John Benjamins Publishing Company

Fifty years of agenda-setting research

New directions and challenges for the theory

Chris J. Vargo
University of Colorado Boulder

50 years have passed since the seminal 1968 election study was conducted in Chapel Hill, North Carolina. A conference was held with formative theorists Drs. Shaw, Weaver and McCombs. Presentations clustered into 9 clear areas. First, there were areas undergoing theoretical expansion: (1) agenda building, (2) Network Agenda Setting (NAS), (3) Need For Orientation (NFO), and (4) agendamelding. Beyond the established areas, (5) new theoretical directions were proposed. Other work tested and validated the theory in the current digital and political landscape. This included work on (6) the current U.S. political climate, and (7) agenda setting in unique international conditions. Methodological boundaries were pushed, with presentations focused on (8) qualitative agenda setting and (9) best practices for big data and on social media. This article summarizes the aforementioned themes and synthesizes comments raised in discussion at the conference.

Keywords: agenda-setting theory, 50 years, agendamelding, need for orientation, network agenda setting, agenda building, agenda melding

2018 marked yet another milestone in the long history of agenda-setting research. 50 years have passed since the seminal 1968 election study was conducted in Chapel Hill, North Carolina. To commemorate the milestone, a conference was held with formative theorists Drs. Shaw, Weaver, and McCombs. The founders reviewed abstract submissions and moderated "50 Years in Agenda Setting Research: Past and Future Perspectives" at the University of Colorado Boulder.[1]

---

1. On July 18th–20th, 2018 the University of Colorado Boulder's College of Media, Communication and Information (CMCI) hosted the "50 Years in Agenda Setting Research: Past and Future Perspectives Conference." Honored guests included Drs. Maxwell McCombs, Donald Lewis Shaw and David Weaver. Editor of the *Agenda Setting Journal*, Dr. Salma Ghanem, presided over the conference. I organized the conference. Special thanks to CMCI's Founding Dean Lori Bergen for her support, without which, the conference would not have been feasible.

The conference had 45 attendees and 27 presentations from universities around the world *(see Appendix 1 for a list of attendees and affiliations)*.

As the organizer, I was a bit struck by how well the accepted presentations grouped themselves. They clustered into 9 clear areas. First, there were areas undergoing theoretical expansion: (1) agenda building, (2) Network Agenda Setting (NAS), (3) Need For Orientation (NFO), and (4) agendamelding. Beyond the established areas, (5) new theoretical directions were proposed. Other work tested and validated the theory in the current digital and political landscape. This included work on (6) the current U.S. political climate, and (7) agenda setting in unique international conditions. Methodological boundaries were pushed, with presentations focused on (8) qualitative agenda setting and (9) best practices for big data and on social media.

This article summarizes the aforementioned themes and synthesizes comments raised in discussion at the conference. I hope it acts as a launching point for scholars looking to begin reading in these areas, and serves as an introduction to many of the themes found in the articles of this special issue.

Theoretical areas of interest

Agenda building

Increased attention was given to the other actors in the agenda-setting process. Many of the papers presented at the conference studied entities that exist outside of the media, and many of the papers showed that those actors were able to set the agenda. For instance, Donald Trump can set the agenda of the public during the election (Lee & Xu, 2018). Public relations practitioners can set the agenda for news media for specific topics and issues (Lee & Riffe, 2017). Even real-world cues, such as the price of a public good, can drive the media to generate news coverage (Alkazemi & Wanta, 2018).

Discussants made note of the sheer number of potential agenda builders. That is, at any given time, many actors could be influencing the agenda for an issue, and those actors may not be easily apparent. For instance, journalists are constantly pressed to be more efficient and to produce more content with less time. As Beam and Meeks (2011) so aptly put it, for journalists in today's digital newsrooms there are "so many stories and so little time" (p. 238). This pressure may be pushing journalists to take shortcuts in the research they put into a story. Greater reliance on outside data, such as FOIA requests and press releases, may further exacerbate the agenda building effect. Sofiyah Tarasevich, Liudmila Khalitova, Phillip Arceneaux, Barbara Myslik, and Spiro Kiousis appear in the next

issue and show that a complex political movement, such as the rise of national-ism across Europe, can have a strong effect on political news agendas. As such, agenda building remains a ripe and relatively understudied area of agenda-setting research in need of expansion.

Network agenda setting (NAS)

There were several papers presented on NAS effects, the bulk of which also tackled social media. This signals a marked interest in the networked perspective of issues and attributes as they exist on social media, particularly Twitter (Vargo, Guo, McCombs, & Shaw, 2014). Even though NAS typically deals with the networks of words (e.g., issues and attributes), not social or people networks, the methodology seems to lend itself well to digital trace data, where user-generated content is eas-ily downloadable and manipulated into networks (Freelon, 2014). From the papers presented, the direction of NAS effects generally flowed from media to the pub-lic, but a marked instance was presented where Donald Trump, then a presidential candidate, showed more influence than traditional media. This paper, authored by Eric Wiemer and Joshua Scacco, features a nuanced approach to NAS with Twitter data and appears in this edition.

Challenges put forward include dealing with the complex statistical modeling issues that surround mapping NAS effects across time. No current best practices exist to measure and assess entire agenda networks using time series modeling. Instead, issue combinations are currently modeled one at a time, making macro and micro effect determinations difficult. Moreover, a call was put forth for mass communication scholars to dig deeper into network statistics to discover new, meaningful network summary statistics that can also explain NAS-related effects.[2]

Need for orientation (NFO)

NFO is the prevailing motivational explanation for the agenda-setting effect as we know it (McCombs, Shaw, & Weaver, 2014). Papers presented at the conference generally held NFO's position as a predictor. Higher levels of NFO still are believed to lead to increased attention to media. In turn, this yields a higher agenda-setting effect. However, a charge was put forward by panelists. NFO is a widely accepted mass communication theory, but it has not undergone a great deal of theoretical development since its inception. Do other variables, such as news trust, also medi-ate the agenda-setting effect? Can other variables be incorporated to build a more

---

2. Currently, degree centrality is the popular metric to signify node (a.k.a., issue and attribute) salience in NAS, but other network statistics likely exist (Vargo & Guo, 2017).

robust and explanatory version of the classic concept? With this premise came caution. If NFO is to be expanded, those in attendance agreed it should only come at the gain of explanatory power, not for the sole sake of complexity. For instance, in the next issue Jennifer Kowalewski and Maxwell McCombs build upon measures of salience. In so doing they also offer increased precision in measuring the agenda-setting effect. Such work in the NFO field remains ripe.

Similarly, a common theme of the conference was the observation that partisan media usage and news production have risen dramatically since seminal NFO studies of the 1970s (Levendusky, 2013). Does partisan media augment the NFO effect? In part, to address this question, David Weaver put forward a model at the conference that incorporates agendamelding and NFO by positing that individuals with moderate NFO also are more likely to rely on partisan media. See Figure 1 for a conceptual model of NFO put forward by McCombs et al. (2014). This model asserts that partisans exhibit moderate amounts of NFO.[3] Similarly, Camaj (2014) found that individuals who exhibit high relevance and low uncertainty seek out partisan media more, and that media usage for these individuals tends to strengthen preexisting attitudes. Moreover, Weaver posits that moderate NFO individuals may be most affected by partisan media at the 2nd level of agenda-setting, the attribute level.
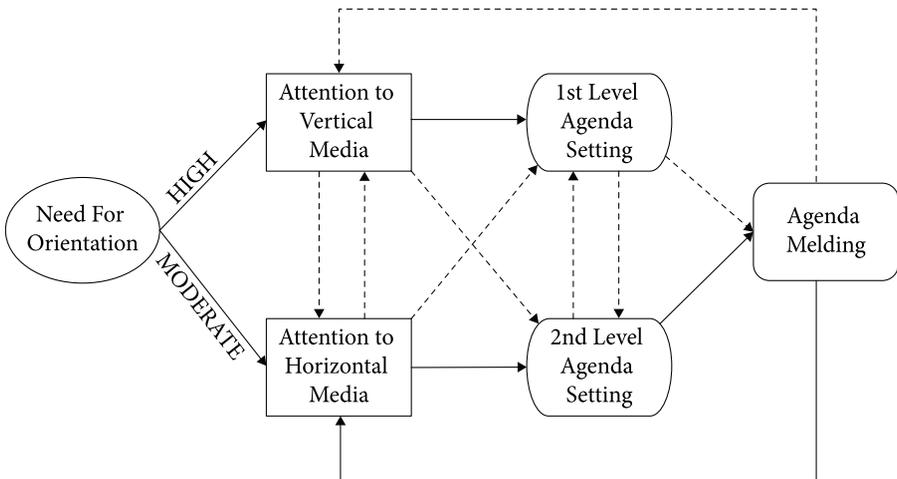

Figure 1. Weaver's updated NFO model incorporating NFO and audience choice of media, as defined by the agendamelding concept. For a review, see McCombs et al., (2014). *Figure reused with permission from author*

---

3. Weaver reasons that partisans exhibit high levels of relevance to politics, but also exhibit high political certainty, resulting in a moderate amount of NFO.

Interesting evidence was presented at the conference that Reddit, a popular social media platform, appears to harbor communities that appear to be immune to the agenda-setting effect. NFO was used as an explanatory mechanism for this observed behavior. Through three presentations on Reddit communities (e.g., subreddits) those in attendance left with a consensus that subreddits possess very high interest and low uncertainty for particular topics. In Marcus Funk's paper that appears in this edition, we see that online communities that form around steadfast support for religion appear to be resistant to the media coverage and resulting attributes on religion.

Others in attendance at the conference posited that NFO may be a predictor of news-related behaviors beyond news consumption. Specifically, news sharing was put forward as a possible behavior best predicted by NFO. After all, the majority of the literature on news sharing leverage news usage as a key variable for predicting sharing (Kümpel, Karnowski, & Keyling, 2015). It stands to reason that NFO, which predicts news attention and usage, may be an antecedent that better predicts the motivational state in which individuals are attuned to the news. This hypothesis begs further empirical exploration.

Agendamelding

One of the largest themes of the conference can be categorized as "audience choice." As McCombs and Shaw (1993) so aptly put, agenda setting is a "social function that is threatened by the expanding choice of information sources created by the plethora of new communication technologies" (p. 63). Since their article 25 years ago, media outlets have continued to increase exponentially in number online. Emerging media now differentiate by beat, target audience, and political affiliation. In 2017, we found at least 2,760 different media that were credible and established to varying degrees in the U.S. (Vargo & Guo, 2017). Anecdotally, it's easy to observe that audiences consume a wider variety of news than ever. No matter what your interests or political views, there is a media outlet for it. The question that remains is the extent to which audiences "meld" or mix the presumably alternative issue and attribute agendas from these new media to create customized agendas. Shaw's proposed extension of agenda-setting theory, now coined agendamelding, devises a formulaic way in which audiences may do so in "comfortable" ways (Shaw, McCombs, Weaver, & Hamm, 1999). See Figure 2 for a depiction of the forces that go into audience agendamelding. The theory has been hard to empirically measure, but promise was provided at the conference. Two papers put forward the concept of agendamelding. Both papers appear in this edition. Kylah Hedding and Kevin Ripka show that political journalists and bloggers on Twitter meld their media agendas differently based on their partisan affiliation, showing that it's not only audiences that are diverging from mainstream

media news agendas. Turning to the hyper partisan subreddit /r/The_Donald and the social media platform Reddit, Jeffrey K. Riley and Holly S. Cowart show that news media degradation can actually prove membership and identity (see article in this edition). They further Shaw's argument that media choice can be a part of how imaginary communities (e.g., online communities) relate and connect to one another. In this example, we see how one online community both disparages liberal media while embracing conservative media agendas, all to further belong to a part of the community.
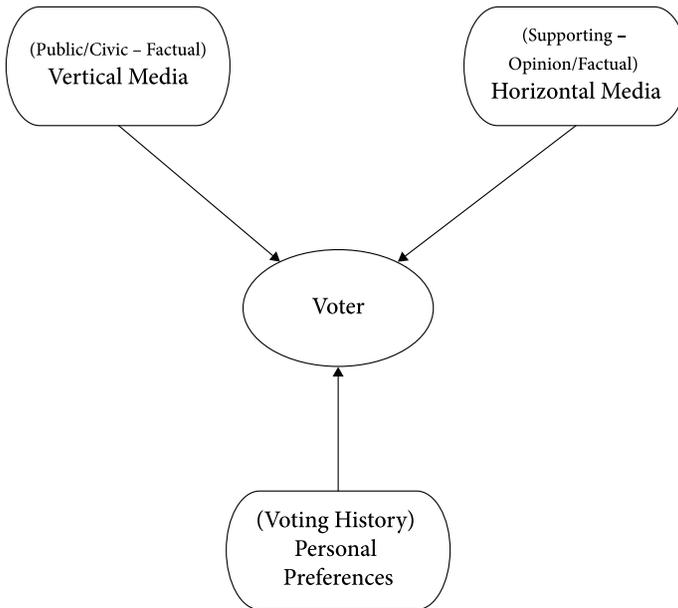

Figure 2. Shaw's agendamelding model depicting how individuals meld media agendas in today's media landscape. For a review, see McCombs et al., (2014)

Much work is to be done with agendamelding, however. As it stands, the majority of agendamelding work relies on testing agenda-setting influence in non-global terms. Put another way, no known studies consider all of the media an individual consumes, compiles all of those agendas, and tests them to assess the degree and conditions unto which those agendas influence an individual. According to those in attendance at the conference, the challenge has been primarily methodological. Media agendas for a handful of different outlets can be derived using content analysis, but when considering the wide array of media a consumer may see online, the challenge quickly becomes "big data" and problematic for traditional content analysis approaches. While computational measures of issue and attribute content analysis do exist (see Vargo & Guo, 2017 for an example using

GDELT), marrying news data to individual's agendas still is problematic, given the wide array of potential news media any individual can consume.

New theoretical directions

Aside from the expansion and extension of the theoretical perspectives above, new areas of agenda-setting theory were proposed. Network components were proposed as ways to expand upon the way in which we think about associations, both explicitly and *implicitly* in agenda setting (Scott, 2017). Expanding on the basic idea of "issue bridging," there may be any number of ways in which media can "tie" or relate issues together in clusters to create more complex, networked understandings of issues and attributes (as in Guo & Vargo, 2015).

It was also brought forward that the overwhelming majority of agenda-setting studies were textual. That is, the primary unit of analysis is text content (e.g., text from news stories, tweets, and so on), or content translated to text (e.g., interviews and surveys). News, however, is increasingly visual in nature. Photos themselves have ways of accentuating and perpetuating specific attributes related to issues and stories (Newton, 2013). A new area of research "visual agenda setting" attempts to address the influence that news media have in setting visual agendas (Lough, 2018). In its infancy, the line of inquiry has already revealed intermedia effects, illustrating how visual images from news outlets can flow from elite media to those that are less so. Kyser Lough and Shimaa Mohammed appear in in the next issue and find that the AP News's Top Photos do appear to set the agenda for smaller media at the 1st and 3rd level. What remains to be studied is audience effects, and how audiences are influenced by the inherit attribute and issue agendas put forward by photos in the news.

Gennadiy Chernov and Maxwell McCombs put forward a paper that appears in the next issue that addresses the major philosophical and theoretical assumptions that underpin agenda-setting theory. In so doing, they find that agenda-setting is theoretically sound and conceptually distinct from framing and priming, countering what others have said about the similarities across the paradigms.

Finally, a provocative notion was put forward called "agenda diversity." The concept stems from Lippmann (1922) and his observation that news makes people aware of problems beyond their immediate experience. This view of agenda setting comes counter to the idea that the agenda-setting function of the mass media focuses the public on issues, to help ultimately lead to collective action (Shaw et al., 1999). The agenda diversity perspective doesn't refute agenda setting. Instead, it asserts the larger the agenda-setting effect, the less agreement there is on public priorities. This thinking aligns with the emergent fact that news media are more numerous, and diverse, than ever before. While empirical evidence was presented

in a presentation at the conference, much more work is needed before the notion can be widely accepted.

Contemporary agenda-setting landscapes

The current political climate

Fake news

Attendees argued that the current political climate could have ramifications for the agenda-setting effect as we know it. In addition to increased partisanship in both readership and number of news outlets, scholars have shown that fake news may have an agenda-setting effect. Existing work on this area is still ongoing, and a clear picture has not yet emerged. We found that fake news in some instances can have a broad intermedia effect (Vargo, Guo, & Amazeen, 2017). We presented evidence that fake news websites can further signify and boost the importance of broad issues to society (e.g., politics, or terrorism). In some ways, fake news may tell us that certain issues are important, and that signal may generate even more coverage on said issues by credible media, a sort of amplification effect. However, our newer work has since tempered and qualified our findings. In a look at the 2016 election we "zoomed in" to look at specific stories, such as Hillary Clinton and the contents of her Goldman Sachs speech, or Donald Trump and allegations of him raping a teenage girl. Time and again, fake news almost never was successful at transmitting false information or attributes to credible, online media (Vargo & Guo, 2018). While far more work is needed, our initial results suggest that fake news may have a broad 1st level effect, but not a more direct story or 2nd level effect. Moreover, none of our work looked at audience reception: fake news → audience agendas. Additional research in this area is sorely needed.

A lying president who uses social media

Presidents have been shown to have an agenda-setting power themselves (Canes-Wrone, 2001). However, there was an echoed concern put forward at the conference that this is perhaps the first time a president so brazenly lied directly to his public via social media and had agenda-setting effects (Skewes, 2018). Each time the president tweets, it generates millions of impressions, thousands of retweets, favorites, and comments on Twitter. Moreover, Trump's tweets generate news coverage, each one resulting in hundreds of news articles written. The direct influence Donald Trump has on issue and attribute saliences is clear. While Trump may not tell people how to think, he certainly is telling people what to think about.

What's worse, on some level, Trump is acutely aware of the influence he can have on media. Donald Trump himself once said in his book *The Art of the Deal:*

> I'm not saying that [journalists] necessarily like me. Sometimes they write positively, and sometimes they write negatively. But from a pure business point of view, the benefits of being written about have far outweighed the drawbacks. It's really quite simple. If I take a full-page ad in the *New York Times* to publicize a project, it might cost $ 40,000, and in any case, people tend to be skeptical about advertising. But if the *New York Times* writes even a moderately positive one-column story about one of my deals, it doesn't cost me anything, and it's worth a lot more than $ 40,000…. the point is that we got a lot of attention, and that alone creates value.   (Trump & Schwartz, 2009, p. 57)

Beyond driving and inflating the salience of issues (e.g., the importance of a border wall, or possible collusion with Russians and the Democrats), Trump may be successfully distracting media attention by forcing them to cover his tweets and lies. In this way, it may be that "the effect of the office of the president now is to distract and entertain" (Lynch, 2017, p. 612). This new effect is harder to fully explicate using current agenda-setting theory. Zhu (1992) showed that agenda-setting can be a zero-sum game where news coverage of issues and events rise to prominence at the cost of others. While Trump's online chatter certainly generates news coverage, to what extent does it diminish coverage of other issues? This secondary, and perhaps more powerful effect, has yet to be incorporated into existing agenda-setting theory in this modern political and social media climate.

Bots and computational propaganda

Beyond the president and his office, other actors are fighting for salience on political issues and attributes. Some of these actors are not even human. Computational propaganda, or misinformation created by humans and disseminated by fake people (e.g., "bots") on the internet via social media, is a new frontier of agenda-setting research.[4] There is little debate that misinformation was spread via social media during the 2016 election. What is largely unknown is the extent that foreign actors, such as bots deployed by the Russian government, had on media and audience agendas.

Challenges that were raised at the conference focused on operationalization. What is a bot? Is there a universally acceptable definition that we can agree upon as social scientists? To what extent can we create computational tools that detect such bots? How can we validate these measures and hold them up to the

---

4. Computational propaganda is a type of misinformation generated and disseminated online, for a definition see Bennett and Livingston (2018).

social science rigor we expect in more traditional content analyses? This discussion generated more questions than answers. There are emergent tools, such as Botornot, but more thought and validation is needed before we can rely on these tools to make heuristic classifications of users on social media (Davis, Varol, Ferrara, Flammini, & Menczer, 2016). While these obstacles persist, optimism was expressed at the conference that these barriers can be overcome.

Agenda setting in unique international conditions

The U.S. aside, it has generally been thought that the agenda-setting effect is observable in most countries where a free press exists and a meaningful election occurs (McCombs, 2018).[5] When considering countries with a free press, Shaw has often acknowledged that agenda-setting effects vary by degree internationally. In this way, he envisions the agenda-effect as a thermometer that gauges an aspect of the health of a democracy (Shaw, Minooie, Akiat, & Vargo, in press). Countries with a moderately high news media to public agenda-setting effect are healthy democracies, with the press contributing a check on government power. Countries with a high government to public agenda-setting effect suggests a lack of checks and balance, and in one way, an unhealthy democracy.

Some have explored other country-level factors that may increase or diminish the agenda-setting effect, such as the perceived importance of elite political opinions (Peter, 2003). However, this work appears to just scratch the surface. It was raised at the conference that other factors, such as the perceived media trust in a country, could also diminish the agenda-setting effect. Other mediators at the country-level have yet to be explored. Further work can help us better understand the conditions required for the mass media agenda setting to exist.

Methodological challenges

More qualitative agenda-setting work

Perhaps the strongest audience affirmation given at the conference was the charge put forward for more *qualitative* agenda-setting work. The preponderance of work in the field is quantitative (McCombs, 2018). Those in attendance gave credit to this phenomenon partly due to the quantitative novelty put forward by classic agenda-setting studies that feature a hybrid content analysis and Most Important

---

5.   In cases where these conditions do not exist, the government has been shown to exhibit control over news agendas (Guo et al., 2015).

Problem (MIP) question approach. As Maher (2001) pointed out, framing studies tend to be qualitative, and given that the method and findings can be similar, scholars tend to study framing when using qualitative methodology.

Future areas for research mentioned at the conference include using qualitative studies to better understand why audiences choose to mix and meld different audience agendas. While current research in agendamelding is descriptive, it does not describe *why audiences choose certain media agendas*. Moreover, qualitative studies may also uncover what sources journalists use in selecting the issues and attributes to cover. While the past adage has been that journalists "look over their shoulders to validate their sense of news by observing the work of their colleagues," now journalists can rely on metrics, data, social media, and audience feedback to select stories (McCombs, 2005, p. 549). Big data analyses of intermedia news media agendas are often complex, reciprocal, and seldom reveal a picture that scholars can use to clearly build theory (Vargo & Guo, 2017). Qualitative work in intermedia agenda setting can help better understand the bigger picture as to what influences journalists to copy or create media agendas.

Moreover, qualitative work in agenda setting can tell better stories. For instance, while we (Vargo, Guo, & Amazeen, 2017) found that fake news had a broad effect on the news media agenda in our 2017 paper, our study was largely lost on journalists attempting to make sense of our findings to share with their readers. They wanted examples of *specific stories* that originated on fake news sites which were then adopted by mainstream media. In our follow up 2018 study (Guo & Vargo, 2018), we used qualitative analysis at the specific story level and provided examples. When we told journalists about a specific Breitbart story regarding a Mexican cartel paying for Donald Trump's wall and how that reporting was repeated in an emerging media outlet, inquistr.com, journalists were better able to understand the rarity and obscureness of the phenomenon better.

The final, and perhaps most promising area in which qualitative inquiry can advance agenda-setting theory, is by going beyond the simple causal relationship of salience transfer. There was echoed concern at the conference for better understanding the implications of agenda-setting. If non-traditional actors, such as fake news, bots, partisan media, and politicians are now setting the agenda with increased precision and scope, what does this mean for society? What does this mean for democracy? What does this mean for journalistic entities? Until now, the leading thinking around the effects of agenda setting were mostly positive. If the mass media are a free, unbiased press, then their attention would provide a compass for public discourse that would be productive and fruitful to accomplishing meaningful things in society and government (Shaw et al., in press). However, as other agenda setters become powerful, these effects could most certainly have different consequences. Early work in this field is beyond the scope of quantitative

research, and perhaps best answered through historical and international qualitative perspectives.

Big data and social media

Turning back to the quantitative work featured at the conference, a major theme involved the use of social media data – lots of social media data. Most of the data used in studies contained sample sizes of thousands to millions. Twitter remains king for agenda-setting studies of social media. Those in attendance accredited this phenomenon to the fact that Twitter data is easy to retrieve. The majority of Twitter data is public, and the Twitter API is easy and free to use for a majority of use cases.[6] With this new type of social data comes new questions.

What is social media measuring, and is that important?

Discussion on exactly what social media is and *what the data on it represents* was a major theme throughout many sessions. Researchers at the conference are now using digital trace data from users on social media platforms as digital representations of issue and attribute agendas.[7] As the assumption goes, if a user posts on Twitter about the economy, then that issue must be salient to that user. Their post, or tweet, in a way, represents their agenda.[8] Reddit, Twitter, Weibo, WeChat and the corresponding digital trace data from users were used for different studies at the conference. In discussion the question was put forward: Does the digital trace data that a user posts to social media actually represent their agenda? It's an assumption that's underpinned most of the agenda-setting work on social media (e.g., Vargo et al., 2014), but one that's never been empirically investigated.

Given what we know about social desirability bias, it could be that users post about certain issues more, other issues less, and some not at all to "flock together" (Himelboim, McCreery, & Smith, 2013).[9] For instance, in agenda-setting theory a distinction has been made between *personal issues* and *social issues* (Weaver, Zhu, & Willnat, 1992). It could be that each social media platform affords a different mix of personal and social issue agendas. We know that different social media platforms afford different uses and gratifications (Phua, Jin, & Kim, 2017).

---

6. See Vargo et al. (2014) for a review of how to use the Twitter streaming API for agenda-setting related research.

7. See Freelon (2014) for a detailed discussion of different types of digital trace data.

8. Conversely, a major assumption that has not been tested is that what a news organization tweets is also representative of their agenda.

9. The same could be said about attributes that underpin issues.

Facebook users tend to use the platform to post personal updates, whereas Twitter users tend to post more news, and that news tends to contain social issues (Kwak, Lee, Park, & Moon, 2010; Marshall, Lefringhausen, & Ferenczi, 2015). It may be that no social media account of an individual is a true manifestation of that individual's perceived hierarchy of issue and attribute importance. Investigation of social media agendas for individuals and how they differ from the traditional MIP questionnaire will help us better understand what digital trace data means for the agenda-setting effect.[10] Are the current agenda-setting studies on social media truly assessing the agenda-setting effect of individuals, or are they solely examining the platform-specific social media agendas of individuals? While both seem important to study, the former may have broader societal implications than the latter.

Beyond the individual, many agenda-setting studies that use social media data aggregate data across users. In some studies, users are sorted into groups, such as supporters of a political candidate.[11] Other studies don't attempt to sort the data and treat all content on the platform as a broad representation of a medium agenda itself (Weimann & Brosius, 2015). After all, journalists are acutely aware of and cover the salient topics on social media platforms, such as Twitter (Friedman, 2016). At the conference, there was a healthy debate on how to classify and sort social media data. Is an entire social media platform itself some form of public opinion? Extant research tends to say no; even with the most careful attention to weighting.[12] But still, on some broad level, social media issue and attribute salience seem to correlate to some broad sense of importance. While no hard lines were drawn at the conference, it is still on the backs of agenda-setting researchers to further explore and define exactly what salience means on social media platforms.

Conclusion

There was renewed interest in the theory from several perspectives. From an agenda building point of view, there appear to be more actors than ever vying for a piece of the public agenda. NAS was heralded and may be better equipped to study the complicated, internetworked nature of issues and attributes in the online

---

10. For a robust review of the "Most Important Problem" question, see Min, Ghanem, and Evatt (2007).

11. For example, our work on Twitter sorted people into groups based on the sentiment they associated with candidates (Vargo et al., 2014).

12. For an in-depth review of how Twitter data doesn't correlate to public opinion polls for presidential candidates, see Pasek and Dailey (2019).

media landscape. The rise of audience choice and the study of how people meld agendas from multiple media sources makes the study of agenda melding more important than ever. While the classic theory of NFO still appears to hold, questions are starting to arise if other factors may strengthen our understanding of agenda-setting antecedents.

The current political landscape may have consequences for the agenda-setting effect as we know it. Fake news poses a broad threat to 1st level audience agendas. Computational propaganda and the bots who spread it on social media may also have some agenda-setting power, but the degree of this effect is largely unknown. Lies by the current U.S. president may be exhibiting more of an agenda-setting effect than ever before observed by a president, and the consequences of this effect on democracy are unknown.

Methodological challenges also exist. While quantitative studies still comprise the majority of studies in agenda setting, qualitative work may better explicate why audiences choose to mix and meld different media agendas. Qualitative investigation may also aid intermedia agenda-setting theory by uncovering the influences on the media agendas of journalists in this new online media landscape. Finally, qualitative work may help us better understand the societal implications of agenda-setting. This work is especially important as we learn that other actors, outside of the mainstream media, have more agenda-setting power in society today.

Big data and social media platforms create an opportunity for agenda-setting researchers. Work on Twitter, Reddit, Weibo, and WeChat were presented at the conference. Methodological concerns persist, however. Is Twitter king for agenda-setting research on social media solely because data is easy to get? How should social media data be collected, sorted, and separated? Do people's tweets correlate to what they feel are the MIPs facing society today? Work here is needed to better situate current social media research in agenda-setting theory.

In all, interest in agenda-setting research appears to be vibrant. This special conference had virtually no promotional budget and no support from academic associations. Yet, we saw 54 submissions.[13] While the conference generated more questions than it did answers, the drive put forward by those in attendance was clear. The next generation of researchers are optimistic, inquisitive, and eager to tackle challenges to advance the paradigm.

---

13. The conference saw many more submissions than anticipated as a result, the acceptance rate was 54%.

References

Alkazemi, M. F., & Wanta, W. (2018). The effect of oil prices on the media agenda: A model of agenda building. *Newspaper Research Journal*, 39, 232–244. https://doi.org/10.1177/0739532918775655

Beam, R. A., & Meeks, L. (2011). So many stories, so little time. In W. Lowrey & P. Gade (Eds.), *Changing the news: The forces shaping journalism in uncertain times* (pp. 230–248). New York, NY: Routledge.

Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, 33, 122–139. https://doi.org/10.1177/0267323118760317

Camaj, L. (2014). Need for orientation, selective exposure, and attribute agenda-setting effects. *Mass Communication and Society*, 17, 689–712. https://doi.org/10.1080/15205436.2013.835424

Canes-Wrone, B. (2001). A theory of presidents' public agenda setting. *Journal of Theoretical Politics*, 13, 183–208. https://doi.org/10.1177/0951692801013002003

Davis, C. A., Varol, O., Ferrara, E., Flammini, A., & Menczer, F. (2016). Botornot: A system to evaluate social bots. In J. Bourdeau (Ed.), *Proceedings of the 25th International Conference Companion on World Wide Web* (pp. 273–274). Geneva, Switzerland: International World Wide Web Conferences Steering Committee. https://doi.org/10.1145/2872518.2889302

Freelon, D. (2014). On the interpretation of digital trace data in communication and social computing research. *Journal of Broadcasting & Electronic Media*, 58(1), 59–75. https://doi.org/10.1080/08838151.2013.875018

Friedman, A. (2016). Hashtag journalism: The pros and cons to covering twitter's trending topics. *Columbia Journalism Review*.

Guo, L., Chen, Y. N. K., Vu, H., Wang, Q., Aksamit, R., Guzek, D., … & McCombs, M. (2015). Coverage of the Iraq War in the United States, Mainland China, Taiwan and Poland: A transnational network agenda-setting study. *Journalism Studies*, 16(3), 343–362. https://doi.org/10.1080/1461670X.2014.885198

Guo, L., & Vargo, C. (2015). The power of message networks: A big-data analysis of the network agenda setting model and issue ownership. *Mass Communication and Society*, 18(5), 557–576. https://doi.org/10.1080/15205436.2015.1045300

Guo, L., & Vargo, C. (2018). "Fake news" and emerging online media ecosystem: An integrated intermedia agenda-setting analysis of the 2016 U.S. presidential election. *Communication Research*. Advance online publication. https://doi.org/10.1177/0093650218777177

Himelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication*, 18(2), 154–174. https://doi.org/10.1111/jcc4.12001

Kümpel, A. S., Karnowski, V., & Keyling, T. (2015). News sharing in social media: A review of current research on news sharing users, content, and networks. *Social media + society*, 1(2), 1–14. https://doi.org/10.1177/2056305115610141

Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? In M. Rappa & P. Jones (Eds.), *Proceedings of the 19th International Conference on World Wide Web* (pp. 591–600). New York, NY: ACM.

Lee, J., & Xu, W. (2018). The more attacks, the more retweets: Trump's and Clinton's agenda setting on Twitter. *Public Relations Review*, 44(2), 201–213. https://doi.org/10.1016/j.pubrev.2017.10.002

Lee, S. Y., & Riffe, D. (2017). Who sets the corporate social responsibility agenda in the news media? Unveiling the agenda-building process of corporations and a monitoring group. *Public Relations Review*, 43(2), 293–305. https://doi.org/10.1016/j.pubrev.2017.02.007

Levendusky, M. (2013). *How partisan media polarize America*. Chicago, IL: University of Chicago Press. https://doi.org/10.7208/chicago/9780226069159.001.0001

Lippmann, W. (1922). *Public opinion*. New York, NY: Routledge.

Lough, K. (2018). Intermedia visual agenda setting: Comparing wire service top photo distribution to what makes the front page. *The Agenda Setting Journal*, 2, 25–40. https://doi.org/10.1075/asj.17002.lou

Lynch, T. (2017). President Donald Trump: A case study of spectacular power. *The Political Quarterly*, 88(4), 612–621. https://doi.org/10.1111/1467-923X.12433

Maher, T. M. (2001). Framing: An emerging paradigm or a phase of agenda setting? In S. D. Reese, O. H. Gandy, Jr., & A. E. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 99–110). New York, NY: Routledge.

Marshall, T. C., Lefringhausen, K., & Ferenczi, N. (2015). The Big Five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates. *Personality and Individual Differences*, 85, 35–40. https://doi.org/10.1016/j.paid.2015.04.039

McCombs, M. (2005). A look at agenda-setting: Past, present and future. *Journalism Studies*, 6(4), 543–557. https://doi.org/10.1080/14616700500250438

McCombs, M. (2018). *Setting the agenda: Mass media and public opinion*. New York, NY: John Wiley & Sons.

McCombs, M. E., & Shaw, D. L. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. *Journal of Communication*, 43(2), 58–67. https://doi.org/10.1111/j.1460-2466.1993.tb01262.x

McCombs, M. E., Shaw, D. L., & Weaver, D. H. (2014). New directions in agenda-setting theory and research. *Mass Communication and Society*, 17(6), 781–802. https://doi.org/10.1080/15205436.2014.964871

Min, Y., Ghanem, S. I., & Evatt, D. (2007). Using a split-ballot survey to explore the robustness of the 'MIP' question in agenda-setting research: A methodological study. *International Journal of Public Opinion Research*, 19, 221–236. https://doi.org/10.1093/ijpor/edm003

Newton, J. (2013). *The burden of visual truth: The role of photojournalism in mediating reality*. New York, NY: Routledge. https://doi.org/10.4324/9781410605900

Pasek, J., & Dailey, J. (2019). Why don't tweets consistently track elections? Lessons from linking Twitter and survey data streams. In T. Stroud & S. McGregor (Eds.), *Digital discussions: How big data informs political communication* (pp. 68–93). New York, NY: Routledge.

Peter, J. (2003). Country characteristics as contingent conditions of agenda setting: The moderating influence of polarized elite opinion. *Communication Research*, 30, 683–712. https://doi.org/10.1177/0093650203257844

Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, 72, 115–122. https://doi.org/10.1016/j.chb.2017.02.041

Scott, J. (2017). *Social network analysis* (4th ed.). Thousand Oaks, CA: Sage.

Shaw, D. L., McCombs, M., Weaver, D. H., & Hamm, B. J. (1999). Individuals, groups, and agenda melding: A theory of social dissonance. *International Journal of Public Opinion Research*, 11, 2–24. https://doi.org/10.1093/ijpor/11.1.2

Shaw, D. L., Minooie, M., Akiat, D. & Vargo, C. (in press). *Agendamelding: How we use digital media to create personal community*. New York, NY: Peter Lang.

Skewes, E. (2018). Time delays are not enough; Media must call out lies. *Journal of Media Ethics*, 33(2), 97–99. https://doi.org/10.1080/23736992.2018.1435498

Trump, D. J., & Schwartz, T. (2009). *Trump: The art of the deal*. New York, NY: Ballantine Books.

Vargo, C. J., & Guo, L. (2017). Networks, big data, and intermedia agenda setting: An analysis of traditional, partisan, and emerging online US news. *Journalism & Mass Communication Quarterly*, 94, 1031–1055. https://doi.org/10.1177/1077699016679976

Vargo, C. J., Guo, L. & Amazeen, A. (2017). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *New Media & Society*. 20, 2028–2049. https://doi.org/10.1177/1461444817712086

Vargo, C. J., Guo, L., McCombs, M., & Shaw, D. L. (2014). Network issue agendas on Twitter during the 2012 US presidential election. *Journal of Communication*, 64, 296–316. https://doi.org/10.1111/jcom.12089

Weimann, G., & Brosius, H. B. (2015). A new agenda for agenda-setting research in the digital era. In G. Vowe & P. Henn (Eds.), *Political communication in the online world: Theoretical approaches and research designs* (pp. 26–44). New York, NY: Routledge.

Weaver, D. H., Zhu, J. H., & Willnat, L. (1992). The bridging function of interpersonal communication in agenda-setting. *Journalism Quarterly*, 69(4), 856–867. https://doi.org/10.1177/107769909206900406

Zhu, J. H. (1992). Issue competition and attention distraction: A zero-sum theory of agenda-setting. *Journalism Quarterly*, 69(4), 825–836. https://doi.org/10.1177/107769909206900403

Appendix 1.   List of attendees

First name	Last name	University name
Seohyun	An	Ewha Womans University
Lori	Bergen	University of Colorado Boulder
Hans-Bernd	Brosius	Ludwig-Maximilians-U Munich
Craig	Carroll	New York University
Gennadiy	Chernov	University of Regina
Holly	Cowart	Georgia Southern University
Jill	Edy	University of Oklahoma
Patrick	Ferrucci	University of Colorado Boulder
Marcus	Funk	Sam Houston State University
Salma	Ghanem	DePaul University
Gregory	Gondwe	University of Colorado
Jennifer	Gregg	Univ. of Massachusetts Boston
Lei	Guo	Boston University
Mario	Haim	Ludwig-Maximilians-U Munich
Kylah	Hedding	University of Iowa
Vanessa	Higgins Joyce	Texas State University
Kyle J.	Holody	Coastal Carolina University
Tobias	Hopp	University of Colorado Boulder
Angelica	Kalika	University of Colorado Boulder
Jennifer	Kowalewski	Georgia Southern University
Gerry	Lanosga	Indiana University
Gunho	Lee	Ewha Womans University
Kyser	Lough	The University of Texas at Austin
Mairead	MacKinnon	The University of Queensland
Tammy	Matthews	University of Colorado Boulder
Maxwell	McCombs	The University of Texas at Austin
Patrick	Meirick	University of Oklahoma
Sharon	Meraz	University of Illinois at Chicago
Milad	Minooie	University Of North Carolina Chapel Hill
Alexander	Moe	Texas Tech University
Matt	Ragas	DePaul University
Daniel	Riffe	UNC-Chapel Hill
Jeffrey	Riley	Georgia Southern University
Donald Lewis	Shaw	University Of North Carolina Chapel Hill
Shuqi	Shi	Beijing Sport University
Elizabeth	Skewes	University of Colorado Boulder
Sofiya	Tarasevich	University of Florida
Thomas	Terry	Utah State University
Hai	Tran	DePaul University
Chris J.	Vargo	University of Colorado Boulder
Wayne	Wanta	University of Florida
David	Weaver	Indiana University
Eric	Wiemer	Purdue University
Lei	Zhao	Shandong University

Address for correspondence

Chris J. Vargo
University of Colorado Boulder
Advertising, Public Relations and Media Design
478 UCB, Armory, 1511 University Ave
Boulder, CO 80309–0478
USA

christopher.vargo@colorado.edu