves as a guide to their significance. By placing one story on the front page and another on the back page, a newspaper signals that readers should pay special attention to the front page story, without according the same privilege to the story on the back page.

Other media employ different conventions of arrangement to send similar signals. These conventions are understood by readers (with varying degrees of sophistication), and arrangement is closely monitored by various individuals both outside the news organization and inside, at all levels of the news hierarchy. 145

<sup>&</sup>lt;sup>145</sup> Warren Breed, *op. cit;* Interview with Mark Johnson, April 8<sup>th</sup>, 2013; Interview with Stan Alcorn, April 11<sup>th</sup>, 2013.

The arrangement of stories thus marks a boundary between a news organization and those outside it. On the inside of this boundary, organizational mechanisms coordinate the gradual production and framing of individual works. These works are gradually conveyed up the hierarchy and reframed along the way. Finally, they are conveyed to outsiders through the arrangement conventions. As a means of selection and emphasis, arrangement conventions express and preserve the frames developed internally, while simultaneously propagating them outward. By arranging stories according to these conventions, an organization not only shapes outsiders' perception, it also declares and affirms the principles of perception in use by the organization as a whole.

The practice of arrangement is connected with the practices of reporting and editing a story. Managers keep tabs on stories as they are investigated and written: as a story develops, they are made aware of its key facts, language, and other significant factors. These facts are conveyed to the top levels of the hierarchy as the story is progressively developed and produced. Arrangement decisions, then, emerge out of the activities of producing journalistic work. Through their position in the hierarchy, arranging managers have access to ongoing reporting and composing activities and make their decisions in consultation with the staffers and managers performing them. In this respect arrangement is an integrated and connected component of a larger work process – the production of the news report as a whole.

<sup>&</sup>lt;sup>146</sup> Gaye Tuchman, *Making News: A Study in the Construction of Reality*, Free Press, 1978, p.56.

Despite this connection, the activity of arrangement is a separate and distinctive activity which is the direct responsibility of high level news managers. Arrangement *per se* is not practiced by the staffer, whose responsibility ends with the internal content of the work she constructs. <sup>147</sup> The staffer is accountable only for the internal content of a work and not its external arrangement. Arrangement decisions, in contrast, affect the relationships between stories rather than the content of individual ones. Nevertheless, arrangement decisions have an impact on a story's perceived significance. Since readers understand arrangements in terms of story significance, a change in arrangement affects a story's significance. Operating from outside a story then, an arrangement decision shifts a story's location relative to other stories. In this way an external event changes a story's significance without modifying its content. <sup>148</sup>

Arrangement is a regular source of feedback from the top levels of an organization to the lower levels. The physical placement of one story in relation to the others constitutes the sign vehicle or signifier of a feedback message being delivered to the producers of the works in question. The signified content of the message is an assignment of priority and importance. Staffers regularly receive these messages by viewing or reading the publications produced by their

<sup>&</sup>lt;sup>147</sup> Gans, *Deciding What's News*, p. 85. Note that editors may delegate the mechanics of arrangement to staffers who specialize in layout. However, major arrangement decisions such as the placement of significant stories are made by editors and not staffers. Interview with Karrie Allen, Jan 25<sup>th</sup>, 2013.

<sup>148</sup> For an example of externally induced shifts in significance from the reporter's perspective, see Jayson Blair's account of how the projected prominence of a story about a murder went from Page A1 to B1 to B3 as details about the victim's race and class were progressively revealed and passed via phone from a reporter to editors. Jayson Blair, *Burning Down my Masters' House*, Beverly Hills, Ca: New Millenium Press, pp. 110-11.

news organizations. By using arrangement to deliver messages about the quality of ongoing work, the top levels of the organization provide feedback to the lower levels. 149

The feedback provided by arrangement is both brief and opaque. The arrangement is not a complex linguistic message, but a gross physical configuration: a story's spatial placement on a page or temporal location within a broadcast, for example. As a sign, the arrangement is opaque: it does not come with any explanation of why this story was deemed more significant than that one. The arrangement as a whole is simply handed down from on high as the organizational product. For these reasons the feedback can be hard to interpret. In some cases the factors taken into account by editors are readily apparent to the staffer. In more complicated cases however, staffers may need to actively inquire into the factors considered by the editors in producing the arrangement.

The brevity and opacity of this feedback reflects the distance between the top and bottom levels of the hierarchy. As previously argued, contact between even immediate superiors and subordinates is limited and intermittent. This is all the more true of the contact between upper level managers and the staffers they indirectly supervise. A top manager or her immediate deputy may indirectly supervise hundreds of journalists. The opportunities for contact and

<sup>&</sup>lt;sup>149</sup> On "signifier/signified" see Ferdinand de Saussure, *Course in General Linguistics* (translator Roy Harris), London: Duckworth, 1983 (originally published 1916).

communication between them are scarce, and outside of exceptional cases the contact which does occur is likely to be cursory. 150

In these ways arrangement reflects and reinforces the independence of staffers from high level managers. Considered as feedback, arrangement is brief, opaque, and delivered from afar. In these respects feedback is a blunt instrument that limits the ability of the top to specify and direct the work of the bottom with any degree of detail. It is not possible to specify all the factors that go into an arrangement decision without using other communication channels. Arrangement therefore reinforces a degree of autonomy on the part of the staffers whose work is arranged.

Nevertheless, like direct supervision, arrangement communicates principles that are eventually internalized by reporters. News managers frequently arrange stories, and news staffers frequently perceive arrangements, especially when the work arranged is their own. As the reporter sees the arrangements that result from her work in comparison with that of others, she acquires a sense of which principles guide the top editors in their arrangement. As she turns in her work edition after edition, this sense is continually tested and modified. As each work results in its own arrangement relative to the other stories of the day, it can be compared to the other stories and examined for those features which make it more or less significant than them. In this way the staffer comes to internalize the principles of the managers despite their distance and the

<sup>&</sup>lt;sup>150</sup> Lane DeGregory had never met her top editor when he called her after her editor was fired. Interview with Lane DeGregory, February 14<sup>th</sup>, 2013.

opacity of their feedback. She becomes able to anticipate somewhat the arrangement a story will receive even before it is turned in. She comes to modify and shape her own conduct according to the placement she expects her work to receive.<sup>151</sup>

The prospect of feedback serves to guide the work of reporting in its earliest stages. When a potential work is first suggested, it is immediately assessed for the final position it is likely to achieve in publication. Because the prospective work's final position will be due to the decisions of the editors, allocation of the staffer's effort depends on an accurate assessment of what the editors would say when confronted with the final work with which they will likely be presented. If the editors are expected to reject the work, then it is unreasonable and counterproductive to continue developing it for publication. On the other hand, if they are likely to accept or prominently feature the work, then it is reasonable and productive to continue developing the work. In this way, the top layers of the organizational hierarchy guide the reporting process from its earliest stages, even if the top editors never see any trace of the prospective story.

The effectiveness of this feedback is strongly tied to the top manager's position in the hierarchy. The top manager's position gives her influence over both the work and the career prospects of the staffer. She is generally known to

<sup>&</sup>lt;sup>151</sup> Breed, op. cit.

Breed, op. cit.

Compare Teri Buhl's statement in the context of freelance work that if she pursues a story with no idea to whom she will eventually sell it, she is "wasting [her] time." Interview with Teri Buhl, March 28<sup>th</sup>, 2013.

the staffers and understood to be in final control not only of the placement of the work they produce, but also of the staffers' positions inside the same organization. These factors make clear to each staffer that the top manager can have a significant impact on her own career prospects and life trajectory. Feedback from this manager matters to staffers.

Arrangement gives upper level news managers a routine way to guide the work of the reporters they indirectly supervise. By arranging stories, these managers play a regular role in the routines of news production, and remain in the minds of their reporters. Because staffers are attuned to the placement their stories will eventually receive, they consider their managers regularly, as a routine part of their work. This permits the managers to influence and guide their staffers in specific ways despite their distance from them and their lack of regular contact with them. 154

In these ways the practice of arrangement relates hierarchy to journalistic independence. Arrangement demonstrates that whole news departments prioritize some principles of selection and importance as more central to the organization than others, and that these principles are regularly reaffirmed both within and without the organization. The more people a news organization has, the more principled are the arrangement decisions of the top news manager and her assistants, thus the more pronounced is the role played by hierarchy.

Arrangements are made on the basis of many extractions and cuts, resulting in a

<sup>&</sup>lt;sup>154</sup> Breed, op cit.

tiny ratio of focal to background factors in the material covered by the organization. They affect many different stories and many members of the organization by prioritizing works in relation to each other. They thereby diffuse a shared sense of journalistic priorities throughout the news organization. When a news report is so principled, it chooses among a great many stories and focuses attention on a few. This provides the news organization with an opportunity to display and hone its journalistic character, not only at the level of detail but at the level of broad journalistic significance.

When the editors of the Times arranged the stories about the Gulf of Tonkin incident and the wider conflict in Vietnam, they affirmed and declared their organization's commitment to the principles of objective journalism.

Statements from official sources, including the frames these sources provided, were let stand without commentary, and were arranged to convey maximum significance in relation to other stories published in the same edition. As an individual journalist, Hanson W. Baldwin was able to write and publish a story that was very close to the truth of the matter: that the United States was increasing its military involvement in order to counteract a deteriorating political situation in the South. 155 Nevertheless, and again in accord with the principles of objectivity, the hierarchy supervened on this piece of "news analysis" by relegating it to a context that deemed it no more important than a dozen other stories. In doing so they demonstrated the organized relationship between the

<sup>155</sup> Hallin, *The "Uncensored War*," pp. 78-79.

hierarchical news department and the distinctive character of the journalism it practiced.

The arrangement of Baldwin's story demonstrates the simultaneous presence of hierarchy and individual autonomy within the *Times*. Without intervening in the substance of Baldwin's story, the editors modified its meaning by altering its arrangement. They thereby preserved Baldwin's autonomy while rendering it less significant at the same time. They thus preserved the diversity and even the accuracy of their news organization while asserting control over the prioritization and emphasis of content. As Todd Gitlin suggests, this kind of move can serve as a useful demonstration that a hierarchy is publishing true and diverse accounts of public affairs, while simultaneously asserting and maintaining its control over a message's basic framing. <sup>156</sup>

There is nothing particularly journalistic in the fact that only a certain number of stories can fit on the front page of a newspaper. But media routines and formats establish a framework within which journalists can make decisions with journalistic consequence. And they structure these decisions into a texture of importance, so that each of them, in some degree, comes to delimit and impact the character of journalism itself. There is agency to be found in the midst of routine, and at times journalistic values can be clearly invoked in making major

<sup>&</sup>lt;sup>156</sup> Gitlin analyzes an interpretive television feature or "takeout" done by CBS on the political organization Students for a Democratic Society. He argues that "paradoxically, the freedom accorded the takeout can serve *within the news organization* to relieve the hard story of the responsibility to be substantively intelligible," exactly the phenomenon we can see in the case of the *Times* Vietnam coverage. Gitlin, *op. cit.* p. 63.

decisions. Consider Gans' description of the editorial thinking regarding whether or not to put Eugene McCarthy on the cover of *Newsweek* during 1968:

Another 1968 leader who did not make the cover was Eugene McCarthy. During the spring and summer of that year, he was always on the magazine's long-term list, but the editors could not agree on his importance and kept postponing the decision. McCarthy's last chance came with the issue appearing the week of the Democratic National convention, but then the editors rejected him because they feared the choice might either influence the outcome of the convention or be taken as the magazine's endorsement of his candidacy. <sup>157</sup>

Here we see another interaction between hierarchy, framing, and journalistic norms. A highly significant decision is the subject of protracted negotiation and debate, and is finally decided by invoking the norm of objectivity. By remaining outside the fray in this case, *Newsweek* not only kept McCarthy out of their spotlight; they affirmed and defined the character of the journalism they practiced, and they did so on the basis of their organizational structure. In addition to the professional and political context then, we should see the organizational mechanisms underlying this decision as significant in their own right.

### Conclusion

I have argued in this chapter that twentieth century American journalism owed some of its distinctive character to the hierarchical form of organization in which it was predominantly clothed. The news department is a hierarchical organization of journalism characterized by a balance of power between the

-

<sup>&</sup>lt;sup>157</sup> Gans, *op. cit.*, p. 155.

individuals making it up. Although management has more power than staff, the factor of distance opens space at every level for the development of individual and journalistic distinction apart from management. Nevertheless, the top-down character of the news department is visible throughout the organization.

Hierarchy structures the framing of the news at every step of its production by a news department, so that the principles of perception it employs, both cognitive and normative, are deeply marked by hierarchy. The mechanisms of the news department explored in this chapter, namely employment, supervision, and arrangement, provide organizational mechanisms by which news departments distinguish themselves and their unique orientation to journalism from others. Because these principles are affirmed and clarified by hierarchical mechanisms, they demonstrate that journalistic distinction and independence have an organizational basis.

American news departments have been committed to objectivity throughout most of the twentieth century, but this is only one possible normative orientation of journalism. As a managerial hierarchy, the news department shares a form taken by many media organizations, including partisan journalism organizations and non-journalistic media. Managerial hierarchy is therefore capable of fostering and supporting a variety of norms and frames. By separating the news department from objectivity, while nevertheless showing how it has operated in support of objectivity, I have tried to show that this form of organization is amenable to housing a variety of normative orientations.

In making the case that organizational form can underlie journalistic independence and distinction, this chapter opens up the question of what other forms of organization may also be used in this way. Continuing this line of inquiry, the next chapter will consider the Google search engine as an organization of independent media producers. Like the corporate news department, this form of organization is not limited to journalism, but is capable of supporting other kinds of media as well. Nevertheless, because of its focus on independence, the Google search engine suggests ways of organizing the practice of journalism that delimit its distinctive identity as a field of practice.

# Chapter 3: Google Search as an Organization of Independent Media Producers

## Introduction

In this chapter I will argue that the Google search engine embodies a specific approach to the organization of independent media producers. Google Search has a strong element of individual independence because it includes content from millions of web pages produced by people independent of Google. At the same time, many of these producers are aware of Google's values and standards and often conduct themselves so as to conform to them. I argue therefore that these producers are part of an organization despite their lack of formal ties to Google. As an organization of independent media producers then, Google exemplifies the framework of this dissertation. In addition, because its organization is significantly different from that of the news department examined in the previous chapter, Google shows the framework's applicability to a wide range of media organizations, both old and new. Finally, as a concrete example of an algorithmic organization, Google offers suggestions and cues for the potential construction of independence-preserving journalism organizations.

First built in the late nineties, Google Search was quickly established as a popular site and hence an influential source of traffic for other sites. As Google's audience grew, many web publishers sought higher placement in Google search

results. Some of these publishers tried to "spam" the search engine by inducing it to accept and display materials that went against the values and standards. Google wished to support. This produced a problem for Google: how to exclude unwanted producers from their search results, and how to guide independent producers to produce content that adhered to Google's values and standards.

The result was an organization: A large group of media producers were generating media works far from Google's oversight, and this independence was inseparable from the original value in the work. At the same time, Google policed the boundaries of their corner of the web, excluding some producers from their index and including others. They also induced many independent producers to conform to the kind of content favored by Google. They had no direct control over the producers of the web, nor any employment relationship with them. Their search index was open to a vast array of producers. Yet Google eventually came to influence their behavior in a way that is relevant to the question of the organization of independent journalists.

In this chapter I will explain the details of this organization. Google is often taken as a tool, and sometimes as a corporation, whose actions are deserving of scrutiny. <sup>158</sup> Although I find great value in these perspective, my focus will be somewhat different, and in line with this dissertation's overall trajectory. I will consider Google Search as an organization of independent media producers. My

<sup>&</sup>lt;sup>158</sup> For an analysis of Google's data collection practices and its relation to advertising, see Felix Stalder and Christine Mayer, "The Second Index: Search Engines, Personalization, and Surveillance," in *Deep Search: The Politics of Search beyond Google*, eds. Conrad Becker and Felix Stalder, StudienVerlag, 2009.

focus will therefore be on the relationship between Google and the independent producers of the web, rather than on Google's utility for searchers, or on privacy concerns. In order to emphasize this relationship, I will refer to Google search as constituting a "search audience." I mean for this term to include the process whereby Google and its users not only index the pages of the web, but also evaluate and deliver feedback about them to those who produce them.

I begin the chapter by describing the evaluators chosen by Google to define and enforce the values and standards of the search audience. I explain how these different evaluators are combined into an overall evaluation of a piece of work, and how this evaluation is delivered as feedback to the producer of the work. I then show that these evaluations are taken up and used by the producers of the web, who construct their works in part based on the evaluations they expect from Google. Finally, I examine the special role of Google Inc. in this organization, its power and the transparency of its procedures. I argue that these factors provide a window into the specific organization of independent media producers enacted by Google.

### The Evaluators

In constructing their search engine, Google relies on certain evaluators to assess the work of others. In choosing to include some evaluators rather than others, and in basing their search engine on the judgments of these evaluators, Google prioritizes some works while de-emphasizing others. In this respect, Google's organization is like that of a news department: By including and

prioritizing some evaluators as trustworthy and reliable, their index as a whole becomes trustworthy and reliable to their users. Unlike the news department, however, Google does not depend on employment contracts to ensure that the independent judgment of their evaluators represents Google Search as a whole. They have therefore developed other means of including evaluators and prioritizing their judgment.

In this section I will describe the constitution of Google Search in terms of the major evaluators relied upon in indexing and ranking the work of the web. I will argue that Google Search includes three main classes of influential evaluator: The Google founders and their associates; the independent producers of the web; and the users of the search engine itself. When a user visits Google and performs a search, the judgments of these evaluators are combined into an organized evaluation of published works on the web. Together, these evaluators constitute the major factors determining Google's impact on the work of web producers.

The first factor in Google's organization is the independent judgment of Google founders Larry Page and Sergey Brin, who guided the development of Google search from its earliest stages. At each step of the project's development this judgment was exercised in a straightforward sense: by testing their technology and evaluating the search results it returned. This direct assessment by the founders and their initial trusted circle provided guidance for making decisions about what to build. In order to devise a single system that could

handle many kinds of searches, the founders continuously evaluated and assessed search results in a direct and personal manner, relying on their own judgment, taste, and intuition. 159

Appraisal by the founders took place whenever a new version of the system was constructed and used. One frequent source of such appraisals was in the testing that occurred during system development. As the search engine evolved, each new version was tested by running search queries and evaluating the results. As Brin and Page were personally conducting the system's development, their judgment was called into play in evaluating the results of the software they wrote. Their assessments occurred in a regular and continuously evolving process of development. 160 In addition to evaluation during testing, the system was periodically evaluated during demonstrations given to others. As the Google search software was developed, periodic demonstrations of its functioning were given to trusted associates of Page and Brin. Over time this trusted circle grew to include thousands of employees and a global network of part-time quality raters used to evaluate search results. 161 The appraisals that result from these demonstrations provide feedback on the process of development that influences the resulting software system. 162

<sup>162</sup> On early development and demos see Vise and Malseed, *op. cit.* pp. 45-69.

<sup>&</sup>lt;sup>159</sup> David A. Vise and Mark Malseed, *The Google Story,* New York: Delacorte, 2005,

pp.36-40.  $^{160}$  I infer this from the facts that Brin and Page developed the Google software system, and that development involves testing.

<sup>161</sup> Saul Hansell, "Google: There's Nobody in Our Black Box. Yet." New York Times Bits Blog, December 19, 2007, http://bits.blogs.nytimes.com/2007/12/19/google-theres-nobody-in-ourblack-box-yet/?\_r=0, accessed November 20<sup>th</sup>, 2013.

Another kind of evaluation occurs when Google indexes the web. During this process a "web crawler" program scours the web, downloading pages and adding them to the Google Search index. An important part of this process consists of recording which pages link to other pages. Each link is taken as an evaluation of the quality of the page linked, so that, roughly speaking, pages linked by many other pages are taken as better, and likely to be more relevant during searches, than pages linked by few other pages. By recording links as votes of confidence in the content linked, Google delegates part of its overall evaluation to the actors creating the links. 163

This moment of delegation is worth dwelling on. As Katja Mayer has shown, the Google founders belonged to a bibliometric research tradition in which the analysis of citations between scientific papers was taken as an indicator of social structure. Drawing on this tradition, Page and Brin conceived of hyperlinking as an act of "voting" that conferred "authority" from the linker to the linked. 164 This frames the act of linking as a kind of delegation, which ratifies the distance between two individuals and gives the linked party an independent role in further evaluations. Furthermore, the act is understood to involve a "type of judgment," or in the terms of this dissertation, an evaluation. 165 Thus PageRank

<sup>&</sup>lt;sup>163</sup> Sergey Brin and Lawrence Page, "The anatomy of a large-scale hypertextual Web

search engine." Computer networks and ISDN systems 30.1 (1998): 107-117.

The word "vote" is used by Google, while "authority" is used by computer scientist Jon Kleinberg, who developed an algorithm similar to Google's PageRank. See Katja Mayer, "On the Sociometry of Search Engines: A Historical Review of Methods," in Becker and Stalder, op. cit. pp. 55-6.

165 Kaja Mayer, *op. cit.*, p. 55.

is based on a concept of social structure which arises from repeated acts of evaluation from a distance.

The evaluators discussed so far prepare the stage for the actual searching activity of an individual user. Although neither the evaluations recorded by the web crawler nor those of trusted insiders results in an arrangement of links on a screen, they structure the environment in which that search takes place. The final arrangement of links as the result of a search, however, depends as much on the activity of the user as on the structure provided in advance of the search. The user therefore provides the third component of the search audience by entering a search term and selecting among results. At this time the three components are brought together to construct a final evaluation of the relevance of potential works. 166 Together these evaluations jointly determine the search result.

To perform a search, the user takes a series of steps. First, she enters a search query into the Google search engine and receives in reply a list of results, all presented on a single results page and ranked by their "relevance" to the query, with the most relevant result on top. Each of the search results includes a link to another page, and a summary indication of that page's content. The results are then examined by the user, who reads the content summaries in turn and considers whether to visit them. If she decides to visit one, she clicks its result link, transferring her attention from the search engine to the page linked

<sup>&</sup>lt;sup>166</sup> Personalized results are increasingly relevant. See Danny Sullivan, "Google's Personalized Results: The "New Normal" That Deserves Extraordinary Attention," http://searchengineland.com/googles-personalized-results-the-new-normal-31290

and potentially ending the search. 167 In providing the initial impetus for the concrete search, and in evaluating the search results, the searcher plays an independent role in the constitution of the search audience.

The various components of the search audience are distanced from the producers whose work they jointly evaluate. The searcher is disconnected from the work she eventually receives through the search. Indeed, this disconnection is the motive for conducting a search at all. Initially the searcher is often completely unaware of the work she eventually receives. 168 The linking web sites are also external to the party linked; this is a key factor in the integrity of the google search index. Finally, the founders and their trusted circle are independent of the vast majority of websites. In sum, the visit in which a search terminates results from the combined evaluations of various independent parties at a distance from the producer of the work visited.

Google Search brings together these factors into an integrated whole, and directs visitors onward, towards external pages. A specific work is thus perceived by an audience through the organization of Google Search. In assuming this organizational role, the search engine brings together the independent factors considered above, thereby comprising a search audience delivering feedback on the producer's work.

<sup>&</sup>lt;sup>167</sup> For a discussion of searching from the perspective of the searcher, see Alexander Halavais, Search Engine Society, Polity Press, 2009, pp. 32-55; also Fiona Fui-Hoon Nah and Sid Davis, "HCI research issues in e-commerce," Journal of Electronic Commerce Research 3(3) 2002, pp. 98-113.

168 Halavais, *op. cit.* p. 35.

## The Impact of the Search Audience

Because Google directs large amounts of traffic, it exercises considerable power over others. In order to illustrate Google's influence over web producers, I turn to the case of Demand Media, a publicly traded company whose business model is based on a novel method of producing media content. The business model employs a practice of discovering audiences' desires and needs, and then producing works that satisfy them. In order to determine the desires and needs of the audience, Demand studies search behavior. I argue in this section that the relationship between the search audience and Demand Media supports the argument of this dissertation that distant evaluators matter to production routines when they provide clear signals of support for works meeting specific criteria.

Demand Media depends on search engines in general, and Google in particular, for large portions of its traffic and revenue. On its owned and operated sites, Demand receives over 40% of its traffic from search engines, and a majority of that traffic is from Google. Demand considers its dependence on search traffic and Google in particular to be a significant source of risk for its future prospects. Any change in the algorithms used by search engines could "negatively impact our ability to earn revenue," wrote Demand in 2011. It therefore highlighted this risk in its initial public offering. As a source of

SECText&TEXT=aHR0cDovL2FwaS50ZW5rd2l6YXJkLmNvbS9maWxpbmcueG1sP2lwYWdlPTc 0NDg1MDkmRFNFUT0wJINFUT0wJINRREVTQz1TRUNUSU9OX0VOVEISRSZzdWJzaWQ9NT c%3d p. 16. Accessed September 2<sup>nd</sup> 2013

\_

http://ir.demandmedia.com/phoenix.zhtml?c=215358&p=irol-

c%3d p. 16, Accessed September 2<sup>nd</sup>, 2013.

170 Demand Media, *op. cit.* pp. 16-17.

considerable revenues and a potential source of disruption, Demand pays close attention to the search audience and seeks to satisfy it with its work. The search audience clearly matters to Demand.

Demand considers three factors when deciding what kind of content to produce. The first factor is the audience's desires as expressed by their search behavior. In order to understand its audience, Demand purchases data about user search habits from search engines and other third party firms, then analyzes this data for statistical patterns. Second, Demand estimates the financial return it will receive from selling advertising against whatever work it might produce to satisfy the audience. This analysis is based on the fact that some search terms are known to bring in higher revenue than others. Finally, Demand checks the current state of works already published on the topics it has gathered from the audience. If there are existing works already published on these topics, then a new work is less likely to be worth producing because it will have to compete against these existing works. These three factors — the search audience, the expected return, and the competition — are combined into a decision about whether to produce a work specified by a particular search term. <sup>171</sup>

Demand Media requires that each work generate enough revenue to justify the cost of its production. <sup>172</sup> In order to achieve this goal, it tailors its

<sup>&</sup>lt;sup>171</sup> Daniel Roth, "The Answer Factory: Demand Media and the Fast, Disposable, and Profitable as Hell Media Model," *Wired*,

http://www.wired.com/magazine/2009/10/ff demandmedia/, accessed February 9<sup>th</sup>, 2014.

172 See Jay Rosen, "Jay Rosen Interviews Demand Media: Are Content Farms 'Demonic'?" *readwrite*, December 16<sup>th</sup>, 2009,

productive capacity toward the interests of a selected segment of the search audience. This audience segment is selected for its revenue potential. Because this portion of the audience is able to provide the revenue Demand seeks. Demand produces work that will attract and satisfy it rather than other portions of the audience. In contrast, other segments of the search audience are unable to provide the support that Demand requires, and these weaker portions of the audience exert correspondingly less influence over Demand's production routines. Demand Media distinguishes the wheat from the chaff by winnowing down its list of search terms to include only those that promise a high enough return to cover the costs of producing a work. Demand thereby strips out all searches — all audience segments — containing terms, such as "history of" that it has determined to be unprofitable "ad poison." <sup>173</sup> In this way it limits the works it is prepared to produce to those that will return a sufficient profit to cover their own costs of production. In exchange for the revenue it requires to operate and expand, Demand tailors its work to the needs and desires expressed by this most consequential audience subset.

In order to tailor its production routines toward a particular audience segment, Demand Media must be able to clearly recognize the favored segment and distinguish it from others. This requires that the audience segment possess distinctive characteristics, and also that Demand be able to perceive those characteristics. The clarity of this perception is based on Demand's ability to

http://readwrite.com/2009/12/16/jay rosen vs demand media are content farms demoni#awe sm=~ooNxZy5XDF8g2r Accessed December 1, 2013.

<sup>&</sup>lt;sup>173</sup> Daniel Roth, op. cit.

accurately assess the revenue potential of the audience associated with a given search keyword. Demand's ability to do this requires expertise in the arts of audience measurement, along with a command of the instruments necessary to carry out these measurements. The possession of analytic expertise and technologies of measurement is a prerequisite of Demand's ability to produce works of communication in line with the preferences of powerful audiences. It is therefore a prerequisite of Demand's ability to operate and grow.

As a corporate entity, Demand Media demonstrates that groups can sometimes be treated as individuals. The corporation has a clear and regular pattern of behavior and a specific set of values and standards, to wit: it values content that meets the needs of the search audience. This content should be original (not yet treated by competitors) and profitable. The building an innovative method of identifying promising topics and a low cost method of producing those works, Demand has established a coherent pattern of behavior that has been both critiqued and praised. In this sense, it has been treated as an individual media producer.

The relationship between Demand Media and Google demonstrates the give and take between a producer and another who matters to it. As a source of traffic, Google emits not only clear directions to Demand regarding what it would like Demand to produce, but also evinces a disposition to help those who cater to

<sup>&</sup>lt;sup>174</sup> Daniel Roth, op. cit.

<sup>175</sup> See Ned Frey, "30 eHow Articles in Ascending Order of Usefulness," The Awl, August 10<sup>th</sup>, 2010, <a href="http://www.theawl.com/2010/08/listicle-without-commentary-30-ehow-articles-in-ascending-order-of-usefulness">http://www.theawl.com/2010/08/listicle-without-commentary-30-ehow-articles-in-ascending-order-of-usefulness</a>, accessed February 9<sup>th</sup>, 2014. Richard McManus, "How Demand Media Produces 4000 Pieces of Content a Day,"

its interests by providing them with advertising revenue. The search engine therefore exercises considerable sway over both Demand Media's production methods and the content of what it produces. In this respect the relationship between Google and Demand Media clearly parallels the relationship between an editor and the journalists she edits. The parallel continues from the side of independence: Although the search audience provides Demand Media with its topics, this provides only a starting point and rough outline of a work. Demand's writers must fill this space, by conceiving, planning, and executing the specific content of the work. They therefore have at least some opportunity to develop and express a unique connection to the materials of their work.

Nevertheless, the independence of both Demand Media and its freelancers is limited in various ways. First, in contrast to the freelancers studied in Chapter 1, Demand Media freelancers do not pitch stories; the closest analog at Demand is the process whereby Demand's writer's and videographers select what they want to work on from a list of approved topics generated by Demand's algorithm. This limits the range of operation accorded to the sensibilities of Demand Media freelancers. Second, in order to earn a living wage, Demand's freelancers must complete many pieces of work in a day. This reduces the freelancer's time to explore and abide with a topic, and makes it harder for her to develop unique and significant connections with the materials of her work. 1777

http://www.ehow.com/how 10192 be-happy.html, Accessed February 9<sup>th</sup>, 2014.

<sup>177</sup> This dynamic is also visible in traditional journalism organizations. See for example Patrick B Pexton, "The Post Fails a Young Blogger,"

These restrictions of autonomy have generated significant criticism from journalistic critics of Demand Media, who have likened Demand media to factories and sweat shops.

Journalistic critics of Demand Media have been quick to connect the issue of autonomy with that of "quality," that is to the norms and values exemplified in the content Demand produces. According to this critique, because Demand Media pays its freelancers between three and fifteen dollars per piece of work, freelancers must finish multiple pieces in an hour in order to make a living wage. Meeting this target, in turn, requires skipping certain operations that must be done in order to conform to the norms and values they hold dear, such as editing out distracting sounds from videos, or thoroughly fact-checking a piece of writing. This work process is a painful one for journalists who must either flout their own standards or forego income that matters to them a great deal. Several journalists have written exposes describing their attempts to work at Demand Media, and the resultant conflict between their own standards and the intense pacing of the work of Demand Media. 178 Thus, much of the indignation directed at Demand stems from an understanding held by journalists that connects low autonomy, low pay, and low quality.

http://www.washingtonpost.com/opinions/elizabeth-flocks-resignation-the-post-fails-a-young-blogger/2012/04/20/gIQAFACXWT story.html, April 20, 2012, accessed February 9<sup>th</sup>, 2014.

178 See Jessanne Collins, "My Summer on the Content Farm," *The Awl*, November 4th, 2010, <a href="http://www.theawl.com/2010/11/my-summer-on-the-content-farm">http://www.theawl.com/2010/11/my-summer-on-the-content-farm</a> accessed February 10th, 2013; and Nicholas Spangler, "In Demand: A week inside the future of journalism," *Columbia Journalism Review*, November 4<sup>th</sup>, 2010, <a href="http://www.cjr.org/feature/in\_demand.php?page=all-accessed February 9<sup>th</sup>, 2010.">http://www.cjr.org/feature/in\_demand.php?page=all-accessed February 9<sup>th</sup>, 2010.

Beyond these concerns however, the actual works produced by Demand Media are of concern to their journalistic critics. Employing Schudson's definition of journalism as a touchstone, we can say that these journalistic critics regard the topics selected by Demand's slice of the search audience as more often frivolous than important, matters of private rather than public concern, and tending to address longstanding rather than contemporary affairs. It is not only that Demand's producers work hard for little pay then, or that another tells them what to write about, but that they do so in order to produce videos about whether polish Vodka is better than Russian, or how to pour a glass of milk. Dedication to work can sometimes be justified by appeal to the contribution one's work makes to a higher cause, but if work amplifies instead the trivial and frivolous content of life, the sacrifices required take on an absurd or tragic air.

The discordance in the norms and values empowered by Demand is amplified by the power and focus of the audience they serve. Many journalists see Demand Media as one more link in a long chain of commercially driven, analytical, nonjournalistic forces tending to reduce their autonomy and deflect attention away from their concerns. Demand's prominence and technological savvy has made them the focal point of a current of media critique that has been building for decades. The technologically enhanced power of Demand to reliably channel an audience, to concentrate and focus its attention on specific topics, and to harness the dispersed attention of scattered individuals into a

<sup>&</sup>lt;sup>179</sup> For the pre-internet history of these concerns see Doug Underwood, *When MBAs Rule the Newsroom*, Columbia University Press, 1995.

unified stream of traffic, has clarified the links between journalistic autonomy and the norms and values of journalism.

The case of Demand Media shows that a search audience may organize media produced by distant others. In the Demand production process, the first production factor comes from the search audience. The search terms that result from this audience are used as the basis for further steps in the production process itself, which further refine the topics. Search audience data sets the outer limits and overall form of the Demand production process. At the same time, Demand must seek out the audience by acquiring the data it uses to interpret the audience's desires, and by developing and using the tools to analyze this data. Thus the relationship between the search audience and Demand Media shows the pronounced influence of a powerful, algorithmic other on the production routines of a media producer.

## The Power of the Company

Although the search audience is in many ways a balanced organization, one party plays a special role. That party comprises the Google founders and their trusted associates, a group that has by now expanded to include thousands of corporate officers and employees. Because of its special position as coordinator of the other parties, Google (hereafter "the company") exercises great discretion and power over the search audience's evaluations. Furthermore, this power is cloaked in secrecy: those affected by the company's actions are often unable to understand or appeal them. Nevertheless, the company offers

strong justification for its opaque and ample powers. In what follows I will consider the company's unique position and power. I argue that the company conceals fundamental characteristics of the search audience from producers, partly in order to maintain the search audience's independence. I also argue that this same mechanism removes Google's reasoning from public review and renders its judgment subject to unpredictable and potentially arbitrary fluctuation. It thereby places producers in the difficult position of conforming to norms and values which are fundamentally unknowable.

An important structural factor in the search audience is the company's dominant position in the flow of information. Google's extensive index contains a ready source of information about who is linking to whom. In addition, because millions of people directly access the Google search engine, their needs are communicated directly to Google. Taken as a whole, this information is essential in determining the values and standards of the search audience, and only the company has access to it. At their discretion they release bits and pieces, or vague outlines of the information. But they themselves are in possession of highly detailed, precise, and voluminous stores of it. This gives them not only the power to influence traffic flows in important ways, but exclusive access to the knowledge of how the audience actually behaves.

The company's tight control over information is reflected in the limited guidance it gives to producers of web sites. Google's webmaster guidelines, for example, state that producers should "Create a useful, information-rich site, and

write pages that clearly and accurately describe your content." Producers are also urged to "Keep the links on a given page to a reasonable number." Policies like these give a general sense of values and standards, but not a precise one. They reflect an attempt by the company to provide some guidance for producers, while keeping many details secret from them.

The company is tight-lipped in individual cases as well. A web page's ranking for a particular search query appears on the search results page with no detailed accounting of how or why the ranking was achieved. The same goes for changes in ranking over time. When a producer's web page either rises or lowers in rank for a particular search query, the change is reflected both in the results of a search and in the corresponding share of the search audience that the producer receives. As a matter of policy however, the company does not disclose the reasons behind these changes. This can cause consternation among those whose rankings are suddenly downgraded, as I demonstrate below.

Google does communicate with some producers, and provide some level of detail about what kinds of problems it has with sites. There are official channels for this communication, and Google's Matt Cuts, the head of Google's Webspam team, engages publicly at times. <sup>181</sup> To a certain extent therefore, this provides clarity regarding audience values and standards, and assists producers in tailoring their work to them. Nevertheless, this clarity only goes so far; when a

<sup>&</sup>lt;sup>180</sup> Google Webmaster Guidelines,

http://support.google.com/webmasters/bin/answer.py?hl=en&answer=35769 accessed December 1, 2013.

<sup>1, 2013.

181</sup> See Cutts' blog, "Matt Cutts: Gadgets, Google and SEO," http://www.mattcutts.com/blog/ Accessed August 30<sup>th</sup>, 2013.

producer inquires too deeply she is met with an officially sanctioned wall of silence. This combination of silence and disclosure leaves a middle ground in which producers get along as best they can, using hunches, clues and a general consensus shared among producers. 182

The practice of linking between web pages provides an example that illustrates the company's balance between transparency and opacity. In what follows I will explain the company's approach to linking and relate it to the organization of independence through an example taken from an online forum. I begin with some background on Google's approach to linking, and then examine the forum exchange.

Google interprets a link as an independent endorsement of one party by another. When building the search index, Google's web crawler counts each link it finds as a separate vote in which the linking party vouches for the quality of the linked party. An assumption of this model, then, is that the vouching party and the vouched are at least somewhat independent of each other. When two web pages link to the same third web page, for example, each link is counted as a separate and independent endorsement. To obtain the total "PageRank" or importance of a given web page, Google considers all of the independent links that point to it. 183 The assumption is that a web page with many endorsements from independent parties is one whose content is very likely to satisfy users and

<sup>&</sup>lt;sup>182</sup> The knowledge practices whereby this consensus is developed are known as "search engine optimization." See Eric Enge, Stephan Spencer, Jessie Stricchiola, and Rand Fishkin, *The Art of SEO*, Second Edition, O'Reilly Media, 2012.

This is a simplified account that leaves out indirect links. Also note that because Google's practices are secret, only broad outlines can be discerned.

hence is given high placement in search results. This outcome depends on each link representing an independent evaluation.

Of course, this assumption is not always true. There are many cases in which links do not express independent endorsements, but rather organized campaigns. For example, a producer can create a number of web pages that all link to a single page in order to increase that page's ranking, a practice known as "link farming." <sup>184</sup> In this case the links feign independence while in reality being controlled as tools by a single agency. Another such practice is buying and selling links from other web sites. These practices all involve issuing links on the basis of something other than what Google calls "editorial votes given by choice." <sup>185</sup> Google therefore discourages producers from creating links that appear independent when they are in reality the result of coordination or exchange.

Over the years, Google has slowly clarified what it considers an independent, or, to use the more common term, a "natural" link. By early 2012, the time when the forum exchange below took place, various hints could be found. By stating that "Links are usually editorial votes given by choice," Google's Webmaster Guidelines stressed the individual's uncoerced decision in

<sup>&</sup>lt;sup>184</sup> See Jennifer Kyrnin, "How Can You Tell if a Site is a Link Farm?" <a href="http://webdesign.about.com/od/seo/f/is\_it\_linkfarm.htm">http://webdesign.about.com/od/seo/f/is\_it\_linkfarm.htm</a> accessed August 29th, 2013. For a recent example see Joost de Valk, "Godaddy's spammy link building techniques," <a href="http://yoast.com/godaddy-link-building/Accessed August 29th">http://yoast.com/godaddy-link-building/Accessed August 29th</a>, 2013.

<sup>&</sup>lt;sup>185</sup> See "Link Schemes," Google Webmaster Guidelines, version from Feb 26<sup>th</sup>, 2012. Available at

http://web.archive.org/web/20120226054431/http://support.google.com/webmasters/bin/answer.py?hl=en&answer=66356 Accessed August 29<sup>th</sup>, 2013.

determining whether to link. The idea here is that a link should be offered without considerations of fear or favor – power, in the terms of this dissertation. The guidelines also set out examples of what *not* to do, thereby clarifying somewhat how a link could indicate a lack of independence. These forbidden behaviors were lumped under the term of "link schemes." The term "link scheme" was not defined precisely, but was said to involve "disregarding the quality of the links, the sources, and the long-term impact it will have on their sites." Four "examples" of link schemes were given, namely "links to web spammers or bad neighborhoods on the web;" "excessive link exchanging ('Link to me and I'll link to you')"; "Links intended to manipulate PageRank"; and "Buying or selling links that pass PageRank." Such broad specifications leave plenty of room for interpretation, as I will now demonstrate.

The forum exchange I will examine took place in March 2012 and raised the issue of what constitutes a "link scheme." A web producer known on the forum as JamesPenn discovered a precipitous decline in referrals from Google to his site, and therefore sent a message to the company asking them to reconsider his ranking. The response he received was as follows.

We've reviewed your site and we still see links to your site that violate our quality guidelines. Specifically, look for possibly artificial or unnatural links pointing to your site that could be intended to manipulate PageRank. Examples of unnatural linking could include buying links to pass PageRank or participating in link schemes.

Google Webmaster Guidelines, version from Feb 6<sup>th</sup>, 2012, <a href="http://web.archive.org/web/20120206092132/http://support.google.com/webmasters/bin/answer.p">http://web.archive.org/web/20120206092132/http://support.google.com/webmasters/bin/answer.p</a> y?hl=en&answer=66736 Accessed August 30<sup>th</sup>, 2012.

The poster declared that he had "never paid for a single link." One tactic this producer had employed in order to gain links, however, was to write "guest posts" at the web sites of others. The posts were written partly in order to spread the word about the producer's own web site: each one included a link to his web site in the body of the guest post, along with another link to his web site in the description of his qualifications as a guest author. <sup>187</sup>

These guest posts illustrate the practice of "anchor text targeting," in which a producer links to a site using a specific piece of "anchor text" (the visible text in a hyperlink that a user can click on to visit the linked site). The specific anchor text is chosen carefully, under the theory that search engines will recognize this link as an assertion that the work linked is relevant to the search keywords contained in the anchor text. For example, a link to a work using the anchor text "best university in California" may be issued by a producer as an attempt to signal to the search audience that the site linked should rank highly on a search for the term "best university in California." The producer then issues this same link from multiple web pages on different web sites, under the theory that each link will be counted as an independent vote for the quality of the site linked. The expected outcome of these actions is a higher ranking of the site linked for searches on the keywords in the anchor text. In JamesPenn's words, "With my

<sup>&</sup>lt;sup>187</sup> Warrior Forum member JamesPenn, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-guest-posts.html#post5890797 March 23<sup>rd</sup>, 2012, Accessed February 10<sup>th</sup>, 2014

guest posts I usually include one contextual anchor text link which is usually a keyword I'm targeting." 188

In an effort to promote his site then, JamesPenn wrote "guest blog" posts on a variety of sites, each one linking to his site using a specific anchor text. <sup>189</sup> The question then arose as to whether this was an attempt to benefit from a "link scheme." Forum member PotPieGirl argued that such guest posts were natural:

When one submits a unique/useful/compelling/awesome guest post to a site owner, that site owner reads it and deems it quality content for their site AND for their readers. The site owner allows a link to the author's site or twitter account or whatever so his/her readers can find more about the guest poster who was nice enough to share that unique/useful/compelling article.

That is a truly editorial link. To me, that IS natural. 190

Forum member BackLinkiT then disagreed: "that will only ever be done by a webmaster trying to improve the rankings of their own site. Therefore, it is unnatural." Further debate ensued.

The participants in this exchange are debating Google's view of independence and how it may be organized. PotPieGirl argues that, if editorial considerations of values and standards play the dominant role in deciding

191 Warrior Forum member BackLinkiT, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-guest-posts.html#post5900622 March 25<sup>th</sup>, 2012, Accessed August 30<sup>th</sup>, 2012.

<sup>188</sup> Warrior Forum member JamesPenn, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-guest-posts.html#post5890797 March 23<sup>rd</sup>, 2012, Accessed February 10<sup>th</sup>, 2014

189 Warrior Forum member JamesPenn, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-guest-posts.html#post5899192, March 25th, 2012, Accessed August 30<sup>th</sup>, 2012.

190 Warrior Forum member PotPieGirl, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-guest-posts.html#post5900607 March 25th, 2012, Accessed August 30<sup>th</sup>, 2012.

whether to allow a guest post and its anchor text-targetting link, then a link is "natural," or independently issued. This position is, of course, supported by the company's reference to "editorial votes given by choice" as one of the standards for determining whether a link is participating in a "link scheme." BackLinkiT argues that the producer is indeed participating in a "link scheme," simply because he is "trying to improve the rankings of his own site." In this interpretation, doing *anything* with the explicit aim of increasing one's search rankings is forbidden behavior. This objection applies to any link intended to increase a site's ranking, regardless of its editorial bona fides.

As far as BackLinkiT is concerned, the issue turns on the question of whether the producer gave *any thought at all* to how the search audience would receive the work. In the terms of this dissertation, the question is whether another can play *any* role in the production of a work, without tainting that work as subordinated to that other's power. At the extreme end of this spectrum, any other-regarding behavior by a producer is an unwarranted violation of that producer's independence. The conclusion is drawn by another participant in this conversation, forum member Steve25:

Let's be realistic about this, ANY link you fetch yourself, whether it be a link exchange, guest blog, bookmarking etc is not natural. By it's [sic] very definition a natural link (at least in [Google's] eyes) can only come about if a site owner has come across your site and felt inclined to add a link to it on their site. As soon as you mention your

site to someone and hint that they may like to link to it, the link becomes unnatural. 192

This poster draws a line in the sand. On one side are those legitimate producers who simply publish their work without promoting it. On the other side are the illegitimate producers, those who "fetch links" by seeking out evaluators of their work and calling their attention to it, perhaps even pitching it to them.

Steve25 concludes that any effort to influence others to approve a work is a violation of the principle of independence. Any direct contact that a producer initiates with an evaluator is tainted by collusion. In the terms of this dissertation, a very great distance, even to the point of separation, must be maintained between producer and evaluator. If something like this underlies Google's moral calculus then the company has assumed an extreme position in the organization of independent media producers. 193

The issue was clarified by an update the company made to their Webmaster Guidelines in mid-2013. In that update, a new example was added to the behaviors constituting "link schemes", namely "Large-scale article marketing or guest posting campaigns with keyword-rich anchor text links." <sup>194</sup> This description seems to include the guest posting done by JamesPenn, and hence clarifies the limits of such posting. Nevertheless, there is still plenty of room for

192 Warrior Forum member Steve25, "Google Punishing Guest Posts?", http://www.warriorforum.com/adsense-ppc-seo-discussion-forum/566582-google-punishing-quest-posts-2.html#post5905104 March 26th, 2012, Accessed August 30<sup>th</sup>, 2012.

Artificial / Unnatural Links Be Wary!" <a href="http://soniconsultants.com/seo/google-warnings-artificialunnatural-links-be-wary/">http://soniconsultants.com/seo/google-warnings-artificialunnatural-links-be-wary/</a> Accessed December 1, 2013.

<sup>194 &</sup>quot;Link Schemes," Google Webmaster Guidelines, <a href="https://support.google.com/webmasters/answer/66356">https://support.google.com/webmasters/answer/66356</a> Accessed August 30th, 2013.

interpretation under these new Guidelines. The question of what constitutes a "large scale" campaign, for example, is not something that will likely be specified exactly. The editor of the news site searchengineland.com, Barry Schwartz, summarized the new policy as follows: "If you are guest blogging with the intent to build links, and those blog posts are done large-scale with very little quality built into them, Google may take action against the links in those articles or guest blog posts." Schwartz thus hedges his description not only regarding the criterion of "large-scale," but also that of "quality." The ultimate arbiter of both the meaning and the relative weights of these criteria is Google. Despite the new specifications then, the company has left itself plenty of discretion to adjust search results as it sees fit.

To the extent that the search audience conceals its values and standards, producers will be inhibited from learning and applying them to their work. As Google in particular pursues this strategy, producers are faced with a quandary. They are aware of the existence of an audience that confers great value on some works, and are therefore motivated to satisfy this audience. But this same audience not only hides some of the values and standards that govern it but penalizes those who seek to discover and fulfill its expectations. Such an audience is to some extent inscrutable; its working resists analysis, while it

 <sup>&</sup>lt;sup>195</sup> Barry Schwartz, "Google Warns Against Large-Scale Guest Posting, Advertorials & 'Optimized Anchor Text' In Press Releases." http://searchengineland.com/google-adds-large-scale-guest-posting-advertorials-optimized-anchor-text-to-list-of-link-schemes-168082, July 26th, 2013. Accessed September 1, 2013.
 <sup>196</sup> As one marketing expert wrote, "This is absolutely necessary knowledge to cut it in

As one marketing expert wrote, "This is absolutely necessary knowledge to cut it in internet marketing – you must understand back links – all the types of them. You must understand WHY you are doing them and how to do them properly." <a href="http://www.potpiegirl.com/2009/03/links-links-links/#ixzz1sbqvzC4o">http://www.potpiegirl.com/2009/03/links-links-links/#ixzz1sbqvzC4o</a> Accessed December 1, 2013.

confers favor for reasons that are publicly unknowable. In this respect Google resembles a typical top editor, who does not provide full guidance to her subordinates regarding what to write, and indeed, would prefer that they exercise their own judgment in producing their own work. Unlike such an editor however, Google as an organization contains an organized, algorithmic apparatus for precisely specifying these values and measuring work's conformance to them.

When audience favor is bestowed for undiscernible reasons, it promotes works and bestows value upon them according to its own discretion. If there is no transparent method of understanding how and why an audience came to value a work, then the favor wielded by that audience may seem arbitrary to all those outside the ken of a few privileged insiders. <sup>197</sup> Company representatives may protest that the audience accords favor only with good reason, and that the reasons must be withheld for some greater good. <sup>198</sup> In doing so the company attempts to position itself as a trusted evaluator of works. It does not give reasons for its conduct but nevertheless expects approval, or at least acquiescence. This is a strong demonstration of the power of the company.

### Conclusion

The primary contrast between the news department as a form of organization and Google Search is the lack of an employment relationship, or

<sup>&</sup>lt;sup>197</sup> For another example, see an episode in which Twitter blocked access to a newspaper based on erroneously categorizing some of its tweets as spam. Andrew Beaujon, "Twitter apologizes for blocking newspaper's URLs," November 4<sup>th</sup>, 2013. <a href="https://www.poynter.org/latest-news/mediawire/228372/twitter-apologizes-for-blocking-newspapers-urls/">https://www.poynter.org/latest-news/mediawire/228372/twitter-apologizes-for-blocking-newspapers-urls/</a> Last accessed November 4<sup>th</sup>, 2013.

<sup>&</sup>lt;sup>198</sup> Marissa Mayer, op. cit.

indeed of any contractual relationship at all between the company and the producers of the web pages featured in Google's search results. Despite this lack of contractual authority, Google nevertheless exercises guidance over the way many web producers work. Google's power over these producers is derived from the traffic the search audience can send to producers whose work they rank highly. Because producers value this traffic, they are motivated to conform to Google's preferences and guidelines.

This chapter has examined the relationship between the search audience and the independent producers of the Web. In organic search, Google has constructed an organized audience based on three forms of evaluation and feedback which combine to offer service to a diverse public: evaluation by the founders, evaluation by independent producers, and evaluation by searching users. This audience provides consequential feedback to manifold producers; it therefore organizes the production of media works on the Web.

Although Google search is not an organization of independent *journalists*, it demonstrates one way to algorithmically organize independent media producers. The lack of employment relationships between Google and the producers it organizes does not preclude the construction of an organization that includes these producers within a specific, normatively oriented balance of power. Google has managed to produce an algorithmic organization of independent media producers. Because this challenge is also faced by

journalism, the case study is relevant to the study of journalism as a distinctive and autonomous field of practice.

## **Chapter 4: An Experimental, Algorithmic News Organization**

In this chapter I describe newskraft.org, the experimental, algorithmic organization developed and launched in the course of this dissertation.

Newskraft.org is an empirical phenomenon that ties together the concepts, data, and case studies presented so far. It does this in two ways. First, it provides a third and final case study that clarifies and tests the theory of the organization of independent journalists. By connecting disparate phenomena from old and new media, newskraft.org demonstrates the value of a theory of organization capable of handling both the traditional news department and a range of algorithmic news organizations. Second, it clarifies the novel research methods used in this dissertation. By examining newskraft.org as a built, framed artifact, and drawing connections between this artifact and the other portions of the dissertation, I try to show the value of using algorithms to guide social science research. Although newskraft.org is not yet a "successful" journalism organization, I argue that it embodies a promising research methodology.

The plan of the chapter is as follows. In order to situate newskraft.org within a wider historical context, I will briefly describe a recent and influential pair of algorithmic organizations which have been used for journalistic purposes.

These organizations are the social news sites Digg and reddit. My aim in this section is to introduce and distinguish the algorithm employed in this dissertation

by comparing it to, and contrasting it with, previous algorithmic organizations. The historical sketch is partial and incomplete. Its purpose is not to thoroughly describe the organizations under study, but to situate them in relation to the perspective of this dissertation. In doing so, I focus on the organizational form shared by two algorithmic organizations, and its development in terms of transparency and access. In particular, I focus on the relationship between the form's *open membership policy* and its *government*.

The second section will describe an algorithmic organization from the perspective of an *imagined usage context*. As such, the section is a description of the structure of an organization which exemplifies the theoretical framework of this dissertation. I argue that this is a description of a partially realized organizational structure, and hence provides a degree of support for the dissertation's main argument. To the extent that this description is not only coherent and intelligible, but actually realized as code and activity, it can be linked with the theoretical framework of the dissertation and thereby provide a point of empirical contact with both the framework and the other case studies. <sup>199</sup> The algorithm is a substantial piece of working software; it was rigorously tested throughout its development, and has been explored and used by an initial cohort

520.

<sup>&</sup>lt;sup>199</sup> This procedure can be compared to Steven Shapin and Simon Schaffer's concept of "virtual witnessing," in which descriptive speech about the performance of an experiment enables an audience to imagine the experiment's course and result, thereby obviating presence at an occasion in which the experiment is performed. See Steven Shapin, "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science*, 14(4), November, 1984, pp. 481-

of participants.<sup>200</sup> This makes the algorithm not only a "design," but a concrete, if nascent activity system with a degree of accomplished realization. Although it is not a full-fledged journalism organization, it has an independent evidential status as a structured system of activity.

My aim in this chapter is to describe the structure of a specific kind of algorithmic organization. To do this I will imagine the algorithm in use, and describe scenarios in which participants interact with each other. Because these scenarios are structured by an algorithm which actually exists, they have a concreteness about them which increases their intelligibility. In this sense the scenarios are not merely hypothetical, but cases of an actually existing activity structure. On the other hand, aspects of the scenarios, such as the motivations of the participants, are indeed hypothetical, and as such, subject to empirical revision. Thus the evidence I will present in this chapter is overlain with a substrate of supposition, including supposition of norms and values, which should be critically viewed. As such, the algorithm and any organizations which it may structure are subject to further negotiation and critique. Although it has a real and independent status, the algorithmic organization is subject to interpretative flexibility.<sup>201</sup>

This system is derived from two previous software systems, namely *Payyattention* by Steve Farrell and Christian Grommell, and *The Hourly Press* by Steve Farrell and Lyn Headley.

201 Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," in Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Anniversary Edition, MIT Press, 2012, pp. 33-7; Ronald Kline and Trevor Pinch, "The social construction of

In the third section of this chapter, I discuss the experimental, algorithmic organization in relation to the various case studies presented in this dissertation. I show that this algorithmic organization is structurally congruent with not only the other algorithmic organizations studied in this dissertation, but also with the news department. I argue that this demonstrates the value of the theory of the organization of independent journalists. In bringing these various case studies into contact with each other, the experimental, algorithmic organization helps us make new connections between seemingly distinct ways of organizing media and journalism.

#### **First Generation Filters**

During its first decade, the web gave rise to a specific form of algorithmic organization that has repeatedly recurred. Broadly speaking, the algorithms which exemplify this form organize their members in order to jointly evaluate web pages and arrange links to them for the benefit of a large, anonymous audience. In this section I argue that this form characterizes the organizations Digg and reddit, two pioneering and widely known social news websites. After briefly describing these organizations, I go on to demonstrate a pattern of historical development manifested by each of them that is relevant to the concerns of this dissertation. Because the term "filter" is often used in describing social algorithms like these, I will call these organizations "First Generation Filters," or FGF's.

Although they compete with each other, Digg and reddit are broadly similar organizations when considered from a structural perspective. 202 In particular, both organizations feature a membership policy which allows almost anyone to join. Both organizations encourage users to submit links to external web sites in order to draw attention to the works hosted at these sites. Finally, both of them allow users to vote on which links they think should be widely shared, and employ algorithms to count these votes and to arrange links according to their significance. <sup>203</sup> Although Digg eventually abandoned this form of organization, its initial rise was predicated on it. Reddit, in contrast, has stuck with this form of organization throughout its existence. In addition to these structural similarities, I will argue that Digg and reddit share a pattern of historical development which I will interpret in terms of their shared structure. Although I will not focus on Google search in this section, I believe that the following pattern of development, mutatis mutandis, characterizes not only that organization but others as well.204

A central feature of the FGF is its membership policy. The policy is inclusive, in that anyone who meets a simple technical criterion, such as

Digg has recently abandoned this form of organization completely. Thus the description which follows treats the original design of Digg, not its current manifestation. For commentary, see Andrew Couts, "Sorry Reddit, Digg's new model proves community rule is overrated," *Digital Trends*, July 21<sup>st</sup>, 2013, <a href="http://www.digitaltrends.com/web/new-digg-is-the-old-reddit/">http://www.digitaltrends.com/web/new-digg-is-the-old-reddit/</a> Accessed February 14<sup>th</sup>, 2013.

<sup>203</sup> Owen Byrne, "Kevin Rose shows off digg.com on The Screen Savers," <a href="http://www.youtube.com/watch?v=W1\_YoG7lql4">http://www.youtube.com/watch?v=W1\_YoG7lql4</a> Accessed February 11<sup>th</sup>, 2014. Wikpedia, "Digg." http://en.wikipedia.org/wiki/Digg Accessed February 11th, 2014. reddit, "Frequently Asked Questions," http://www.reddit.com/wiki/faq, accessed February 11<sup>th</sup>, 2014.

For example, Google Scholar. See Joeran Beel and Bela Gipp. "Academic search engine spam and Google Scholar's resilience against it." *Journal of electronic publishing* 13(3), 2010.

possessing an email address, can join and be counted as a full-fledged member of the organization. I argue in this section that such a highly inclusive membership policy ironically results in an opaque, technocratic apparatus of organizational government. The process I will describe is one of organizational growth accompanied by simultaneous growth in unwanted attention from "spammers." By describing this type of algorithmic organization, I aim to introduce and set the stage for newskraft.org, which makes different choices not only about its membership policy, but also about the transparency of its organizational government.

The life cycle of a successful First Generation Filter (FGF) seems to proceed as follows. First, an algorithm's code is developed and launched, participants are recruited, and the FGF begins to evaluate works of media and journalism. As the algorithm's popularity increases, feedback is delivered to external producers, who notice the feedback, find it valuable, and modify their production routines to accord with the algorithm, as described in previous chapters. These producers consider the FGF as a source of valuable traffic, and carry out their production activities with an eye toward attracting that traffic. This can take various forms, from simply submitting their content to the FGF after it is produced, to crafting content in order to appeal to the FGF, to more complex forms of orchestrated promotion which I will consider below. Here the point is simply this: Because the FGF matters to these producers, they try to shape the

reaction of the FGF to their work, and this shaping becomes a part of their work itself.

When the algorithm is initially established, a clear sense of distance exists between the FGF and the external producers whose work it evaluates. During this period, the FGF functions as an audience whose members freely evaluate works produced by unaffiliated others. As the site's popularity increases however, external producers are brought closer to the site: they mingle with the site in the ways described above. Thus their distance from it decreases, and issues of independence are raised. One such issue is raised when producers seek to form alliances with strategically situated members of the organization, to direct traffic towards work in which they have an interest. Another is raised when producers "game the system" by such tactics as creating multiple accounts in order to gain increased influence. In such ways the organization acquires a "spam problem." Of course, this process occurs gradually, and we lack detailed internal knowledge of its emergence at various companies. But the overall

<sup>&</sup>lt;sup>205</sup> Kevin Morris, "How The Atlantic successfully spammed Reddit," The Daily Dot, April 04, 2012, http://www.dailydot.com/society/atlantic-slaterhearst-jared-keller-reddit/ Accessed February 11th, 2014. Kristina Lerman, "Social networks and social information filtering on digg." arXiv preprint cs/0612046 (2006). http://arxiv.org/pdf/cs/0612046.pdf?origin=publication\_detail Accessed February 11th, 2014.

<sup>&</sup>lt;sup>206</sup> See Cade Metz, "Blackhat SEO 'cheats' Reddit," The Register, October 11th, 2010. http://www.theregister.co.uk/2010/10/11/blackhat\_seo\_games\_reddit/ Accessed February 11th, 2014.

<sup>&</sup>lt;sup>207</sup> Kevin Rose, "Digging Fraud," Digg Blog, April, 2006, http://diggtheblog.blogspot.com/2006/04/digging-fraud.html Accessed February 11th, 2014. Reddit administrator spladug, "[reddit change] Domains can be blocked from being submitted", 2013.

http://www.reddit.com/r/changelog/comments/umx99/reddit\_change\_domains\_can\_be\_blocked\_f rom\_being/ Accessed February 11th, 2014. Reddit features a special subcommunity entirely for reporting spammers, /r/reportthespammers. At the time of this writing, there were 36 reported spammers in the last hour.

trajectory is clearly visible not only on Digg and Reddit, but also on Google search.

The rise of spam reveals a tension in the algorithm's view of its members and users. On the one hand, users are viewed as independent individuals who evaluate other people's work according to their own judgment, without fear or favor. On the other hand, users are potential spammers. The rise of the spammer thus bifurcates the algorithm's view of its users: alongside the independent user, another kind of user is increasingly seen: a coopted user, one who is subject to influence from organized media producers. A dichotomy is seen to exist in the heart of the algorithmic user base and in the organization's membership.<sup>208</sup>

The rise of spam therefore changes the algorithmic organization: it transforms the assumption of independence into a goal to be accomplished and a condition to be maintained. As popularity increases, so too does spam; independence, then, can no longer be assumed, but must be cultivated and defended. The organization therefore dedicates increasing resources to maintaining a safe haven for free individuals under threat of infiltration by spammers -- users in cahoots with interested media producers. Algorithm developers and independent users are faced with the problem of how to maintain

John Resig's reddit moderation tools called "Man\_is\_Good" and "Man\_is\_Evil" vividly convey this bifurcated view of the reddit userbase. According to Resig, "By default Reddit makes the assumption that many new users (or first time posters) are evil (in that they're likely spammers). In general this is good as it helps to kepp spam to a minimum - in practice however many users' posts get stuck in the spam filter with absolutely no explanation. (Many users think they've been banned or that somehow the spam filter hates them - frequently becoming angry at the moderators or even angry at Reddit itself)." See John Resig, project modbot https://github.com/jeresig/modbot Accessed February 11th, 2014.

their distance from the producers whose work they evaluate. In response to this problem, structures, algorithms and routines emerge whereby spammers and their collaborators are detected, reported, and sanctioned. The organization develops an anti-spam policy.

A crucial component of the anti-spam policy is the development of secret, algorithmic techniques for recognizing spammers and protecting not only independent members but also the public from their influence. These methods include extensive analysis of the behavior of users. <sup>209</sup> Although the exact algorithms are secret, they probably take account of factors such as when the user joined the organization, how she interacts with established, independent users, and of course, the list of producers she has evaluated. <sup>210</sup> These algorithms may be used directly by corporate administrators, or by moderators: strategically situated users who have police power over the specific topical forums they oversee, including the power to ban users and remove their submissions. Reddit provides these moderators with algorithmic "spam filters" which structure and guide the process of detecting and combating spam. <sup>211</sup>

As organizations, FGF's offer a specific type of independence to their users. Independent users are trusted and empowered to evaluate work, gain

Julia Layton, "How Digg Works," howstuffworks,
http://computer.howstuffworks.com/internet/social-networking/networks/digg3.htm Accessed

February 11th, 2014.

210 See Amir Rachum, "Reddit Thinks I'm a Spammer," August 25<sup>th</sup>, 2012, http://blog.amir.rachum.com/blog/2012/08/25/reddit-thinks-im-a-spammer/ Accessed February 14<sup>th</sup>, 2014.

<sup>14&</sup>lt;sup>th</sup>, 2014.

211 User badp, "Why are posts on reddit starting as spam?" Stack Exchange: Web Applications, December 16th, 2010, http://webapps.stackexchange.com/questions/10394/why-are-posts-on-reddit-starting-as-spam Accessed February 11th, 2014

reputations, and justify their reputations as a reward of their merit. The cost of this arrangement lies in the assumption of the reins of organizational government by corporate technical administrators such as software developers, system administrators, and security experts, along with their corporate managers. I will call these administrators "technocrats" to emphasize the combination of expertise and governmental authority exercised by these employees, contractors, and managers. 212 Arbiters in the fight against spam, technocrats monitor and police user behavior, and are situated close to the financial resources derived from members' activities. Insofar as users consent to this arrangement, they permit technocrats to oversee their behavior and determine their social standing within the organization. In return, members are empowered to exercise a specific kind of independence and partake of a specific kind of organized social life. Because this independence is constantly assailed by spammers, it must be beaten back by investments in secret technology financed by revenue from the unpaid work the users contribute.<sup>213</sup>

If this description is valid, then the technocratic governance structure of the FGF is inseparable from its membership structure. In particular, by granting power to anyone with an email address, an FGF opens the door to spam. The fight against spam then justifies investments in secret algorithms, and obscures the mechanisms whereby evaluations are aggregated and works are finally

Where "governance" is understood in a sense broadly compatible with Transaction Cost Economics, as potentially administered by non-state actors. Oliver Williamson, *op. cit.* p. 41.
 On the significance of unpaid work in contemporary communication media, see Philip M. Napoli, "Revisiting 'Mass Communication' and the 'work' of the Audience in the New Media Environment." *McGannon Center Working Paper Series* (2008): 24.

arranged. An FGF thus represents a specific relationship between access and governance. Unlike news departments, which carefully screen applicants and thereby limit access, FGF's open their doors widely and haphazardly. By starting with virtually unrestricted access however, the organization gradually acquires a secretive government. In the final analysis, we cannot know the specific tradeoffs these organizations have made between open access and transparency. The technocrats are trusted to maintain the integrity of the system, in the sense that they are the only ones who know in what that integrity consists.

## The Rapid News Awards Algorithm

Newskraft.org, the organization formed as a part of this dissertation research, uses an algorithm called Rapid News Awards (RNA) to coordinate organizational behavior. The RNA algorithm, which I developed for this dissertation, provides a body of software code which describes and structures a specific kind of algorithmic organization, comparable to the filters described above. I will refer to an organization structured by RNA as a "news aggregator" or simply an "aggregator." newskraft.org, then, the concrete organization described in the next chapter, is an aggregator structured by the RNA code. Considered as code, RNA is an abstract pattern that can be used to structure a specific news aggregator such as newskraft.org. Considered as usage, an RNA aggregator such as newskraft.org is an activity partly structured by code.

The imagined users of RNA are people who aim to collectively advance a distinctive commitment to journalism as a field of practice in the new media

economy. These users believe that an organizational structure which balances independence and evaluation by others who matter can be used to achieve this goal. Independence is understood in terms of organizational mechanisms designed both to provide participants with the space to develop their own sensibilities, and also to limit the power of any single individual. At the same time, participants are committed to fostering a coherent, shared identity as a distinctive journalism organization. In order to balance these factors, participants organize themselves into a subtle, largely decentralized power structure.

Participants aim to reinforce journalistic distinction by giving positive feedback to producers who adhere to journalistic norms and values. In order to provide such feedback, participants regularly select and arrange links to the work of independent producers, who may or may not be affiliated with their organization, in accordance with journalistic norms and values. For this purpose, RNA provides a web-based interface that the organization's members can use to regularly evaluate, prioritize, and publicly display links to previously published works of journalism. By arranging these links on the aggregator's front page, the organization publicly displays its evaluations of previously published works and its collective judgment of their journalistic value. Works that emphatically evince these values therefore stand out more prominently than works that display adherence to a lesser degree. Because readers are conversant with its traditions, arrangement directs more attention from the anonymous public toward exemplary works, in contrast to those less exemplary works that receive less

attention. The same process progressively clarifies the organization's own understanding of the proper norms and values of journalism.

In addition to directing attention, the aggregator also distributes funding to the producers whose works are featured. The funding comes from a diverse group of donors who make a range of contributions to the aggregator, from relatively small to large contributions consisting of thousands of dollars, or more. Thanks to its funding base, the aggregator has enough funding to cover substantial portions of the cost of producing the works that it signals as meritorious. This funding is allocated in the regular course of publication: by signaling her appreciation for a work of journalism, a member simultaneously indicates that the work should receive funds. Likewise, the arrangement of links in order from most significant to least significant allocates funding to the works so arranged, so that the most funding goes to the work signaled as most significant, and less funding goes to other stories.

In addition to its funding base, the organization is made up of reputable participants who have a history of involvement in journalism and recognize what they believe to be good journalism when they see it, according to standards they have developed over time through involvement in journalism. The phrases "reputable" and "involvement in journalism" are not meant to imply any specific kind of reputation or involvement, such as newspaper reporting, blogging, or critical reading. Instead, they apply to any kind of activity which could be called

 $<sup>^{214}</sup>$  For the newskraft.org donors, who contributed \$8,100 hypothetical dollars, see http://www.newskraft.org/#donors

"journalism" in our new media age, from traditional forms to more recent ones.

The net result of this body of participant experience is that the evaluation of work by each participant reflects a developed sense of journalistic norms and values.

In combination with the funding that these participants jointly dispose of, the experience and standards of the participants, when organized, constitute an aggregator whose evaluations matter to those who receive them.

In order to produce an organization like this, someone takes the initial steps that set the basic conditions of the aggregator's routine. The agency taking these steps will be called the *publisher*. The initial steps are 1) to establish a schedule of publication and 2) to recruit initial participants.

The publisher plays a central role in the formation of the organization. Without a publisher there is literally no organization at all. By recruiting the initial participants, the publisher limns the outermost context of the aggregator itself, its tone, mood, and basic interpersonal dynamics. Because the initial participants will have a major impact on the organization, recruitment sets the stage for an entire organizational character and trajectory. The frequency of publication is also a fundamental aspect of the aggregator established by the publisher.

Consider how strongly a weekly periodical differs from a daily one, or imagine an hourly publication in contrast to a daily one. The publisher thus exercises great influence over the aggregator and the journalism it promotes. If there is a single, centralized point of influence for the aggregator itself, the publisher inhabits it.

And yet the overall role of the publisher is limited by the countervailing power of

the other participants. This will be explored in more depth later, but for now it suffices to note that the publisher is insulated from the process of news judgment, or put differently, the news judgment of the organization is insulated from interference by the publisher in multiple ways. By establishing the basic parameters and initial participants of the organization, the publisher exercises a pronounced influence over the organization. Beyond this point, however, she does very little. Like every other participant, her role in the organization is a limited one.

The publisher recruits the initial participants, called *editors*. An editor does not directly evaluate any works of journalism, but rather authorizes others to do so. In particular, an editor performs the role of *following* others and thereby authorizing them to evaluate works of journalism for the aggregator. Those people who are followed by editors are called *judges*. The role of a judge is to evaluate works of journalism and to publicly indicate *which works* best exemplify adherence to journalistic norms and values. The role of an editor, in contrast, is to establish the authority of judges, that is, to publicly indicate *which judges* can be trusted to adhere to journalistic norms and values. An editor can also *unfollow* a judge and thereby revoke her support for that judge's future evaluations.

Every RNA aggregator has a *schedule*. This is a specification of how many future arrangements the aggregator will construct, and when they will be published. Each arrangement of an RNA aggregator is called an *edition*. When a publisher decides to construct an aggregator, she specifies the aggregator's

schedule by entering the future date and time at which each edition will be published. She also establishes the list of who the editors are. When the aggregator starts running for the first time, journalists and members of the public are enabled to join the site as judges, and editors are enabled to follow judges. When the time comes to publish an edition, all the news judgments issued by judges since the last edition was published are counted and combined, and links to the works thereby supported are set in their final arrangement: on the "Top Stories" page, in an order from most prominent to least prominent. Finally, all the follows performed by editors since the last edition was published take effect, awarding the followed judges an increased influence over the final arrangement of subsequent editions.

A judge exercises critical news judgment in support of journalistic norms and values as she understands them. Regular readers of recently published works of journalism, judges routinely evaluate these published works, and call attention to those that they believe best exemplify journalistic norms and values. As a judge encounters recently published works, she submits any work that she deems especially meritorious to the aggregator by entering its URL (web address) into the system. In addition, the judges use the aggregator itself to discover works that have been submitted by other judges, and register their approval and support of them, thereby adding their own judgment to the originally submitting judge.

Members understand the relationship between editors and judges as a subtle one, in which both parties exercise significant power and autonomy.

Although editors evaluate and empower judges, and hence could be said to "supervise" them, they do not thereby acquire preponderant influence over either the judges or the organization. The power of editors in relation to judges is limited in several ways.

First, the power of the editors is limited by their dependence on judges. Without judges, editors are powerless, because only judges can evaluate works. Editors cannot produce an organized evaluation of work without relying on judges to make concrete selections and evaluations. Editors can only delegate the power of evaluating works to judges; they then depend on judges to carry out whatever news policies they favor. If an editor cannot find a judge whose values accord with her own, or motivate a judge to further her own interests, then she will be unable to use the organization to further those values and interests. This distance between editors and judges limits the power of editors over the aggregator and over judges.

The power of an editor is further limited by the fact that an RNA aggregator has multiple editors. For example, an RNA aggregator might have five, ten, or one hundred editors (newskraft.org had 11 editors). A judge's influence, however, *increases with the number of editors following her*. If judge A is followed by 2 editors and judge B is followed by 1 editor while judge C is followed by no editors, then judge A has twice the influence of judge B, and judge

C has no influence. This means that a judge who is followed by multiple editors is capable of acquiring substantial power within the system, arguably more than any single editor. Insofar as each of the editors represents a distinctive orientation towards the norms and values of journalism, editors differ in their evaluation of judges. Thus, a judge's evaluation may provoke strong disapproval from one editor, mild approval from another, and indifference from another, for example. The net result of this arrangement is that, although judges are subject to influence from many editors, and take the wishes of editors into account, they need not behave in exactly the manner which any editor would wish them to behave in order to retain substantial power in the system.

Furthermore, although editors have influence over judges, they may not control them, but must accept some of their decisions despite disagreeing with them to some extent.

Editors follow judges in order to maintain a diverse but coherent organization. The organization can expand without limit, from multiple points, because each editor has the power to expand the network to include new participants (by following previously unfollowed judges). In this way the organization reflects both the diversity of the various editors, and the diversity of the various judges. At the same time, this diversity is not random or unlimited, insofar as each individual editor makes choices to follow judges according to a

<sup>&</sup>lt;sup>215</sup> The ranking algorithm is therefore simple: it assigns scores to works by summing the "authority" of every judge voting for the work, where "authority" is the number of editors following the judge. It then orders works by score on the Top Stories Page. For example, if the three judges A, B, and C above voted for the same work, it would have a score of 3. Funding is then proportionately allocated to works based on their scores.

coherent orientation toward what kind of journalism she believes the organization ought to represent.

There is no limit on the number of participants that can eventually be included in the network. This provides an opportunity for the aggregator to benefit from economies of scale that combine the independent judgments of many individuals into a single comprehensive result. Given hundred or thousands of participants, such an aggregator can filter thousands of works of journalism in a short period of time, thereby shifting public attention in the direction of those works which exemplify journalistic norms and values. At the same time, this provides opportunities for participants and the public to critically regard the journalistic norms and values that are thereby prioritized, in order to clarify the basis for their commitment to them, and guide the development of other norms and values.

The organization is distinguished from other news organization by the transparency of its procedures for selecting and arranging works. In particular, the concrete sequence of steps which leads to the arrangement of media works is clearly specified alongside the final arrangement itself. Instead of relying on secret techniques administered by a separate body of technical administrators, the organization maintains its integrity by operating transparently and distributing power and accountability throughout the various members of the organization.

Because the concrete sequence of steps leading to each arrangement is publicly visible, editors and judges are subject to critique. Editors are expected to

unfollow judges found to be evaluating works on the basis of non-journalistic criteria, and judges are subject to critical feedback both from editors and from the public. Editors who continue to follow judges despite clashing with them over values are accountable to the public for the aggregator's performance.

The presence of funding in the aggregator increases the efficacy and force of the organization as a factor in the emergence of new journalistic norms and the clarification and strengthening of existing ones. Insofar as the recipient of substantial funding is directly empowered to produce further journalism, the funding provides an incentive to the recipient to produce journalism that will receive future funding awards. In addition to the funding, producers are motivated by the prospect of receiving traffic from the aggregator. Finally, producers consider the normative focus of the aggregator in deciding whether to accept an award; this provides an opportunity for producers to clarify not only their relationship with the aggregator, but also their own journalistic norms and values.

#### **Discussion**

The foregoing description combines elements of technical and organizational analysis. By postulating an imagined user base, it not only describes activity structured by code, but also infuses the description with a set of values and motives adopted by the imagined users. This clearly demonstrates the entanglement of social and technical factors in the development of technology, a theme stressed by STS scholars. In this case, the algorithm's code has been developed in tandem with a specific theory of the organization of

independent journalists; by postulating users motivated to organize their independence in this way, the algorithm makes assumptions about the composition of society. In particular, it postulates the existence of a relevant social group of journalists whose values and goals accord with those the algorithm is designed to further. Clearly, contact with such a group provides opportunities for reinterpreting and changing the algorithm.

RNA is a transparent algorithm, whose source code is open to inspection, and whose procedures are known to all participants and the public. Unlike most other aggregators then, RNA does not keep any part of its source code secret. This practice contrasts with the oft-heard claim that code secrecy is required in order to maintain the integrity of algorithmic organizations. It may therefore be of interest to scholars, some of whom tend to treat algorithms as secretive things. 217

RNA consciously inherits structures from the news department. In particular, RNA's membership policy, whereby editors are recruited by a publisher, and judges are followed by editors, is structurally similar to news departmental hiring practices. In chapter two I argued that these hiring practices provide a news department with a means of balancing the independence of its members with the need to maintain organizational coherence and a consistent orientation towards the norms and values of journalism. RNA's membership policy has a congruent structure because it is designed to be used to accomplish

<sup>&</sup>lt;sup>216</sup> The software is located at https://github.com/laheadle/rapidnewsawards

See Tarleton Gillespie, *The Relevance of Algorithms*, in Tarleton Gillespie, Pablo Boczkowski, and Kirsten Foot, eds, *Media Technologies: Paths Forward in Social Research*, forthcoming from MIT Press.

the same function. The algorithm was consciously crafted as a means of achieving this result.

Unlike a news department, however, RNA diversifies organizational membership by decentralizing its membership policy. Because every editor has the power to follow judges and empower them to modify arrangements, every editor has the power to expand the organization. The decision to induct a new judge does not require consensus or approval from a superior. Although an RNA aggregator is originally centralized at the point when a publisher unilaterally initiates recruitment, this first step immediately expands into a decentralized process which the publisher does not control. A news department, in constrast, features a hiring policy that remains centralized at the level of the hierarchy most interested in a given act of hiring.

Another consciously inherited structure taken by RNA from the news department is the arrangement of links according to their significance. In chapter two I argued that news departments arrange the works they produce in order to signal their journalistic value and to provide feedback to the producers of the works arranged. In chapter three I extended this claim to include the Google search engine, abstracted from specifically journalistic norms. RNA inherits this structural feature of both news departments and the Google search engine (as well as the FGF).

Nevertheless, RNA differs from a news department regarding the practice of arrangement. In particular, it substitutes an algorithmic arrangement for a

hierarchical one. Whereas the arrangement of stories in a news department is the specific responsibility of news managers at the top of the hierarchy, RNA distributes responsibility for arrangement throughout the organization, and uses an algorithm to coordinate the various acts which result in an arrangement. Although some individuals have more influence in this process than others, no individual has final responsibility for the resulting arrangement. Differences between individuals are resolved by following a procedure encoded in an algorithm, rather than submitting them to arbitration at the top of a hierarchy. In this respect, RNA's algorithm serves a *non-hierachical governance* function.

RNA's governance mechanism is similar to that of Google and the FGF's in using an algorithm to combine the votes of various individuals into an overall arrangement. Unlike these organizations, however, RNA does not use additional algorithms to classify members as either free and independent members or potentially coopted spammers. Instead, RNA exposes the behavior of its members to public view, and provides a detailed accounting of all the steps that lead to a particular arrangement. In this way RNA commits its government into the hands of its members, who are expected to defend their own choices with reference to the particular version of the norms and values of journalism they are upholding. The algorithm thus serves not only to facilitate the process whereby outcomes are achieved, but also to expose them to view in order to enable members to account to each other and to the public.

In depending on its members to govern themselves, RNA denies discretionary control over major decisions to the organization hosting the aggregator. Because participants can check for themselves that a particular arrangement resulted from a specific sequence of votes and follows, technicians cannot modify arrangements without alerting others to this fact. This serves as a check on the power of technocrats and their corporate managers to influence the news agenda. The resulting organizational structure then lacks hierarchy in two ways. First, like an FGF, its formal structure is nonhierarchical because it distributes the authority to determine arrangements among a wide membership. Second, and unlike an FGF, the (hierarchical) entity with access to the algorithm's code is unable to step in behind the scenes and modify or determine arrangements. This structural constraint on hierarchy results from the decision to restrict access to judges vouched for by editors, and to publicly perform the acts that result in arrangement.

An RNA aggregator is structurally similar to an FGF in featuring distance between the organization's members and the independent producers whose work it evaluates. The regular product of an RNA aggregator is an arrangement of links to works such as articles or videos on the web. Any work on the web may be linked, including works produced by people who have never heard of the aggregator. RNA aggregators differ from FGF's, however in distributing attention and funding toward those producers for the avowed purpose of influencing their future conduct in the direction of the aggregator's own normative orientation. The

aggregator's coherent focus, combined with its power over traffic and funding, are intended to signal a range of independent producers and make them aware of the potential rewards available to them for producing work in accord with the organization's journalistic values. In this sense an RNA aggregator is more like a traditional editorial hierarchy than a search engine.

### Conclusion

It this chapter I have related the RNA algorithm to the research focus of this dissertation: the relationship between algorithms and the organization of independent journalists. I have done so by situating the algorithm within the context of what I have called the First Generation Filter algorithms Digg and Reddit, and then by describing the algorithm itself. I have used this method to bring out the distinctive character of the RNA algorithm in comparison with other organizations. In conducting this analysis, I have focused on the relationship between an organization's membership policy and its manner of governance. Specifically, I have argued that an unrestricted membership policy is likely to develop into a technocratic mode of governance, whereas the RNA algorithm is structured according to a more restricted, but also more transparent mechanism. Because these structures have consequences for the independence of the members of each organization, they represent different approaches to the organization of independent journalists and media producers.

In addition to its membership and governance policies, the RNA algorithm has been designed as a balance of power. Thus, the roles of the various

participants have been structured in such a way as to limit the potential impact of any single individual. In this way the RNA algorithm aims to limit the potential for opportunistic behavior by any member of the organization, and thereby provide the distance between participants required for journalistic independence. At the same time, because each individual's behavior is coordinated with the others, opportunities arise for adjusting individual difference and clarifying divergent norms and values.

Although the RNA algorithm is supported by the concrete existence of working code, the description given in this chapter is not fully realized. As such, it contains suppositions and value assumptions that may not be borne out in practice. In order to bring such a description into closer contact with organized activity, the next chapter will investigate the launch of newskraft.org, an experimental organization partly structured by the RNA algorithm.

## **Chapter 5: Experimental Results**

I will now describe the initial launch of newskraft.org: an experimental, algorithmic news organization. As an experiment, the intended outcome of newskraft.org was that I, the publisher, would communicate the project goals and methods to the editors, who would then recruit judges. Once the judges joined the site, editors would follow judges, and judges would begin selecting meritorious articles. From this point forward the different participants would continue to interact with each other throughout the course of the experiment, establishing a short-lived organization publishing three editions per week. Each edition published would arrange a set of links in order of their value, and associate a hypothetical monetary reward with each link so arranged, thereby directing hypothetical funding and actual attention towards works that best exemplified the norms and values that emerged as upheld by the organization. Finally, the producers of the works linked to would notice that the organization was directing an audience toward their works, one that was evidently characterized as clearly upholding certain norms and values in contrast to others, and significant enough to consider and incorporate into ongoing production routines in a directive capacity. In this way an organization of independent journalists would be established.

In this chapter I consider the actual outcome of the experiment, by analyzing the interview data I gathered in conversation with its participants. This data illustrates how some of the participants perceived and understood the experimental organization when they carried out the experiment. In addition, it clarifies the relationship between the algorithm as technologically framed code, and the participants' own attempts to frame the algorithmic organization. I argue that this data relates the algorithm to the organization of independent journalists via the lived experience of the participants, and via their engagement with a variety of technological frames. In doing so it adds additional empirical material to the dissertation's concerns. It exposes the way participants experience and understand the algorithm and thereby provides a point of contact for relating the algorithm to the major research question and to the other case studies. Finally, it demonstrates the role of algorithms in coordinating work through tacit engagement with coded structure.

# **Recruiting and Launch**

Recruiting for the aggregator was done over email. Donors were contacted via university email addresses which I found by looking at web sites for journalism and communication departments. A total of 594 donor recruitment emails were sent, and eight donors agreed to participate. The initial funding amount provided by these donors was \$8100 hypothetical dollars. Editors were also recruited via email. Editors were selected based on my prior exposure

<sup>&</sup>lt;sup>218</sup> See http://www.newskraft.org/#donors

to and appreciation of their work in the areas of journalism or journalism scholarship. A total of eighteen editor recruitment emails were sent, and eleven editors agreed to participate.

Editors were given the following description of their roles:

The role I would like to invite you to fill is called an "editor," which means a person who establishes the authority of other users of the system to distribute hypothetical funding. The time commitment is minor and flexible, above a certain minimal threshold. Concretely, your role as "editor" would be to invite at least one person to join the site as a "judge", and to "follow" and "unfollow" as many or as few judges as you are inclined to do, for about three weeks.

Thus editors were intended to function as liasons with others: by inviting judges to join the system and by following them, editors would provide the aggregator with a body of judges. The judges would in turn supply the actual evaluations constituting the aggregator's recognized, funded works.

Newskraft.org was launched on July 26<sup>th</sup>, 2011, and published eleven total editions, three times per week until August 22<sup>nd</sup>. Of eleven editors who agreed to participate in the project, seven signed on to the web site. A total of six judges joined the web site during the experiment. Eleven follows were issued by four different editors. One work was selected as meritorious by a single judge during edition 3, receiving \$736.36 of hypothetical funding.

After the experiment was completed, all participants were emailed a request for a follow-up interview. Six editors, two judges and two donors agreed to be interviewed. In the following section I analyze the participants' experience of the algorithmic organization, using their statements regarding how they

participated in the experiment and what it felt like to use the algorithm and be a part of the organization. The following sections examine more reflective material: the participants' understanding of and evaluations of the proposed organizational structure itself.

## The Experience of Participating

Although seven of the eleven editors signed on to the web site, all editors showed signs of disengagement. Besides the four who never signed on, three signed on but did not follow any judges. All three of them were interviewed, and all were somewhat disengaged, in part because they were not able to devote time to the experiment, and in part due to cognitive difficulties. Of the four editors who did follow judges, one did not respond to the interview request. Another did not invite any judges into the organization because he did not understand that to be part of his role. The remaining two editors invited judges in to the system, but expressed varying degrees of disengagement in their interviews. On the whole then, the editors were minimally engaged with the organization.

Editor Jason Fry was disengaged in part because of a cognitive disconnect. This editor thought that he had been signed up as a judge rather than as an editor. Thus he was oriented towards performing actions that the software system did not allow him to perform. As a result, he stated that he "didn't understand where [he] was or what [he] was supposed to do." Fry also perceived a lack of engagement by others: He "kept seeing empty editions without anything to do." Finally, his other commitments played a role in his

participation. After a few visits to the site, "life took over" and he stopped participating.<sup>219</sup>

Another editor, who asked not to be identified, was also disconnected cognitively. Although he had a broad understanding of his role, he stated that the system was not understandable to him. 220 In this case, however, the misunderstanding was strongly related to the fact that the editor had other pressing commitments that prevented him from engaging fully with the organization. "I'm just overloaded with stuff... I wasn't able to focus on it; that was my challenge," he told me. Thus this editor's engagement was broadly similar to Fry's: both had difficulty understanding their roles and both were unable to engage fully due to other commitments.<sup>221</sup>

Editor John McQuaid's engagement was also affected by a cognitive disconnect. The source of his difficultywas rooted in the temporal dynamics of the site: specifically, he did not understand that the site was engaged in highlighting previously published articles. Rather, he understood the site to be evaluating pitches – ideas for stories not yet produced or published. Beyond that, McQuaid had some minor difficulty with the complexity of the interface: "It

<sup>&</sup>lt;sup>219</sup> Interview with Jason Fry, November 30<sup>th</sup>, 2011.

<sup>220</sup> He understood his role in these terms: "By following the other people I was effectively ranking stories." <sup>221</sup> Interview conducted September 21<sup>st</sup>, 2011.

seemed a little bit hard to get into at first, although I didn't really have any trouble after looking at it for a few minutes."<sup>222</sup>

McQuaid's understanding of the site as geared towards pitches impacted his thoughts about recruiting other judges into the system.

I think it's a function of my age cohort...most of the people I know personally in journalism are traditional print journalists...I know a lot of people via twitter and social networking who you also know...I assume that you are in touch with them so I wasn't reaching out in that way. I figured what I would bring would be my own cohort, but I figured my own cohort would not know what the hell this was and would have difficulty getting involved with it or perceiving what it was and how it was supposed to work, so I kind of got caught between the two worlds in essence.

In McQuaid's view, the prospects that his cohort could be successfully recruited were dim, largely because of the unfamiliarity of the project goals: "it's hard to...on the surface of it...make a sale. The idea of navigating software to judge story pitches...it's not totally alien, but it's not what people are used to."

Thus McQuaid chose not to invite others into the system partly because of a cognitive disconnect: he understood the system as one of judging pitches, whereas it was designed as a way of judging already published works.

Showing somewhat more engagement was Scott Rosenberg. He visited the site twice, and followed three judges on his second visit. This was the extent of his activity on the site. Rosenberg gave the following account of his experience at the site:

<sup>&</sup>lt;sup>222</sup> Interview with John McQuaid, September 15<sup>th</sup>, 2011. For the newskraft.org interface, see appendix A.

I am supposed to be picking people to follow...The first time I looked, either there wasn't anyone, or there were just a couple of people, or a small number that I was able to find...I think I looked at them and thought, "Well, I don't know these people, so how can I follow them?"...When I came back I realized that I think you had gone through a whole cycle already and I missed out on it. This time I thought, "OK, you're doing this research and this experiment and I'm here to participate," so I just sort of randomly followed some people, since I thought it was better to actually participate in that way than not, and then I thought, "Is there anything else I'm supposed to be doing here," and I kind of looked around and for better or worse wasn't able to figure out anything else that I as an editor was supposed to do, so I stopped. 223

This suggests that Rosenberg conceived of his role exclusively in terms of following judges that joined the site. In particular, he did not conceive of his role as inviting or recruiting judges to join the site. Rosenberg confirmed that he had not conceived his role to include recruiting. Faced with a site that clearly was not populated by anyone that he knew and trusted to exercise good news judgment, he did not reach out to bring in others, but rather left the site and waited for word to spread in other ways. When he returned, he again saw a site populated by people he did not recognize, whom he was therefore not inclined to authorize by following. But since following was the only action he understood to be available to him, he exercised that option, not primarily to endorse the news judgment of these individuals, but in order to comply with an external obligation or agreement to participate. His action was performed *despite his lack of trust* in the individuals

.

<sup>&</sup>lt;sup>223</sup> Interview with Scott Rosenberg, October 6<sup>th</sup>, 2011.

Rosenberg argued that the complexity of the algorithm was a factor in determining engagement: "Because it has these two tiers [of editors and judges] it has a level of complexity, of just understanding what's going on that can be a bit of a barrier."

he was following, rather than *because of his trust* in them.<sup>225</sup> Thus Rosenberg's participation was also affected by a cognitive disconnect. Because he was not aware of one of his intended responsibilities, he found himself in a confusing situation and performed actions which seemed arbitrary and unreasonable. After this experience, Rosenberg disengaged from the organization.

A fifth interviewed editor, who asked not to be identified, had a strong cognitive connection to the organization. This editor both understood his role and acted to carry it out. He invited several people to join the project and promoted it on social media. He also followed two judges. <sup>226</sup> Nevertheless, he expressed a sense of disengagement in the interview, and argued that the very structure of the system acted as a brake on his engagement. This editor felt that his role lacked any "substantial interaction" with others in the organization.

Other than to come back a few times to see what was happening with the system, beyond the initial 'OK, now I'm inviting people in', I felt like I didn't really have a role, like maybe my role was done, or my role was tertiary, because I didn't have an ongoing influence in the process.

As a result of this limited role, the editor said, "I felt like there was nothing to sustain my engagement." 227

The last editor whose engagement will be considered is C.W. Anderson.

Anderson had no cognitive disconnect with the project. 228 After joining the site,

Rosenberg's engagement was also limited by external concerns that required his attention. He stated that he "turned out much busier...than [he] had expected to be."

<sup>&</sup>lt;sup>226</sup> His understanding took some time to develop, however: "At first I was a little confused; I didn't know if I would be participating in the editorial process: voting on things. Eventually it became clear."

<sup>&</sup>lt;sup>227</sup> Interview conducted October 7<sup>th</sup>, 20111.

he contacted multiple potential judges and followed two judges on newskraft.org, thus fulfilling his role responsibilities. At this point he "felt like [he]...discharged [his] commitment and [his] obligation," and other "stuff came up." "A couple weeks later," he said, "I was not even thinking about it anymore."

Anderson understood his own sense of distance from the project in terms of a lack of ownership. "This isn't my project; I think it's interesting, it's useful, but it's not mine," he thought. This lack of ownership seemed related to his position "in the middle level of things:" As an editor, Anderson was located between the publisher and the judges. Because of his position at the middle level, Anderson said, it was "hard to...want to aggressively recruit people too much." When people did not immediately respond to his solicitations, he thought "[the project is] not mine...and I don't want to make people angry or make them annoyed with me," so he did not persist in his recruiting efforts.

The engagement of Michael Morisy, a judge, was broadly similar to that of the editors. Morisey had a general understanding of his role as a judge and the process whereby editors conferred authority on him. He signaled some general cognitive distance, commenting that the "mechanics" of the site were "fuzzy," but "not super confusing," though he "had a hard time following the activity." Morisy felt that the user interface could be improved to make it more engaging, specifically by sending out notifications to judges over email when they were

<sup>&</sup>lt;sup>228</sup> This may be partly explained by the fact that Anderson had been exposed to a previous algorithm from which RNA inherited much of its structure, *The Hourly Press* by Steve Farrell and Lyn Headley.

<sup>229</sup> Interview with C.W. Anderson, September 26<sup>th</sup>, 2011.

followed by editors (Morisy did not realize that he was followed by three editors after he joined the site). And he noted that he lacked time to devote to the project, being "swamped" by other commitments. 230

Morisy also signaled a disconnect between what he was asked to do as a judge and what he was accustomed to doing, both in his background as a reporter and as a reader who shares news online. Indeed the very "title" of judge "almost didn't seem to match what I would be interested in," he said.

I guess maybe this comes from being a reporter, where you try to be an impartial observer and then you're being told, make a qualitative judgment, which is fine, I mean either way you're making a qualitative judgment but being told [that "judge" is] the role name was a bit weird, in sort of saying "OK, I'm going to choose and fund this," versus this gets a thumbs up or a thumbs down or a share or whatever.

Morisy is comparing the judge's role, both with his previous background as a reporter, and also with his practice of giving a "thumbs up" or performing "a share" of online materials. At first, he seems to say that reporters, as "impartial observers" are unlike judges who make "qualitative judgments." He then recognizes that even reporters make "qualitative judgments" all the time, and goes on to compare the role of a judge with that of his own online sharing practices. Morisy offered an analogy:

It almost reminded me of the county fair where you're judging and awarding prizes based on these qualities and that sort of thing. Which is a really interesting thing to apply that sort of idea to the news ecosystem, but it was a little alien to me.

<sup>&</sup>lt;sup>230</sup> Interview with Michael Morisy, September 20<sup>th</sup>, 2011.

Taken together, these statements show that Morisy found the practice of "choosing and funding" with its aspect of "judging and awarding prizes based on these qualities" to be new and unfamiliar, perhaps even disconcerting. Within the technological frame Morisy was asked to inhabit, the role of a judge is a serious and deliberative one, infused with a significant degree of power. Morisy clearly sees a difference between this activity and merely "liking" or "sharing" an article, although exactly what this difference is does not come across clearly. In the terms of this dissertation and the resultant framing of the algorithm, the judges are meant to matter to the producers whose work they evaluate. In this frame, the role of a judge is a weighty one. Morisy seems to be encountering this frame, trying it on, and finding it new and strange.

The other judge interviewed, Chris Diakopolous, showed a higher level of engagement. Not only did this judge fulfill his role responsibilities by selecting a work of journalism as meritorious, but he expressed his "excitement" about several aspects of the project. Diakopolous, a former journalist, saw newskraft.org in terms of a mixture of "old" and "new" models of journalism. "In the old model," he said, "it doesn't matter how popular a topic was, you were still going to be served news that somebody else thought was important to you based on their judgment," while "the new model is: you're going to be served news based on how popular it is." Newskraft.org, then, had affinities with this "old" model, with some admixture of the "new": "I think [newskraft.org] is more the old way, the way that it's set up, but I feel like it's set up in a way that it doesn't

discourage the popularity, it just encourages maybe a broader application of the old way to do it."<sup>231</sup>

Diakopolous did some work to understand the organization he was joining. 
"It was a little confusing at first," he said, because he "wasn't sure what the difference between judges and editors was," but after reading through the materials on the site, he said he "began to get a better understanding." 
Diakopolous also felt that the "user interface could be a little more self-explanatory." In general, he felt the interface lacked "a little directional instruction on where to go to accomplish x, y, and z."

In sum, the major factors inhibiting engagement with the organization were complexity and commitment. As a relatively obscure research project, newskraft.org relied on curiosity and voluntarism from its users, all of whom were very busy people. Furthermore, as the publisher, developer, and principal researcher, I adopted a mostly hands-off attitude toward the organization, which left the editors solely responsible for sustaining the process of recruiting. Finally, the structure of the organization was both unfamiliar and complex, which resulted in confusion about how the organization was intended to function. As a result of these factors, the experiment failed to sustain a coherent pattern of behavior. Despite these hurdles, however, some coordinated activity did emerge, which, in the face of such substantial difficulties, is noteworthy. I will have more to say about this outcome below.

<sup>&</sup>lt;sup>231</sup> Interview with Chris Diakopolous, September 21<sup>st</sup>, 2011.

Before moving on, I will briefly consider the engagement of the donors. The role of the donor was to provide the hypothetical, lump-sum funds to be distributed by the aggregator. As such, donors were, by design, uninvolved in the process of allocating and distributing these funds to specific producers. As a result of this tangential role, donors were disengaged from the experiment. Two donors were interviewed, and were found to be disconnected from the experiment in terms of their understanding of and familiarity with it. This result is readily explained: donors were given a tangential role in a fairly complex experiment, and their involvement reflects that fact.

## Framing the Algorithm

Besides answering the question of what happened in the course of the experimental organization, the interview process provided an opportunity of elaborating and testing the technological frame of the algorithm in collaboration with the interviewees. This clarified the nature of the relationship between the organization, the participants, and the dissertation. During these interviews the participants framed the organization in terms of various meanings and values, not only through consideration of the parts of the organization, but also through consideration of the relationship between the organization and its environment. This process thereby elaborated and clarified the developing algorithm and its potential framing in light of the concerns of the participants. In these respects each interview was not only a process of collaborative technology design, but

also a process of shared thought about the organization of independent journalists.

As a part of the interview process, I invited the participants to reflect on various possible meanings of the algorithmic organization. These topics were ones which I had found useful in framing the RNA algorithm, and were taken from different quarters of the discourse about journalism as I understood it in the period from 2009-2011. For example, I asked the participants about the potential role of an "audience" in directing attention toward "important" works of journalism, given the "decline of newspapers." Another question invited reflection on the tension between "the open internet" and "the traditional role of editing and oversight in ensuring quality work is done" in the context of the relationship between editors and judges in newskraft.org. My object in asking these questions was to uncover points of contact and disjunction between newskraft.org and the contemporary situation and problems of journalism. Because I saw more than one way to relate the algorithm with these concerns, I used the interviews to explore and test a variety of frames. The multiple meanings of the artifact reflected the high degree of interpretative flexibility inherent in the algorithm at this stage of its development.

Thus, at the time these interviews were conducted, I did not have a fully coherent perspective on either the algorithmic organization or its relationship to contemporary journalism. Insofar as this chapter incorporates such a perspective, it should be understood as having emerged out of a mass of data

originally subject to a variety of potential technological frames and theoretical frameworks. In writing this chapter then, I have highlighted those portions of the interviews that are most relevant to the interpretation finally arrived at in this dissertation, obscuring other topics which might instead have been revealed.

## **Independence and the Balance of Power**

Newskraft.org was a conscious attempt to build a balance of power, and some of the participants took notice of this. That is, they saw the system as providing a context in which questions of power and independence would be negotiated. In exploring and critiquing this aspect of the algorithm, participants actively framed and reframed it in conversation and dialogue during the interviews. In this way the participants articulated connections between the emerging technological frame and the case studies of this dissertation, not only in terms of concepts, meaning, and values, but also via their lived experience.

The question of independence arose in discussing the editor-judge relationship. During our interview, Scott Rosenberg initially saw the editor-judge relationship as a somewhat unequal one, with the editors having an edge over the judges. The terminology of "editor" and "judge," however, does not clearly convey this relationship, which Rosenberg found confusing: "When you hear [the words 'editor' and 'judge'] you don't have a clear sense of the relationship between the two," he argued. "A judge is a powerful figure in a courtroom, and an editor is a powerful figure in a newsroom;" yet Rosenberg thought he detected a disparity in their power: "The judges definitely do sort of report to the editors...the

editors are sort of monitoring the judges...an editor can withdraw his approval from a judge," he argued.<sup>232</sup> Rosenberg then suggested "you might pick another word for one or the other or both that makes that relationship clearer somehow."

### To which I replied:

I would point out one thing about the sort of power dynamics here...Since a judge has so many editors that are potentially following him or her, that can... be understood as a sense in which the judge has a kind of independent power base or almost an increased influence relative to any individual editor.

#### Rosenberg then replied:

I see, right. So if a judge had a lot of editors behind him then any one is not likely to make a huge difference although if a judge did something really dumb and all the editors...decided to disavow him, that could change quickly...Ok I see what you're saying...it's a subtler and more complex relationship.

This exchange illustrates the process of framing the system, developing its overall meaning. One of the clearest aspects of the relationship between the editors and the judges is that the editors monitor, oversee and influence the behavior of the judges. This led Rosenberg to see a quasi-hierarchical relationship between them, where the editors are above the judges in terms of influence. This would make sense in a traditional hierarchical organization in which each individual "reports to" one supervisor or manager. But if the system is viewed at scale and in its general operation (when it is more "heavily populated"), this initial impression is harder to sustain.

<sup>&</sup>lt;sup>232</sup> Earlier in the interview, Rosenberg had summarized the project: "You had two groups...one that was more expert...conveying the authority."

This exchange also demonstrates that the experimental organization exists in a cultural environment which includes a variety of terms, concepts, and other tools and artifacts. In this case, the terms "editor" and "judge" are preexistent, linguistic artifacts suffused with layers of connotation from journalistic and legal history. When participants encounter these terms, they use them as resources in interpreting the system. As Rosenberg argues, however, these terms are problematic when brought into relation, because participants lack a shared history within which these terms have been meaningfully combined. When combined with the fact that newskraft.org shows clear affinities with the news department, upon which it is consciously based, the meaning of the system becomes problematic. Is hierarchy being instilled here? What kind of autonomy can judges expect vis-a-vis editors? In this case the cultural artifacts and inherited meanings have guided interpretation only up to a point. Beyond this point, new meanings must be actively constructed.

It is important to acknowledge my own role in this exchange. As the publisher of newskraft.org and the developer of its algorithm, I brought a set of preferred meanings to my conversation with Rosenberg, and, in this instance, actively tried to frame the algorithm in accordance with these meanings. My preferred framing was a non-hierarchical one, and I gave a reason in support of it. But clearly I did not know the exact nature of the power relationships that would emerge between editors and judges. I did not have hard evidence to point to, but could only imagine scenarios. As Rosenberg said:

The fact that at least at the times that I was looking at it the system wasn't that heavily populated...kind of made it harder to understand that [these are] the sort of different ways the relationship would be working, whereas if you had thousands of people or even hundreds, I guess, the situation you just described would be more immediately visible. <sup>233</sup>

The tension between the terms "editor" and "judge" raises questions and invites reflection. These terms were chosen in part in order to frame the system in a specific way: as one in which both kinds of participants are imbued with a distinctive kind of power, while neither possesses more power than the other. As Rosenberg says, the terms convey an idea of power but do not convey a sense that one class of participant holds more power than the other. In these respects, the terms as cultural resources provide clues to understanding the structure of the experimental organization. They do not immediately convey a clear sense of the relationship between these kinds of participants, of course. And they become problematic in the context of the notion of supervision and oversight, associated as they are with hierarchical forms of organization.

From the editor's perspective, the prospect of exercising power and influence by following judges can be problematic in a direct and personal sense.

John McQuaid told me he felt "a little bit self-conscious" knowing that his decision to follow or refrain from following a judge would affect that judge either positively or negatively. "If I were following individual X, then X would say, "oh, he's

<sup>&</sup>lt;sup>233</sup> As Neil Pollock and Robin Williams put the matter, "Many of the affordances of the complex software systems, in particular their ability to support particular work processes and goals, cannot readily be resolved on the basis of vendor statements about system capabilities, since the organizational effectiveness of the system will only become clear following a substantial implementation effort (and then can only be demonstrated when the system is in use)," *Software and Organizations: The biography of the enterprise-wide system or how SAP conquered the world,* Routledge, 2009, *p.* 38.

following me, all right!" and individual Y would say 'Why is John McQuaid not following me, and following this other guy," McQuaid felt. Thus the potential to help and hinder others may lead to a heightened self-awareness on the part of the editor, potentially raising the stakes of the interaction and impacting the quality of engagement. We saw a similar phenomenon from the perspective of the judge who was given the task of judging the work of outside producers. In each case then, a kind of seriousness and deliberateness may be introduced, leading to a heightened sense of the stakes of the interaction, with potential impacts on the fluidity and ease of engagement with the organization.

Another potential threat to engagement, in McQuaid's estimation, came from the judge's side. "Over time if you're a judge and nobody ever picks you and you've got no funding to dole out then it's going to make you leave at some point," he hypothesized. Thus in addition to the problem of power's effect on the engagement of the one exercising it, there is a potential effect on the engagement of those who lack power, those who are excluded from its exercise. The judge's position as both an object of the editor's evaluation and an evaluator of external producers renders them subject to both kinds of engagement effects. Furthermore, as noted above by the anonymous editor, editors are excluded from the exercise of the specific kind of power exercised by the judge, namely the power to choose and fund works of journalism. Editors too, then, are subject to disengagement due to exclusion from power.

I have argued in this work that the organization of independent journalists involves a negotiated connection between a relationship and the evaluation of work. Participants also showed an awareness of this dynamic. One anonymous editor argued that an editor's act of following or unfollowing a judge could have consequences for the relationship between the editor and the judge. In particular, he pointed out that there are "social costs" to unfollowing a judge with whom one has a preexisting relationship. We have previously explored this dynamic in chapter 1. The issue here is that en editor may disagree with a judge's evaluation of a work, and yet be reluctant to unfollow that judge out of a fear of damaging the relationship. This situation led the editor to suggest a modification of the system, to allow editors to remove their backing from a judge for a specific work, without unfollowing the judge.

The issue raised by this editor can be seen in terms of independence and its organization. The algorithm as currently designed limits an editor's options for exercising fine-grained control over the judge's work, and maintains an ample distance between editors and judges in order to provide space for distinctive sensibilities to develop. The interviewed editor's suggestion, in contrast, would increase the options of the editor and reduce those of the judge: Instead of being subject to a broad, coarse-grained level of support, with scope for decisions with which an editor might not agree, the judge would be subject to finer-grained oversight, with the editor having a more constant and ongoing power to impact the standing of her work, and hence the work itself. From the editor's standpoint,

this removes a potential source of friction, as it enables an editor to disengage from works she does not personally support. But it could also reduce the autonomy of judges by involving editors more directly in the judge's sphere of activity.

I turn now to the relationship between the judges and the producers of the works to be funded. In this case it is the judge who is the evaluator, while the issues of autonomy concern the extent of the influence of a judge over a producer. These issues took three main forms in the interviews. First, several participants argued that judges would need significant financial backing in order to have any influence over producers. Second, several participants argued that awarding funding to producers already salaried by media companies would be inappropriate or ineffective. Third, two participants couched their concerns in terms of a basic distinction between distribution and production, a line blurred by the RNA funding system and the perspective taken in this dissertation.

This dissertation has used the concept of "others who matter" to mean the combination of norms and power constituting influence from outsiders on independent journalists. I have demonstrated the dynamics of this mattering in a range of contexts, and applied the concept in the design of newskraft.org.

Statements made by two interviewees about newskraft's funding model may be used to further articulate this concept. These participants saw a direct relationship between funding power and the amount of influence a judge is likely

to exercise over the producers whose works she evaluates.<sup>234</sup> As one editor said, "I might not be willing to change my behavior for an extra fifty bucks, but I might be willing to change my behavior for an extra 500 bucks." Of course, this statement does not assert that funding necessarily results in increased influence and control in specific cases, only that it "might" make a difference. Thus funding may be efficacious, but cannot be divorced from the context in which it occurs.

Another reflection on the relation between funding and social context is provided by C.W. Anderson, who also has a sense that larger funding amounts might "matter" more than smaller ones. "I think [the funding model is] a great idea as long as the money is big enough to make a difference." Anderson connected this criterion to that of the producer's emotional and social context: "If somebody is happy writing for free or if they're comfortable being rewarded in other ways then I don't necessarily think a small amount of money will matter to them." Thus, funding may be an efficacious tool if it conveys significant resources in a context in which the producer is receptive to being funded. 235

Chris Diakopolous extended this logic to the case of larger, better funded producers. "I think if you're being published by an online platform you probably don't need funding, unless you're a personal blogger," he told me. "For example, if you're sharing a story on the *Huffington Post*, the *Huffington Post* doesn't need

<sup>&</sup>lt;sup>234</sup> Yochai Benkler's theory of Peer Production is based on a distinction between a realm of social production, in which financial incentives are weakly operative, and other realms, in which they are stronger. Benkler's approach is not strictly incompatible with that taken here, because he recognizes a range of degrees of applicability of financial incentives in various contexts. See Yochai Benkler, *The Wealth of Networks*, Yale University Press, 2006, p. 97.

Anderson also felt that the recipient was not the only target of the funding, insofar as declaring an award sends signals to others that the recipient's work is valued by the funder.

funding. If you're sharing out a story from the *New York Times*, they don't need funding." Again we see the argument that funding is best directed towards others whose social context makes them receptive to being funded. A better funded producer does not "need" funding, which implies that she is in some sense satisfied with her current circumstances, which fulfill her existing "needs." This language of "need" thus reinforces the framing of Anderson, who used the terms "happy" and "comfortable" to describe the satisfied amateur. Thus it would seem that a producer who is satisfied with her circumstances, who is not hungry for recognition and funding from others, is less likely to become a participating member of the organization. <sup>236</sup>

Continuing this line of thought, Chris Diakopolous imagined what kind of producers would in fact be receptive to funding. This led him to suggest that newskraft.org might develop exclusive funding relationships with a group of individuals. He imagined "a de-facto network of newskraft bloggers" who are "funded solely by newskraft." This follows from a framing in which funding should be allocated based on need. According to this logic, there is little point to distributing awards to those who don't need funding, such as established media companies. Funding should instead seek out those who are most receptive, namely individuals who are not employed by corporations and who are funded exclusively by newskraft.

<sup>&</sup>lt;sup>236</sup> On this point see Herbert Simon, *Administrative Behavior*. *A Study of Decision-Making Processes in Administrative Organizations*, Fourth Edition. Free Press, 1997, pp. 140-1.

A third variant of this logic focuses on the incongruity involved in awarding funding to a salaried employee. Newskraft judge Michael Morisy told me that the idea of doing this seemed "weird." Like Diakopolous, Morisy felt the funding mechanism "would have felt less weird" if funding was going to more appropriate recipients, which in, Morisy's phrasing, meant "saying 'Ok, this money's going to this independent author or to this project,' or to something where it wasn't like a bonus prize." Thus an individual award recipient may not need an award because she is already salaried by another, whereas an "independent author" or a "project" is more available to be funded, in part because they are weakly affiliated with a primary news department.

In the thinking of one newskraft editor, the concern with salaried individuals springs from that individual's inclusion in an overarching organization:

If I am working for an organization, I don't really have an incentive because my salary is the same no matter what. I'm paid to produce x y, z. So where is the personal motivation? I'm already paid by, say, the *New York Times* to produce quality content. Does an extra thousand dollars matter to the *New York Times*? Not really. It might matter to me as an individual. So who are you rewarding? Are you rewarding the organization or the individual? If you're rewarding the organization, then that's a very different kind of impact than if you're rewarding the individual. It's a very different kind of motivation that's spurred.

These arguments unpack the process I am calling "feedback from others who matter." They underscore the distance between the provider of feedback (the judge) and its receiver (the producer); they thus highlight the independence of the producer who receives feedback on her work. As Ron Smith argued in chapter one, "the other part of feedback is: What do you do with it?" That is, the

producer has options here. Feedback may be received and ignored, or it may have a pronounced effect, or its effect may be only somewhat significant.

Likewise, the reception of feedback may take into account the receiver's entire social situation, including not only her need for income but her position within an organization, her commitment to her current style of work, as well as her perception of the provider of feedback and her evaluation of the feedback itself. In all of these ways the delivery of feedback is contingent on a variety of other factors beyond the control of the one who delivers it.

Another source of difficulty was the distribution of funding to producers after their works were published. "It seems very odd to be paying somebody or awarding something after the work is done," said Michael Morisy. Upon reflection, however, Morisy found a parallel in his own experience, namely the production of Kindle Singles, something Morisy said "lots of independent journalists" were doing. When a journalist produces a Kindle Single, she takes an article she has previously published and offers it for sale in the Amazon online store. In this way she gets funded and recognized for work she has already published. Thus although the funding mechanism seemed odd to Morisy, he was able to reframe the algorithm in accord with a familiar practice.

John McQuaid also felt ambivalence about retrospective payment. He felt that although payment after publication had its advantages, it was generally less effective than payment before publication:

If you want to do good journalism then it's better to give someone money to do journalism rather than give it to them after they've already done it. I mean, that may fund their next project but you don't know what their next project is going to be. I think [when you are] funding before you do something, it's harder to judge what that thing is going to be and whether they can do it or whatever than a finished project but it's probably more beneficial in terms of churning out good journalism than giving money after the fact. <sup>237</sup>

McQuaid's answer again highlights the distance between the judge and the producer, and thus the question of autonomy. I have argued in this work that the effectiveness of retrospective feedback is indirect, in that it only has an impact on future acts of production. This limits the impact of the other, and provides the producer with a chance to select or reject various aspects of the feedback. Thus the influence of a judge on a producer will be limited, and the autonomy of the producer will be given space to develop. Given this limited influence, it might seem that if your goal is to have an impact on journalism, a retrospective funding model is not the first thing to try. However, if your goal is less to "churn out good journalism" than to balance the influence of another with the independence of a self, then retrospective funding, as a form of retrospective feedback, may be indicated.

The funding relation can be viewed not only from the perspective of the producers, but also from the perspective of the donor. This figure arose in my interview with Scott Rosenberg, in the form of the concept of "micropayments." This terms is often used to refer to small payments exacted for articles online,

<sup>&</sup>lt;sup>237</sup> Compare Kenneth Arrow's statement of the "fundamental paradox" of information: "its value for the purchaser is not known until he has the information, but then he has in effect acquired it without cost." Quoted in Oliver E. Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, Free Press, 1985, p. 9.

generally before an article is read. This concept provided us with an opportunity to frame the Newskraft funding model in relation to another, similar one, which helped isolate some points of comparison. Rosenberg began his reflection with a general remark about micropayments and existing critiques of them.

There's been many different dreams of...apportioning micropayments in interesting ways, all of which have seemed worthy in one way or another and all of which have seemed...ultimately really impractical...The Clay Shirky critique of micropayments was all about...Did we want the mental overhead of actually thinking about: 'are we paying for something or not?' And is there a translation cost to even visiting this thing or not and, 'Oh now I've already used up the time I was going to use paying attention to this story just in thinking about whether I'm going to pay for it."<sup>238</sup>

So the first potential problem with micropayments is the cognitive overhead of having to think about whether any particular piece of content is worth paying for. I then pointed out that newskraft.org donors give to the system as a whole, not to a particular story, to which Rosenberg replied:

So the [Newskraft] system apportions it as a whole...as a donor...you're saying I'm going to trust that the system will produce a good result and here's my money...That donor isn't then having to worry about the micro decision, so that...gets around the clay shirky argument.

Rosenberg then considered the problem of how much funding there would be to distribute, which, as we have seen, was a concern shared by money of the participants. In this case however we see the concern arise in the context of the donor base itself.

<sup>&</sup>lt;sup>238</sup> See Clay Shirky, "The Case Against Micropayments," http://www.openp2p.com/pub/a/p2p/2000/12/19/micropayments.html, accessed January 21, 2014.

Then...it's the crude and painful matter of scale...If you were actually distributing a large sum of money this way to a small enough number of recipients, it could actually make a difference; but since the odds are much more likely that you're distributing a small amount of money to a very large number of recipients...that makes it feel less consequential. I think ultimately until you start actually having a mechanism that makes any particular individual or institution feel that it's getting significant income from a source, then it kind of doesn't matter...it's a hurdle to get over to think about taking an idea that is fairly complex to begin with and then getting enough people to embrace and understand it that the pot of money becomes large enough to matter to people.

This remark suggested to me that Rosenberg was conceiving of the amount of funding as a function of the number of donors, where many donors would be required to obtain substantial funding. I then replied:

Yes, although I would point out that you only really need one big donor to make that happen.

To which Rosenberg responded:

Well that's true...that's a smart strategy...I guess I was assuming that you were thinking more along the lines of a distributed kind of...'let's get a whole lot of people to give small amounts of money,' but if you could persuade one deep pocket that would get you pretty far down the road, wouldn't it?

During this dialogue, Rosenberg and I tested the frame of "micropayments" in application to newskraft.org. Through a process of dialogue and conversation, we proceeded to apply this framing to the newskraft system. At each point, a difficulty was raised through comparison with the concept of micropayments, and used as a means of exploring the Newskraft funding model. The frame provided a beginning for shared thinking and a way to compare and contrast newskraft.org with other projects. In this way the meaning of the algorithm was actively negotiated between users and developers.

### **Aggregation and the Human**

My interview questions did not include the words "human" or "algorithm." I was therefore surprised to find that the issue of the role of the "human" in a world saturated with computers was repeatedly raised by interview participants. In the course of the interviews, it gradually became clear that this aspect of newskraft.org had attracted special interest. I was intrigued to see participants characterize newskraft.org as a "human powered" aggregator, or single out its "human element" in contrast to other "algorithmic" forms of communication. I argue in this section that newskraft.org both reveals and problematizes a discourse of the human in contemporary journalism.

The question of the "human" arose in different interview contexts. C.W. Anderson raised the issue when I asked him how he would characterize the overall goals of newskraft.org. His reply included the term "human." Anderson saw the overall goals of newskraft.org as follows:

Entirely crowd-sourced or algorithmically oriented editorial filtering and recommendation programs don't rely enough on smaller scale, individual expertise. Something like Google News...is built off this idea that there are no human beings involved in any way...just an algorithm. So this seems to try to capture some of the power of the internet, in terms of the recommendations of crowds...but also...retilt the balance back a little more towards...bringing in the individual expertise of a small group of people.

My goal here is not to put too sharp an interpretation on Anderson's comment, but to signal its participation in a discourse both relating and distinguishing "algorithms" and "humans." As we will see, Anderson is critical of

overly sharp separations between "human" and "algorithmic" filtering.

Furthermore, the notion of the "human" is invoked not directly by Anderson but by his citation of Google. Nevertheless, Anderson's comment helps situate newskraft.org within this discourse. In a broad way, it suggests that "algorithms" tend to be associated with large numbers of people, and that this tends to deemphasize their "human" aspect.

Participants also tended to invoke the notion of the "human" in relation to the concept of "aggregation." Newskraft.org was billed as an "aggregator," and one of my interview questions included this term. The interview question was:

One of the things I was trying to do here is explore aggregation as a way to raise our standards of journalism, to say how can we work together to get an aggregation of the best journalism on the internet in our field. Does that spur any thoughts for you?

In response to this question, Donor Ken Sands signaled a terminological preference:

To me, "aggregation" is an automated process, and I use "curation" for the human intelligence part of it that actually adds the value. "Aggregation" would be accumulating a pretty large quantity of content and the "curation" would be zeroing in on the highest and the best content.

Here we see an explicit contrast between humans and machines. The unique role of the human is to add value by exercising discriminating judgment, whereas the role of the machine is to accumulate large quantities of content.

Again we see an association between large scale and algorithms, whereas humans are understood as operating on a smaller scale, and providing value.

Several participants referred to newskraft.org in "human" terms. "You're exploring a human-powered filter to identify more worthwhile content," said an anonymous editor, who also called newskraft.org a "human-powered aggregation system." Donor John Leach also noticed a human element in the system. Judge Chris Diakopolous spoke at greater length:

One of the things that excited me about your project was that it's human aggregation, not robotic aggregation or algorithmic aggregation, you know it's not automatic; you're actually using people. You're crowd-sourcing the aggregation except hopefully your crowd is going to...have the qualities of good news judgment.

Diakopolous's comment is of interest because it not only affirms the human aspect of newskraft.org, but denies the algorithmic aspect. Furthermore, it assimilates the notion of "crowd-sourcing" to newskraft.org, which in Anderson's comment had drifted a bit closer to the larger scale, more algorithmic side.

The term "aggregation" is contested territory in this discourse. As C.W. Anderson reports:

I use aggregation to refer to human curation, because that's part of the dialog...but a lot of people get angry when I do and they say, "That's not aggregation, that's curation." I feel like your project is a little more nuanced when it comes to the man-machine interface.

One question then is whether a specific term is needed to distinguish between different ways of organizing the process of selecting and arranging links, and whether the terms should reflect the degree of humanity involved in the process. Some would seem to deny or avoid the necessity of such a distinction, as Anderson indicates:

The people who don't use those terms are...the programmer's don't, in my experience. The people who try to draw that line are either the journalists or the news consumers. Programmers on the other hand...know that the tools they're building...implicate human beings in all sorts of really interesting ways.

One further comment about aggregation regards its externality to the journalist. During our conversation, newskraft editor Scott Rosenberg perceived a disconnect between common notions of "aggregation" and the concept of "standards."

Usually aggregation is conceived...sometimes it's a very passive thing. It's just telling you: Here's what is popular and here's what is already getting lots of attention, and since it's getting lots of attention you should pay attention too...That doesn't really connect at all with the notion of standards in any way...it's very passive. You're talking more about building a system that is reflective of different experts or different, at least groups of people who were chosen for one reason or another to apply their standards and use those standards as...a ranking system.

This argument signals an understanding of aggregation as a practice of passively registering the popularity of news and media content. Instead of actively seeking out and evaluating such work according to a coherent normative orientation, such an aggregator treats others as external objects to be observed and counted. It does not infuse their work with its values and standards but simply stands aside, detects, and reports them. <sup>239</sup> This comment does not directly raise the issue of the human in the algorithm. But it fits with a notion of algorithms as accumulating large quantities of content and data. It adds to these

<sup>&</sup>lt;sup>239</sup> On this distinction see C.W. Anderson, "Between creative and quantified audiences: Web metrics and changing patterns of newswork in local US newsrooms," *Journalism* 12(5), 2011: 550-566.

notions the idea of separation: such an aggregator is a kind of instrument that observes and detects activity with which it is uninvolved.

The connection to the algorithm is made by newskraft editor Jason Fry. In our conversation we touched on the question of aggregation and its role in journalism, which Fry has considered in public. 240 Fry considers aggregation to be a tool that can help journalists understand their audiences and what they are reading. He argues that this practice can be responsibly carried out by journalists because such a tool is only one source of data among many, which hones the perception of its user while leaving final decisions about coverage in the hands of a news organization. In our conversation, Fry characterized the interplay between a news organization, its distinctive values, and the potentially homogenizing effects of algorithms.

Whatever your news organization is, it probably has a mission and values and stuff like that, and if it does, you're not going to abandon everything to algorithms, or if you are you're going to pretty soon be the same as everything else and you're going to have lost your reason for being.

Here we see a conception of an algorithm as a tool that can be used well and in moderation, as a source of data and suggestions. If used poorly, however, an algorithm may come to usurp the distinction of the news organization. Such a news organization has abdicated their judgment to the algorithm, and thereby

<sup>&</sup>lt;sup>240</sup> Jason Fry, "Algorithms Aren't Evil," July 21<sup>st</sup>, 2010, http://reinventingthenewsroom.wordpress.com/2010/07/21/algorithms-arent-evil/ Accessed February 20<sup>th</sup>, 2014.

lost touch with those norms and values that distinguish the news organization and its specific orientation toward journalism from "everything else."

In sum, we can see a tolerably clear picture of commonly held notions of the nature of algorithms and their relationship to human journalists. Human journalists are sources of value and distinction, organized via small scale relationships, active and involved with the fields they cover. Algorithms, on the other hand, are large scale, impersonal things that stand apart from the activities they observe, collecting and processing large amounts of data about them.

Participants tended to place newskraft.org on the "human" side of this register rather than the "algorithmic" side. Although I have called newskraft.org an algorithmic organization, participants hardly seemed to notice the algorithmic aspect of newskraft.org. Indeed, one of them even denied it!

I have argued in this dissertation that algorithms may structure the organization of media and journalism. But I have considered two very different types of algorithms, namely those, such as Google search and reddit, that employ a technocratic government to separate free users from spammers, and another type exemplified by newskraft.org, which does not use algorithms to analyze its users' behavior or to classify them as potential threats to the organization, and incorporates a transparent governance apparatus. I have argued that technocratic algorithms are likely to become separated from their users by the opacity of their own governments, while objectifying their users,

whose behavior they closely monitor in order to differentiate them from spammers.

Is the sense of separation and inhumanity associated with the terms "algorithm" and "aggregation" a perception of inherent separation between humans and machines? Or is it a reflection of specific kinds of socio-technical arrangement underlying and overlain on some algorithms, but not all? I will not attempt to resolve that question here. But I do argue that one of the contributions made by newskraft.org to the social study of journalism is to help us pose these types of questions. By calling attention to the organizational structure of these algorithms, and in particular to their modes of governance, we are better able to critically analyze them. In doing so, we are helped to see the hitherto dominant form of these algorithms as only one among various forms of algorithm, and one among various forms of algorithmic governance.

### The Algorithm as Coordinator

As we have seen, newskraft.org was only lightly attended to by participants. Even those who made time to participate were beset by both commitment issues and a sense of the complexity of the organization. No shared sense of the meaning and purpose of the organization emerged during the experiment. As the interviews revealed, the organization could be framed and

<sup>&</sup>lt;sup>241</sup> This kind of argument has been made by STS scholars who see certain technologies as reflecting and symbolizing specific relationships between capital, management, and labor. See Harry Braverman, "Technology and capitalist control," in Mackenzie and Wajcman, *The Social Shaping of Technology*, op. cit., p. *159*; and David F. Noble, "Social choice in machine design: the case of automatically controlled machine tools," in Mackenzie and Wajcman, *The Social Shaping of Technology*, op. cit., p. 168

interpreted in various ways, not all of them inspiring. Many participants had doubts about whether an organization like newskraft.org could accomplish its goals.

Despite this lack of commitment and coherence, however, the sociotechnical fact of a running algorithm contributed to the occurrence of coordinated behavior via tacit understanding. Even without a strong technological frame, the algorithm's code and interface lent structure to a complex coordinated activity involving a division of work and responsibility between four distinct classes of participants. Although engagement with this interface was intermittent, some participants of each category managed to carry out their roles as intended by the developer/publisher. As a result, an edition was produced which published a link to an external work of journalism, thereby channeling \$736.36 in hypothetical funding from donors, through editors, through judges, to the producer. Furthermore, the funding was allocated according to a mathematical procedure with several parameters. The fact that this complex task was not understood in an integrated fashion by the participants whose activity factored into it did not prevent the coordination from occurring. By relating those portions of activity structured by code with activity which is partly tacit, the algorithm shouldered some of the cognitive burden of participation, and contributed to the successful achievement of a complex, coordinated activity.

Furthermore, participants readily engaged the organization via its interface, understood their activity in its terms, and suggested features to further

coordinate activity. By using familiar artifacts such as computers, web browsers, keyboards, and mice, participants could draw on their existing repertoires of practical experience. After logging in to newskraft.org, participants found familiar media genres with traditional affordances and affinities including hyperlinks, buttons, and check boxes that communicated the structure of activity such that the work of learning to interact was embedded in a structured environment of objects and indicators.

Of course, at various points in this interaction, interruptions occurred; at other points hints and cues were missed and even resisted. Far from discounting the structural role of the algorithm, however, these obstacles and oversights provide it with increased purchase. During the course of our interview, Michael Morisy learned that he had been followed by several editors without realizing it. At this point he immediately asked me if he had been sent a notification email. Other discussions also revealed the intimate connection between those portions of activity structured by the algorithm and the context in which they occurred. For example, when the anonymous editor reflected on the potential social costs of unfollowing a judge, he immediately suggested a modification of the algorithm. In this way the algorithm was taken up as a central topic of negotiation in the process whereby it was itself being reframed.

In these respects newskraft.org demonstrates the role of algorithms in structuring organizations. Without an interface to guide them, these participants would have been unlikely to achieve such a complex coordination. Without the

experience of using the interface, the conversation and dialogue through which the participants framed and scrutinized the organization would have lacked focus and direction. In these respects the algorithm not only made activity more likely to occur, it also made it easier to understand.

#### Conclusion

The algorithmic organization studied in this chapter is compatible with the theory of the organization of independent journalists, in part because the theory was developed in tandem with the algorithm. Beyond this, the interviews reveal that the organization manifested, in empirical fact and in organizational structure, the concepts of distance, feedback, and others who matter, as well as the connection between evaluation and relationships. Furthermore, the organization embodied these concepts in the lived reality of the participants, who experienced them in the context of their own biographies and social situations. When an editor feels "self-conscious" or a judge feels "weird," algorithmic structure has brought social theory into contact with lived experience. Conversation with participants following the performance of the experiment disclosed the structure of an organization to which the theoretical framework is applicable, as one technological frame among others. In this sense interpretative flexibility may be harnessed in service of social science research.

The interviews also provided insight into the range of values adhering in the algorithm, and the kinds of users who might be compatible with it. When an editor feels restricted by the system, this raises the question of whether the restriction should be removed or not. In the cases described above, restrictions of editorial discretion could be seen as providing increased autonomy for judges; they therefore raise the question of the proper balance between autonomy and organization. Considering the restriction in light of the values that adhere in it provides an opportunity to weigh different values against each other and determine their relative priority as a matter of organizational design and policy. Objections and difficulties raised by participants thus have the effect of highlighting the values inherent in the algorithm and clarifying the choices to be made in organizing journalists, whether algorithmically or not.

Thus newskraft.org raises, but does not resolve, the question of the value of the organization of independent journalists. A central aspect of organization is the ongoing negotiation of the scope and limits of independence. At what point should one participant compromise, allowing another to take the reins in a specific interaction? What kinds of mechanisms are available for handling the differences of individuals within a somewhat coherent organization? And to what extent can we anticipate these issues within an organizational design perspective? By raising questions such as these, by providing a setting in which they may be both considered and enacted, newskraft.org has served a useful purpose, if not in practicing journalism, then in studying it.

### **Chapter 6: Conclusions**

The primary argument of this dissertation has been that journalistic independence and distinction are produced by news organizations. From this perspective, I have situated contemporary American journalism within a historical trajectory stressing the decline of the traditional news department as a form of organization. In order to explore other, potentially ascendant forms of organization, I have broadened the concept of organization to include those structured by algorithms in addition to those structured by contract. On this basis, I have attempted to elaborate a coherent perspective on journalistic organization by relating it to not only independence but also to specifically journalistic norms and values.

Throughout this work I have attempted to see organizations not as static things, but as dynamic processes. My focus has therefore been on the ways in which independence is maintained and organized. I have argued that independence involves the active construction and negotiation of distances between people, spaces in which individuals may assume discretionary control over their own work and develop it according to their own sensibilities. From the side of organization, I have argued that evaluation, delivered as feedback by others who matter, shapes and directs work when it is brought into the work process and anticipated. At the same time, I have argued that the influence of

others who matter is limited in various ways, and that these limitations contribute to independence by maintaining distance. This general process was described and empirically supported in chapter 1, and found to characterize diverse organizations, from the news department to various algorithmic forms of organization.

Beyond this general process however, I have examined specific cases of organization, in which people become related to each other in more formal ways. In doing so I have attempted to approach the topic of independence not only from the perspective of the individual in relationship with another, but also from the perspective of potentially large groups of people, who must navigate their differences while attempting to pursue a coherent pattern of behavior. By considering these specific ways of organizing journalists and media producers, I have sought not only common factors but also a basis for comparison between different organizations.

All of the organizations studied in this dissertation have a policy whereby new members are inducted into the organization and empowered to represent it. Because this involves risks and rewards, they all have mechanisms whereby certain members of the organization oversee the behavior of others, and evaluate it according to the norms and values upheld by the organization. Finally, all of them combine and coordinate the behavior of their members by arranging media works into an expression of the organization's values and interests. Within

this arrangement, some work stands out as most exemplary and distinguished, while other work is obscured. This pattern is a basic finding of the dissertation.

Within these broad outlines, however, we can detect great variety.

Membership policies may run the gamut from highly inclusive to highly constrained, to somewhere in between. Evaluation may be tightly or loosely integrated with production, and evaluators may have different ways of making their judgments matter to producers. Long chains of evaluators may stretch between producers and consumers, or these chains may be very short.

Combination, coordination and governance may be achieved through a chain of command, or it may be achieved by counting votes, or in some other way.

Algorithms may be hidden or exposed, and so forth. Each of these ways of organizing journalism represents a different way of contingently relating the independent work of journalists to the evolving norms and values of journalism.

By inheriting structure from not only the news department but also the Google search engine, newskraft.org helps us see the organization of media and journalism, not as a binary choice between "hierarchy" and "democracy," but as a process of sociotechnical change, contingent on the values, choices, and social situation of those who build, operate, and live with them. Algorithms too, are seen in this light. Instead of a private source of technical knowledge, kept secret out of necessity, an algorithm should be seen as a component of an organization with a specific and contingent structure. In particular, its algorithms should be seen in

relation with its membership policy, supervision or evaluation policy, and its manner of governance.

#### **Future Work**

I have argued that the RNA algorithm is a useful device for studying the organization of independent journalists. Although the first deployment resulted in weak engagement, interview data suggests various ways of rectifying this problem. In particular, conversation between publisher and editors should take place, before launching an organization, in order to hammer out any difficulties or confusions that may prevent engagement. In addition, various ways of simplifying the interface and increasing engagement are indicated. This kind of research is valuable not only because it investigates specific ways of organizing journalism, but because it enhances our critical faculties and helps us to question the dominant ways of doing things.

Nevertheless, the primary goal of this research program is not to develop and deploy algorithms, but to understand the organization of journalism. Although further development of the RNA algorithm could yield interesting results, many more lines of research are suggested that might make use of historical and empirical methods. First, further research on the forms of organization studied in this dissertation is needed in order to specify more fully the range of conditions which may impact the relationship between independence and evaluation. Within news departments, for example, some kinds of work are more constrained than others, and the various degrees of constraint and independence should be

associated with the conditions which they give rise to. Freelance work is also likely to exhibit specific forms of independence and constraint. With regard to algorithmic organizations, a fuller account of the First Generation Filter and a comparison between Google search, Digg, and reddit would shed much light on the specific variations of this form of organization.

In addition to these topics, a deeper treatment of Google search is warranted. Examination of a series of recent changes to the algorithm alongside their interpretation by members of the SEO and journalism communities could provide a chance to study the developing relationship between the company and the producers of the web. To what degree is Google willing to specify its values and standards, and to what extent is it committed to maintaining a zone of discretion within which producers can be disciplined for opaque reasons? What is the general process whereby the Google search algorithm is developed in relation to the problem of self promotion and spam? Comparative analysis between Google and reddit could also be carried out.

I am confident that new methods of organizing journalism will continue to engage the question of journalistic independence and its relationship to the norms and values of journalism. From the perspective of this dissertation, each new organization provides a field of experience and a possible case study against which to test the concepts developed herein. As these new organizations emerge, our understanding of the issue of journalistic independence will change

and develop. Nevertheless, not only the core concern for independence but also its general organizational outline are likely to remain with us for some time.

# Appendix A: Newskraft.org as Interface

### **Top Stories Page**

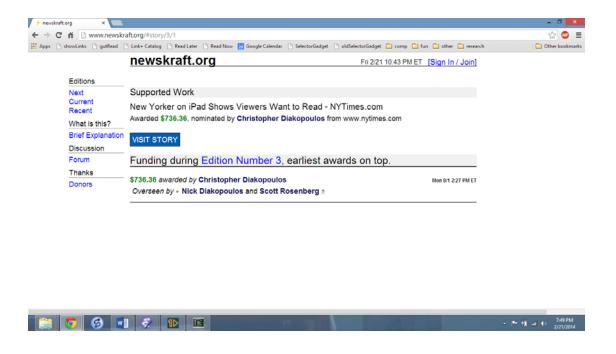
This page shows the works funded by newskraft.org during a specific edition, ordered by the amount of funding they received. Clicking the title of a story takes the user to the story page for that story. The Words "Stories" and "Top" are in black font to indicate that these words are selected. Other possible selections include "Recent Stories," "Top Network," and "Recent Network." On the left are navigation links to the Next Edition; Current Edition; Recently Published Editions; a link to a brief explanation of the experiment; a link to the Google Groups discussion forum; and a list of the Donors. Not Pictured is a link that shows up when a judge is logged in: Nominate Work. Clicking this link takes the judge to a form used to enter the URL of a work to be considered meritorious

#### by the judge.



### **Story Page**

This page shows a link to a work of journalism. The title, amount of funding awarded to the work, initially nominating judge, and domain name of the external site are at the top of the screen. Upon clicking the "Visit Story" button, the user is taken to the external page hosting the work. Beneath the button, all the judges who funded the story are listed, along with the editors who oversaw their funding. Not shown: If the logged-in user is a judge, a checkbox appears which enables the judge to fund, or stop funding, the work.



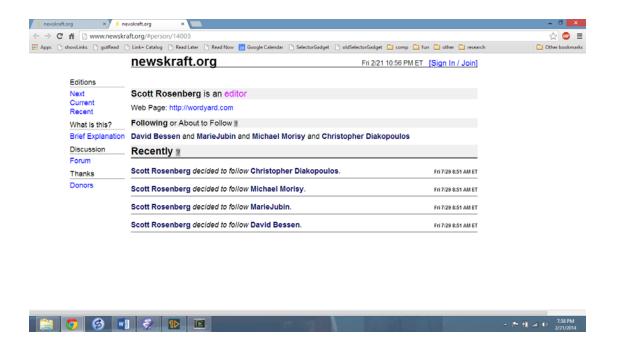
## Person Page (Judge)

This page shows a profile of a judge on newskraft.org. It states that the user is a judge, and provides a link to their personal web page. It shows the editors they are followed by, and the works they have funded. Links can be followed to editors and works. Not shown: If the logged-in user is an editor, a check box appears which signifies whether the editor is following the judge, and permits the editor to follow or unfollow the judge.



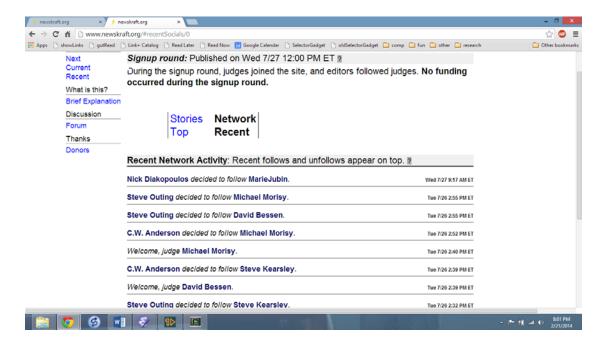
## **Person Page (Editor)**

This page shows a profile of an editor on newskraft.org. It states that they are an editor, and provides a link to their personal web page. It shows the judges they are following, and their recent activity of following and unfollowing. Links can be followed to judges.



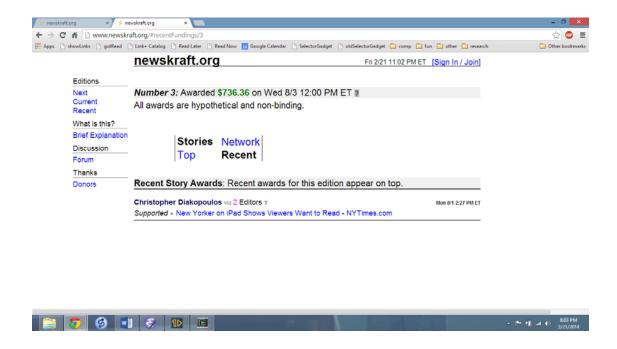
### **Recent Network Activity Page**

This page shows the follows and unfollows during an edition. Links can be followed to editors and judges. The Black Font Face signifies that "Network" and "Recent" are selected.



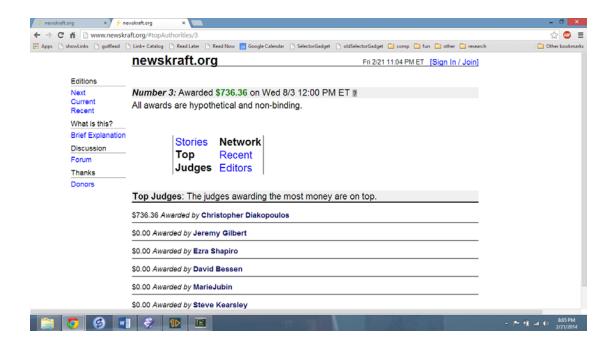
### **Recent Stories Page**

This page shows the funding awards granted during an edition, in reverse chronological order (most recent on top). The Black Font Face signifies that "Stories" and "Recent" are selected.



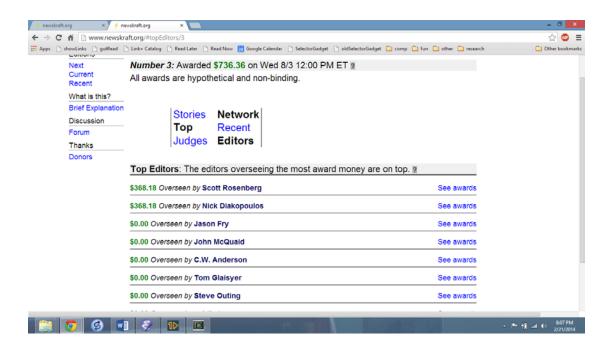
## **Top Network Page (Judges)**

This page shows the judges who have awarded the most funds during this edition. Links can be followed to judges. The black font face signifies that "Network," "Top," and "Judges" are selected.



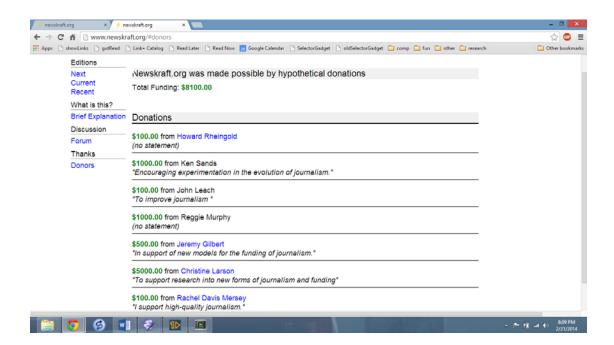
## **Top Network Page (Editors)**

This page shows the editors who have overseen the most funding awards during this edition. Links can be followed to editors. The black font face signifies that "Network," "Top," and "Editors" are selected.



## **Donors Page**

This page shows the total amount donated to newskraft.org and a list of the donors, with each donor's name, the amount the donor provided, and an optional statement by the donor.



# **Appendix B: The Rapid News Awards Algorithm Specification**

#### **Aggregators and Editions**

A running instance of the Rapid News Awards software is called an aggregator.

An aggregator is first launched, and then runs until it completes.

An aggregator has a schedule of editions which is fixed at launch time. It consists of a fixed number of editions and, for each edition, the edition's number, and its scheduled publication time. Editions are numbered starting at 0 and counting up from there.

After an aggregator is launched, nothing has been published, so the next edition is edition 0 and there is no current edition. When an aggregator completes, the current edition is the final edition, and there is no next edition. At all other times, there are both a current and a next edition. When the next edition, Edition N, reaches its publication time, the aggregator publishes that edition, making edition N current. If there is an edition N + 1, it becomes the next edition, otherwise the aggregator completes. That is, an aggregator completes when its final edition reaches its publication time.

#### **Editors and Judges**

An aggregator has a set of users, fixed at launch time, called editors. All users who are not editors are called judges. Judges may join the aggregator as long as there are at least two editions that have not been published yet.

During edition N, a judge J has Y points of authority. Y is a whole number greater than or equal to zero. We say that J has an authority of Y, or an authority score of Y. Y is equal to the number of editors following J during N.

When a judge J joins an aggregator, J has authority 0 during the next edition. While edition N is next and not final, an editor may choose to follow or unfollow a judge. These actions take effect during edition N + 1.

## Voting

If there is a current and a next edition, a judge may nominate a story for the next edition. This enables any judge to vote for it.

If there is a current and a next edition, a judge may vote for any story nominated for the next edition.

#### **Publication**

When an aggregator publishes edition N, then:

First, the aggregator distributes funding to stories (see Funding).

Then, if there is an edition N + 1, the aggregator adjusts the authorities of the judges, as follows:

for each judge J whose authority was Y during N, the aggregator sets J's authority during N + 1 to: Y PLUS the number of editors who chose to follow J during N MINUS the number of editors who chose to unfollow J during N.

We say that the editors who chose to follow J during N are following J during N + 1, while the editors who chose to unfollow J during N are not following J during N + 1.

## **Tallying**

Throughout each edition, the aggregator maintains a ranked list of stories for that edition, sorted by score.

At any time, anyone may ask the aggregator for an edition's ranked list of stories.

During each edition on a regular basis, the aggregator tallies up all the votes that have been cast for the next edition N, as follows:

## Stage 1: Initialize story scores

for each story S with a vote in edition N:

set S's score in edition N to 0

#### **Stage 2: Total story scores**

for each story S with a vote in edition N:

for each vote V cast by judge J for S

set S's score in edition N = (S's score + J's authority during edition N)

# **Funding**

The aggregator starts with a fixed amount of funds. At all times, the amount of funds the aggregator currently has is called its balance.

When the aggregator publishes Edition N then the aggregator distributes funding to stories in three stages as follows:

#### **Stage 1: Set Edition Revenue**

set the revenue for edition N =

(the aggregator's balance)

**DIVIDED BY** 

(the number of editions remaining, including N)

#### **Stage 2: Set Story Revenues**

for each story S receiving a vote in edition N:

set the revenue for S =

(the revenue for edition N)

**TIMES** 

(the number of authority points cast for S)

**DIVIDED BY** 

(the total number of authority points cast for edition N)

# **Stage 3: Set Aggregator Balance**

set the aggregator's balance =

(the aggregator's balance)

MINUS

(the revenue for edition N)

# **Appendix C: Interview Questions for Newskraft.org**

## Project goals / understanding

Can you describe the way you understand or tried to understand your role in newskraft.org?

Do you feel you had a clear understanding of your role in newskraft.org?

Can you describe the way you understand or tried to understand the way your role interacted with others?

Do you feel you had a clear understanding of the way your role would interact with other roles?

Can you describe the way you understand or tried to understand the overall goals of newskraft.org?

Do you feel you had a clear understanding of the goals of newskraft.org?

What did you do in order to carry out your role?

Were there any obstacles that got in the way of carrying out your role?

Did your role seem like a good fit for your skills and interests?

Did you notice the behaviors of other participants? Which ones?

Was the software system understandable and usable?

# Now I'd like to tell you how I conceive of the goals of newskraft.org to get your input about that.

One of the things I was trying to do here is explore aggregation as a way to raise our standards of journalism, to say how can we work together to get an aggregation of the best journalism on the internet in our field. Does that spur any thoughts for you?

I've been influenced by the open internet and by the fact that almost anyone can now be a publisher, but I'm also influenced by the traditional role of editing and oversight in ensuring quality work is done. One thing about newskraft.org is that some judges have more influence than others, because of the number of editors following the judge. Does that spur any thoughts for you?

Another thing along this track is that some judges don't actually contribute any funding at all. If a judge is not followed by any editors then that judge's votes are visible, but they don't contribute funding. Does that spur any thoughts for you?

Another goal of mine is is to explore the role of the audience. For one thing, I wonder if an audience can actually play a positive role, in helping to direct attention towards those important stories that might get ignored, given the decline of newspapers.

The second thing about the audience in newskraft.org is that it actually distributes funding to the producers of journalism. The goal here is to provide an incentive to produce excellent work. Do you have any thoughts about that?

Now a few broader questions about the current state of journalism, to help get a sense of where newskraft.org might fit into things.

Does newskraft.org resemble other journalism projects or general trends in journalism you are familiar with?

Does newskraft.org seem different from any of these projects?

Did any of the goals of the project, as you understood them, coincide with any of your own goals?

Did any of the goals of the project, as you understood them, conflict with any of your own goals?

# Now some final questions about future work

How could the software system be made more understandable and easier to use?

How would you modify future versions of the system in order to make it better?

Would you be interested in taking part in a modified version of the experiment?

Do you have any other questions or comments about anything?

#### **Works Cited**

- Anderson, C.W. "Between creative and quantified audiences: Web metrics and changing patterns of newswork in local US newsrooms," *Journalism* 12(5), 2011: 550-566.
- Anderson, C.W. "Deliberative, agonistic, and algorithmic audiences: Journalism's vision of its public in an age of audience transparency." *International Journal of Communication* 5, 2011.
- Anderson, C.W. and Michael Schudson. "Objectivity, Professionalism, and Truth Seeking in Journalism," in Karin Wahl-Jorgensen and Thomas Hanitzsch, eds, *Handbook of Journalism Studies*, Routledge, 2009
- Austin, John and John Cokley. "The Key Hiring Criteria Used by Journalism Employers" *Australian Studies in Journalism*, no. 17, December 2006, pp. 74-89.
- Barlow, Aaron. *The Rise of the Blogosphere*, Westport, Ct: Praeger Publishers, 2007
- Beaujon, Andrew. "Twitter apologizes for blocking newspaper's URLs,"
  November 4th, 2013. http://www.poynter.org/latestnews/mediawire/228372/twitter-apologizes-for-blocking-newspapers-urls/
  Last accessed November 4th, 2013.
- Beel, Joeran and Bela Gipp. "Academic search engine spam and Google Scholar's resilience against it." *Journal of Electronic Publishing* 13(3), 2010.
- Benkler, Yochai. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, Yale University Press, 2006.
- Benson, Rodney and Erik Neveu, *Bourdieu and the Journalistic Field*, Polity Press, 2005.
- Blair, Jayson. *Burning Down my Masters' House*, Beverly Hills, Ca: New Millenium Press, 2004.
- Braverman, Harry. "Technology and capitalist control," in Mackenzie and Wajcman, *The Social Shaping of Technology*, op. cit., p. 159; and
- Breed, Warren. "Social Control in the Newsroom: A Functional Analysis," *Social Forces* 33(4), May 1955, pp. 326-35.

- Brin, Sergey and Lawrence Page, "The anatomy of a large-scale hypertextual Web search engine." *Computer networks and ISDN systems* 30.1 (1998): 107-117.
- Bucher, Taina. "Want to be on the top? Algorithmic power and the threat of invisibility on Facebook," *New Media & Society* 14(7), 2012, pp. 1164-1180.
- Byrne, Owen. "Kevin Rose shows off digg.com on The Screen Savers," http://www.youtube.com/watch?v=W1\_YoG7lql4 Accessed February 11th, 2014.
- Callon, Michel. "Society in the Making: The Study of Technology as a Tool of Sociological Analysis," in Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Anniversary Edition, MIT Press, 2012, pp. 77-97.
- Castells, Manuell. The Rise of the Network Society, Wiley-Blackwell, 2000.
- Clark, Roy Peter and Don Fry, Coaching Writers: The Essential Guide for Editors and Reporters, St. Martin's Press, 1992.
- Collins, Jessanne. "My Summer on the Content Farm," *The Awl*, November 4th, 2010, http://www.theawl.com/2010/11/my-summer-on-the-content-farm accessed February 10th, 2013;
- Compaine, Benjamin M. "The Newspaper Industry," in Benjamin M. Compaine and Douglas Gomery, eds, *Who Owns the Media? Competition and Concentration in the Mass Media Industry*, Third Edition, Routledge, 2000, pp. 1-61.
- Couts, Andrew. "Sorry Reddit, Digg's new model proves community rule is overrated," *Digital Trends*, July 21st, 2013, http://www.digitaltrends.com/web/new-digg-is-the-old-reddit/ Accessed February 14th, 2013.
- de Valk, Joost. "Godaddy's spammy link building techniques," http://yoast.com/godaddy-link-building/ Accessed August 29th, 2013.
- Enge, Eric, Stephan Spencer, Jessie Stricchiola, and Rand Fishkin, *The Art of SEO*, Second Edition, O'Reilly Media, 2012

- Epstein, Edward Jay. News From Nowhere: Television and the News, Vintage Books, 1974.
- Ettema, James S. and D. Charles Whitney, eds, *Audiencemaking: How the Media Create the Audience*, Sage Publications, 1994.
- Everitt, David. A Shadow of Red: Communism and the Blacklist in Radio and Television, Ivan. R Dee, 2007.
- Frey, Ned. "30 eHow Articles in Ascending Order of Usefulness," The Awl, August 10th, 2010, http://www.theawl.com/2010/08/listicle-without-commentary-30-ehow-articles-in-ascending-order-of-usefulness, accessed February 9th, 2014.
- Fry, Jason. "Algorithms Aren't Evil," July 21st, 2010, http://reinventingthenewsroom.wordpress.com/2010/07/21/algorithms-arent-evil/ Accessed February 20th, 2014.
- Gans, Herbert J. Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time, Vintage Books, 1980.
- Giles, Robert H. *Newsroom Management: A Guide to Theory and Practice*, Indianapolis: R.J. Berg and Company, 1987, pp. 124-6.
- Gillespie, Tarleton. The Relevance of Algorithms, in Tarleton Gillespie, Pablo Boczkowski, and Kirsten Foot, eds, *Media Technologies: Paths Forward in Social Research*, forthcoming from MIT Press.
- Gitlin, Todd. The Whole World is Watching: Mass Media and the Making and Unmaking of the New Left. University of California Press, 2003.
- Goffman, Erving. Frame Analysis: An Essay on the Organization of Experience, Northeastern University Press, 1986.
- Halavais, Alexander. Search Engine Society, Polity Press, 2009, pp. 32-55.
- Hallin, Daniel C. "The Passing of the 'High Modernism" of American Journalism Revisited," *Political Communication Report*, International Communication Association & American Political Science Association, Vol. 16 No. 1, Winter 2006.
- Hallin, Daniel C. *The "Uncensored War:" The Media and Vietnam*, University of California Press, 1986.

- Hallin, Daniel C. and Paolo Mancini, Comparing Media Systems: Three Models of Media and Politics, Cambridge University Press, 2004.
- Hansell, Saul. "Google: There's Nobody in Our Black Box. Yet." New York Times Bits Blog, December 19, 2007, http://bits.blogs.nytimes.com/2007/12/19/google-theres-nobody-in-our-black-box-yet/?\_r=0, accessed November 20th, 2013
- Hayes, Arthur S. *Press Critics are the Fifth Estate: Media Watchdogs in America*, Praeger, 2008, and
- Herman, Edward S. and Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, Pantheon Books, 2002.
- Introna, Lucas D. and Helen Nissenbaum, "Shaping the Web: Why the Politics of Search Engines Matter," *The Information Society*, 16(3), pp. 1-17, 2000.
- Kline, Ronald and Trevor Pinch, "The social construction of technology," in Donald MacKenzie and Judy Wajcman, eds., *The Social Shaping of Technology*, Second Edition Open University Press, 1999, pp. 113-15.
- Kyrnin, Jennifer. "How Can You Tell if a Site is a Link Farm?" http://webdesign.about.com/od/seo/f/is\_it\_linkfarm.htm accessed August 29th, 2013.
- Lawrence, Paul R. and Jay W. Lorsch, "Differentiation and Integration in Complex Organizations," *Administrative Science Quarterly* 12(1), June, 1967, pp. 1-47.
- Layton, Julia. "How Digg Works," howstuffworks, http://computer.howstuffworks.com/internet/social-networking/networks/digg3.htm Accessed February 11th, 2014.
- Lerman, Kristina. "Social networks and social information filtering on digg." arXiv preprint cs/0612046 (2006). http://arxiv.org/pdf/cs/0612046.pdf?origin=publication\_detail Accessed February 11th, 2014.
- Mayer, Katja. "On the Sociometry of Search Engines: A Historical Review of Methods," in Conrad Becker and Felix Stalder, eds., *Deep Search: The Politics of Search beyond Google,* StudienVerlag, 2009.
- Mayer, Marissa. "Do Not Neutralize the Web's Endless Search," Financial Times, July 14th, 2010.

- McLeod, Jack M. and Garrett J. O'Keefe Jr., "The Socialization Perspective and Communication Behavior," in F. Gerald Kline and Philip J. Tichenor, eds, *Current Perspectives in Mass Communication Research*, Sage Publications, 1972.
- Metz, Cade. "Blackhat SEO 'cheats' Reddit," The Register, October 11th, 2010. http://www.theregister.co.uk/2010/10/11/blackhat\_seo\_games\_reddit/ Accessed February 11th, 2014.
- Molotch, Harvey and Marilyn Lester, "News as Purposive Behavior: On the Strategic Use of Routine Events, Accidents, and Scandals," *American Sociological Review*, 39(1), February, 1974, pp. 101-112.
- Morris, Kevin. "How The Atlantic successfully spammed Reddit," The Daily Dot, April 04, 2012, http://www.dailydot.com/society/atlantic-slaterhearst-jared-keller-reddit/ Accessed February 11th, 2014.
- Mukerji, Chandra. *Impossible Engineering: Technology and Territoriality on the Canal du Midi*, Princeton University Press, 2009.
- Mutter, Alan D. "The Daunting Reality Facing Newspapers," 2009. http://newsosaur.blogspot.com/2009/12/daunting-reality-facing-newspapers.html Accessed November 18th, 2013.
- Nissenbaum, Helen. *Privacy in Context*, Stanford University Press, 2010, pp. 67-102.
- Nah, Fiona Fui-Hoon and Sid Davis, "HCI research issues in e-commerce," Journal of Electronic Commerce Research 3(3) 2002, pp. 98-113.
- Napoli, Philip. "The Algorithm as Institution: Toward a Theoretical Framework for Automated Media Production and Consumption," Paper presented at the Media in Transition Conference, Massachusetts Institute of Technology, Cambridge, MA, May, 2013.
- Napoli, Philip. "Revisiting 'Mass Communication' and the 'work' of the Audience in the New Media Environment." McGannon Center Working Paper Series (2008): 24.
- Neff, Gina. Venture Labor: Work and the Burden of Risk in Innovative Industries, MIT Press, 2012.
- Noble, David F. "Social choice in machine design: the case of automatically controlled machine tools," in Mackenzie and Wajcman, *The Social Shaping of Technology*, pp. 161-76.

- Norman, Donald A. "Cognitive Artifacts," in *Designing Interaction: Psychology at the Human-Computer Interface*, edited by John M. Carroll, Cambridge University Press, 1991, pp. 25-6.
- North, Douglass C. and Barry R. Weingast, "Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England." *The Journal of Economic History* 49(4), 1989, pp. 803-832.
- Oudshoorn, Nelly and Trevor Pinch, "User-Technology Relationships: Some Recent Developments," in Edward J. Hackett, Olga Amsterdamska, Michael Lynch, and Judy Wajcman, eds, *The Handbook of Science and Technology Studies*, Third Edition, MIT Press, 2008.
- Patterson, Thomas E. "Political Roles of the Journalist," in Doris Graber, Denis McQuail, and Pippa Norris, eds., *The Politics of News, The News of Politics*, Washington, D.C: CQ Press, 1998, p. 22.
- Perrow, Charles. *Complex Organizations: A Critical Essay*, Third Edition, Random House, 1986.
- Pexton, Patrick B. "The Post Fails a Young Blogger," http://www.washingtonpost.com/opinions/elizabeth-flocks-resignation-the-post-fails-a-young-blogger/2012/04/20/gIQAFACXWT\_story.html, April 20, 2012, accessed February 9th, 2014.
- Pinch, Trevor J. and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," in Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Anniversary Edition, MIT Press, 2012, pp. 33-7;
- Pollock, Neil and Robin Williams, Software and Organizations: The biography of the enterprise-wide system or how SAP conquered the world, Routledge, 2009, p. 38.
- Rachum, Amir. "Reddit Thinks I'm a Spammer," August 25th, 2012, http://blog.amir.rachum.com/blog/2012/08/25/reddit-thinks-im-a-spammer/Accessed February 14th, 2014.
- reddit. "Frequently Asked Questions," http://www.reddit.com/wiki/faq, accessed February 11th, 2014.

- Reese, Stephen D. and Jane Ballinger, "The Roots of a Sociology of News:
  Remembering Mr. Gates and Social Control in the Newsroom." *Journalism & Mass Communication Quarterly*, 78(4), pp. 641-658 (2001).
- Rose, Kevin. "Digging Fraud," Digg Blog, April, 2006, http://diggtheblog.blogspot.com/2006/04/digging-fraud.html Accessed February 11th, 2014.
- Rosen, Jay. "I'm There, You're not, Let Me Tell You About It: A Brief Essay on the Origins of Authority in Journalism," *PressThink*, March 27th, 2012, http://pressthink.org/2012/03/im-there-youre-not-let-me-tell-you-about-it/accessed February 21st, 2014.
- Rosen, Jay. "Jay Rosen Interviews Demand Media: Are Content Farms 'Demonic'?" readwrite, December 16th, 2009, http://readwrite.com/2009/12/16/jay\_rosen\_vs\_demand\_media\_are\_content\_farms\_demoni#awesm=~ooNxZy5XDF8g2r Accessed December 1, 2013.
- Rosenberg, Scott. Say Everything: How Blogging Began, What it's Becoming, And Why it Matters, New York: Crown Publishers, 2009, p. 270.
- Roth, Daniel. "The Answer Factory: Demand Media and the Fast, Disposable, and Profitable as Hell Media Model," Wired, http://www.wired.com/magazine/2009/10/ff\_demandmedia/, accessed February 9th, 2014.
- Schudson, Michael. "Autonomy from What?" in Rodney Benson and Erik Neveu, eds, *Bourdieu and the Journalistic Field*, Polity Press, 2005, pp. 214-223.
- Schudson, Michael. "The Objectivity Norm in American Journalism," *Journalism* 2(2) August, 2001, pp. 149-170.
- Schudson, Michael. *The Sociology of News*, W.W. Norton and Company, 2003, p. 121.
- Schwartz, Barry. "Google Warns Against Large-Scale Guest Posting, Advertorials & 'Optimized Anchor Text' In Press Releases." http://searchengineland.com/google-adds-large-scale-guest-posting-advertorials-optimized-anchor-text-to-list-of-link-schemes-168082, July 26th, 2013. Accessed September 1, 2013.
- Shapin, Steven. "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science*, 14(4), November, 1984, pp. 481-520.

- Shirky, Clay. "The Case Against Micropayments," http://www.openp2p.com/pub/a/p2p/2000/12/19/micropayments.html, accessed January 21, 2014.
- Shirky, Clay. Here Comes Everybody: The Power of Organizing without Organizations, Penguin Books, 2008.
- Shirky, Clay. "A Speculative Post on the Idea of Algorithmic Authority," http://www.shirky.com/weblog/2009/11/a-speculative-post-on-the-idea-of-algorithmic-authority/ accessed December 1, 2013.
- Siles, Ignacio and Pablo J. Boczkowski. "Making sense of the newspaper crisis: A critical assessment of existing research and an agenda for future work." New Media & Society 14(8), 2012, pp. 1375-1394.
- Simon, Herbert A. Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations, Free Press, 1997.
- Spangler, Nicholas. "In Demand: A week inside the future of journalism," *Columbia Journalism Review*, November 4th, 2010, http://www.cjr.org/feature/in\_demand.php?page=all accessed February 9th, 2013.
- Stacks, John F. Scotty: James B. Reston and the Rise and Fall of American Journalism, Little, Brown and Company, 2003, pp. 89-90.
- Stalder, Felix and Christine Mayer, "The Second Index: Search Engines, Personalization, and Surveillance," in Conrad Becker and Felix Stalder, eds., *Deep Search: The Politics of Search beyond Google,* StudienVerlag, 2009, pp. 98-115.
- Star, Susan Leigh and James R. Griesemer, "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." *Social Studies of Science* 19(3), 1989, pp. 387-420.
- Suchman, Lucy. "Do Categories Have Politics? The Language/Action Perspective Reconsidered. *Computer Supported Cooperative Work (CSCW)* 2, 1994, pp. 177-90.
- Suchman, Lucy. *Plans and Situated Actions: The Problem of Human-Machine Communication*, Cambridge University Press, 1987.

- Sullivan, Danny. "Google's Personalized Results: The "New Normal" That Deserves Extraordinary Attention," http://searchengineland.com/googles-personalized-results-the-new-normal-31290
- Tuchman, Gaye. *Making News: A Study in the Construction of Reality*, Free Press, 1978, p.56
- Tuchman, Gaye. "Objectivity as Strategic Ritual: An Examination of Newsmen's Notions of Objectivity." *American Journal of sociology* 77(4), 1972, pp. 660-679.
- Turner, Fred. From Counterculture to Cyberculture: Stuart Brand, the Whole Earth Network, and the Rise of Digital Utopianism, University of Chicago Press, 2008.
- Underwood, Doug. *When MBAs Rule the Newsroom*, Columbia University Press, 1995.
- Vise, David A. and Mark Malseed, *The Google Story*, New York: Delacorte, 2005, pp.36-40.
- White, David Manning. "The Gatekeeper: A Case Study in the Selection of News," *Journalism Quarterly* 27 (1950), pp. 383-96.
- Williamson, Oliver. The Economic Institutions of Capitalism, Free Press, 1985.
- Wikipedia. "Digg." http://en.wikipedia.org/wiki/Digg Accessed February 11th, 2014.