



The Reality of the Virtual:

Looking for Jewish Leadership Online

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Note: This is the second release of this report. It has benefitted significantly from comments and conversations since the first release, and in the spirit of the internet and ongoing updatability, we are re-releasing the report with some additions and changes.

Introduction¹

In September, 2009, MASA, a partnership between the Jewish Agency and American communal organizations that provides a “gateway to long term Israel programs,” launched a PR campaign on Israeli television and the internet. A central feature of the \$800,000 effort was a commercial, shot with a vague MTV aesthetic, that featured mocked-up missing persons posters of American Jews. The advertisement’s female narrator urged her Israeli audience to connect their American acquaintances with MASA in order to encourage them to travel to Israel and save the “more than 50% of diaspora youth [who] assimilate and are lost to us.”²

Though intended for an Israeli audience, the advertisement quickly caught the attention of Jewish bloggers and journalists in the United States, many of whom objected vociferously to the commercial and its implicit message. Most expressed a sense of outrage at the use of the

¹ The author would like to extend his deep gratitude and appreciation for the insight and assistance of the following people: Steven M. Cohen, Sarah Bunin Benor, Shaul Kelner, Sylvia Barack Fishman, and Jack Wertheimer, who are some of the finest collaborators, thinkers, colleagues and friends that I’ve had the pleasure to work with. At various points Riv Ellen Prell, Jack Ukeles and J. Shawn Landres provided valuable insight into some of the issues discussed here. Ted Sasson and Charles Kadushin offered vital criticism and assistance at exactly the right times, and without their help, this would have been a much impoverished project and a significantly less interesting paper. Eli Kannai provided some very thoughtful and instructive critiques on a later draft that have changed my thinking and challenged my findings. Robert Swirsky wrote the custom script used to gather the data for this project and he also mapped the networks that appear here. Without Robert, this project could never have happened, and I’m deeply grateful to him for his help, patience, curiosity and interest in the project. Finally, I want to express my gratitude to the Avi Chai Foundation who helped usher an idea into a research project and a research project into this paper.

² The 35-second commercial is still available online at <<http://www.youtube.com/watch?v=ZPYGdglxle4>> [accessed December 10, 2009]

term “lost” and questioned an outreach strategy that insulted its target population.³ Some bloggers questioned the cost of such an effort, and a handful of print publications, including the *Jerusalem Post*, published their own critical responses online.⁴ In response to the the broad and loud chorus of blog-based objections, MASA removed the commercial and issued a public apology, explaining the event as a “misunderstanding.”⁵

The MASA incident highlights three critical ways in which the internet is changing the landscape of Jewish life. First, the internet made the objections possible by bringing the commercial to American viewers. Were it not for the internet and its ability to facilitate the rapid sharing of information, the commercial likely would have run its course on Israeli television without objections from American Jews. However, the “viral” nature of media on the internet, and the ability of people to share information quickly, cheaply, and transnationally meant that an Israeli cultural product quickly became part of a global Jewish conversation.

³ Kung Fu Jew’s *Jewschool* post of September 3, 2009 is one of the most widely cited and circulated of these. <<http://jewschool.com/2009/09/03/17696/masa-tv-commercial-intermarried-jews-are-lost/>> [accessed December 10, 2009]. Other objections came from bloggers like Esther Kustanowitz <<http://estherkustanowitz.typepad.com/myurbankvetch2005/2009/09/lost-not-the-tv-show-the-intermarried-jews.html>> [accessed December 10, 2009], and Ed Case, the CEO of interfaithfamily.com <<http://www.interfaithfamily.com/smf/index.php?article=3373>> [accessed December 10, 2009]

⁴ JJ Goldberg, “‘Lost’ In Plain Sight: An Israeli Plan to Rescue American Jews.” Posted September 6, 2009. <<http://blogs.forward.com/jj-goldberg/113535/>> [accessed December 10, 2009]. It should also be noted that there is some anecdotal evidence of conversations between American Jews and some leaders at the Jewish Agency which also helped foment the organization’s change of heart, but nevertheless, the conversation online helped evidence the widespread concern over the advertisement and its overtones.

⁵ The Jewish Agency posted its response on its websites (September 6, 2009) <<http://www.jewishagency.org/JewishAgency/English/About/Press+Room/Press+Releases/2009/sep06a.htm>> [accessed, December 10, 2009]. The full text of the letter explaining the response appeared in a number of blogs and on a host of online Jewish news sources including ejewishphilanthropy.com (Posted September 8, 2009) <<http://ejewishphilanthropy.com/masa-officially-pulls-the-plug-on-lost-campaign/>> [accessed December 10, 2009] and the fundermentalist blog on the JTA.org website (Posted September 8, 2009) <<http://blogs.jta.org/philanthropy/article/2009/09/08/1007698/jewish-agency-changes-course-on-masa-ad>> [Accessed December 10, 2009].

Second, it highlights the power of the internet as a new forum for debate and conversation about contemporary Jewish issues. The chorus of voices raised in objection to the MASA commercial resulted in a short-term change in the organization's media strategy, but more importantly, the incident showed that established, mainstream Jewish organizations no longer have sole propriety over the content of communal Jewish debate, nor do they control the venues in which those debates take place. Before the internet opened up these new spaces for communal debate, it would have been unimaginable that a collection of relatively independent writers could force the Jewish Agency to change its policies and shelf a costly advertising campaign.

Third, the MASA incident revealed the diversity of Jewish voices eager to participate in communal discussion. From the left and the right, the religious and the secular, from established newspapers to single-authored blogs, the MASA commercial generated responses from almost every imaginable corner of the Jewish world. One could read the variety of responses as indicative of the fragmentation of the Jewish people, or one could understand it as a reflection of diverse opinions within a single, unifying conversation. Either way, it is clear that the internet enabled a great diversity of participants from a variety of Jewish communities to join the debate without having to channel their participation through established communal organizations, news sources, or congregations.

Episodes like this one are as mythical as they are myriad in the literature about the internet. Both journalists and scholars have argued that the internet will radically reshape the commercial marketplace, alter how we regard knowledge and education, challenge our understandings of marketing, shift our conceptions of power, and even change our relationship

to democracy.⁶ One need only look to the role of Twitter in the social upheaval in Iran during the summer of 2009 for one small example of how these changes are playing out globally.⁷

What these changes *mean*, however, remains the subject of active and ongoing debate.

Why Study the Internet?

Of course, the changes initiated and enabled by the internet are affecting Jews as they are everyone else. Abundant anecdotal examples aside, we know almost nothing about how the internet is changing the arrangements of power and order in Jewish communities worldwide, or how it is informing conceptions of Jewish collectivity, education, and leadership. What does it mean for Jewish communal organizations when individual bloggers can challenge the Jewish Agency over its characterizations of diaspora Jews? How is the diversity chorus of voices on the internet changing the qualities of Jewish communities? What do dynamics like these mean for a global sense of Jewish communal membership? Who is leading these conversations? Are we seeing new expressions and modes of leadership or merely the emergence new venues for older forms of leadership? How is the internet challenging some of the established structures of Jewish life, and how is it reenforcing others? Where are new loci

⁶ For examples of each see Chris Anderson, *The Long Tail* (Hyperion, 2008); James Surowiecki, *The Wisdom of Crowds* (Anchor Books, 2005); Charlene Li and Josh Bernoff, *Groundswell* (Harvard Business Press, 2008); Clay Shirkey, *Here Comes Everybody* (Penguin, 2009); Yochai Benkler, *The Wealth of Networks* (Yale University Press, 2007).

⁷ Malcolm Gladwell's thoughtful critique of this event notwithstanding, the global dimension of local political events is an undeniable effect of online communication platforms. See Malcolm Gladwell, "Small Change: Why the Revolution Will Not Be Tweeted" *The New Yorker*. October 4, 2010. Or, online here: <http://www.newyorker.com/reporting/2010/10/04/101004fa_fact_gladwell>. For the response of Twitter's founders to Gladwell, see Liz Gannes, "Twitter Founders: Gladwell Got It Wrong" October 11, 2010. <<http://gigaom.com/2010/10/11/twitter-founders-gladwell-got-it-wrong/>> [accessed November 28, 2010]

of power emerging in the Jewish community as it takes shape online? How does what happens online inform what happens offline?

As a response to these questions, this paper will focus primarily on the internet as a representation of communal life, one that is connected to offline realities, but that operates according to a slightly different set of rules and norms. Focusing on the internet means exploring the ways in which Jewish websites and blogs interact with one another to create a network, but it also means never losing sight of the fact that the internet functions, effectively, as a representation of offline Jewish communal dynamics. Jewish communal organizations, activists, advertisers, resources, and services all contribute to the online network of Jewish websites and blogs. Insofar as every website has a person or people behind it, they are all representations of something offline, and their online relationships capture and produce communal dynamics that cannot appear through surveys, interviews, or other social scientific methods of investigation with which Jewish communal professionals are more familiar. Focusing on the network of Jewish websites and blogs as a representation of Jewish communities and communal dynamics offers another window into questions of community, influence, information and leadership.

As an increasingly necessary sphere of Jewish life, the internet becomes an illuminating case study for the changing dynamics of the American Jewish community. The internet has made information far more accessible, it has enabled new venues for communal debate, discussion and engagement, and it has expanded the chorus of voices in the Jewish communal conversation. The organizations and institutions of the organized Jewish world, built primarily in the thick of the 20th century, have found themselves working in a world where communication is much more multifarious, and in which information (and the curation of that

information) plays an ever-increasingly important role. Jewish organizations are discovering what record companies, television networks, advertisers and PR firms are all learning: the old broadcast model does not work as well as it used to. As a result, the ways in which organizations imagine and engage their audiences have to change, as well. Just claiming to be the “central address” no longer packs the punch it once did, especially because we can measure whether or not a particular website’s address (or url) actually is central with a given network (Spoiler Alert: Jewishfederations.org is not the “central address” of the network. Not by a long shot).

Online, the centrality of a url can be measured, in part, by documenting its relationships to other sites. The more sites with which it is connected, the more central the site. Consider an offline analog. Jewish institutions like synagogues, museums, and federations are typically housed in free-standing buildings and work relatively independently. There is no necessary coordination between how they operate. Additionally, relationships between one organization and another are not always clear -- sometimes the co-sponsor, sometimes they don’t, and one can belong to one or more organizations and have little or no contact with others, even within one’s local Jewish community.

The internet is similarly built out of relatively free-standing sites, but by contrast, it is fueled by the relationships between sites. We call these relationships links. A site with no links will, in all likelihood, not attract a whole lot of traffic because people navigate the internet by following links between sites. Without links, the internet would be almost impossible to navigate and quite cumbersome to use. Links turn free-standing websites into a network. Usually, the more links a website has, the more it benefits from those links as the links drive traffic to the site. Links concretize relationships online that can be quite ethereal offline, and

they represent some ways in which sites interact and direct visitors. Mapping and measuring those links will provide some important insights into the dynamics of community organization, leadership and influence within the network of Jewish websites and blogs.

To date, much research and popular wisdom have shown that technology is dominated by young people.⁸ So, one could conclude that the significance of sites written by and for younger audiences ought not to be a surprise, and that their prominence in the overall network shows little more than the fact that young people remain more adept at using the internet than their older counterparts. This is true, but it remains only part of the overall story. Equally as important is the fact that the internet is not going to recede or disappear; in all likelihood it will continue to play a significant role in our lives, our culture, and our communities. Although it currently favors the young, its importance is not an effect of age; the current generation of people in their 20s and 30s will not “age out” of using the internet, and the following generation will not necessarily supersede the current one in this regard. Therefore, the internet is crucial for examining current communal dynamics that are likely to inform the future, because of the prevalence of young people in shaping it. The picture of the internet presented in this paper, then, is important for the specifics it reveals about contemporary Jewish life online, but it is more important for the general trends it emphasizes about the internet in Jewish life both online and off.

This paper is in conversation with other social scientific investigations of online and offline investigations of religion and technology. Specifically, it is an attempt to engage two

⁸ The Pew Research Center’s Internet and American Life Project routinely releases data about the gaps (generational, class, race, region and otherwise) in internet use. The most recent data still shows a significant lag in people aged 65 and older, when compared to their younger counterparts, although it also shows that 79% of all adults 18 years old and older are online.

other research projects in conversation, helping to deepen and develop our understanding of religion online. The first paper, “Mapping the Arabic Blogosphere,” is a project of Harvard’s Berkman Center for Internet and Society’s Internet and Democracy Project.⁹ It explored 6,000 of the “most connected” Arabic language blogs and mapped them both geographically and in relation to one another, in an attempt to find correlations between blogging and emergent democratic movements. The second paper, “The New Landscape of the Religion Blogosphere,” is a project of the Social Science Research Council, and it studies the dynamics among English language blogs that focus on religion, in an effort to “foster a more self-reflective, collaborative and mutually-aware religion blogosphere.”¹⁰ This project both builds on and extends the findings of these two others, and attempts to account for the particulars of Jewish websites and blogs, as crucial voices in online discussions of politics and religion.

This paper takes a systematic look at a network of Jewish websites and blogs. Examining websites and blogs as nodes in a network creates the opportunity to assess the significance of each, the role it plays in the overall network, and allows us to read the overall dynamics for the ways in which Jewish activity online is informing Jewish life offline. Employing some tools of social network analysis, we will map relationships between websites, creating a detailed depiction of Jewish communal relations within Jewish blogs and websites. First, we will apply this analysis to 148 popular Jewish websites. Then we will recalculate and recalibrate our measurements to account for nearly 300 Jewish blogs. Finally, we will turn our attention to two

⁹ Both an executive summary and the full report are available online <http://cyber.law.harvard.edu/publications/2009/Mapping_the_Arabic_Blogosphere>

¹⁰ Social Science Research Council, “The New Landscape of the Religion Blogosphere,” 3. The full report is available online <<http://blogs.ssrc.org/tif/religion-blogosphere/>>.

local communities, Los Angeles and San Francisco, in an effort to account for differences of scale in the virtual sector.

Methodology and Social Network Analysis

Defining Websites and Blogs

This paper is concerned first and foremost with evaluating relationships between blogs and websites as indicators of leadership. It takes, as its primary data set, blogs and websites that account for the network of Jewish individuals and organizations that contribute to and share in the collective production of a Jewish conversation online.¹¹ Because of the dynamic nature of the web, this is necessarily a flexible and partial definition. It is also a broad one that leaves the determination of the “Jewishness” of a particular site or blog up to its authors.

As a result it does not focus on the content of particular sites, nor does it focus on audience size, beyond some basic considerations. This paper is not an examination of “best practices,” and it does not explore how to optimize search engine capabilities or generate advertising revenue. Similarly, it does not focus on any of the three most popular social

¹¹ This is an adaptation and a paraphrase from Technorati’s definition of its 2008 “State of the Blogosphere” report, in which it described the blogosphere as “the ecosystem of interconnected communities of bloggers and readers at the convergence of journalism and conversation.” Technorati’s definition is also employed by the SSRC “Religion Blogosphere” paper, page 18. For Technorati’s report, see Technorati. “State of the Blogosphere” (2008) <<http://technorati.com/blogging/state-of-the-blogosphere/>>

networking platforms: Facebook, MySpace, or twitter.¹² Instead, this paper examines the dynamics that shape the network of Jewish websites and blogs as a way to represent the emergence of new loci of influence and leadership within discussions and performances of Jewish communal life.

This paper distinguishes between websites and blogs, so a word about that distinction will be helpful. In truth, the distinction between the two is blurry, and visitors may either not either care or know about the finer points of the difference. A 2008 survey from the Pew Internet and American Life Project reported that one third of internet users read blogs, and that 42% believe that they never have.¹³ These numbers, however may be a better reflection of the fact that many people who come across blogs may not know that they are reading one, or that many websites have blogs embedded in them, or that many bloggers consider their efforts to “count” as websites. In fact, in terms of visitor behavior, there is little difference between blogs and websites.

However, for the purposes of this project, which is concerned primarily with identifying the ways in which leadership is exerted online, the difference between blogs and websites is both important and instructive, as will be explained in greater detail, below. Despite the

¹² Certainly, these social networking platforms are changing the ways in which people are engaging online. They are changing how websites and blogs interact, and they are changing the ways in which people discover and experience new websites. These platforms are continually evolving, and their use continues to expand. They are, undoubtedly and along with mobility, the trend of the future. However, measuring or assessing the impact of these tools lay beyond the scope of this paper. Facebook, famously, does not share its data, and Twitter is still not deeply infused throughout the Jewish community. So, this paper focuses on websites and blogs, excluding social networking platforms. As a first investigation into Jewish communal dynamics online, this paper hopes to begin a conversation that will reveal additional insights about technology, community, leadership and Jewish life well into the future.

¹³ Aaron smith “New Numbers for Blogging and Blog Readership.” Pew Internet and American Life Project. <<http://www.pewinternet.org/Commentary/2008/July/New-numbers-for-blogging-and-blog-readership.aspx>>. Quoted in SSRC, 9.

potential power of individual voices, as evidenced by the MASA incident, there remain important differences within the Jewish community between individuals and organizations. This is not to say that one is more important than the other, and it should go without saying that the latter would not exist without the former. Yet, as social actors, individuals and organizations behave in different ways, and while there is no correlation between one or the other and leadership, those differences are significant and ought to be highlighted. Insofar as this paper is focused on exploring and identifying new dynamics of leadership as they emerge online, the crucial difference between blogs and websites is that blogs, for the most part represent the work of a single individual, while websites stand in for organizations.

As a result, I define a “Jewish website” or a “Jewish blog” as any site that regularly contains overt Jewish content, targets a Jewish audience, and self-identifies as Jewish. More broadly considered, Jewish websites and blogs engage in a larger, evolving, and common conversation about Jewish issues. According to this definition, websites like Haaretz, Jdate, and Jewlicious all count as Jewish websites, but the wikipedia entry on “Jews” does not. Neither does Jewwatch, an anti-semitic site dedicated to tracking Jews and their influence (both real and fictional). For the purposes of this study, Shamash, the self-proclaimed “Jewish search engine” is a Jewish website, but Google, even though it can find the most sites with information about Jews, is not.¹⁴

Included in the study of websites are those that either represent or have come to represent either an offline organization or collective editorial perspective. In some cases, these institutions have walls, buildings and a professional staff. This includes the websites of the

¹⁴ A note on nomenclature: When referring to websites, I will be excluding the .com or .org suffixes throughout the body of this paper, for the sake of readability. A full list of all websites included in this study, complete with their suffixes, is included in Appendix A and Appendix B.

Orthodox Union and the Anti-Defamation League, as well as that of J-Dub Records and Jewcy.¹⁵

These websites serve largely as portals for connecting an organization with its audience or membership, and they are important sites for distributing information or engaging in online debate. News outlets like JTA and Ha'aretz are included here, as well, and although they often have blogs embedded in their websites, I treat them as elements of the larger website, not as stand-alone blogs. I also include in this category the handful of group-authored blogs like Jewschool, Jewlicious and Jcarrot. Although they may have begun as individual or group-authored blogs and do not necessarily pay their writers for content, they maintain a robust and regular presence, and they either have editorial boards or they operate like a kind of collective, which makes them function much like online magazines or newspapers with which they are in conversation (and competition). Thus, the operational definition is that a website represents an entity of some kind, even when that entity is a loosely organized editorial board.

Blogs, by contrast, are solo-authored websites that reflect or represent the voice of a single author, and in the study that follows, I treat them as a different category than websites because they represent a different kind of relationship between an individual and his or her Jewish community. They are cheap to maintain, because of free blogging platforms like blogger or wordpress, and although some blogs sell advertising and generate a little income, most do not. Typically, blogs have much smaller audiences than websites and most do not reach more than a few people (This does not necessarily mean that they are not influential -- if read by the

¹⁵ During the primary data collection period for this project, Jewcy and JDub records were independent organizations. Since that time, they have joined efforts and, though they still maintain separate web presences, they are, effectively, different branches of a single organization. This is but one of a number of examples of significant changes online that have taken place in the relatively short period of time between our initial data collection period and the time of this writing. Undoubtedly, there will be others between the time of this writing and the final publication of this report.

“right” 5 people, a blog with only 5 readers could be quite powerful). Because of their typically small readerships, blogs are more interesting in their aggregate impact on the overall network than they are on account of their individual content. As we will see below, accounting for blogs within the larger social network of Jewish websites exerts a significant force and reveals new loci of leadership within the Jewish online world.

What We Counted and What We Didn't (and what we couldn't)

From the outset, two items bear repeating. First, our primary data set for this project is *not* a comprehensive ranking of popular websites from top to bottom. Traffic only matters as a baseline for inclusion here, and it is not the ultimate measurement of a site's significance. Second, the internet is dynamic, which means that links are constantly updated, added, deleted and changed. It also mean that the ways in which people use, access, navigate, and otherwise engage with the internet is changing. In other words: we are entering into a conversation about a moving target, or trying to change a tire on a moving car as the car, itself, is changing.

Nevertheless, the data presented here provide a useful snapshot of the network of Jewish blogs and websites during the middle of 2009. The analysis that follows is instructive but not definitive, and if we were to analyze this same set of sites in a year or two, the data would reveal an entirely different set of relationships and dynamics, some of which we cannot even imagine yet (who could have predicted twitter six or seven years ago?). Thus, this paper should be understood as a first attempt to explore relationships between Jewish websites and what those relationships might tell us about patterns of leadership in Jewish communities. The trends observed and discussed here should be understood within the larger framework of the broader, well-documented changes that are reshaping Jewish communities at the outset of the

21st century. This project approaches its subject as one representation of a multi-faceted Jewish world in which we are trying to map trends that emerge out of the tensions between establishment and non-establishment, religious and secular, conservative and liberal, online and off.

In order to assess the network of Jewish websites and blogs, we began by surveying available literature on measuring “significance” of websites. Quickly, we discovered that there was no single method or unit of measurement. Within the industry that has developed around calculating the significance of websites, there is no gold standard with respect to what makes a blog or website influential, significant, or otherwise important. Any number of programs, metrics, and companies exist to undertake this work, and none is perfect. There is no Nielsen-type rating system for internet use. “Page views” are one measure of the gross number of visitors and thus an indicator of popularity, but then the number of visitors merely raises the question of how long people stayed on the site, how many times they came back, and whether or not they clicked on one of the advertisements. Similarly blogs can track the number of visitors, but bloggers also count the number of followers the number of comments, and the number of times a particular post is quoted elsewhere. Though each of these matter in some respect, there is no standard measure for the popularity, significance or influence of a single websites. As a general rule, websites and blogs are moving targets.

Moreover, these measurements are even less instructive with respect to evaluating a site’s place in the network of Jewish blogs and websites. Audience measurement services cannot calculate what percentage of visitors are Jewish, so the difference in traffic between Haaretz (which attracted over 300,000 unique visitors in January, 2010) and Myjewishlearning

(which drew only 81,000 during that same month) indicates a difference in general popularity, but not necessarily definitive popularity among Jewish visitors.¹⁶

Given these limits in our ability to assess the significance of blogs and websites that participate in the relatively small conversation about Jewish issues, and accounting for the paper's primary interest in leadership within the Jewish community, broadly defined, this paper focuses on the relationships between websites as a key indicator of a site's significance within the overall network. The paper focuses on links for two reasons -- one sociological and one technical.

Sociologically, leadership and community are both social formations, which means they require relationships with people. Clumsily paraphrasing rabbi Hillel from Pirke Avot (2:5), one can't be a community of one, and neither can one lead without followers. By this reasoning, both leadership and community can only be measured by social relationships. Sociologists have a wide vocabulary for talking about these relationships; Robert Putnam calls it "social capital," Mark Granovetter calls them "ties," social network analysts call them "edges."¹⁷ What is important for our purposes is that these relationships are central to defining and determining the strength and importance of both communities and leaders. Consequently, they occupy a central place in this study.

The technical reason derives from the general agreement that popularity (as measured by total number of visitors) and "links in" (links from other websites) are two of the most important measures of a site's significance. Because of the way the internet works, it is difficult

¹⁶ <www.compete.com> [accessed February 5, 2010]

¹⁷ Mark Granovetter. "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory* 1 (1983) 201–233; Robert Putnam. *Bowling Alone: The Collapse and Revival of American Community* (Simon and Schuster, 2001)

to imagine either a site with high traffic and a low number of links or a site with low traffic and a high number of links. More influential sites attract large numbers of visitors, but perhaps more importantly, they are also connected to other sites. Links both direct traffic and serve as indicators of reliable content, much like references in an academic paper or a news source. According to one oft-recited saying “links are the currency of the internet.”¹⁸ Therefore, this paper focuses on how websites and blogs connect to one another, as indicators of how they facilitate exchanges of information and build relationships that can represent and lead the Jewish community.

In calculating links, then, we counted only mutual links, which indicate the strongest possible connection between two sites. The presence of a mutual link, in which site A links to site B, and site B links back, indicates a reciprocal relationship between two sites in which each thinks of the other as reliable or worthy of linking to. If site A links to site B, but site B does not link back, then this indicates a weaker relationship than if that link is reciprocated. Any site can embed a nearly infinite number of links out (links to other sites) with a minimum of effort. However, the presence of large lists of links do not indicate much beyond the industriousness of the creator of the list. Trying to account for the sheer number of “links out” or “links in” would have produced a preponderance of interesting data, but it would not have shed a whole lot of

¹⁸ This aphorism is repeated countless times around the net as a pithy summary of how sites interact. One of the best explanations I’ve read recently belongs to Pete Cashmore, the editor and founder of the social networking site Mashable.com. The definition is embedded in an article he wrote for CNN.com explaining his objections to the New York Times announcement of a fee-for-service model for accessing its online content. See Cashmore “Why the NYTimes.com Fee is a Step Back.” Posted January 21, 2010 <<http://www.cnn.com/2010/TECH/01/21/cashmore.times.payment/index.html>> [accessed February 8, 2010]

light on the ways in which the dynamics between Jewish websites help us to understand those of Jewish communal life more broadly considered.¹⁹

Focusing on links allows us to emphasize this quality of the online community and discuss in detail the emergence of leadership that is cultivated through developing relationships. However it means that we downplay two important aspects of websites and how visitors interact with them. First, focusing on links means looking for connections that are *potential* passages for visitors; we were not tracking individual users or how they actually moved from site to site. Second, it flattens the differences between kinds of links, effectively treating a page with a list of links the same as a link that appears in the middle of a paragraph of text (as long as both of those links were reciprocated). Visitors are much more likely to follow links that appear within the flow of a webpage's text than they are to navigate to another page with a list of links. As a result, our method does not account for the ways in which visitors actually navigate sites. Instead, it focuses on the actions of a webmaster or blogger to cultivate links as an indicator of an attempt to lead, influence, and shape Jewish conversations online.

¹⁹ To be sure, some sites expend a great deal of energy and attention on building a rich network of other sites to which they are linked, and there are companies out there who will, for a fee, consult with an organization looking to optimize their placement in Google searches and so on. Services like these might give some sites an advantage over others in terms of their ability to position themselves both within general searches and within networks of other sites. This, however, is a strategy for enhancing the position of one's site online, and ought to be considered as one dimension of the internet, generally. That is, if using a Search Engine Optimizer (SEO) helps position a site within the network, then that is a strategy worth exploring for sites who wish to enhance their position within the network. That said, we did not ask webmasters if they employ these SEO tools.

Sampling

We collected data on 148 websites and 257 blogs between May and November of 2009, using a combination of readily-available online services and custom-authored script. We determined both popularity and demographics through an aggregate analysis of existing rankings from four well-known sources: SEOmoz.com, Compete.com, Google pagerank, and Alexa.com.²⁰ Although each of the four sources provided different assessments of a site's significance, they all basically agreed on which sites comprised the most popular Jewish sites. Yet, because the traffic to Jewish websites is so small, in the context of the internet more generally, the sources we used, which are calibrated to measure much larger traffic patterns, may have excluded some sites that should have been included here. Though we did our best to include all of the relevant sites, it is possible that our tools inadvertently excluded some sites that could have been included, if we had access to tools that were better tuned to the particulars of Jewish website traffic and usage.

Based on our accounting of these four traffic measurement tools, we generated a list of the 99 most popular Jewish websites. Because this project is explicitly interested in the generational dimension of leadership as it is represented online, we also included the 49 most popular Jewish websites that attracted audiences between the ages of 21 and 35. To assess the top 49 sites that catered to audiences between the ages of 21 and 35, we examined reports by Compete.com, Alexa.com, and SEOmoz.com, each of which provided a breakdown of audience

²⁰ The SSRC report on the religion blogosphere used Alexa and Compete in addition to Technorati (SSRC, page 20). I opted to exclude Technorati because so few of the Jewish sites used it during our data collection period. Because Jewish sites did not rely on Technorati, it did not seem like it would have produced an accurate measure of a site's significance.

by age. The calculation of age is, at best, approximate, and obviously there is a great deal of crossover between which people visit which sites.²¹

This baseline measurement of popularity generated the list of 148 websites which comprise the primary data set of the analysis that follows [see Appendix A for the list of 99 sites, and Appendix B for the list of 49]. We followed this with a deeper analysis of each site's links, extending five pages deep within each site. We chose to stop after five pages for two reasons. First, we concluded that five pages would provide enough depth to gather a significant amount of data, but not too much that it would prejudice our findings toward older sites which, necessarily, accrue many more links. This would balance our findings between older and newer sites. Second, the number of visitors declines rapidly the deeper into a site one looks, so links embedded deeper than five pages within a given site would not generate enough traffic to be sufficiently significant for our purpose.

These measures generated a profile of each site and identified mutual links between each site and the other 147. In this way, we created a kind of "closed network," because we counted only mutual links among the primary set of 148 sites. Although this kind of assessment goes against much conventional wisdom when people talk about the power of the internet (that it can connect disparate communities and opinions), we found it necessary to limit our network and the kinds of links for which we account in order to focus on the particular dynamics within a

²¹ This list was never intended to be a definitive compilation of a site's popularity or significance, and although we attempted to be as conclusive as possible during our data collection period, it is likely that we missed a site or two that could have qualified for inclusion. As with all social scientific sampling methods, there is no perfect sample. Additionally, the distinction between websites and blogs might also have played a role in this, as I might have counted a site as a blog, while its author may consider it to be a website. However, given the number of websites and blogs for which we do account, and the qualities of the network we discovered in this analysis, I am confident in the sample, its size, and its ability to represent the broader dynamics of this network.

general Jewish conversation. The analysis of Jewish websites and blogs produced here depicts a closed community when, in truth, the network is far more porous.

In addition to the list of 148 websites, we generated a list of 257 blogs by following the listings included on two major Jewish blog aggregators: Jrants and Jewishblogging. Of the over 800 blogs listed on the aggregators, we included only those that had been updated within three months of our investigation.²² We also pursued a snowball sampling method, following links from within the blogs themselves to other blogs. Because the majority of blogs have very small readerships, we could not create a traffic baseline for inclusion, so we included all of the active Jewish blogs we found. Part of the story here is the prevalence of blogs (particularly among the Orthodox), so their sheer number is, itself, of significance. Moreover, they are not easily categorized according to topic or viewpoint, and they are not exclusively the domain of either the old or the young. Thus, they represent a powerful and unique forum for expression and potential organizing that is only made possible because of the internet.

Once we generated these two lists, we began a detailed and systematic social network analysis of the relationships between these sites, in an effort to better understand the relationships that emerge, and how they inform our understanding of influence and the emergence of Jewish leadership online.

An Overview of the Network

To put the Jewish network in the context of the internet generally, we are looking at a very small corner of it, with very particular interests and themes. The network of Jewish

²² Jewish blogs, like all blogs have a very low survival rate. The vast majority of blogs have a lifespan of less than one month. Because they are free to maintain, they are rarely taken down, and most are simply abandoned by their authors after a few posts.

websites and blogs constitutes, as network analysts explain, a “small world,” a dense cluster of nodes that are situated within and connected to a much larger network that generally accrue through shared affinities or interests.²³ The dynamics of this particular small world serve to both amplify and mitigate some of ways in which the internet is changing. For example, at the time of this writing Facebook recently surpassed google for users’ time online, and Facebook, Twitter and google are all contending to direct the most online traffic.²⁴ If this trend continues, then we will find that social networking sites play a more active role in “leading” people than either links or search engines do. On one hand, this severely diminishes the importance of links in locating leadership; if people are making their way to websites via Facebook or twitter and not through embedded links, then Facebook or twitter become an important venue for exerting and identifying leadership within this small world. On the other hand, Facebook and twitter work because the recommendations are not random; they are offered by someone “trustworthy,” and more-or-less familiar.

Within a small world like this one, the power of recommendations emphasize the importance of organizations and individuals who are poised to lead within the network. Thus, recommendations, although delivered through social networking sites like Facebook and twitter, function similarly to the ways in which links did during our data collection period. Because we are focusing on a small world as opposed to the internet as a whole, and because we are mining this particular network for what it can reveal about Jewish communal dynamics offline,

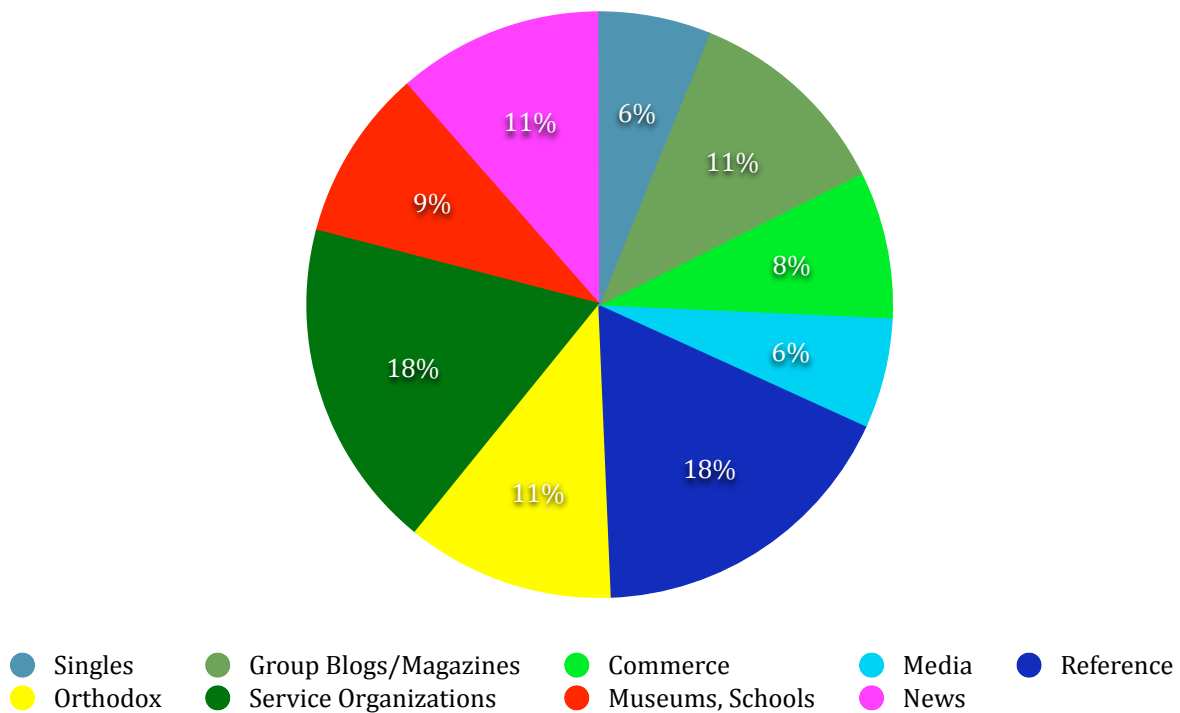
²³ Duncan Watts. *Small Worlds: The Dynamics of Networks Between Order and Randomness*. (Princeton University Press, 1999). See also Duncan Watts and Steven Strogatz, “Collective Dynamics of ‘Small-World’ Networks.” *Nature* 393 (June 1998). 440–442

²⁴ “Facebook Surpasses Google in Weekly US Hits for First Time.” Businessweek online <<http://www.businessweek.com/news/2010-03-17/Facebook-surpasses-google-in-weekly-u-s-hits-for-first-time.html>>

recommendations and links will likely reveal similar patterns and dynamics of emerging leadership.

Therefore, this small world exhibits certain qualities and characteristics that are unique to small worlds, so let's turn to a more finely tuned analysis of the websites that comprise it. Despite the general density of this network and the homophily among sites, relative to the rest of the internet, there are some significant differences between the sites that are worth exploring. In other words, though it is a small and relatively homogeneous world, it is quite diverse, internally. To begin, we can categorize the 148 sites into nine different affinity areas that represent various aspects of Jewish life. Figure 1 shows the percentage of the total represented by each affinity area. [see Figure 1].

Figure 1: Breakdown by Affinity Area



Three important facts emerge from this first level of analysis. [For a list-based breakdown of these nine interest areas, see Appendix C] First, given the large number of Jewish service organizations, it should be no surprise that they account for a significant proportion of Jewish websites. By that measure alone, one could conclude that the virtual sector is but a reflection of the public sector. However, the equally significant presence of reference sites that are committed to making information about Jews and Jewish life available to their visitors indicates that the internet is a fertile place for the production and distribution of information. Indeed, seen alongside media sites, news sites, and group blogs and magazines, it appears that information rather than community organizing is one of the leading sectors of the networks of Jewish websites.

The second notable aspect of the affinity area breakdown is the presence of sites that cater to the interests and needs of Orthodox Jews. In fact, the percentage of such sites is even larger than the 11% calculated here because dating sites like Frumster or Sawyouatsinai are counted as “singles” sites, even though they cater almost exclusively to religiously observant Jews. Likewise, the majority of the commerce sites also likely serve a predominantly Orthodox audience who are looking for kosher food products, ritual items or other goods that serve the particular needs of Orthodox Jews. Far from technophobic, we see here (and we will see again when we account for blogs, below), that Orthodox Jews are actively involved in Jewish life online, and as such play a disproportionately large role in the overall shape of the network of Jewish websites.

The third finding speaks directly to questions of leadership and influence. Traditional news outlets and group blogs/magazines account for equivalent percentages of the total. More importantly than their parallel presence, however, is the fact that the group blogs and

magazines tilt heavily toward a younger demographic. This is not to say that group blogs or magazines are as popular or powerful as traditional news outlets; generally speaking, the two most popular Jewish websites by far belong to the *Jerusalem Post* and *Ha'aretz* (with Jdate holding steady in third place). However, the prominence and popularity of blogs/magazines among younger readers indicate that younger visitors are likely to be visiting them instead of or in addition to traditional news sources.

Clay Shirkey, in his book *Here Comes Everybody* explains that the low cost of starting and maintaining a website (as opposed to the relatively high start up costs for a newspaper or print magazine), has made it possible for anyone to seek an audience online.²⁵ Within the network of Jewish websites, this situation has created an environment where a handful of group-authored blogs have successfully moved into important positions within the world of Jewish information sharing, and have become valuable sites for news, culture, and community on their own merit (consider Jewlicious, which began as a blog and now hosts a large annual festival of Jewish culture in Southern California). The rise of group blogs/magazines with younger editorial boards and younger audiences than traditional news outlets reinforces the prominent ways in which the Jewish virtual sector is changing the structure of Jewish communities by altering not only what “counts” as news, but by engaging an audiences that might otherwise not find their way to more traditional news sites.

Group blogs/magazines represent a variety of voices and perspectives. Some focus on humor, others on popular culture, and still others on providing alternative news or commentary within the Jewish community. Some of the group blogs/magazines see themselves as a kind of

²⁵ Clay Shirkey, *Here Comes Everybody: The Power of Organizing without Organizations* (Penguin, 2009)

free-form op-ed addendum to traditional news sources either through alternative reporting or through parody and humor. Most offer a little of everything. Significantly, over the past few years, they have also played a significant role in breaking and exploring some important news stories including the MASA incident, the Rubashkin's scandal and revelations of sexual misconduct at Brooklyn yeshivot.

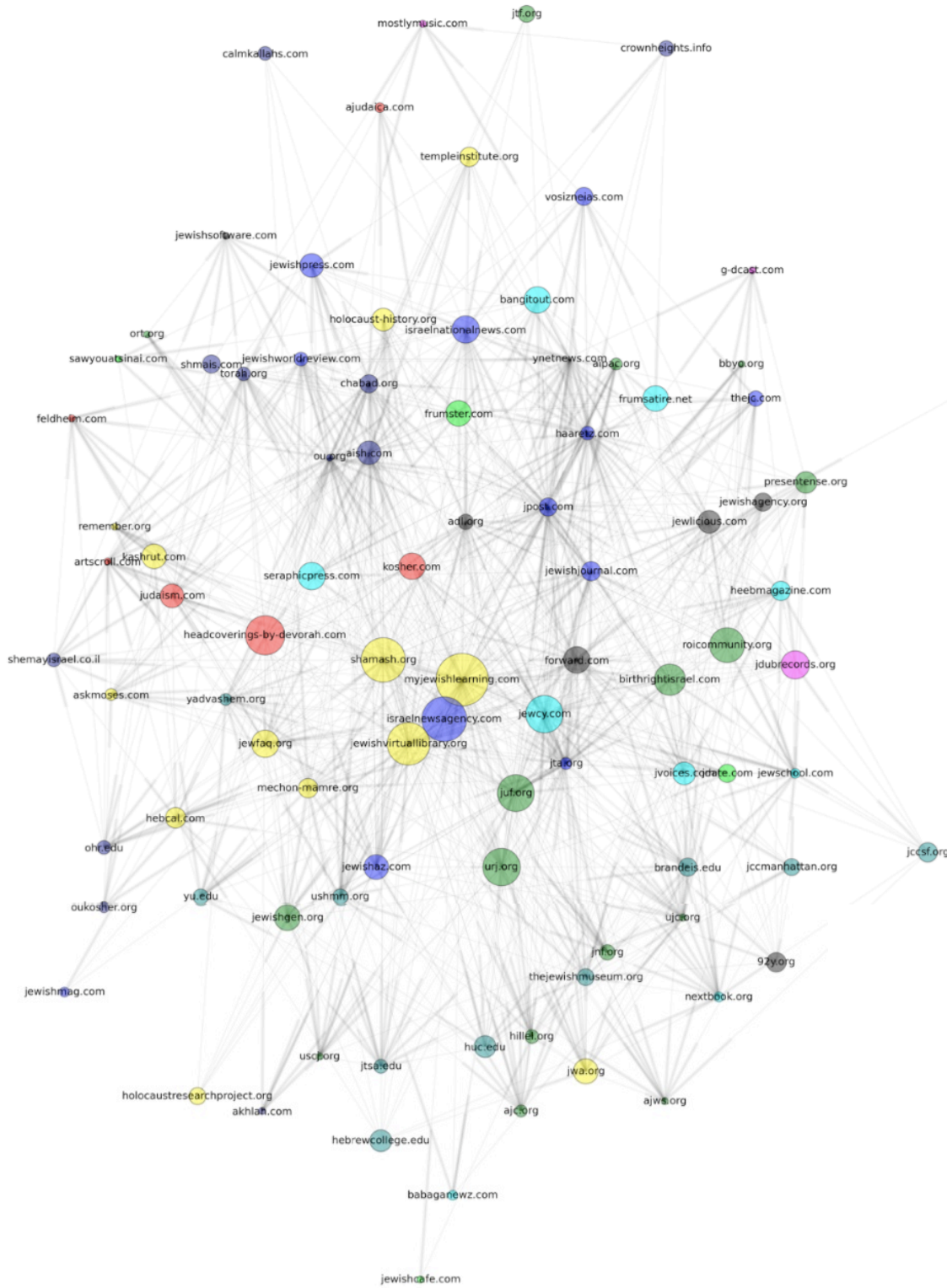
This accounting of websites provides some general data about the breadth of Jewish websites, but in order to understand them as a network, we must account for the relationships between the sites themselves. To do this, we will need to move from a list to a sociogram. Sociograms map networks of relationships, with each "ego" or "node" in the network represented by a dot, and each relationship, mutual link, or "edge"(those are all synonyms) represented by a line. In our sociogram, each node will represent a website, and each edge represents the presence of mutual links between nodes.

Using an energy-repulsion algorithm, we generated a map that highlights two aspects of the Jewish virtual sector. First, the size of a node indicates the number of mutual links it possesses; the larger the node, the more mutual links it has. Second, the location of the node within the sociogram indicates the presence of common links among neighboring sites. We generated this sociogram using the Fruchterman-Reingold 'physics model' algorithm, which operates according to the following principle: Imagine a general force that is trying to move each node away from each of the others, as in models of the expanding universe following the Big Bang. But, a secondary force (like a spring) is acting between nodes that share links in common, which works to counteract the general force pushing them all apart. The dynamic tension between the general force of repulsion among all nodes and the specific force of

attraction among particular nodes eventually serves to create an equilibrium in the network as a whole.

In order to understand the figures that follow, it is important to remember that specific pairs of linked nodes cannot reach equilibrium on their own within a complex network because of the other forces working upon them. Instead, they only reach equilibrium through a clustering of linked nodes, whose mutually attractive forces work in combination to stabilize the network as a whole. Thus, sites that share a lot of common links appear close to one another on the map, even if they may not share any mutual links. The colors correspond to the affinity areas described in Figure 1, above (note: In order to present the entire sociogram here, the names of the sites must be reproduced so small as to make them impossible to read. Not to worry, they will be discussed and presented again in greater detail, shortly).

Figure 2: Sociogram of the Network of Jewish Websites



Three general observations. First, and consistent with small worlds generally, this network is fairly small and very well-connected. The longest distance between two sites is only 4 links, and the average distance between two sites is 1.93 links. That means that it is possible to traverse the entire network in only four “clicks,” and that many sites are less than two clicks away from many others. By the “six degrees of separation” rule of thumb, the network of Jewish websites is quite densely populated and easily traversed. Moreover, this measurement does not include linked advertisements that one site might purchase on another. So, for example, though Chabad might advertise on Jewlicious, and thus allow visitors to click through directly from the latter to the former, this measure does not account for such options. This means that if we account for the prevalence of advertisements for other Jewish websites, the network is likely even more easily traversed than the current measures suggest.

Second, the largest nodes, indicating the sites with the most links in the network, belong to sites dedicated to sharing information. Specifically, they represent Myjewishlearning, a “trans-denominational” resource for information about Jewish life, Shamash, a “Jewish search engine,” the Jewishvirtuallibrary, which describes itself as “the most comprehensive online Jewish encyclopedia in the world,” and the Israelnewsagency, an Israeli news source. All four of these sites are information sites, and none has an off-line component. Since we collected this data, Myjewishlearning purchased Shamash, and Israelnewsagency has apparently ceased regular updates. These changes in the network are further evidence that the internet will continue to evolve and some sites that seem vital will fade away, creating opportunities for new sites to emerge. Despite these changes to the network, the data that we captured in 2009 evidences the significance of information in the distribution of collective Jewish leadership online.

It is possible that, by focusing on links, we have weighted our findings toward these reference sites, because lots of sites will link to them for basic information. Jewishvirtuallibrary has thousands of pages with reliable information about a vast array of topics, and many sites will link to it, making it a site with a lot of links in. Because we emphasize links, it might put these sites at a methodological advantage, as reference sites contain information whose content and value do not change that much over time. They will continue to attract links regardless. Yet, what is notable about the size of their nodes and their position in the sociogram is that these sites are not just absorbing lots of incoming links, but they are reciprocating, as well, capitalizing not only on their reputations for information, but also playing an active role in developing the network of Jewish websites and blogs. This, again, is an indicator that information and the ability to broker it are becoming powerful qualities of leadership in Jewish conversations online.

Third, the small world network appears to be relatively healthy. The overall “health” of a network can be measured by the chance that a network could be crippled should a single node disappear. A network that is represented by a network with a sociogram that resembles spokes radiating outward from a single hub is highly centralized but not terribly healthy, as it relies entirely on the single, central node for its survival. Healthier networks are characterized not by the presence of a single, strongly linked node, but by the presence of many nodes, which distribute power throughout the network.²⁶ From this perspective, the network of Jewish websites appears to be relatively healthy. It does not have a single, dominant, central node, although it does feature a few that claim significantly more links than the rest. This is a healthy

²⁶ The distribution of links around a network as the sign of a healthy network is well-documented. See Albert-Laszlo Barabasi, *Linked* (Plume, 2003); Mark Buchanan, *Nexus* (Norton, 2003); Duncan Watts, *Small Worlds* (Princeton University Press, 2003).

quality in social networks because it shows that the network will not collapse or be significantly handicapped if a single node disappears. Although some sites play more influential roles than others, the network, overall, benefits from a more-or-less even distribution of links throughout it. By this measure, the Jewish virtual sector appears to be rather healthy and capable of responding to shifts within the network.

The four sites discussed above play a powerful role in organizing the network. By sharing a large number of links with other sites, these four sites appear not only as trusted references, but they reciprocate that trust and become important hubs in the small world. More importantly, because links provide visitors with a virtual roadmap for traversing the network, these sites are more likely than many others to turn up when visitors attempt to move throughout the network, should they follow available links. In this way, they exert far more influence over the network than any communal institution, any traditional news source, or any representation of a religious body or single community. Online, information plays a key role in convening community and it indicates that both visitors and other sites are seeking reliable sources of information about Jewish life.

Accounting for Links (Not Just Counting Links)

This becomes even more apparent when we measure how certain sites *can* facilitate the movement of visitors through the network. As a result, we want to measure not only how many links a node has, but how many relationships it enables. In the language of social network analysis, this is called “betweenness centrality,” which describes the “capacity to broker contacts

among other actors -- to extract 'service charges' and to isolate actors or prevent contacts."²⁷ In other words, betweenness is not a gross measurement of the number of links, but it is an attempt to account for the active participation of a particular node within the overall network.

This measurement is important because people can traverse the net by "clicking through" one site to the next. Even if Facebook, Twitter, and Google direct more traffic than embedded links do, sites still labor to link themselves to other sites, and links remain an important indicator in a site's influence over a network. Since we are examining the small world of Jewish websites as a network, we are more interested in how the sites interact than in how visitors to the sites actually behave.²⁸ Tracing the network, we can infer that a site with high betweenness centrality can play a valuable role in facilitating movement through the overall network. The results of these calculations are presented in Table 1, which presents the top 10 sites with the highest betweenness centrality scores. To keep this in perspective, these measurements do not capture actual "click-throughs" of website visitors, but instead, they calculate the number of *possible* relationships that a particular node helps to broker within this representation of the Jewish world.

²⁷ This definition of betweenness is provided in the online version of Robert A Hanneman and Mark Riddle's *Introduction to Social Network Methods*. The specific quote is from this page <http://www.faculty.ucr.edu/~hanneman/nettext/C10_Centrality.html#Freeman> [accessed February 5, 2010]

²⁸ This is a modest beginning to what I hope and intend will become a vital and vibrant conversation about Jewish life online. Accounting for the behavior of visitors to Jewish websites was beyond the scope of this project.

Table 1: Betweenness Centrality

Rank	Betweenness Centrality	Site Name
1	1317.231	Myjewishlearning.com
2	328.1	Shamash.org
3	302.784	Jewishvirtuallibrary.org
4	237.196	Jpost.com
5	231.13	Jewcy.com
6	167.507	Urj.org
7	163.053	Israelnationalnews.com
8	161.52	Israelnewsagency.com
9	152.396	Headcoverings-by-devorah.com
10	137.067	Juf.org

The four sites represented by the large nodes in the first sociogram are all represented here, but Myjewishlearning has a betweenness centrality score of approximately four times as large as its closest counterpart. This means that Myjewishlearning potentially plays a far more active in brokering relationships and directing traffic than its closest counterparts. Although Jpost may have more overall traffic than Myjewishlearning, the latter occupies a more central role than the former within this small Jewish world, and can be said to exert more influence over the network. By comparison, the low score of Israelnationalnews indicates that it plays a much more marginal role in the overall network, despite the presence of large numbers of links. Correlated with its younger audience, Myjewishlearning is just one example of an endeavor that is leveraging the internet to supersede the ability of more traditional Jewish communal institutions to shape Jewish experiences online.

Perhaps even more importantly for the larger discussion of leadership, Jewcy has a higher degree of betweenness centrality than every other established news source except Jpost. Even with a much smaller audience than its more-established competitors, Jewcy is nearly as successful as Jpost at brokering relationships within the small Jewish world, and thus exerts even greater potential influence within the network. Compounded with the fact that Jpost, as a well-established and well-respected authority, may not feel compelled to link back to sites that link to it, Jewcy's score suggests a greater investment in building linked relationships within the network than its better-known counterpart. In terms of leadership, Jpost may be more of an authority, but Jewcy might be playing a more active role in attending to relationships that constitute the online Jewish communal conversation.

Again, betweenness centrality does not calculate how visitors actually move from site to site, but rather it measures the relative value of each node within the network in terms of their ability to direct visitors as they move from site to site. Taking stock of these ten sites reveals the clear significance of information-brokering sites, which account for seven of the ten sites on the list. Clearly, Jewish people and websites share a desire for reliable information and they rely on these reference sites to provide corroborating data or longer explanations of aspects of Jewish history, culture, and politics. These sites play a key role in the ways in which Jewish internet users from all backgrounds engage with information about Jewish life and learn how to be Jewish.

Taken together, Myjewishlearning and Jewcy, which both have editorial staffs largely between the ages of 21 and 40, and which cater to an audience from that same demographic, are employing strategies to become powerful players in the network of Jewish websites. The influence they exert may or may not translate to sheer numbers of unique visitors, and their

links may not correspond to the behaviors of actual visitors, but it certainly evidences that they are consciously building connections between Jewish websites and outpacing most traditional news sources and establishment Jewish organizations. As a representations of trends in the Jewish world, this correspondence of youth and technology indicates some of the ways in which the internet is enabling new insights into the nature and exertion of influence and leadership within Jewish communities.

By comparison, Jewish communal organizations have been less successful at building relationships online, as they are represented in Table 1 by only two websites: URJ and the JUF (Jewish United Fund/Jewish Federation of Metropolitan Chicago). The relatively weak showing of communal organizations illustrates a great disparity between their ability to convene community and build relationships online and off. Compared to news and reference sources, establishment communal organizations hold very weak positions within the network of Jewish websites and thus lag in their ability to either lead or build relationships online.

Yet, measuring betweenness only tells us how many short paths a particular node sits on. It does not tell us if those paths connect otherwise important sites. If a site connects other sites that are unpopular, then we might say that even though it has high betweenness centrality, it is less significant than a site that connects other sites with greater “prestige.” When we account not only for betweenness but for the prestige of the sites to which each node connects (according to what social network analysis calls the Bonacich centrality measure), we find slight adjustments in the bottom four of the top ten. JTA appears and Headcoverings-by-devorah disappears, but little else changes.

Table 2: Bonacich Centrality Measure

Rank	Bonacich Centrality Measure	Site Name
1	88	Myjewishlearning.com
2	61	Shamash.org
3	59	Jewishvirtuallibrary.org
4	50	Jpost.com
5	49	Jewcy.com
6	49	Israelnewsagency.com
7	45	Forward.com
8	43	Urj.org
9	39	Juf.org
10	38	Jta.org

Headcoverings-by-devorah may have appeared on the earlier chart because of its unique product and because of the prevalence of sites that cater to Orthodox visitors. Once we account for prestige, however, it drops far off the list, as it does not broker relationships with other prominent sites, even though it brokers a significant number of relationships on its own.

Viewed through the lens of prestige, we find a few sites with younger audiences and editorial staffs asserting a significant amount of influence and compete with established news outlets for influence not only over the structure of Jewish conversations, but over the content of those conversations, as well. The ability of a site like Myjewishlearning or Jewcy to amplify certain voices within the broader Jewish community makes them both significant and influential, and their connectivity with other sites in this small Jewish world make them

important and active nodes in the network. Particularly when we take into account the very real possibility that many visitors to these two sites are younger (between 21 and 40, generally speaking) and thus rather unlikely to belong to synagogues or JCCs, these sites are positioned to exert significant influence not only within the network online, but among their visitors who are likely to live largely outside the Jewish institutional world.²⁹

Having mapped the network of Jewish websites, we can see a new image of American Jewish leadership begin to come into focus. It is an image that includes organizations and individuals who have not, historically, been close to centers of Jewish communal power. It is an image that emphasizes the importance of information in sustaining and shaping conversations about Jewish communities and Jewish life. It is an image that features younger Jews who not only direct the flow of information but generate it, as well. Finally, it is an image that runs counter to the more conventional image of “The Jewish Community” as represented primarily by establishment organizations.³⁰ What emerges is a very densely connected small world of websites, the most valuable of which, from the perspective of social network analysis, are not establishment communal organizations but rather sites that trade primarily in information.

Given the prominence of information over communal service organizations in this network, it is clear that the internet is not simply a reflection of Jewish life offline. Instead, it is a relatively independent sphere of Jewish communal engagement and involvement,

²⁹ The literature on Jews ages 20-40 is now fairly substantial. For some examples, see Steven M. Cohen and Ari Y. Kelman, *Uncoupled: How our Singles are Reshaping Jewish Engagement*. (ACBP, 2008). See also Pearl Beck, Ron Miller and Jack Ukeles. *Young Jewish Adults in the United States Today* (AJC, 2006); Leonard Saxe. *Tourists, Travelers, and Citizens: Jewish Engagement of Young Adults in Four Centers of North American Jewish Life*. (Steinhardt Social Research Institute. 2009).

³⁰ Jerome Chanes, *A Primer on the American Jewish Community* (AJC, 2008) Available online <<http://www.ajc.org/site/apps/nlnet/content3.aspx?c=ijlT12PHKoG&b=843137&ct=1044883>>

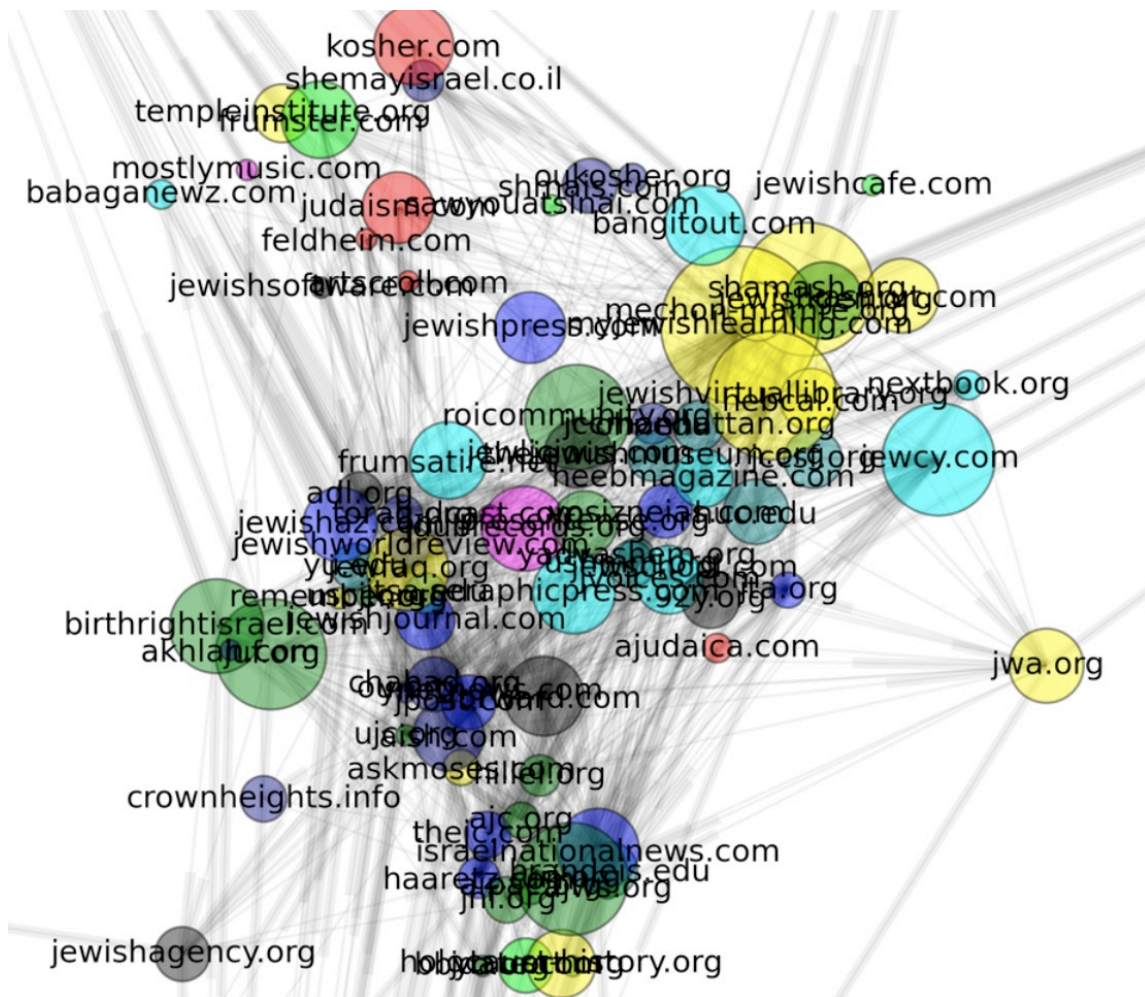
representing certain qualities of Jewish life more broadly considered. The preceding analysis revealed the growth and development of a network of Jewish websites in which younger voices compete with and often outperform traditional organizations, where newer voices occupy central positions within the overall landscape of Jewish websites, and where leadership emerges through the ability to contribute to and shape common, if internally varied, Jewish communal conversations.

Neighborhood Networks

Having laid out this overview of the network and its emerging loci of influence, we will now turn our attention to the internal organization of the network as a small world. Therefore, it is instructive here to return to a brief discussion of the algorithms employed to produce the sociogram in order to reveal further insights into the nodes, the links between them, and what they tell us about the network. Because the Fruchterman-Reingold algorithm uses the existence of common links to create equilibrium among all nodes in the sociogram, it necessarily produces certain groupings or “clusters” of websites, according to the presence of commonly held links. In order to emphasize the appearance of clustering, we employed another algorithm which we hoped would produce an even better representation of those clusters. Instead, this second algorithm revealed an even more densely-connected map featuring two, not terribly distinct clusters [See Figure 3].³¹

³¹ To produce this sociogram, we used the LinLog energy model.

Figure 3: Network Map With Clustering



One reason for the failure of this algorithm to reveal a more nuanced clustering pattern is because we are already dealing with a densely-connected small world. Therefore, the differences between clusters might not appear as vividly as they would if we were analyzing a more diverse or diffuse network. In any event, this second mapping revealed two scarcely discernable clusters: one, in the upper left-hand corner, that caters largely to the Orthodox, and

another, spanning the middle, that does not. This clustering reinforces the earlier finding about the significance of Orthodox Jews in the Jewish virtual sector, and the impression that the large number of such sites share more in common with one another than they do with other Jewish sites. However, the proximity of the two clusters suggests that these differences are easily transgressed online.

The other cluster, comprised of the rest of the sites (with a few far-flung exceptions) amass to comprise a large, densely connected cluster with JWA (The Jewish Womens' Archive) sitting just to the right of the main cluster and Jewishagency just to the left. Slight openings emerge between the large mass in the middle and the two clusters immediately below it, but they are so closely located to the main cluster that they hardly qualify as independent clusters.³² If any clustering logic could be applied here, it might find that the smaller cluster at the bottom of the sociogram represents sites that have an overtly transnationalist focus, given the inclusion of Haaretz and TheJC, a British Jewish news site.

The failure of the clustering algorithm produce significant distinctions reinforces the earlier observation that the network is relatively small and well-connected. So, in order to observe any clustering at all, we must return to Figure 2 and take a closer look at the emergence of a few subtle but significant groupings. Strictly speaking, these are not clusters, so instead, I will refer to them as "neighborhood networks," a term that suggests some similarities between the sites but is not held to the same mathematical standard as clustering.

Figure 4 presents the overall map again, highlighting the neighborhood networks.

³² This pattern of clustering reproduced when run through two different algorithms.

At the center of the Figure are the four large nodes representing the Reference Section. The large, relatively dispersed network across the top of the sociogram constitutes the Orthodox Archipelago. On the far right sit two neighborhood networks that comprise the Start-Up Sector, both of which primarily include sites by and for Jews between the ages of 21 and 40. The upper grouping includes three sites that are actively engaged in a Zionist conversation, while the lower one features sites for which Israel features among a broader array of other issues. Below those lies the Establishment Bloc, which includes most of the sites belonging to communal service organizations.

Not surprisingly, the center of the sociogram features the largest and therefore best connected nodes [Figure 5].

Figure 5: The Reference Section



The Orthodox Archipelago, which includes news sources alongside dating sites, reference sites, and commercial portals, all evidence dimensions religious life. Thus, the sites tend to link with one another, as visitors who would be interested in Vosizneias, a news service dedicated to meeting “the demanding needs of the Orthodox Jewish community,” might also be interested in Oukosher, or any of the number of Orthodox dating sites. The Orthodox Archipelago is not, however, exclusively Orthodox, and it includes a balance of sites of interest to Jews of all ages. In fact, a handful of sites in this region, including Frumsatire and Bangitout, are written by and cater to younger Jews, and both feature comic takes on religious life from the perspective of people within the religious world. In terms of the overall shape and relations of the network of Jewish websites, this large neighborhood network indicates that the internet has become an important aspect of contemporary Orthodox Jewish life.

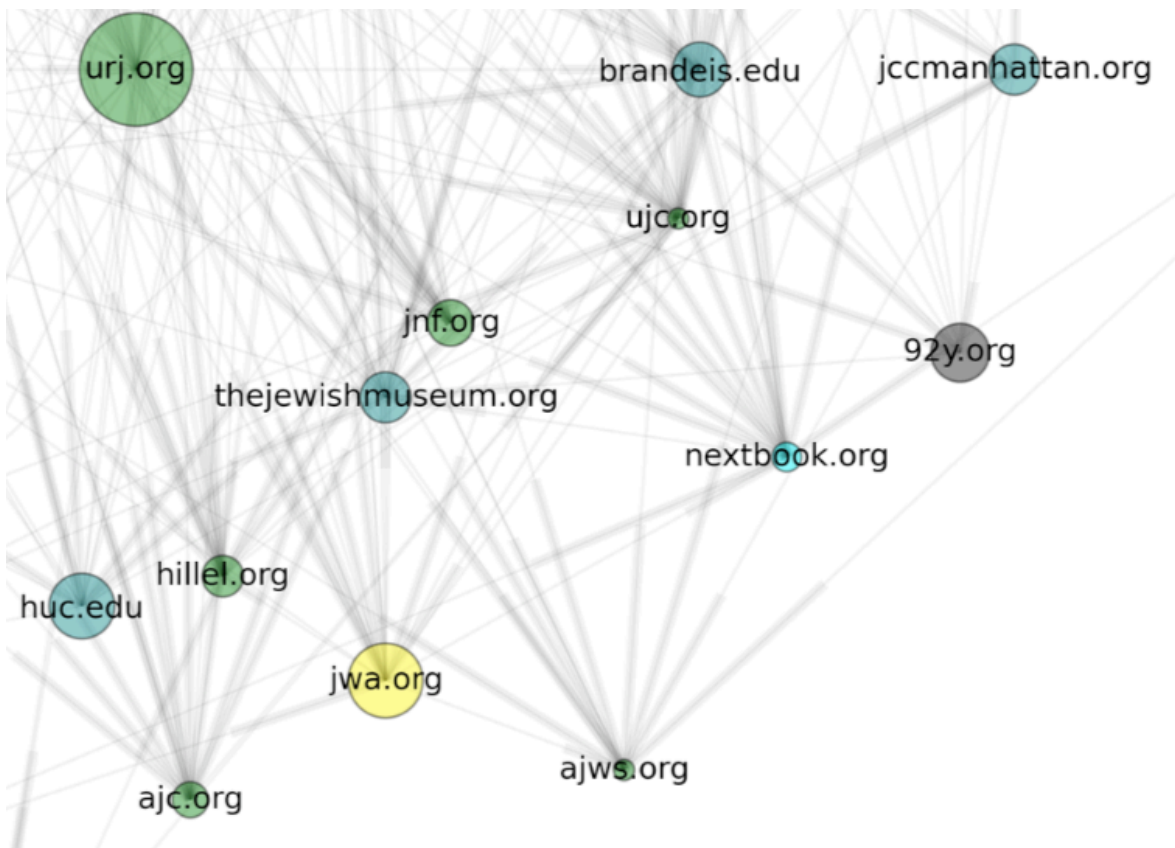
Although none of these sites score very highly in terms of betweenness or prestige, the sheer number of sites that cater to the needs and interests of Orthodox Jews is worth our attention. As a representation of Jewish life more broadly, the prevalence of sites catering to Orthodox Jews indicates the deep and broad engagement of Orthodox Jews with the internet. However, the absence of a single site that dominates the Orthodox Archipelago, indicates that the community it represents remains rather diffuse, diverse and decentralized, despite its significant presence online.

Because Orthodox Jews tend to be deeply embedded in Jewish social networks offline, the preponderance of online sources that cater to Orthodox Jews makes sense; people interested in Jewish issues offline are more likely to seek out Jewish websites. The Orthodox Archipelago is comprised of sites -- like Headcoverings-by-devorah -- that cater almost exclusively to Orthodox Jews, whose needs are particular to their Jewish interests, practices,

and communities. The relatively small size of most of these nodes is not of much consequence, as none seem to seek a position of broad communal prominence as much as they do to serve the particular needs of their communal niche. Thus, the Orthodox Archipelago illustrates the prevalence of Orthodox Jews who have expanded their search horizons to include the internet, which has become a powerful alternative to offline sources.

The same is not quite true of the Establishment Bloc, which sits almost directly opposite the sociogram from the Orthodox Archipelago. [Figure 7]

Figure 7: The Establishment Bloc



The Establishment Bloc includes leading cultural and educational organizations like the 92nd Street Y and Hillel, as well as the sites of important communal organizations like the American Jewish Committee (AJC) and the website of the United Jewish Communities (UJC, now Jewishfederations). Unlike the diversity of nodes that comprise the Orthodox Archipelago, the Establishment Bloc is constituted primarily by educational and communal service organizations. The generally small size of the nodes in the Establishment Bloc indicate that these sites do not share many mutual links with other sites in the network. However, the emergence of this neighborhood network indicates that the sites represented here likely do share similar links with one another, which means that the establishment organizations are, in some measure, talking to one another but they are not engaged in fostering conversation or actively building relationships with many other sites in the network.

In other words, the emergence of this neighborhood network might represent high bonding social capital, as in the case of Nextbook (now Tabletmag), which appears close to the 92Y because they co-sponsored programs during our period of data collection, but weak bridging social capital as they are generally not very successful in establishing mutual links with sites across the larger network.³³ The Establishment Bloc represents the shortcomings of many communal organizations in building the links necessary for them to connect with other websites and either contribute to or influence Jewish conversations and relationships online. By way of comparison, if MyJewishLearning were to be deleted, it would impact but not cripple the overall network, but if UJC (now JewishFederations.org) were to be deleted, it would have almost no impact at all because it does not occupy a central place within the network. Insofar as the

³³ Robert Putnam. *Bowling Alone: The Collapse and Revival of American Community* (Simon and Schuster, 2001)

network of Jewish websites represents broader Jewish communal dynamics, the emergence of new loci of leadership online effectively challenges establishment organizations to develop new strategies for cultivating influence by developing relationships with other sites in the network and by engaging other segments of their Jewish communities in active, engaged conversation.

By contrast, the final neighborhood network, the Start-up Sector, consists of two different groupings, which are both comprised of sites that largely cater to and are often authored by Jews between the ages of 21 and 40. None of the sites in these two sub-neighborhoods has proven particularly adept at leveraging its role in the network, either, although they do tend to be better connected than their more established counterparts. The primary distinction between the two sub-neighborhoods corresponds to the centrality of Israel in each. The first sub-neighborhood includes sites that foreground a connection to Israel, while the second sub-neighborhood locate Israel alongside a host of other contemporary Jewish issues.

The first sub-neighborhood consists of three nodes representing very different entities, though each is committed to a shared conversation about Israel and Zionism.

Figure 8: The Start-up Sector (Part 1)



These three organizations -- one long-standing institution and two others established within the past 10 years -- represent three different approaches to contemporary conversations about Zionism. Jewlicious began as a blog and now hosts annual Jewish cultural festivals, Presentense is an incubator for Jewish social entrepreneurs and the Jewishagency oversees MASA and coordinates thousands of Israel trips for young Americans annually. Of these three, two are run by younger Jews but all three sites appeal to an audience aged 40 and younger. Additionally, all three of these organizations articulate a strong Zionist sensibility and a connection to Israel, and thus end up sharing many similar links which correspond to the emergence of this neighborhood network.

By contrast, the other sub-neighborhood in the Start-up Sector includes many non-establishment organizations for whom Israel and Zionism are not primary concerns. [Figure 9]

Figure 9: The Start-up Sector (Part 2)



The sites included here generally cater to younger audiences and represent a variety of efforts to reinvigorate Jewish culture, primarily for American Jews. Both Birthrightisrael and Roicommunity serve Jews roughly between the ages of 18-35. Likewise, Jdubrecords and Heebmagazine both cater to a similar audiences of young Jews who are seeking routes of connection to Jewish life, culture, and community that are not explicitly centered around Israel.

Birthrightisrael, much like Jewishagency, centers around trips to Israel, but unlike its counterpart, Birthrightisrael does not necessarily advocate for *aliya* (immigration to Israel), nor does it raise money for Israeli causes. In this way, Birthrightisrael is dedicated to deepening connections between American Jews and Israel, not with helping American Jews become Israelis, which differentiates it from Jewishagency and partially explains its appearance in this sub-network as opposed to its counterpart. As is the case with their neighboring cluster, what accounts for the particular grouping is less a matter of explicit politics and more a matter of shared sensibility and audience, as evidenced by the links they share in common.

In terms of leadership, the emergence of this neighborhood network within the more general network suggests that these sites are playing a role in cultivating a distinctly youthful Jewish presence with an emphasis on American Jews. And, like their counterparts in the Establishment Bloc, they are better at cultivating a conversation among themselves than they are at leveraging mutual links to transgress the network. The exception to this trend is Jewcy, which bridges the Start-Up Sector and the not-quite-a-neighborhood of news sites that falls just to the right of the reference sites.

The presence of Jewcy among these other news sources, all of which have significant offline followings, reinforces the contention that the internet has opened up opportunities for

engagement in public discourse in ways that significantly weaken the positions of traditional media outlets. Certainly, Jewcy's relatively large number of links, high betweenness score, and presence in the stretch of nodes belonging to traditional news sources indicates that the news arena is making room for voices and audiences that would have likely been excluded from the conversation prior to the advent of the internet.

The network of Jewish websites illustrates changes like these and can be seen, partially, as a representation of larger Jewish communal dynamics. Yet, the network explored here is not merely a representation. Rather it is produced discursively alongside the emergence of new communal agendas, trends, opportunities and forces. Examining the shape and structure of the network reveals just how the network of Jewish websites both represents and points to new directions in Jewish leadership. Online, we find a more level playing field between new and old, establishment and non-establishment organizations. The MASA example is but a small one of how an establishment organization changed its communications strategy in response to a vocal chorus of criticism. But the fact that some of the most influential sites in the network do not represent offline organizations and the most powerful offline organizations tend to take less influential positions within this small Jewish world indicate that the internet is enabling a new array of dynamics of Jewish life. The prominence of Myjewishlearning, the emergence of Jewcy, the sheer size of the Orthodox Archipelago, and the relative marginality of the UJC (now Jewishfederations) illustrate that any conversation about "the Jewish community" must begin to account for these new virtual realities.

One quality of this new virtual reality is the prominence of information and the influence wielded by sites that broker information. Whether focusing on news or reference, sites that trade in information are among the best connected and most valuable to the overall network.

Insofar as the web excels at making information widely and readily accessible, it should come as no surprise that the network of Jewish websites follows this pattern. However, what is striking here is that these sites both provide information to their visitors and potentially shape the ways in which people navigate between and among Jewish websites. In this way, the reference sites both providing information and provide links for their visitors to follow. Information, then, is more than mere facts; it literally shapes how people engage in Jewish life online and off.

Attending to this dimension of Jewish life also reveals that the majority of establishment organizations exert only a modest force upon the overall network. Not significant in terms of centrality, betweenness, or prestige, the majority of these nodes, representing the majority of establishment organizations, they do not represent the offline prominence of their parent organizations. Though well-funded and quite powerful in the public sector, these organizations show only modest success at establishing relationships with other websites and building online relationships that would constitute a more tightly knit small world.

As a venue for investigating the exertion of leadership in Jewish communal matters, the network of Jewish websites reveals some emerging dynamics in the structure of American Jewry. Information plays a crucial role in the network, and sites that are emerging as facilitators of information are better positioned to lead and influence the network. The leading sites in this conversation do not come from establishment organizations, and the Orthodox represent a significant percentage of Jewish websites in general. As a representation of the American Jewish community, the online network captures a very different image in which there is no central address, and within which leadership and influence are more diffuse, derive from a greater diversity of sources and, ultimately, take very different forms than they have in the past.

Accounting for Blogs

Expanding the Jewish virtual sector to include blogs, the picture becomes both clearer and murkier. Blogging technology has made entering the Jewish communal conversation easy and nearly free; both Jewcy and Jewlicious all began as blogs authored by one person or small groups of people, and each has since grown into a significant source of information for younger Jews. Moreover, blogging platforms like Wordpress or Blogger provide all of the hosting, search-engine placement, and widgets that one could need in order to create a fairly robust and comprehensive web-presence without having to learn one line of programming code. Indeed, blogs are so easy to start and so many blogs are created that something like 95% of all blogs are essentially abandoned.³⁴

Nevertheless, as an often unfiltered, varied and popular vehicle for personal expression, blogs represent the voices of individuals who are motivated enough to put their own thoughts online for anyone to read. Still more importantly, they are not just independent journals, but linked to other blogs, they become a loosely affiliated cacophony of voices that contribute to and shape a collective conversation. Moreover, because of the “comments” feature and the protocol that bloggers respond to comments left for them, blogs are more than virtual soapboxes (although they are that, too), but they are often opportunities for connection and conversation within a larger social network.

Both the Berkman Center report and the SSRC report focus explicitly on blogs, as indicative of a larger phenomenon. Their explicit focus on blogs, however, reflects the projects’

³⁴ Douglas Quenqua. “Blogs Falling in an Empty Forest” New York Times June 5, 2009. <http://www.nytimes.com/2009/06/07/fashion/07blogs.html?_r=1> [accessed September 4, 2009]

respective emphases on democracy and academic publishing. In both of these cases, blogs offer an alternative platform for the expression, publication and circulation of ideas that might not otherwise find an appropriate venue. In mapping the Arabic blogosphere and the Religion blogosphere, each of those two reports reach insightful conclusions about the function and meaning of blogs within their larger communities and conversations. Because the larger frame for this project was that of leadership, not democracy or publishing, the question of blogs emerged as part of a larger conversation about communal leadership and generational change.

In fact, what is so interesting about Jewish blogs and the reason that they are included here is not that they attract very large audiences. Rather, in terms of social network analysis, blogs are interesting because they rely so heavily on mutual links, comments, and on the contributions of individuals, not organizations. For this reason, blogs represent a crucial aspect of this small Jewish world not because they exemplify leadership in any traditional sense nor because any one blog has the ear of the “right” readers, but because they represent a network of individuals in conversation. Traffic, again, proves less important than the presence and value of links between sites because those links represent relationships and those relationships comprise and traverse a broad and varied population of Jews. In other words, as a representation of a broad, dispersed and diverse Jewish population, blogs are more interesting in aggregate than individually.

Although it would be impossible to categorize most blogs because of their varied content, what becomes clear after surveying nearly 800 Jewish blogs, is that many many writers either identify as Orthodox Jews or indicate that they were raised in Orthodox families. Some identify themselves as having left that community, while others regularly post lengthy exegeses about torah portions or politics, the lives of single people looking for partners or the daily lives

of young mothers. Given the sheer dominance of Orthodox bloggers over non-orthodox bloggers in this arena, it appears that for Orthodox Jews, blogging has become both a popular past time and a powerful vehicle for expressing dissent or differentiation within that community, and their presence shadows the large dispersed network of websites that cater to those same communities.

There are any number of reasons for the preponderance of Orthodox blogs. One might be that a non-Orthodox Jewish blogger might not identify her blog as “Jewish” and post about any number of issues, only some of which might be easily identified as Jewish. Identifying one’s blog as Jewish, indeed, orients it and its readership toward conversations that deal, primarily, with Jewish issues. So, Orthodox bloggers, given their relatively deep investment in Jewish issues might be more prepared than their non-Orthodox counterparts, to engage primarily in those conversations. In other words, this project might identify more Orthodox bloggers because more Orthodox bloggers identify themselves and their blogs as Jewish.

Another reason might be that blogs provide an outlet for sharing stories and information beyond the grasp of traditional communal authority. For those questioning their relationship to Orthodoxy, the web might provide a safer space for doing so than within their synagogues, families, or schools. Similarly, those who have left the Orthodox world may use blogs as a way to remain in contact with friends and family, but from a distance, while others use their blogs as forums for sharing Torah or teachings.³⁵

Nevertheless, the sheer number of Orthodox blogs is worth noting and accounting for them all dramatically shifts the overall map of the network. Figure 10 presents a representation

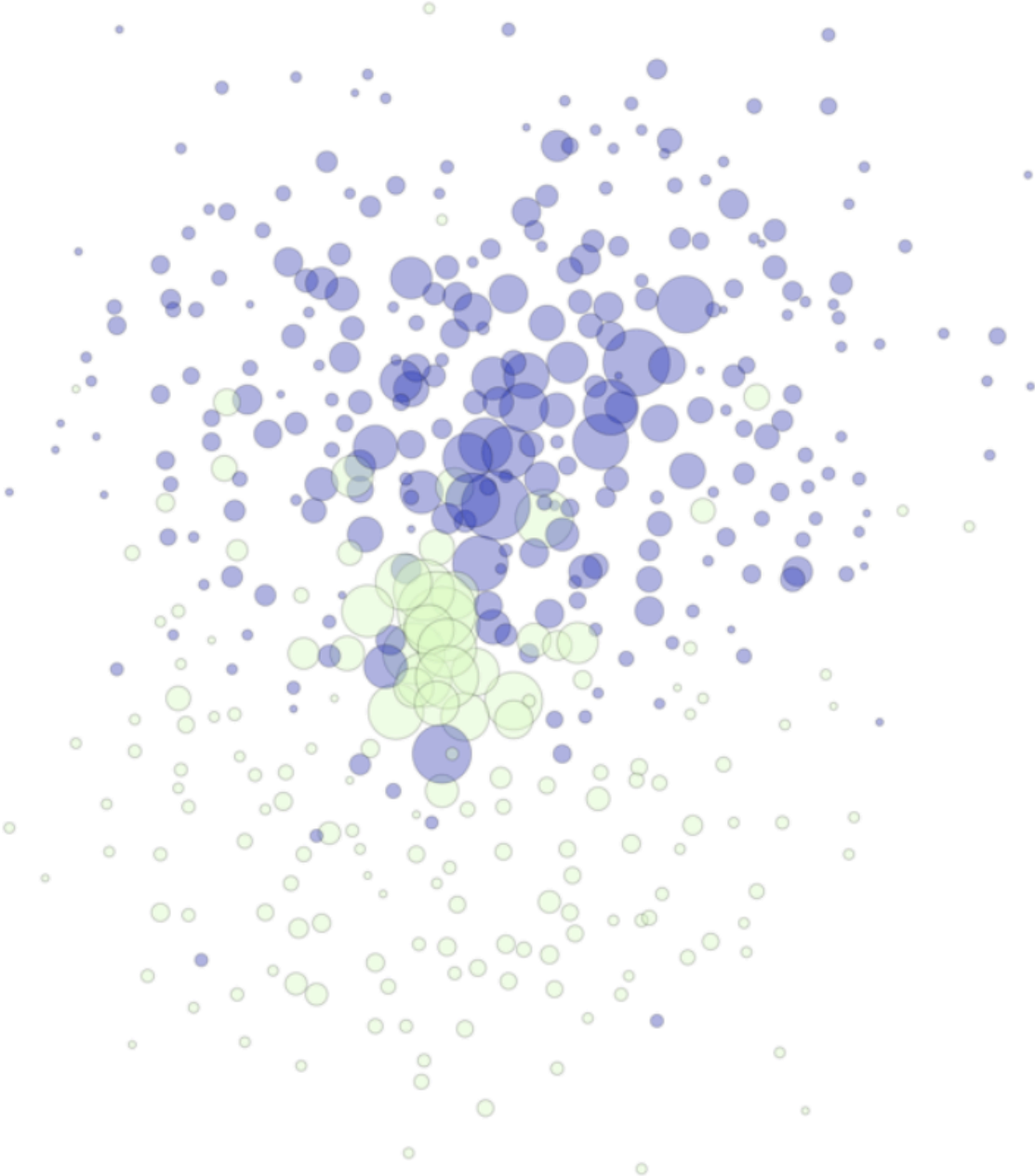
³⁵ These are speculations as to the preponderance of Orthodox bloggers and additional research into the writers and their blogs would be necessary to properly account for this phenomenon.

of the overall network, mapped out according to the same algorithm used to produce the sociogram of Jewish websites, so as to emphasize the pull of common links. In order to highlight its general dynamics, we have omitted the names of the sites represented here.³⁶

Blogs are represented in light green and the websites appear in purple.

³⁶ To include the names of all of the websites and blogs would have made the map entirely unreadable.

Figure 10: Sociogram of Blogs and Websites



In terms of the effect on the overall size of the network, accounting for blogs increases to 6 the greatest number of links between nodes (it had been 4, when calculated for websites), and it increases the average distance between nodes to 2.622 links (it had been 1.93). Thus, the presence of 279 additional websites expands the size of the small Jewish world, but only slightly, maintaining its earlier characterization as a fairly well-connected and easily traversed network.

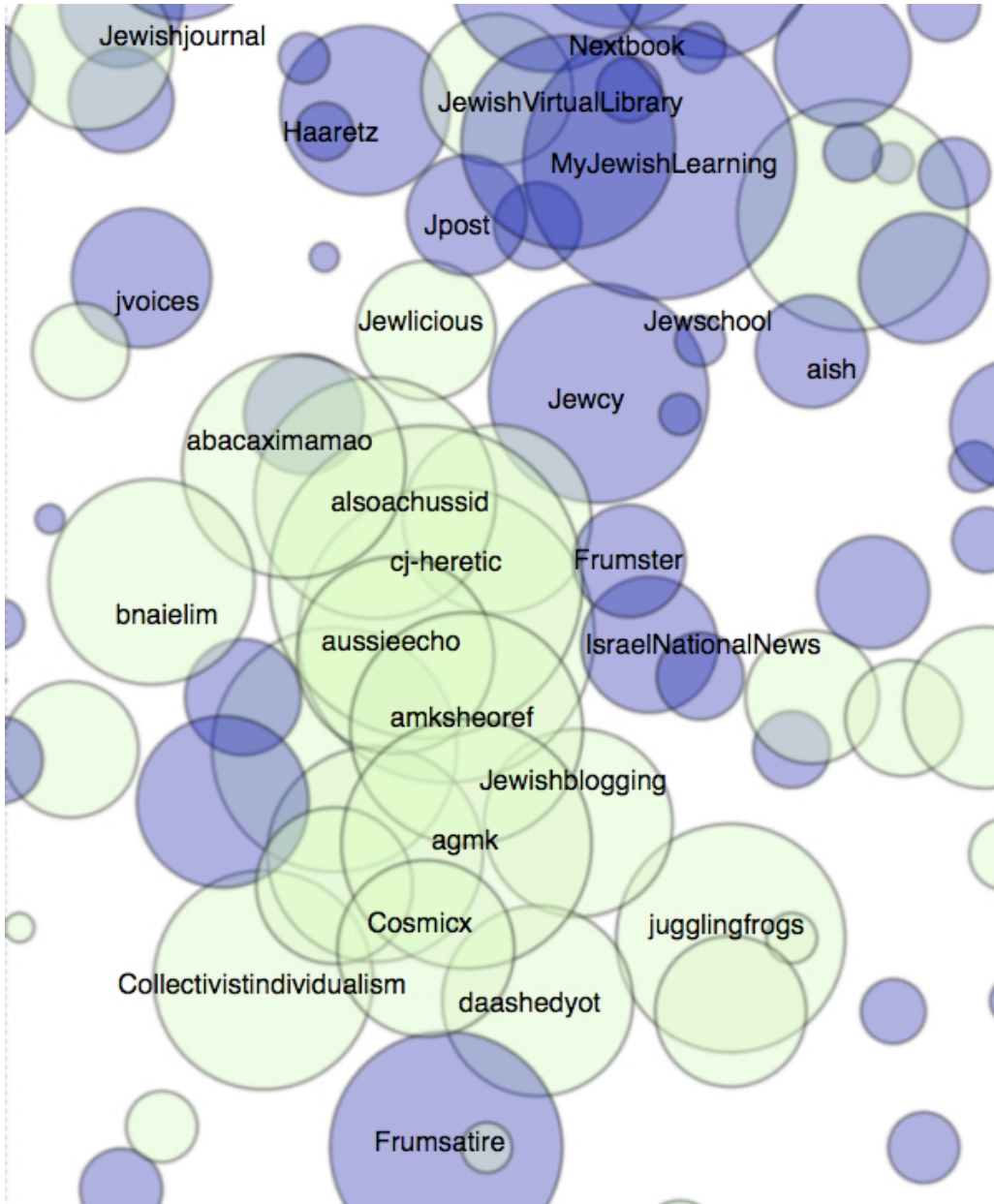
The sociogram, even without the names of the sites, shows clearly that despite the pronounced number of Jewish blogs and the sizable links accrued by a handful of blogs, the map divides fairly neatly in half with the majority of websites on one side and blogs on the other. This indicates that most blogs, while plentiful and certainly capable of generating lots of links, do not generally garner the reciprocal attention of Jewish websites, which limits their ability to exert influence over the network as a whole. Nevertheless, there are a significant number of blogs that are well-connected to one another, and a smaller number whose location within the sociogram indicates that they have successfully attracted the attention and trust of some more prominent websites.

Moreover, at the center of the map are a handful of very active and very well-connected blogs, evidenced by the cluster of large, overlapping nodes. The size of these nodes indicates the large number of links, and their placement shows that they share a lot of the same links in common. Yet, the balance of blogs are sprinkled around the bottom half of the sociogram, suggested that the majority of blogs are small, not terribly well-connected, and without a discernible pattern with respect to links held in common.

The few blogs at the center of the sociogram, then, reveal a committed core of bloggers whose collective efforts indicate the emergence of a Jewish blogosphere and, perhaps more

importantly, its impact on the network of websites and blogs is substantial. In order to highlight this phenomenon, we can take a closer look at the core of the sociogram. Figure 11 is a close-up view of center of Figure 10 that captures the contact zone between blogs and websites and features only a handful of site names, for the sake of legibility.

Figure 11: Core of Blogs - Websites Sociogram



Here, we find some of the usual suspects, including MyJewishLearning and Jewishvirtuallibrary (both located in the upper right-hand quadrant of this close-up). But we also find the websites

FrumSATire, Frumster, Aish, IsraelNationalNews, and Jewcy, each of whom relocate to the center of the sociogram because of the commonality of links they share with both websites and blogs. The dense, overlapping center evidences the presence a common conversation among these sites, even if it does not indicate how visitors interact or move between them. So many overlapping sites reveal a preponderance of similar linking patterns, even if the sites themselves do not necessarily link to one another. In other words: the sociogram shows that these sites to be participating actively in the same small world.

Looking at the size of the nodes in this dense center reveals a handful of sites and blogs with lots and lots of links. Additionally, accounting for links between blogs and websites changes the size and location of a few, notable sites. The node representing Nextbook (now TabletMag), basically did not change sizes once we account for blogs, although it moved closer to the center of the network because of the similarities of the links that it shares with those of other blogs and websites. Jewcy expanded and relocated, dwarfing IsraelNationalNews and emerging as a central source of connection within this expanded small world. Meanwhile, nodes representing a few other sites, like FrumSATire, expand dramatically and emerge as particularly influential within the overall network.

The shifts evidenced here -- toward the young and the Orthodox -- indicate the emergence of new loci of leadership in Jewish life online. An outlet like Jewcy or Jewlicious (accidentally appearing in green here) might be more prepared to share links with an Orthodox blog than Haaretz or the UJC (now JewishFederations) would be. Differences in approaches to sharing links between websites and blogs, and commonalities in those links position some sites far more advantageously than others to lead online.

Calculating for betweenness centrality affirms this trend. Table 3 lists the ten blogs and websites with the highest betweenness centrality.

Table 3: Betweenness Centrality for Blogs and Websites³⁷

Rank	Betweenness Centrality	Site Name
1	117	Myjewishlearning.com
2	112	Cj-heretic.blogspot.com
3	101	Frumsatire.net
4	100	Jpost.com
5	91	Jewcy.com
6	89	Forward.com
7	88	Jewishvirtuallibrary.org
8	85	Jewishjournal.com
9	77	agmk.blogspot.com
10	76	Haaretz.com

Accounting for blogs considerably alters the Jewish virtual landscape as it favors those who are willing to share links broadly. Myjewishlearning and Jewishvirtuallibrary retain their strong positions within the network, as do Jewcy, Jpost and Haaretz. Yet, we also see the emergence of two single-authored blogs and one website, Frumsatire, that functions primarily like a blog, as well. Thus, we see three blogs emerge among the most significant nodes in the network and the virtual dominance of information-sharing sites in the network as a whole. In

³⁷ Calculating for Bonacich Power reproduced this list almost exactly. The only change was that in the new calculation, Haaretz drops off and is replaced by JTA. Otherwise, the rankings remain exactly the same.

terms of brokering links, sites that trade in information play a crucial role in the experience of Jewish internet users who are drawn to the network of Jewish websites.

Perhaps the most notable development in this recalculation is the extraordinary prominence of Frumsatire, the website of one Heshy Fried, which apparently receives no funding beyond what it makes in advertising (which, according to Mr. Fried, is not much). In terms of betweenness, Fried is more important than every other website save Jewishjournal, and including Jpost, Jewcy and Haaretz, and he brokers far more relationships than the websites of any of the establishment Jewish organizations. Fried owes his success to his mixture of Jewish insider knowledge and his ironic, humorous attitude which allows him to attract attention (and links) from the Orthodox world while simultaneously transcending it. Fried's influence derives from his location on the margins of the Orthodox world and his ability and desire to engage in conversations about current Jewish issues that intentionally transgress the offline boundaries that structure Jewish communities.

In an interview with Fried, who is both young and Orthodox, he explained that his efforts with Frumsatire are intended to engage the very large Orthodox audience in conversations and debates over contemporary Jewish life. "Blogger is still a dirty word in some Orthodox communities," he said, adding that sites like his and like Failedmessiah are attempts to foster dialogue and transparency. Fried attributed his success to two things. First, he talks about things that Orthodox people are not "supposed" to talk about. He talks openly about sex, about dating, and about interfaith relationships. Second, he regularly includes opposing viewpoints on his blog. "And I mean really opposing. I push people's buttons." He explained, "When you go to Myjewishlearning, people are expecting to find [opposing views]. When you go to Aish, you're not going to find it." This strategy enables him to host a dialogue between the

religious, the non-religious, and the ultra-Orthodox in ways that are rare in the offline world.³⁸

Further, he explained that he is not interested in the “Manischewitz Judaism” that he sees Jewcy and Heebmagazine peddling. “There’s only so many times you can talk about the hole in the sheet,” he says.

Fried’s betweenness centrality score indicate that he practices what he preaches, and it evidences his ability to create and sustain mutual links with bloggers and websites. Indeed, much of his cache derives from his connections to other bloggers; recall that Frumsatire did not appear terribly central within the Orthodox Archipelago or in the network of Jewish websites more generally.

If leadership can be measured in terms of one’s ability to exert influence, then the network of Jewish websites and blogs clearly demonstrates the influence of younger, Orthodox voices on the overall network. For the ways in which they are building relationships between sites, occupying positions in every neighborhood network, and for their ability to bridge the gap between blogs and websites that comprise the Jewish virtual sector, younger voices are leading their older, more established counterparts by virtually every measure. They are making active inroads into every sector of Jewish life online, they are more adept at establishing mutual links between blogs and websites, and they are more deftly leveraging the potential for community organizing online. As a relatively independent arena of Jewish communal engagement, the network of Jewish websites and blogs is clearly taking shape around a younger cadre of leaders who are both contributing to and reconfiguring Jewish communal conversations.

³⁸ Interview with Heshy Fried. February 10, 2010.

Two Local Case Studies

The preceding analysis is instructive for what it reveals about the significance of information-sharing and relationship-building as qualities of leadership online. Additionally, it demonstrates the ways in which the network of Jewish websites and blogs has enabled the emergence of new modes and expressions of leadership from outside the traditional halls of communal or institutional power. Examining the network at this scale assumes that websites like Jpost, Myjewishlearning, Jewcy, and Frumsatire all participate in and shape a transnational exchange of information that is by, for, and largely concerning Jews. In this way, the preceding assessment of the Jewish virtual sector primarily focuses on the large and often abstract notion of Jewish collectivity on a global scale.

Yet, Jewish life is always lived locally. Regardless of mobility and resettlement patterns, people can only live in one place at a time, and while the above analysis reveals some important dynamics in terms of leadership and influence on the level of global Jewish collectivity, we cannot neglect the ways in which people build and live Jewish lives locally. Internet use reflects these two scales, as well. People search for answers to questions or buy books from Amazon, but they also use it to find restaurants, local services, movie times, synagogues, schools and so on. So, in order to better understand the role of the internet in the actual Jewish communities in which people live, we will turn to representations of Jewish life online in two case studies: the Jewish communities of Los Angeles and the San Francisco Bay Area.

These two communities exhibit a few important qualities that make them well-suited for analysis within this larger conversation about influence, innovation and leadership. San Francisco Bay Area is home to one of the largest Jewish communities in the United States, and it has one of the highest rates of inter-faith families and some of the lowest rates of synagogue

membership in the country. Moreover, because of the presence of Silicon Valley, the Bay Area has the reputation of being an innovative, risk-taking community that is only loosely bound by tradition.

Los Angeles, as the second largest Jewish community in the United States, provides another rich site for analysis. Sarah Benor's essay in this volume provides a deep qualitative portrait of its organizations and relationships, and this analysis offers a different perspective on that community in order to understand the relationship between online and offline organizing, influence, and leadership. Comparing offline and online representations of that community will offer an important additional perspective on Benor's ethnographic analysis.

To examine our two local communities, we gathered lists of local websites and applied the same algorithms and formulae as we did to the data in the earlier part of the paper. The sociogram of the San Francisco Bay Area appears in figure 12.

Unlike the fairly well-distributed sociogram of the network of Jewish websites depicted in Figure 2, the Bay Area's map resembles the spokes of a wheel radiating out from a central hub that more or less resembles the geographic layout of the community; nodes representing organizations in the East Bay largely sit to the right of the map, and organizations based in San Francisco and the Peninsula sit to the left. The large node in the upper left belongs to BayJews, a kind of bulletin board that promotes itself as "your portal to Bay Area Jewish Life." The size of its node indicates that it has many mutual links, although its location shows that it shares many more common links with East Bay sites than with those focused on San Francisco or the Peninsula. In other words, BayJews has high degree centrality (lots of links), but significantly lower betweenness centrality, as it plays a less significant role in brokering relationships between sites across the network.

At the center of the sociogram we find two, overlapping nodes: One representing the San Francisco Jewish Community Foundation (SFJCF) and the other, Jewishsf (now Jweekly) representing the "J," the Jewish newspaper of Northern California. The node representing SFJCF dwarfs that of Jewishsf, indicating a departure from the earlier pattern that emphasized information-brokering sites in the network. Calculating for betweenness and prestige reinforced this pattern. The dominance of SFJCF in the network indicates another significant difference between global and local mappings, as well. In this context, it appears that the SFJCF wields a powerful place online, as the site with the greatest number of links, the highest degree centrality and the highest betweenness centrality.

Yet, in such a highly centralized network, the network itself is actually weakened because it is too reliant on this single node to broker relationships. Indeed, were we to remove this site from the sociogram, the network would be deeply compromised, and the coordination

of information within the network would become far more difficult. Without the brokering role of SFJCF, links between the organizations of the East Bay, San Francisco and the Peninsula would become quite strained. Though this speaks to the centrality of the SFJCF website, it also indicates the overall weakness of the network as a whole. Healthier, more balanced networks are typically more diffuse, featuring a number of well-connected sites which do not rely on a single hub to sustain the entire network.

The sociogram of the San Francisco Bay Area therefore reveals a rather old-fashioned distribution of local power and leadership, one that is highly centralized among an otherwise weakly connected population. This representation of the community raises significant questions about the nature and style of leadership and influence exerted in this context. Online, the SFJCF is leading and leading strongly, but there is little evidence that it is successful here in building coalitions among constituents or relationships among communities, as illustrated by the relative paucity of mutual links between synagogues, JCCs, museums and other local agencies. Additionally, the SFJCF is not closely clustered with other sites, indicating that although it has a lot of links, it does not share many links in common with other sites representing organizations or agencies in its community.

It would be a mistake to simply read this sociogram as a representation of the Bay Area's demographic profile, which features a large but fairly disconnected Jewish population because the sociogram does not map individuals.³⁹ It maps representations of relationships between organizations who are, by definition, committed to building Jewish life. If the most committed organizations are represented here, and they appear as relatively weakly linked, then the actual

³⁹ Bruce Phillips. *2004 Jewish Community Study*. (Jewish Community Federation of San Francisco, 2004)

The online network of Jewish Los Angeles appears to be more evenly distributed and not dominated by a single node. Though, like San Francisco, the map is roughly radial, unlike its neighbor to the north, Los Angeles is not dominated by a single node. Rather, the center is occupied by a cluster of nodes, none of which can claim mutual links with a majority of sites, and whose close proximity to one another suggest quite a bit of similarity between the links they do possess.

Before focusing on the center, though, we will turn to some clusters, which, owing to the size of the overall map, emerge with some clarity. Across the upper right-hand corner are a string of nodes representing organizations that cater primarily, but not exclusively to Los Angeles' younger Persian Jewish community: Nessah, 30yearsafter, and Ledorvador. [Figure 12]

Figure 12: Cluster of Sites Catering to Persian Jews



It makes sense that the nodes representing organizations that cater to young Persian Jews would all appear in a cluster, owing to the greater likelihood of their common interests and the presence of other links in common. In addition, it is worth noting the presence of

Jconnectla nearby, which is due, in part to a number of co-sponsored events during the data collection period and the increased likelihood of common ties.

The same dynamics of co-sponsorship and common interests inform the emergence of a small cluster of nodes to the lower left of the center, which represent organizations that feature, as well, in Benor's paper, highlighted in Figure 13.

Figure 13: Non-Establishment Los Angeles

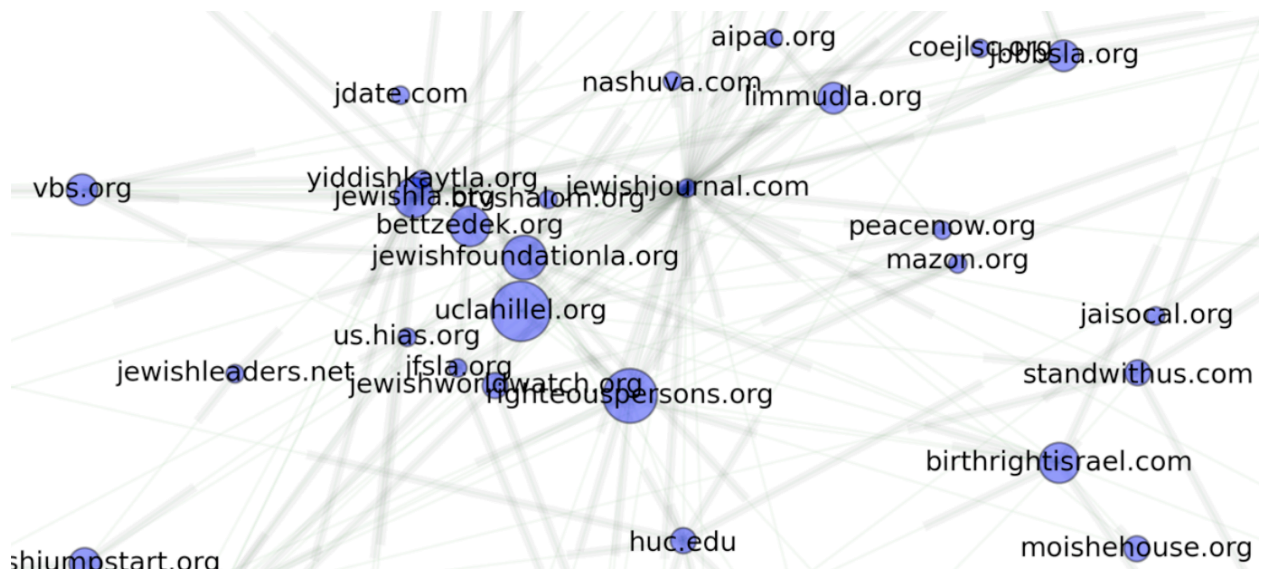


These clustered organizations share similar visions of their roles within the social and generational landscape of Los Angeles, and they represent some of the most active and interesting organizing efforts by and for younger Jews in the area. The largest node of these four belongs to the Progressive Jewish Alliance, which, while not the oldest, is clearly the most successful of these organizations at building relationships, as evidenced by the presence of mutual links, between itself and other Los Angeles-based organizations. The presence of the 110 year-old Workman's Circle (Circlesocal) in this group can be explained both by its generally

progressive political commitments, which ally it with PJA, and also by its relationship to the Shtibl Minyan, an independent minyan that meets at the Workman’s Circle building. Shtibl’s node lies further toward the margin of the sociogram, close to that of Ikar, another “spiritual community” that attracts some of the same demographic as PJA and Reboot.

Turning to the center of the sociogram, we find a diverse collection of sites, none of which dominate either in terms of either centrality or links, but their cluster indicates the presence of a common pattern of linking.

Figure 14: Los Angeles Central Sociogram



A quick look at the center of the sociogram reveals a few larger nodes belonging to one locally-based philanthropy (righteouspersons), Uclahille, and Jewishfoundationla, the city’s central Jewish philanthropic organization. Also present is Jewishjournal, which, despite its central role

in the larger network of blogs and websites, plays a much smaller role here, suggesting that much of its local influence is exerted through its weekly paper publication.

In order to reveal differences among the roles these sites play, we can calculate for betweenness and prestige, as well [See Table 4].

Table 4: Betweenness Centrality in Los Angeles

Rank	Betweenness Centrality	Site Name
1	1015.25	jconnectla.com
2	806.234	30yearsafter.org
3	714.231	righteouspersons.org
4	712.231	laguardians.org
5	696.677	jdubrecords.org
6	686.779	jewlicious.com
7	668.992	jewishfoundationla.org
8	471.978	jewishla.org
9	469.024	16hazon.org
10	456.301	jcpsocal.org

Calculating for betweenness centrality reveals the centrality of jconnectla and 30yearsafter, who, despite their marginal presence in the sociogram, occupy important roles in brokering relationships in the network. We also find Jewishla, the website of the Jewish Federation of Greater Los Angeles, and Jewlicious, which emerged as an influential site in our earlier discussion and also evidences a strong connection to Southern California. Jconnectla, a relatively new organization that caters mainly to Jews between 21 and 35 years old, echoes earlier findings that sites representing non-establishment organizations have been much more

successful at leveraging their position online than establishment organizations. Indeed, on its website, Jconnectla expresses exactly this sensibility to community building. As the self-described “premier Jewish experience organization for young professionals in Los Angeles,” the organization also emphasizes its independence, boasting that it is “an independent, grass-roots organization, not affiliated with any movement or parent organizations.”⁴⁰ The absence of affiliation or “parent organizations” seems to empower Jconnectla to establish relationships across social differences, much like we observed earlier with respect to Frumsatire and other, similar sites.

However, looking at Bonacich Centrality reveals a slightly different account of the sites.

Figure 5: Bonacich Centrality

Rank	Bonacich Centrality	Site Name
1	19	righteouspersons.org
2	14	pjalliance.org
3	14	uclahillel.org
4	11	jconnectla.org
5	11	30yearsafter.org
6	10	birthrightisrael.com
7	10	jdubrecords.org
8	8	jewishjustice.org
9	8	jewlicious.com
10	8	yiddishkaytla.org

⁴⁰ <<http://www.jconnectla.com/>> The full description, which is currently posted on the right side of the page reads like this, “JConnectLA is the premier Jewish experience organization for young professionals in Los Angeles. We are an independent, grass-roots organization, not affiliated with any movement or parent organizations. Dedicated to promoting community, unity and Jewish connectivity, find out more about us today!” [accessed, March, 13, 2010].

When we calculate which sites are connected to others with high prestige, Righteouspersons emerges as the most significant and influential site in Jewish Los Angeles, in terms of the links it maintains. As the website of a powerful foundation, it makes a certain amount of sense that Righteouspersons not only has high betweenness, but that it is connected to other sites with high prestige. Hardly a start-up, righteouspersons supports a few of the organizations represented in this sociogram, including Jdubrecords and Reboot. More importantly for the question of influence and emerging leadership, this recalculation finds both Jewishla and Jewishfoundationla -- the nodes representing the city's most established communal organizations -- missing.

What appears is a listing of centrally influential sites that consists almost exclusively of sites that represent organizations that are either run by or cater to Jews between the ages of 21 and 40.

This speaks volumes about the ways in which the internet is changing the definitions, dimensions and articulations of influence in the larger Jewish world on the local level. The Los Angeles sociogram reveals a diffuse and stable network that is being led by a handful of organizations that are led by and cater to younger Jews. Calculating for centrality reveals the powerful role of non-establishment organizations in creating a well-connected and stable network that manages to cross social boundaries that often divide ethnic and religious communities from one another. In comparison to San Francisco, where the sociogram was dominated by a single node representing an establishment organization, Los Angeles reveals the vital power of non-establishment organizations to build healthier, more diverse Jewish communities both online and off.

Taking a closer look at these two local community studies both reaffirms and refines what we observed in the study of the network of Jewish blogs and websites more generally. Most significantly, we find that online, older models of leadership, such as that revealed by the San Francisco Bay Area sociogram, are not effectively fostering healthy networks. And as the analysis of Los Angeles revealed, these new modes of influence, leadership, and community building are being driven in large measure by organizations that are led by or cater to younger Jews. As illustrated by the difference between Myjewishlearning and UJC, or by the difference between Righteouspersons and Jewishla, this reenforces our earlier finding that non-establishment organizations are more deftly able to mobilize mutual links on the internet than their establishment counterparts.

Conclusion

This paper is a first attempt to assess the role of the internet in Jewish life by examining relationships and dynamics between between Jewish websites and blogs in an effort to better understand how Jewish life online represents and informs Jewish life offline. This paper evidences a well-established trend in Jewish communal life, namely that community, politics, leadership, and influence are both virtual and real. They exist and are created both online and off, and, increasingly, the virtual and the real are mutually constitutive of Jewish life. In terms of community, communication, and leadership in the 21st century, the virtual and the real are not opposites, they're collaborators.

Yet, websites, blogs and sociograms only matter if they help us understand shifting landscape of contemporary Jewish life. This essay argues that they do. The blogs and newspapers that ultimately forced MASA to rethink its public relations strategy exerted

influence over a large, establishment organization. Because of its strategy of investing in mutual links, Myjewishlearning exerts influence over the network of websites, and once we account for blogs, it appears that Frumsatire does the same. In Los Angeles, Jconnectla works on a similar principle and, as a result youthful organizations dominate the virtual sector. Each of these cases represents one way in which websites that are authored by or cater to a younger audience are putting themselves into influential positions within the online network that represents the Jewish community.

Part of what makes Myjewishlearning, Jewcy, Jewlicious, Frumsatire and Jconnectla so influential in this analysis is their respective abilities to cultivate mutual links that cross social distinctions and in this way, build relationships that circumvent some of the older political distinctions (though sometimes creating others). Working largely outside the establishment Jewish organizations (though sometimes funded by them), the websites of these organizations (and Mr. Fried) prove far more capable at creating and sustaining mutual links than their establishment counterparts.

This dynamic was brought into sharp relief by the comparison of the San Francisco and Los Angeles sociograms. San Francisco, dominated by the SFJCF, presented a strongly centralized but weakly connected network in which non-establishment organizations played a marginal role. Los Angeles, by contrast revealed a well-connected and diffuse network in which sites representing non-establishment organizations emerged as the most significant and influential presences in the network.

Additionally, the emergence of clusters or neighborhood networks within the small Jewish world indicate the presence of common links, even in the absence of direct links between specific sites. These clusters illustrate the existence of a common conversation, or at

least a common set of concerns among sites and suggest areas of shared interest. Looking closely at the sites that participate in these common conversations opens up ways of understanding new modes and expressions of leadership that do not fit more traditional models.

In this way, what we observe the creation of new venues of Jewish communal life. But more importantly, we can understand that the internet is modeling a different kind of communal structure, one that is decentralized, multi-dimensional, diverse, and in which leadership can be exerted in a variety of forms. Blogs are but one artifact of these circumstances, and their inclusion is crucial here not only because they reshape the overall network, but because they also evidence a chorus of voices from outside established Jewish organizational structures. The conversations in which they share and the uncoordinated relationships they create make for a more healthy, more decentralized network, and this uncoordination is part of what lends the network its overall dynamism. It also supplies a crucial factor in the emergence of new leadership within the community generally.

Whereas the “Jewish community” used to be shorthand for the organizations that claimed to represent the concerns and needs of Jews, the map of the small Jewish world online clearly captures a much more variegated and diverse community, sustained across social divisions. The internet has given both younger and more marginal voices a platform for speaking, broadcasting, organizing, and creating their own communities while still participating in larger communal conversations. The emergence of online technologies has opened up the possibilities for new forms and formulations of leadership, and these voices are spurring the Jewish virtual sector to vie for prominence alongside its public and private counterparts. The

leaders are those who have most successfully leveraged this new technology and who, more importantly, activate their social networks both online and off.

APPENDIX A:

Top 99 Jewish Websites by Traffic (in alphabetical order)			
adl.org	holocaust-history.org	jnf.org	oukosher.org
ahuva.com	holocaustresearchproject.org	jpost.com	remember.org
aipac.org	huc.edu	jranits.com	seraphicpress.com
aish.com	huji.ac.il	jsingles.com	shamash.org
ajc.org	iranjewish.com	jta.org	shemayisrael.co.il
ajudaica.com	israelnationalnews.com	jtf.org	shlager.net
ajws.org	israelnewsagency.com	jtsa.edu	shmais.com
akhlah.com	jbooks.com	judaicawebstore.com	templeinstitute.org
anshe.org	jccmanhattan.org	judaism.com	thejc.com
artscroll.com	jccsf.org	juf.org	thejewishmuseum.org
askmoses.com	jcpa.org	jwa.org	thejewishweek.com
babaganewz.com	jewfaq.org	k12.il	torah.org
beingjewish.org	Jewishagency.org	kashrut.com	torahmedia.com
chabad.org	jewishaz.com	kkl.org.il	tzadik.com
cjh.org	Jewishblogging.com	kosher.com	ujc.org
cjnews.com	Jewishencyclopedia.com	kosherdelight.com	urj.org
crownheights.info	jewishfamily.com	luach.org	uscj.org
debka.com	jewishgen.org	maven.co.il	ushmm.org
feldheim.com	jewishjournal.com	mechon-mamre.org	virtualjerusalem.com
Forward.com	jewishmag.com	my-hebrew-name.com	vosizneias.com
haaretz.com	jewishpress.com	nmajh.org	wiesenthal.org
hareshima.com	jewishrecipes.org	ohr.edu	yadvashem.org
hebcad.com	Jewishsoftware.com	oorah.org	ynetnews.com
hebrewbooks.org	jewishvirtuallibrary.org	ort.org	
hebrewsongs.com	jewishworldreview.com	ou.org	

APPENDIX B

Top 49 Jewish Websites with significant audiences between ages 21-35 by Traffic (in alphabetical order)	
92y.org	jewishclub.com
atime.org	jewishfirefinder.com
bangitout.com	jewlicious.com
bbyo.org	jewSSIP.com
birthrightisrael.com	jewSSIP.com
brandeis.edu	jewtube.com
calmkallahs.com	jlove.com
chossonandkallah.com	jpeoplemeet.com
frumchat.com	jvoices.com
frumsatire.net	mostlymusic.com
frumster.com	myjewishlearning.com
g-dcast.com	ncsy.org
geshercity.org	nextbook.org
headcoverings-by-devorah.com	nfty.org
hebrewcollege.edu	presentense.org
heebmagazine.com	roicommunity.org
hillel.org	sawyouatsinai.com
israel-music.com	shabot6000
israel-free.com	theknish.com
isreallycool.com	theyeshivaworld.com
jcarrot.org	tznius.com
jdate.com	usy.org
jdubrecords.org	wejew.com
jewcy.com	yu.edu
jewishcafe.com	

Appendix C: Sector Breakdown of Websites

News	Singles	Blogs, Magazines
jpost.com	jdate.com	theyeshivaworld.com
haaretz.com	jpeoplemeet.com	jewcy.com
jewishworldreview.com	frumster.com	bangitout.com
ynetnews.com	jewishfriendfinder.com	Jewlicious.com
israelnationalnews.com	jewishcafe.com	nextbook.org
debka.com	sawyouatsinai.com	heebmagazine.com
jta.org	jsingles.com	seraphicpress.com
jewishjournal.com	jewishclub.com	Jewishblogging.com
Forward.com	jlove.com	frumsatire.net
vosizneias.com		jewschool.com
jewishmag.com		jewssip.com
thejewishweek.com		jbooks.com
jewishaz.com		jrant.com
israelnewsagency.com		jcarrot.org
jewishpress.com		jvoices.com
thejc.com		theknish.com
cjnews.com		babaganewz.com

Appendix C: Sector Breakdown of Websites

Orthodox	Service Organizations	Museums, Schools
aish.com	adl.org	ushmm.org
chabad.org	jewishgen.org	brandeis.edu
ou.org	urj.org	yu.edu
torah.org	ujc.org	92Y.org
crownheights.info	uscj.org	yadvashem.org
oukosher.org	hillel.org	thejewishmuseum.org
akhlah.com	ort.org	jtsa.edu
ohr.edu	birthrightisrael.com	jccmanhattan.org
shmais.com	jnf.org	huc.edu
shemaisrael.co.il	juf.org	jccsf.org
oorah.org	Jewishagency.org	cjh.org
torahmedia.com	ajws.org	nmajh.org
anshe.org	ajc.org	huji.ac.il
frumchat.com	israelfree.com	hebrewcollege.edu
atime.org	jtf.org	
calmkallahs.com	aipac.org	
	bbyo.org	
	nfty.org	
	usy.org	
	wiesenthal.org	
	ncsy.org	
	jcpa.org	
	kkf.org.il	
	iranjewish.com	
	geshercity.org	
	roicommunity.org	
	presentense.org	