

Psychology of Agenda-Setting Effects Mapping the Paths of Information Processing

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Highlights

- New research complements the concept of Need for Orientation as a psychological explanation for agenda-setting effects.
- Dual paths of psychological responses to media messages that result in agenda-setting effects are explicated in recent research.
- Need for Orientation and dual psychological paths are extended to attribute agenda setting.
- Need for Orientation, selective exposure, and motivated reasoning are merged in expanded theoretical perspective on agenda setting.

Abstract

The concept of Need for Orientation introduced in the early years of agenda-setting research provided a psychological explanation for why agenda-setting effects occur in terms of what individuals bring to the media experience that determines the strength of these effects. Until recently, there had been no significant additions to our knowledge about the psychology of agenda-setting effects. However, the concept of Need for Orientation is only one part of the answer to the question about why agenda setting occurs. Recent research outlines a second way to answer the *why* question by describing the psychological process through which these effects occur. In this review, we integrate four contemporary studies that explicate dual psychological paths that lead to agenda-setting effects at the first and second levels. We then examine how information preferences and selective exposure can be profitably included in the agenda-setting framework. Complementing these new models of information processing and varying attention to media content and presentation cues, an expanded concept of psychological relevance, motivated reasoning goals (accuracy versus directional goals), and issue publics are discussed.

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Agenda setting made its formal debut in a 1972 article authored by Maxwell McCombs and Donald Shaw. That article presented the basic agenda-setting thesis: issues emphasized in the media frequently become the issues identified as most important by the public. McCombs and Shaw found strong correlations between the issues nominated as most important by citizens of Chapel Hill, North Carolina and the issues emphasized by the media. The original article sparked extensive follow-up research that confirmed the proposed causal relationship between media coverage and judgments of issue importance (e.g., Beckett, 1994; Cook, et al., 1983; Iyengar & Kinder, 1989).

Although many extensions of agenda setting have emerged, we focus here on the psychology of agenda setting. What individual-level, psychological factors help us to understand the agenda-setting effects of the media? We

turn our attention to this aspect of agenda setting because there has been a recent surge in scholarship tackling the psychological underpinnings of agenda setting. This research uncovers two information processing paths that affect how agenda setting occurs. In the following, we first review classic psychological explanations for agenda-setting effects, and then proceed with a detailed discussion of the dual psychological paths of agenda-setting outcomes. Subsequently we examine how information preferences and selective exposure can be profitably included in the agenda-setting framework. Complementing these new models of information processing and varying attention to media content and presentation cues, an expanded concept of psychological relevance, motivated reasoning goals (accuracy versus directional goals), and issue publics are discussed.

Five years after Chapel Hill, David Weaver introduced the central psychological concept of agenda setting theory, Need for Orientation. This concept is defined by a combination of *uncertainty* about a topic in the news and how *relevant* people find the news about that topic to be. Those with high uncertainty who find the news to be quite relevant are defined as having high Need for Orientation. The seminal Chapel Hill study (McCombs & Shaw, 1972) was tightly focused on the effects of news coverage about public issues among undecided voters in the 1968 U.S. presidential election. The decision to study undecided voters turned out to be particularly fortuitous. These citizens had the precise combination of feeling uncertain, but finding the news relevant, that gives rise to heightened agenda-setting effects. The concept of Need for Orientation, however, was not introduced formally until five years after the Chapel Hill study. The Charlotte study (Shaw & McCombs, 1977) examined the agenda-setting effects of news coverage across the summer and fall of the 1972 U.S. presidential election among the general population of voters. In addition to showing the broad agenda-setting effects of the news media on the public, this study introduced Need for Orientation as a psychological moderator of these effects (Weaver, 1977).

Need for Orientation measures voters' desire for more information on the issues and provides a robust explanation for the strength of agenda setting effects. In Charlotte, the correspondence between the media agenda and public agenda of issues in October was only 0.29 for voters with a low Need for Orientation. Among voters with a high Need for Orientation, the correspondence between the media agenda and public agenda of issues was 0.68. In the years since Charlotte, the concept of Need for Orientation has provided similarly strong explanations for variations in the level of agenda-setting effects among general populations in countries around the world.

In line with most discussions of the concept, we identify Need for Orientation as a moderator variable, yet note that an argument can be made that it is an antecedent variable, namely that the full theoretical model is: NFO → media exposure → agenda setting. Weaver's original presentation of the concept in *The Emergence of American Political Issues* (Shaw & McCombs, 1977) reported findings supporting this full model. However, in the decades since the original findings from the 1972 Charlotte study, most research has used the truncated model, NFO → agenda

setting, and refers to Need for Orientation as a moderator primarily because the majority of agenda-setting studies assume exposure to the content of ubiquitous media rather than measuring exposure, an idea we probe more carefully later in this chapter. The original Chapel Hill study is the classic example of this research design. However, these content-based studies of agenda-setting are complemented in the literature by attention-based studies documenting explicit links between level of attention to the news media and the strength of agenda-setting effects (see, for example, Strömbäck & Kioussis, 2010).

Until recently, the only major addition to our knowledge about the psychology of agenda-setting effects was Matthes' (2006, 2008) new set of scales measuring Need for Orientation. These scales take into account the expansion of agenda-setting theory subsequent to Charlotte to a second level of effects, attribute agenda setting, the effects of news coverage on the details of public issues and other topics (McCombs, Lopez-Escobar & Llamas, 2000; Takeshita & Mikami, 1995; Weaver, Graber, McCombs & Eyal, 1981).

However, the concept of Need for Orientation is only one part of the answer to the question, why do agenda setting effects occur? A question about why media effects occur can be answered in two ways. First, as is the case for Need for Orientation, *for what reason*. That is, what do persons bring to the media experience that determines the strength of any effect? From extensive research, we know that an individual's level of Need for Orientation affects the strength of the agenda-setting effect. Beyond Need for Orientation, what else do people bring to the media experience that affects agenda setting? In this chapter, we explore the contribution of people's political and issue preferences on their media exposure and, in turn, agenda-setting effects.

There is a second way to answer the *why* question as well, by describing the manner, or the process, through which these effects occur. In other words, answering the *why* question by specifying what happens psychologically when people encounter the media and how that affects the resulting agenda-setting effects, whatever their strength. In the following pages, we review recent research on a dual-processing model to explain agenda-setting effects.

Given that much remains to be known, why has there been a lengthy hiatus in research on the psychology of

the agenda-setting process? Two reasons immediately come to mind. First, the concept of Need for Orientation provided a detailed and precise connection between individual, psychological motivations and agenda-setting effects. Scholars across the world found Need for Orientation to be a useful concept, and there was no obvious gap in our knowledge about the variations in the level of effects. In many ways, the empirical success of the concept offered little encouragement for additional research. We also need to consider a second reason, a strong tradition of emphasis in mass communication research on media effects. Subsequent to Chapel Hill and Charlotte, scholars were attracted to investigations of attribute agenda setting, the second level of agenda-setting effects and to a variety of other effects, including the extended impact of both basic first-level and second-level agenda-setting effects on subsequent attitudes, opinions and behavior and the effects of a variety of sources on the shaping of the media agenda (McCombs, 2014).

The combined impact of these factors was a lack of new theoretical initiatives regarding the psychology of the agenda-setting process until very recently. These new initiatives, which will be reviewed and elaborated here in detail, complement Need for Orientation's important role as a moderator concept with new insights into what members of the public bring to the communication setting and how dual psychological paths of information processing influence the media experience and, in turn, agenda-setting effects.

Our review and discussion of this new phase of agenda-setting research begins with Toshio Takeshita's seminal 2006 paper in the *International Journal of Public Opinion Research* suggesting two distinct routes between exposure and agenda-setting effects. Subsequently, three German scholars, Kristin Bulkow, Juliane Urban, and Wolfgang Schweiger (2013) explored these paths in two extensive experiments. Their ground-breaking research was followed by Raymond Pingree and Elizabeth Stoycheff's (2013) creative experiment in the United States that provided succinct names for these paths, agenda-cueing and agenda-reasoning. These works advance our understanding of the psychological process by which media exposure can yield agenda-setting effects.

A complementary research trajectory looks at the news that people select. One stream of research focuses on how people's issue interests affect their news selections, which,

in turn, can affect the issues they name as most important. Here, Scott Althaus and David Tewksbury (2002) conducted an influential experiment to test how agenda setting works online, where people have extensive media choices. Work by subsequent scholars added to the idea that those using new media seek information on issues of interest (Kim, 2007) and nominate more diverse issues as most important (Nie, Miller, Golde, Butler & Winneg, 2010). A second stream of research looks at how people's preference for likeminded political news affects agenda setting. Using partisan media can change the issues and attributes considered important (e.g., Stroud, 2011). More recently, Lindita Camaj (2012) presented a paper at the Association for Education in Journalism and Mass Communication that brought the concepts of Need for Orientation, selective exposure, and attribute agenda-setting effects into our theoretical view of the psychological paths to agenda-setting effects. This expanded theoretical view is grounded empirically in content analysis and survey research from Kosovo.

In this extended review, our mission is to integrate diverse research into a broad theoretical model of the psychological underpinnings of agenda-setting effects. To do so, we combine recent literature on dual-processing models and selective exposure to account for the interaction between individual psychology and the modern media environment in producing agenda-setting effects.

A preliminary theoretical map

... there might be two types of agenda setting: a deliberate 'genuine' agenda setting involving active inference and an automatic 'pseudo' agenda setting explained by the accessibility bias.

Takeshita (2006, p.279)

Toshio Takeshita's conclusion about the possibility of two psychological processes leading to agenda-setting effects results from his careful explication of the concept of salience in the agenda-setting tradition. The starting point for this explication is his disagreement with two theoretical papers (Price and Tewksbury, 1997; Scheufele, 2000) grounded in cognitive psychology's knowledge activation model, a model defined in terms of accessibility and applicability. These papers argued that salience

is synonymous with accessibility, or the ease with which concepts are retrieved from memory, and that agenda-setting effects can be explained on the basis of accessibility alone. Takeshita takes issue with this theoretical assertion on two grounds. First, he notes that theoretically the definition of salience frequently includes two components, accessibility and perceived importance (Young, 1992; Rössler and Eichhorn, 1999), and that not all easily accessible ideas are automatically regarded as being important. Second, he notes that the historical origins of the concept of salience in agenda setting center on the idea of perceived importance. One of the most common measures of issue salience among the public in agenda-setting studies is the Gallup Poll's MIP question: "What is the most important problem facing this country today?" This question asks not only which issues are readily activated from memory, Takeshita contends, but also which of those issues are *important*.

Roles of accessibility and perceived importance in media effects

Empirical research adds to the notion that accessibility is an incomplete explanation of media effects. Nelson, Clawson and Oxley (1997) empirically distinguished between the concepts of accessibility and perceived importance in an experiment comparing the effects of TV news stories that presented two different attributes of a highly publicized rally by the white supremacist group, the Ku Klux Klan (KKK). The contrasting sets of stories stressed free speech versus public order. In the experiment, accessibility was measured by timing participants' responses to stimulus-related words on a computer screen. Perceived importance was measured with a self-report questionnaire. Nelson, Clawson, and Oxley concluded:

Media framing of the KKK controversy significantly affected tolerance for the group, and this effect came about primarily because the two frames stressed the relevance or importance of different values (free speech versus public order), not because the frames altered the cognitive accessibility of these values. [p.574] ...Our results point to a more deliberative integration process, whereby participants consider the importance and relevance of each accessible idea. [p.578]

In a study drawing specifically upon Scheufele's (2000)

definition of salience as accessibility, Kim, Scheufele, and Shanahan (2002) designed an attribute agenda-setting study that focused on the accessibility of six attributes of an urban development issue in a small American city. Accessibility of the issue attributes was measured by the proportion of survey respondents who indicated *Don't Know* or *Neutral* opinions on questions that asked how likely it was for each attribute to happen as a consequence of the proposed urban development. The assumption was that the smaller the proportion of *Don't Know* and *Neutral* opinions, the more accessible an attribute was among respondents.

As hypothesized, the accessibility of these issue attributes increased sharply with greater exposure to the local newspaper. Further, accessibility among survey respondents who were heavily exposed to the local news (High Exposure) and accessibility among respondents who were not exposed to the local news (No Exposure) differed depending on how frequently the attribute was covered in the media. However, the resulting attribute agenda among the public based on accessibility did not correspond to the attribute agenda presented in that news coverage.

There was, however, no apparent correspondence of salience of attributes between the media and their audience. Among both High and Medium Exposure respondents, *Increased Sales-Tax Revenues*, *Increased Potential for Flooding*, and *Increased Traffic*, which were emphasized in the media, were not more salient (accessible) than other attributes. Particularly, the *Increased Potential for Flooding* was in fact the least salient attribute among High Exposure and Medium Exposure respondents. (Kim, Scheufele & Shanahan, 2002, pp.16-17)

The results of their study in which salience was operationalized as accessibility failed to replicate the attribute agenda-setting effects found over many decades (Benton & Frazier 1976; Weaver et al. 1981; Mikami, Takeshita, Nakada & Kawabata, 1994; McCombs, Lopez-Escobar & Llamas, 2000).

More directly examining accessibility, Miller (2007) reported two laboratory experiments testing the hypothesis that accessibility mediates the relationship between media exposure and agenda-setting effects. Using a different operational definition of accessibility in the two experiments, she found no support for the hypothesis. In

her studies, Miller randomly assigned study participants to one of three different conditions. One set of participants read an article explaining that the crime rate was high, a second set of participants read an article saying that crime was declining, and a third set did not read a crime article. If accessibility were responsible for agenda-setting effects, participants in the crime high *and* crime low conditions should display similar agenda-setting effects. Yet those reading the crime high article were *more* likely to name crime as important compared to participants reading the crime low article. In a second study, Miller shows that accessibility is unlikely to explain the findings. She gave respondents a word completion task, asking them to fill in the blanks of word fragments. If crime is highly accessible, *_UN* would be *gun* instead of *sun* or *fun*. Contradicting the idea that accessibility explains agenda-setting effects, Miller found that crime was more accessible for those reading the low crime article than those reading the high crime article – exactly the opposite of what an accessibility explanation would suggest.

Within the agenda-setting tradition, research on Need for Orientation demonstrates that the salience of issues among members of the public involves more than the accessibility of those issues as a consequence of the frequency with which they have appeared in the news. An individual's cognitive involvement with an issue, specifically each individual's perception of the issue's relevance and desire for additional information about the issue, moderates the strength of the media's agenda-setting effect. As Takeshita (2006, p.277) noted, "Not all easily accessible ideas, however, are automatically regarded as important." The Bill Clinton-Monica Lewinsky scandal is a case in point. Despite intensive press coverage that made the details of the scandal highly accessible, the public gave a collective shrug regarding its importance (Yioutas & Segvic, 2003).

Historical origins of salience in agenda setting

Takeshita observes that mass communication effects research in general and agenda-setting research in particular have their roots in the classic voting studies of the 1940s, not in cognitive psychology. The first footnote in the seminal 1968 Chapel Hill study (McCombs & Shaw, 1972) cites the 1948 Elmira study (Berelson, Lazarsfeld and McPhee, 1954). In addition, the 1972 Charlotte study

(Shaw & McCombs, 1977), the initial large-scale study of agenda setting among the general public, notes the similarity between agenda setting and the status conferral function of the mass media (Lazarsfeld & Merton, 1948) because both ideas concern the salience of objects. "This suggests," said Takeshita (2006, p.278), "that the founders must have meant salience to stand for perceived importance because the concept of status conferral asserts that the mass media bestow prestige or importance on certain individuals just by paying attention to them."

Although Takeshita makes the case that the dominant psychological path to agenda-setting effects is defined by salience as perceived importance, he concludes that "... there might be two types of agenda setting: a deliberate 'genuine' agenda setting involving active inference and an automatic 'pseudo' agenda setting explained by the accessibility bias." He set the stage for the further exploration of these paths to agenda setting.

Mapping the duality of agenda-setting

On the one hand, information is captured incidentally, which implies that it is processed subconsciously. On the other hand, audience members actively look for information.... Since not every issue has equal personal meaning for all audience members, it will be processed more peripherally by some and more centrally by others.

Bulkow et al.(2013, pp.44 & 47)

Advancing the theoretical map of these two paths, Kristin Bulkow, Juliane Urban, and Wolfgang Schweiger focused their research on the conditions under which agenda-setting effects occur. As they noted (p.45), "there is evidence indicating that the learning of issue salience is *neither* an automatic *nor* an intentional process for all audience members with regard to all issues."

Most people are routinely and casually exposed to a vast amount of information about the issues of the day. With an ever-expanding medley of communication channels, ranging from traditional newspapers and television news to a variety of personal media such as Facebook and Twitter, citizens become aware of many topics and issues. In some instances, this casual incidental exposure is sufficient to produce agenda-setting effects. However, some

of these issues and topics – those that resonate with an individual because of personal interests, needs, or goals – are the subject of further deliberation and cognitive processing. As McCombs (1999, p.154) observed, “Whether events are noticed, whether persons take any interest in a problem, depends on their own personal situation.”

Bulkow et al. identify this level of “personal involvement” as a key factor in identifying which path, an automatic or deliberative one, explains agenda-setting outcomes: “Since not every issue has equal personal meaning for all audience members, it will be processed more peripherally by some and more centrally by others.”

When issue involvement is low, they argue, people will process information via a peripheral route (Petty & Cacioppo, 1986). This process will be largely unconscious and rely upon peripheral cues, such as the emphasis placed on the issue in the media, to determine issue importance. Effects resulting from this more superficial route will be unstable (Petty, Cacioppo, & Goldman, 1981).

On the other hand, argue Bulkow et al., when issue involvement is high, people will process information via a central route that is conscious and more systematic. For example, Graber (1988) observed that only when someone regards an issue as relevant to their personal situation will they read a news article in detail and think about its content. Petty and Cacioppo (1986) note that the more central the information processing route, the less influential that peripheral cues will be and the stronger and more persistent will be the effects.

Based on these arguments, Bulkow et al. designed two experiments to test these hypotheses:

Hypothesis 1: The more a person is involved with an issue, the more likely this person will determine the importance of the issue via a central route in the agenda-setting process.

Hypothesis 2: If information processing is more peripheral, media cues will have more influence on the audience members’ importance perception.

Experiment one: presentation effects

The website created for the experiment contained current news articles from actual news media, plus articles about an issue, nuclear waste disposal, that was not in the news during the time of the experiment. Coverage of this issue was varied by the frequency of the coverage (a

daily news story vs. an occasional news story) and by the prominence of the presentation (lead story vs. short report). In other words, there were four experimental groups based on these variations in the media agenda. Participants were instructed to visit the experimental website every day for two weeks, but were completely free in their choice of articles. Based on the log-files of their behavior on these visits, three groups were identified: Non-readers, Readers, and Heavy Readers. A series of surveys across the two weeks collected additional information, including judgments of issue importance and involvement with the experimental issue prior to their first web visit. This initial level of involvement with the issue of nuclear waste disposal was used as a covariate in subsequent analyses of the agenda-setting effect observed in the experiment. This was an important control because initial involvement predicted the amount of reading on the website and the initial level of importance attached to the issue.

In interpreting the results from the experiment, Bulkow et al. assumed a peripheral information processing route for the Non-readers, who had not read a single article on the experimental issue. A moderate central processing route was assumed for Readers and a stronger central processing route was assumed for Heavy Readers.

For Non-readers, the development of issue importance depended on the prominence of the news articles, lead stories versus short reports. Non-readers’ judgments also were affected by the interaction of the two media cues (prominence and frequency) so that the impact of lead stories was particularly distinct when the lead stories appeared every day. In the case of short reports, issue importance decreased slightly no matter if the articles appeared every day or only occasionally.

Readers’ judgments of issue importance also were influenced by the prominence of the news articles, but not their frequency of appearance. There are two alternative explanations for this outcome, according to Bulkow et al. The differences in issue importance could be the result of the issue’s prominence in the news (a peripheral cue) or the result of the amount of information that Readers obtained about the issue from short reports versus lead stories.

In contrast to both Non-Readers and Readers, Heavy Readers’ judgments about the importance of the nuclear waste disposal issue were not influenced by media cues, neither the prominence of the news articles nor their

frequency of appearance. And based on the final survey among participants, which was conducted a week after their final visit to the experimental website, the agenda-setting effects among the Non-Readers and Readers largely disappeared. In other words, in the absence of continuing news coverage, the effects were not very persistent. In contrast, the agenda-setting effects among Heavy Readers remained stable.

In sum, high involvement with an issue is more likely to result in reading more articles about the issue and more persistent effects, which Bulkow et al. interpret as a central route to agenda setting. Lower involvement with an issue is more likely to result in reading fewer articles – or no articles at all – about the issue and less persistent effects, which Bulkow et al. interpret as a peripheral route to agenda-setting.

Experiment two: content effects

In a second experiment, Bulkow et al. shifted from *presentation* effects, the frequency and prominence of news stories on an issue, to *content* effects on judgments of issue importance. Specifically, they investigated the influence of journalists' evaluations in news stories of an issue's importance, drawing upon Jörg Matthes' (2006, 2008) expanded set of scales measuring three aspects of Need for Orientation. In addition to NFO regarding an issue, the first level of agenda setting, two additional measures in the Matthes' scales examine need for orientation to specific aspects of an issue. The additional measures in the Matthes' scales take into account two aspects of second-level agenda setting, the substantive attributes of the issue under consideration and the affective attributes of the issue, specifically the journalistic evaluations found in commentaries and editorials.

Two hypotheses specified the processing and effects of explicit versus implicit evaluations:

Hypothesis 1: If information processing is more peripheral, *explicit* journalistic evaluations will have more influence on the audience members' perception of importance.

Hypothesis 2: If information processing is more deliberative, *implicit* journalistic evaluations will have more influence on the audience members' perception of importance.

The website created for the second experiment con-

tained current news articles from actual news media, plus articles about a fictitious issue, new border crossings between Germany and Poland. Articles on the experimental issue contained either explicit or implicit evaluations about the importance of the issue. Explicit articles labeled the issue as "important" whereas implicit articles indicated its importance by presenting the possible consequences of the issue. In addition to the two experimental groups based on these variations in the media agenda, there was a control group whose articles on the experimental issue contained no journalistic evaluations. Participants viewed the experimental website on three consecutive days, but were completely free in their choice of articles. Based on the log-files of how much time participants spent reading the articles on the experimental issue during these visits, three groups were identified: Light Readers, Readers, and Heavy Readers. Surveys conducted prior to the experiment, at the end of the experiment, and one week later measured judgments of issue importance.

The trend in issue importance was similar across the time of the experiment when there were implicit or no evaluations in the news stories, but differed when the stories contained explicit evaluations. Bulkow et al. assumed that articles with implicit or no evaluations are processed in a more active, central, and deliberative manner. Both require recipients to make sense of the issue on their own. Articles with explicit evaluations can be processed peripherally, they assume. Combining the implicit or no evaluation groups and comparing them with the group receiving explicit evaluations revealed a significant treatment effect among Readers and a weak treatment effect among Light Readers. There were no treatment effects among Heavy Readers, who read the articles more attentively. Assuming central processing of the articles by this group, it is plausible that the presence of explicit, implicit, or no evaluations resulted in similar outcomes regarding the importance of the issue.

Bulkow et al.'s summary of the two paths to agenda setting, peripheral agenda setting and central agenda setting, is presented in Figure 1. The key theoretical elements distinguishing these paths are issue involvement, incidental exposure / information-seeking, peripheral / central processing, relevance of presentation and content cues, and the stability of the agenda-setting outcomes.

Figure 1. Process model for dual agenda-setting.

PERIPHERAL PATH		DELIBERATIVE PATH
Low	ISSUE INVOLVEMENT	High
Incidental	EXPOSURE TO ISSUE INFORMATION	Deliberate
Peripheral	INFORMATION PROCESSING	Central
High	RELEVANCE OF MEDIA CUES	Low
Low	RELEVANCE OF CONTENT	High
Unstable	AGENDA-SETTING EFFECTS	Stable

Either path, they note (p.59, italics added):

can lead to the same result, even if the initial issue importance differs with the degree of involvement. Our findings show that less involved persons, who initially did not assign much importance to an issue and did not pay much attention to the issue-related coverage, estimated the issue as important as the high-involved, prejudiced, and attentive persons, if the media emphasis placed on the issue was strong enough.

From this perspective agenda-setting, as it was originally devised, *homogenizes the public opinion* by bringing in line the judgments of involved and uninvolved persons for issues, which are regarded as important by the media at a certain point of time. Thus it *widens the view of audience members beyond their personal life for problems in the society as a whole*.

In their discussion of future research on these two paths to agenda setting, Bulkow et al. note that their experiments examined only one aspect of the relevance of an issue for an individual, personal issue importance.

Explicating the concept of relevance

The media can stimulate agenda-setting effects, but the magnitude of these effects is moderated by a variety of individual differences. Among these moderators, the accumulated evidence regarding need for orientation suggests that in particular a key moderator variable is relevance.

McCombs & Lee (2013, pp.48-49)

Although the concept of Need for Orientation is defined by two sub-concepts, relevance and uncertainty (Weaver, 1977), relevance is the initial defining concept. Uncertainty plays a secondary role of distinguishing between moderate and high NFO for persons who consider a topic relevant. Over the past decade or so, this key concept, the relevance of public issues and other agenda items, has been examined afresh from a variety of perspectives. Collectively, these recent studies form the theoretical gestalt diagramed in Figure 2.

The concept of relevance explicated here is theoretically distinct from the concept of importance in agenda-

Figure 2. Relevance: A theoretical gestalt defined by recent research.

SOURCES OF RELEVANCE (McCombs, 1999)	TYPES OF RELEVANCE (Bouza, 2004; Evatt & Ghanem, 2001)		
	Personal Relevance	Social Relevance	Emotional Relevance
	Self – interest	Civic duty	Emotional arousal
	Avocation	Peer influence	

setting theory. For example, *importance*, frequently measured by the question “What is the most important problem facing the country today?,” asks respondents to make a judgment about priorities. That is, to select a single item from a larger set as the most important of all. On the other hand, *relevance* defines the boundaries of that larger set of items. Not all issues are deemed relevant by an individual and not all relevant issues are equally important. The measurement of relevance typically is measured in terms of the larger environment in which those issues are embedded. In Weaver’s (1977) original work on Need for Orientation, his measures of relevance included indices of political interest, political discussion, and political participation.

Explicating the basic dimensions of relevance, Dixie Evatt and Salma Ghanem (2001) analyzed the public’s response to eight different issues on a set of 13 semantic differential scales. Their analysis of these data identified two substantive aspects of issue salience, personal relevance and social relevance as well as an affective aspect of issue salience, emotional relevance.

Spanish sociologist Fermin Bouza (2004, p.250) made a similar theoretical distinction to identify the *impact area* of political communication:

... individuals maintain an important area of personal interests that is separated, to a certain degree, from what that individual considers to be public interests or everyone’s interests... This clear distinction between an area of personal interests and another area of public interests makes the existence of an area that I will define as the impact area of political communications possible... because it is the area in which the individual feels a clear coincidence between the country and himself...

Approaching the concept of relevance from a different perspective, a pair of statewide polls in Texas asked why respondents named a particular issue in response to the widely used Gallup MIP question, “What is the most important problem facing this country today?” (McCombs, 1999). Using a set of questions developed to probe the resonance of an issue for each survey respondent, McCombs’ analysis of these polls from 1992 and 1996 identified a stable set of five sources of issue relevance: self-interest, avocation, civic duty, peer influence, and emotional arousal. As Figure 2 indicates, these five motivations dovetail with Evatt and Ghanem’s distinctions

between personal salience, social salience, and emotional salience. The Texas measures of self-interest and avocation reflect personal salience; the measures of civic duty and peer influence reflect social salience; and emotional arousal obviously reflects emotional salience, as shown in Figure 2.

Bulkow et al. noted that their experiments examined only one aspect of the relevance of an issue for an individual, personal issue salience. Future research on these dual paths of information processing and agenda-setting effects should investigate issues that are socially relevant and emotionally relevant to individuals to complement the research discussed above on personally relevant issues.

Agenda cueing and agenda reasoning

Substantial agenda setting effects were found using a pure agenda cue without any exposure to agenda reasons, suggesting that cueing is an important mechanism of agenda setting. Further, these effects were concentrated among those with high gatekeeping trust For audience members lower in gatekeeping trust, agenda setting effects were strengthened by the inclusion of agenda reasons supporting the cue, suggesting that when the mere presence of coverage is not seen as a valid agenda cue, audience members require substantive information about problem importance that can be used in making their own systematic importance judgments.

Pingree and Stoycheff (2013, p.864)

Continuing the theoretical mapping of the dual psychological paths that result in agenda-setting effects, Raymond Pingree and Elizabeth Stoycheff’s experiment advances the distinction made by Bulkow et al. (2013) between *presentation cues* in the media about the importance of an issue, such as prominence and frequency, and the *actual content* of the media, information about the importance of the issue.

Participants in the agenda-cueing experimental group saw modified versions of The Pew Research Center’s Project for Excellence in Journalism’s weekly report on the five most-covered issues in the news. These reports are based on large national samples of approximately 1,000 news stories from 52 mainstream news outlets. One

version of this agenda cue in the experiment listed the national debt as the top story of the week. Another version listed unemployment as the top issue of the week. In short, these were pure presentation cues about which issue appeared most frequently in the news. Participants in the agenda-reasoning group saw these same two versions of the Pew report, but with additional information supporting the importance of the top issue (either the national debt or unemployment).

In addition to this important distinction between presentation cues and content cues that characterize the peripheral and deliberative paths to agenda setting, respectively, Pingree and Stoycheff introduced a key contingent condition, gatekeeping trust, that affected which type of cue an individual was more likely to utilize in making a judgment about an issue's importance. In contrast to the conceptualization of media trust as a general attitude about the credibility or trustworthiness of the news media (Gaziano & McGrath, 1986; Tsfaty, 2003), gatekeeping trust more specifically is the perception that journalists have done the "heavy lifting" to determine the importance of issues and that their news judgments are useful cognitive shortcuts to use in determining the importance of an issue. Gatekeeping trust is measured with items such as "News outlets choose which stories to cover by carefully deciding which issues or problems are the most important in society." As illustrated by this item, there is an assumption that the presentation of issues in the news results from the prioritizing of issues by journalists based on the issues' importance when they create their news programs, newspapers, and web sites (Pingree, Quenette, Tchernev & Dickinson, 2013). For individuals with higher gatekeeping trust, presentation cues are a useful cognitive shortcut. However, for individuals with lower gatekeeping trust, presentation cues are inadequate and content cues are more useful.

Utilizing this concept of gatekeeping trust, Pingree and Stoycheff tested two key hypotheses:

Hypothesis 1: For a pure presentation cue, the agenda-setting effects will be stronger for those with higher gatekeeping trust.

Hypothesis 2: For those with lower gatekeeping trust, the agenda-setting effects will be stronger when information is included about the issue's importance than when this information is absent.

Both hypotheses were strongly supported by the results

of the experiment. "Conceptually, the most important contribution of this study," conclude Pingree and Stoycheff, "is to differentiate agenda cueing not only from agenda reasoning, but also from the commonly assumed heuristic of cognitive accessibility." The shortcut here that defines agenda cueing is the frequency of an issue on the media agenda per se, a heuristic grounded in gatekeeping trust, the belief that the news judgments reflected in the media agenda are largely based on judgments about how important a problem is. In contrast, agenda reasoning is based on the content of the news.

...our conceptualizations of the two processes specifies differences in the independent variable as well as differences in mechanisms. In particular, agenda cueing effects are effects of the mere fact of news coverage of an issue, regardless of its content, and agenda reasoning effects are effects of information contained in news stories that is useful for systematically reasoning about issue priorities. (p.864)

Pingree and Stoycheff describe their dual process model as a complement and contrast to the model advanced by Bulkow et al. They describe their model as memory-based that specifies processes that occur during some later moment of agenda response whereas they interpret the Bulkow et al. model as focused on cognitive mechanisms that occur in response to each news story examined. The integration and further exploration of these perspectives is an item for future research.

Both of these experiments focused on issue salience, the traditional focus of first-level agenda setting. The frontier beyond these experiments is investigations of these dual paths to agenda setting at the second level, attribute agenda setting, and the emerging third-level of agenda setting, which is grounded in the salience of networks of objects, attributes, or both (Guo, 2013; Guo, Vu, & McCombs, 2012) rather than the salience of discrete objects (the first level of agenda setting) or attributes (the second level of agenda setting). Although there may be unique psychological aspects to each level of agenda-setting, "the core theoretical idea [of agenda setting] is that elements prominent in the media pictures not only become prominent in the public's pictures, but also come to be regarded as especially important" (McCombs, 2014, p. 39). Thus we suggest that there may be similar dual-paths for other agenda-setting levels.

The audience experience

Agenda-setting is a robust and widespread effect of mass communication, an effect that results from *specific content* in the mass media....Mass communication effects can sometimes result, as many of the early scholars believed, from the sheer volume of exposure. First-level agenda-setting effects demonstrate that phenomenon to some extent. But, as attribute agenda-setting shows, closer attention to the specific content of media messages provides a more detailed understanding of the pictures in our heads ...

McCombs (2014, pp.79 & 97, italics added)

Media content, not amount of exposure, is paramount in agenda setting. The Chapel Hill study, like many others that followed, did not even measure exposure to the news media. Exposure to the widely disseminated messages of the news media was assumed. This focus on the media content, rather than exposure, is manifest in the common tandem use of content analysis and survey research as the methodologies of most agenda-setting studies. The emphasis on media content also underlies the common research strategy of comparing specific aspects of the media content – the frequency with which issues appear in the news, to cite the most common example – with citizens' responses to survey questions about aspects of this content – for example, the Gallup Poll's question about the most important issue facing the country.

The experiments conducted by Bulkow et al. in Germany and by Pingree and Stoycheff in the U.S. further identify and specify the aspects of media content that are key in the agenda-setting process. In both experiments, the frequency with which issues appear in the news is an important cue for those following the peripheral path. The second German experiment focused on the nature of the content in the news stories – explicit journalistic evaluations of the issue's importance versus implicit evaluations of the issue's importance grounded in discussion of the consequences of the issue. In this second experiment, explicit evaluations were significant for participants on the peripheral path, but not for participants taking the deliberative path.

The Pingree and Stoycheff experiment further explicates the distinction between presentation cues and content cues. Agenda cueing, making judgments about issue

importance on the basis of how frequently these issues appear in the news, is characteristic of the peripheral route to agenda setting. Agenda reasoning, making judgments about issue importance on the basis of media content, is characteristic of the deliberative route to agenda setting.

Frequency can be useful for those following a deliberative path, not as a cue per se, but rather as an indicator of the opportunity to attend to the actual content about the issue. The valuable theoretical contribution by Pingree and Stoycheff is the separation of these two interpretations of frequency, sheer appearance versus opportunity for deliberation. The success of agenda-setting studies over the years in finding strong effects stems from its traditional reliance on the frequency of objects and attributes in the news, a situation that stimulates the creation of effects along both paths, albeit for entirely different reasons.

Prominence seems less important for persons pursuing either path. It has a secondary role in the first German experiment. And revisiting a seldom-cited finding from the Chapel Hill study, there was no difference in the agenda-setting effects of major and minor news reports (0.967 vs 0.979). Major reports included the lead stories of newspapers and TV newscasts and lengthy stories in either medium and in news magazines. Minor reports were smaller in terms of space, time, or display. One interpretation, of course, is that those high Need for Orientation undecided voters in Chapel Hill were in a deliberative mode where any appearance of an item about an issue was an opportunity to learn something about the substance of the issue.

In any event, the frequent appearance of news about a particular object or topic is useful for both the peripheral and deliberative paths, but its utility sharply differs in terms of whether agenda cueing versus agenda reasoning occurs.

Individual choices of media content

The traditional mass media are in decline as audiences shift to more individualized media, and, partially as a result, the ability of leaders to hold large social systems together is also in decline because citizens are as likely to seek out messages from other individuals or groups who think like themselves as

they are to remain committed to messages that represent the entire group.

(Shaw & Hamm, 1997, p. 210)

Shaw and Hamm ask a fundamental question: does a heightened ability to choose media affect people's beliefs about which issues are important? Building on this question, we turn to another aspect of the psychology of agenda-setting effects and the audience experience: the media selections that people make. Quite obviously, two people reading the same newspaper, or browsing the same website, will pay attention to different things. If people are able to pick and choose their news sources, and specific articles within those sources, do the news media retain their agenda-setting effect? The answer to this question is deeply related to a psychological perspective on how agenda setting occurs in the first place. We find, as detailed in the paragraphs below, evidence that selectivity may change aggregate levels of agenda setting, but there is little evidence that the basic, psychological processes underlying agenda setting have shifted. By integrating recent selection and agenda-setting research, we return to the question of how agenda setting relates to selectivity processes raised by McCombs and Shaw in their original 1972 article.

In the following pages, we review research on media selections at two levels. First, we examine research on how issue preferences affect news selections and agenda setting. Second, we look at research bearing on the degree to which partisan interests affect news selections and agenda setting. Without question these two forms of selection are related, but when thinking about agenda setting, their implications are different and so we consider each separately. Throughout, we explore the relationships between selectivity and dual-processing approaches to the study of agenda setting.

Issue-based information selection and agenda setting

Personal interests have become increasingly relevant to agenda setting. The expanding number of media choices, driven largely by cable/satellite television and the Internet, allows people to find information about their unique interests more easily. Instead of waiting for the newspaper or television news to cover a preferred issue,

citizens can monitor websites or watch television programs targeting their specific interest. This development raises a fundamental question for agenda setting: Will the media continue to affect the issues people consider to be important, or will people's impressions of important issues affect their media diet? We return to this question after considering some relevant evidence.

People pursue their unique interests when making media choices, particularly online. Young Mie Kim (2009) conducted a creative study by unobtrusively observing people's online behavior. Study participants were given a CD filled with websites about the candidates for a 2004 United States Senate seat. Participants answered questions about how personally important they found each of seven different issues and then they browsed the CD at their leisure. For six of the seven issues (education being the exception), those finding the issue personally important selected more web pages about the issue and spent more time on issue-relevant pages than those finding the issue less important. Further, across all seven issues, those selecting more issue-related pages had higher levels of knowledge about the issue. In sum, those driven by an interest in particular issues used the Internet to seek additional information on these issues.

The implication for agenda setting is that those using the Internet for newsgathering may identify a more diverse set of issues as important because they pursue their unique interests. Two studies provide evidence for this idea. Using a cross-sectional survey, Norman Nie and his colleagues (2010) asked respondents to indicate the most important issue facing the U.S. from a list of seven issues and an *Other* category. The authors then categorized respondents into two groups, those who used the Internet for news and those who used television, but not the Internet, for news. Comparing these groups, the authors found that those using the Internet for news were more likely to select "other" and nominate an unlisted issue as most important. Further, Internet news users were more likely to select one of the three *least common* listed issues than those relying on television news. The causal direction, however, is ambiguous. It could be that the media had no effect, but instead those with diverse interests chose the Internet for news and those whose interests coincided with the more salient issues at the time preferred watching television news. Alternatively, online and televised news may have affected audiences differently, with

the web producing more diversity in the issues named as important.

A second experimental study allows us to sort through these options more clearly and suggests that there is something unique about the experience of browsing online news. Scott Althaus and David Tewksbury (2002) hypothesized that agenda-setting effects would vary depending on whether people read a hard copy newspaper or an online newspaper. They suspected that those browsing a newspaper website would be more likely to avoid stories about topics that were not of interest than those looking at a newspaper offline. Given that U.S. citizens tend to be relatively uninterested in international stories, the authors suspected that foreign affairs would be a casualty of the Internet newspaper compared to its offline counterpart. To test this idea, Althaus and Tewksbury randomly assigned study participants to one of three conditions: (1) an online newspaper group, where participants browsed the *New York Times* website for 30 minutes to an hour each day for a week, (2) an offline newspaper group, where participants spent the same amount of time with the hard copy version of the paper, or (3) a control group. The results confirmed what the authors suspected:

Readers of the paper version of the *New York Times* were exposed to a broader range of public affairs coverage than readers of the online version of the *Times*. More importantly, readers of the paper version of the *Times* came away with systematically different perceptions of the most important problems facing the country. Subjects in the paper group tended to be relatively more concerned about international issues than subjects in the online group (p. 196).

This pattern of results has led scholars in different directions. Some suggest that in the aggregate, the media's agenda-setting capacity may be waning (Bennett & Iyengar, 2008; Chaffee & Metzger, 2001). If online news allows people to pursue their own agendas, then the media will be less influential in setting the overall agenda. There's some truth to the idea. If people increasingly avoid mainstream news content and instead focus on news about specific issues, then the observed correspondences between the media agenda and the public agenda, at large, should decline in magnitude. Both the Althaus and Tewksbury (2002) and Nie et al. (2010) studies could be read as providing supportive evidence. Further, if people's issue

interests dictate their media exposure, it seems likely that the effect of the media on their interests would be less pronounced.

Others, however, are skeptical about declines in the media's agenda-setting power. First, despite documented patterns of specialization in news selection, the media still may focus on similar issues. Jae Kook Lee (2007), for example, compared the issue agenda in blogs to the issue agenda in mainstream media, finding substantial similarities. Second, selecting content based on issue preferences has always been a possibility. Even among hard copy newspaper readers, some will jump over public affairs sections in favor of sports. By themselves, however, neither of these explanations accounts for the Althaus and Tewksbury (2002) findings. In their study, similar content was available in the online and offline version of the newspaper yet study participants' issue agendas differed.

Two additional explanations are worth considering. First, people may encounter a mainstream news agenda even if they seek out information about specialized interests. In the Althaus and Tewksbury (2002) study, respondents in the newspaper reading conditions were asked to curtail their news use outside of the study. This may have removed naturally-occurring contact with a more mainstream agenda through a variety of other channels (Webster & Ksiazek, 2012). Given the research on agenda cueing, which suggests that it does not take an extensive allocation of cognitive effort to understand the news agenda, it is at least plausible that the mainstream media retain their agenda-setting power despite the availability of media content targeting specific issue interests.

Second, and perhaps more compelling, is that agenda setting still operates, but the way in which we study it must be adjusted to consider niche audiences, as opposed to the general public. The arguments thus far focus on the magnitude of agenda-setting effects at the aggregate level, determined by comparing the overall media and public agendas. Yet a focus on the psychology of agenda setting begs us to focus on individual-level effects. At the individual level, even if an individual pursues her own interests when making information selections, agenda setting *still can occur*. Here, individuals may find their original issue prioritization reinforced, not just in the sense of supported or buttressed, but in the full sense of strengthened and enhanced. A person passionate about

gun rights and looking mainly at gun rights media coverage may subsequently believe that the issue is even more important.

Research on issue-based information selection has focused mainly on first-level agenda-setting effects, asking whether individuals finding certain issues interesting will seek out information related to their issue interests at the expense of information about other possible issues. Although the pursuit of information tailored to specific issue preferences could dampen aggregate-level agenda-setting effects, this has not yet been established. And although aggregate-level effects could decline, individual-level agenda-setting effects could be enhanced if issue-specific niche media reinforce people's passion about those issues. Returning to the question that opened this section, we suggest that yes, the media will continue to affect the issues people consider important and yes, people's impressions of important issues do affect their media diet.

Partisan-based information selection and agenda setting

In addition to the pursuit of certain topics in the media, citizens also can choose news from a preferred perspective. Some radio programs, television stations, and websites have identifiable political biases and are targeted toward people holding similar beliefs. The selection of politically likeminded media, a behavior known as selective exposure, potentially affects both first- and second-level agenda setting. The original Chapel Hill study foreshadowed an intersection between the selective exposure and agenda-setting research traditions. In this study, McCombs and Shaw (1972) found that media coverage of the parties' issue agendas differed – coverage of Democrats Humphrey and Muskie, for instance, featured more foreign policy than coverage of Republicans Nixon and Agnew. In spite of differences in media coverage, undecided voters inclined to vote for Humphrey and undecided voters inclined to vote for Nixon had strikingly similar issue agendas. It did not matter which candidate people preferred. And it did not matter that the media emphasized different issues when covering different candidates. The media's agenda and citizens' issue priorities, in the aggregate, were strongly correlated.

Two features of the Chapel Hill study, however, warrant reflection based on today's media environment. First,

McCombs and Shaw recruited undecided voters for the study. Although this high Need for Orientation group was a smart choice in many regards, the Chapel Hill study did not tell us about agenda setting among Partisans. Later research documented that Independents were more likely to display agenda-setting effects than Partisans (Iyengar & Kinder, 1989), a finding that could be interpreted in light of research on Need for Orientation. Partisans should be more certain than Independents and thus score lower on Need for Orientation, holding relevance constant.

But in the contemporary media environment, where partisan media options are available, it is less clear that Partisans will display weaker agenda-setting effects. Partisans may use more news media, thus increasing aggregate agenda-setting effects relative to Independents (Camaaj, 2012). Further, Partisans find likeminded media trustworthy. Research suggests that trust can enhance agenda-setting effects (Miller & Krosnick, 2000; Tsfati, 2003). Drawing from Pingree and Stoycheff (2013), higher gatekeeping trust could increase the likelihood of agenda-setting effects via a peripheral route. We return to this idea shortly.

A second detail of the McCombs and Shaw study worth reflection is the changes in the media environment that have occurred since their original study. Citizens today are faced with many more media sources that cover politics in distinctly different ways than were available during the Chapel Hill study. The availability of more outlets increases the chances that people will choose likeminded content (Fischer, Schultz-Hardt, & Frey, 2008). Indeed, numerous studies demonstrate contemporary preferences for likeminded political information, whether looking at the selection of pro-attitudinal articles on a web site (Knobloch-Westerwick & Meng, 2009) or news from sources known to cover the news from a particular political bent (Iyengar & Hahn, 2009; Stroud, 2008). Just as the news has fragmented, agenda-setting effects may fragment as well. Instead of the media fostering a similar agenda across citizens, it may facilitate the creation of many different agendas that correspond to different media diets.

Several studies have analyzed agenda-setting effects taking selective exposure into account. In the book *Niche News*, Stroud (2011) analyzes whether those using conservative-leaning media name different issues as most im-

portant compared to those using liberal-leaning media. Using data from the 2004 National Annenberg Election Survey, Stroud found that there were differences in issues named as important depending on the media sources on which people relied. Those using conservative-leaning media were more likely to name the “war on terrorism” as the most important issue facing the nation and those using liberal-leaning media were more likely to name “Iraq.” Interestingly, and similar to the Chapel Hill study, these effects were infrequently moderated by partisanship.

A content analysis revealed modest differences among liberal and conservative media in their relative rates of covering Iraq and the war on terrorism. More profound differences in the coverage appeared when looking at how the media covered the *attributes* of each issue. Liberal media portrayed Iraq as a quagmire distinct from the war on terror more frequently than conservative media. These results suggest that the effects of partisan media may be more related to second-level, compared to first-level, agenda-setting effects.

More recent work is suggestive that partisan media may be particularly influential at the second level of agenda setting. Partisan outlets may cover similar issues (first-level), but offer substantially different takes on those issues (second-level). Although not from an agenda-setting perspective, Lauren Feldman and her colleagues (2012) identify differences in how CNN, MSNBC, and Fox News covered global warming. Audiences, in turn, held attitudes about global warming that were in keeping with the outlets that they watched. Muddiman, Stroud, and McCombs (forthcoming) also find evidence supporting second-level agenda setting in their analysis of cable news use and viewers’ attitudes about Iraq.

Expanding the paths: Need for Orientation & Attribute Agenda Setting

[In contrast to the widely used sequential measure of Need for Orientation in which the sub-concept of relevance is prioritized over the sub-concept of uncertainty, another] operational definition of NFO is based on “the simultaneous measurement of NFO” which considers the two sub-concepts in a 2 x 2 typology, defined by high and low relevance and high and low uncertainty (Weaver, 1980). This approach produces four levels of NFO, making operational (if not theoretical) distinctions between the two moderate levels of NFO. ‘moderate-active NFO’ [high relevance / low uncertainty] and ‘moderate-passive NFO’ [low relevance / high uncertainty]...

Camaj (2012)

In a paper presented at the Association for Education in Journalism and Mass Communication Conference in 2012, Lindita Camaj provides a thoughtful integration of the psychological processes we have covered thus far in our analyses. She suggests that Need for Orientation is related to partisan patterns of media consumption. Specifically, Camaj decomposes the two elements of the Need for Orientation, uncertainty and relevance, into the 2 x 2 matrix diagrammed in Figure 3.

She argues that these four cells should have different media use patterns. Those with High Need for Orientation should turn to *mainstream* media for news and information. Those with a Moderate-Active Need for Orientation, who have low uncertainty and high perceptions of relevance, Camaj contends, should be the most likely to look at *partisan* media. Camaj finds that, indeed, the Moderate-

Figure 3. Need for Orientation: The “simultaneous measurement” model (Camaj, 2012).

		NEED FOR ORIENTATION	
		Uncertainty	
Relevance		Low	High
		Low	Low NFO
High	Moderate – Active NFO	High NFO	

Active group is unique.

Operationally, those with Moderate-Active NFO in her model are those who are interested in politics (high relevance) and have strong partisan identities (low uncertainty). She also categorizes media in Kosovo, where she conducts her study, as independent or partisan on the basis of their ownership and coverage. Results reveal that the Moderate-Active group used independent media as frequently as the High NFO group, and that both groups use independent media more frequently than the Moderate-Passive and Low NFO groups. Yet the Moderate-Active group is more likely than any other to use partisan media, especially partisan television. Adding a cross-cultural perspective, the results square with findings from Stroud (2011), who finds that strong Partisans interested in politics are more likely than others to use partisan media.

Camaj (2012) goes a step further, suggesting that those with High NFO should, based on their diet of independent media, display second-level agenda-setting effects on the basis of gaining knowledge from the media about which issues are most important. Those with Moderate-Active NFO, she suggests, should display second-level agenda-setting effects based on reinforcement. Although her data do not allow her to test these different processes, she is able to compare attribute agenda setting among those with various levels of NFO. Her data demonstrate that those with Moderate-Active NFO display the greatest evidence of attribute agenda setting, where the issue attributes they find important align with the salience of the attributes in media coverage, and those with Low NFO display the least attribute agenda setting.

The results raise new questions. Why might the Moderate-Active NFO group display *higher* attribute agenda-setting effects? It could be that they simply spend more time with the media. Providing some evidence, Camaj's results show that this group has the highest levels of exposure to partisan media and exposure to independent media at the same level as the High NFO group. Higher levels of exposure to the media may translate into stronger agenda-setting effects, particularly via the deliberative route to agenda setting that we've outlined previously. Another possibility is that regardless of how much time they spend with media, those in the Moderate-Active NFO group are more motivated to process the media. It may be that deliberative processing is a matter of degree,

rather than kind. Those with Moderate-Active NFO may be more motivated than those with High NFO to process information via a central route.

A precedent for thinking about effects in this way comes from the work on motivated reasoning (Kunda, 1990). Motivated reasoning proposes two different goals that can motivate people: accuracy goals, whereby people are motivated to reach a correct conclusion, and directional goals, whereby people are motivated to reach a conclusion that coheres with their previously-held beliefs. It may be that those high in NFO are motivated by accuracy goals and those with Moderate-Active NFO are motivated by directional goals. Conceptually, these distinctions are aligned. Interested partisans (the Moderate-Active group with low uncertainty and high relevance) are likely motivated, and motivated by some sense of their preferred outcome. Their partisan identity may motivate them to see attributes aligned with their partisanship as more salient than other attributes. Interested independents (the High NFO group with high uncertainty and relevance) are motivated too, but motivated more by accuracy than directional goals. Those with directional goals engage in more biased information seeking than those with accuracy goals (Kim, 2007; Kunda, 1990) – exactly what Camaj observes when the High NFO group used less partisan media than the Moderate-Active NFO group. The most interesting part, however, is how a motivated reasoning explanation can account for Camaj's attribute agenda-setting findings. To do so, however, we first need to describe another research project done by Young Mie Kim (2007).

Kim (2007) conducted an experiment about the issue of abortion where she manipulated whether people were motivated by directional goals or by accuracy goals. She also categorized people as either issue public members, those rating the issue of abortion as personally important, or as members of the general public, those indicating that abortion was less personally important. Let us interject to encourage the reader to consider the possible parallels between Kim's categories and our desire to explain Camaj's results (see Figure 4). Those who are members of an issue public and have directional goals are similar to the Moderate-Active NFO group: both are high in relevance (political interest) and low in uncertainty (strong political views). Those who are members of an issue public and have accuracy goals are similar to the High NFO group:

Figure 4. A conceptual merger of Kim and Camaj.

MODERATE-ACTIVE NFO	HIGH NFO
Low uncertainty = directional goals (strong partisanship)	High uncertainty = accuracy goals (weak partisanship)
High relevance = issue public member (high political interest)	High relevance = issue public member (high political interest)

both are high in relevance and high in uncertainty. What we are suggesting is that Moderate-Actives may be motivated more by directional goals and those high in NFO may be motivated more by accuracy goals.

Returning to Kim's study, participants browsed a portal website containing information about two political candidates' positions on abortion and other issues. Afterward, study participants were asked to indicate how they felt about the candidates on feeling thermometers. Kim analysed whether goals (directional, accuracy) and issue importance (issue public, general public) interacted to predict extremity in candidate evaluations. Her results, which are presented in the top portion of Figure 5, are revealing.

Although candidate evaluations are notably different from attribute agenda setting, the consistency of the findings is noteworthy. Compare Kim's results in Figure 5 to those from Camaj in the bottom portion of Figure 5.

As shown in Figure 5, both Kim (2007) and Camaj (2012) find greater effects for those high in relevance, such as issue public members, and low in uncertainty, such as those motivated by directional goals. This Moderate-Active group displays the highest attribute agenda-setting effects (Camaj, 2012) and the greatest extremity in candidate attitudes (Kim, 2007).

The greater effects among the Moderate-Actives may be particularly likely when considering second-level agenda setting. Partisan media outlets – consumed more by the Moderate-Actives than by the High NFO group – emphasize aspects of issues that privilege a preferred party's perspective (Jamieson & Cappella, 2008; Levendusky, 2013). Further, likeminded media are more trusted, and trust predicts agenda-setting effects (Miller & Krosnick, 2000; Pingree & Stoycheff, 2013; Tsfati, 2003). If the trusted, partisan media sources used by the Moder-

ate Active group emphasize issue attributes that satisfy a directional goal, the Moderate Active group would be expected to display heightened attribute agenda-setting effects.

The same pattern may not appear when looking at first-level agenda setting. Research suggests that the media often emphasize similar issues, even if they feature different attributes (e.g., Lee, 2007; McCombs & Shaw, 1972). When the media emphasize similar issues, we anticipate that the High NFO and Moderate-Active NFO groups would display similar agenda-setting effects that would be stronger than the Moderate-Passive NFO and Low NFO groups.

When different issues are emphasized across the media, however, the Moderate-Active NFO group may exhibit greater first-level agenda-setting effects than the High NFO group. This arguably would be particularly likely when partisan outlets critique other media for insufficiently covering an issue, or make a case for why certain issues should be seen as more important than others for partisan reasons (Levendusky, 2013; Stroud, 2011). A similarly intensified agenda-setting effect may occur among those motivated to seek messages relevant to an issue about which they are particularly passionate. Here, those motivated by an interest in a particular issue may see a lack of coverage by the traditional media as problematic and trust sources covering a pet issue more. When consuming trusted media covering a favoured issue, the individual, first-level agenda-setting effect may be enhanced. These musings are at best highly speculative, but they suggest one way to make sense of the Camaj findings from a psychological approach.

This merger of motivated reasoning and Camaj's conceptual distinction between Moderate-Active NFO and High NFO is an important addition to the paths leading

Figure 5. A comparison of Kim and Camaj’s research findings.

A. Extremity of evaluations by goals and public issue membership (Kim, 2007)

	DIRECTIONAL GOALS	ACCURACY GOALS
GENERAL PUBLIC	Low	Medium
ISSUE PUBLIC	High	Medium

B. Attribute agenda-setting effects by uncertainty and relevance (Camaj, 2012)

	LOW UNCERTAINTY	HIGH UNCERTAINTY
LOW RELEVANCE	Low	Medium
HIGH RELEVANCE	High	Medium

to agenda-setting effects. Lee (2013) notes that while Need for Orientation predicts the amount of information an individual will seek in the media, the distinction between accuracy and directional goals identifies what kind of content an individual will seek. The two concepts in tandem offer a more complete picture of information-seeking behaviour.

This tandem explanation for a stronger agenda-setting effect among the Moderate-Active NFO group in Camaj’s study is further buttressed by reference to the Elaboration Likelihood Model (ELM), which holds that strong effects primarily occur as a cognitive process achieved through a centrally routed message processing when two conditions are met: people are motivated (the information presented to them is relevant) and they are able to process the new information presented to them (have some previous knowledge that enable them to understand) (Camaj, 2013). People with Moderate-Active NFO in Camaj’s study are also the most politically active people (highly interested in politics and with strong political affiliation). Thus, we can assume that this category of people also has the most ability to process political messages in the media, given their predisposition towards and knowledge of politics. Previous studies and an earlier section of this paper emphasize the relevance of knowledge activation for agenda-setting effects. Bulkow et al.’s study also suggests that high involvement with an issue is more likely to result in reading more articles about the issue and more persistent effects. People with high involvement in an issue are also more knowledgeable about that issue. Thus,

both motivated reasoning and facilitated reasoning might impact the strength of agenda-setting effects and provide explanations on how these effects occur, especially at the second level of agenda setting.

The theoretical merger of all these concepts culminates in a process known as agenda-melding.

Agenda Melding

We mix agenda objects and attributes from a variety of media to construct a picture of the world, a process so integrative we use the term *agendamelding*. *Agendamelding* is the way we balance agendas of civic community and our valued reference communities with our own views and experiences to create a satisfying picture of the world.

(Shaw & Weaver, 2014, p.145)

In the vast media landscape there are many agendas. Camaj (2012) focused on two of the most important sets, independent media and partisan media. Donald Shaw’s concept of agenda melding focuses on how people mix the elements from a variety of agendas to construct their pictures of the world (Shaw, Hamm & Terry, 2006). Agenda melding does not replace media agenda setting, but rather seeks to explain why the strength of media agenda setting varies between different media, groups and individuals.

Agenda setting varies among individuals based on the media content that they use. Muddiman, Stroud, and McCombs (forthcoming) found that using various cable news outlets affected second-level agenda-setting perceptions about U.S. involvement in Iraq in the lead-up to the 2008 election. According to the survey results, “people who watched Fox News had a .63 expected probability of saying the U.S. should withdraw troops, all else held constant. People who watched CNN had a .80 expected probability. Watching Fox News and CNN led to an expected probability of .72.” This finding suggests that people watching multiple cable news outlets meld the agendas, arriving at a different conclusion than those watching only one outlet.

Agenda melding also places an emphasis on individual differences and values. Explicitly linking individual values and agenda-setting effects, Valenzuela (2010) focused on Inglehart’s (1977, 1990) concept of materialist and post-materialist values. Using a content analysis of major daily newspapers across Canada and survey data from a nationally representative sample, Valenzuela found stronger agenda-setting effects at both the aggregate and individual levels among persons with materialist values than among those with post-materialist values. At the aggregate level, for example, the correlation between the media agenda and the public agenda was .55 for materialists and .35 for post-materialists. These findings reflect the media’s greater emphasis on materialist issues such as the economy and crime relative to post-materialist issues such as the environment and political reform.

Within the media, the key distinction made by agenda melding is between mainstream *vertical media*, which reach down through many strata of society to build a mass audience, and horizontal media, which seek out audiences with special interests or specific points of view. Shaw and Weaver (2014, p.145) note:

Vertical media provide the main news agenda for public life and horizontal media provide the supporting information and perspectives that supplement the vertical agenda. In politics, we also have preferences and voting histories. These are unseen ingredients that help us mix, or meld, agendas from vertical and horizontal media into personally satisfying agenda communities.

In Camaj’s Kosovo study, Moderate-Active NFO citizens made greater use of horizontal partisan media than

the other three NFO groups. And, as noted previously, Moderate-Active NFO citizens showed stronger attribute agenda-setting effects. Does this suggest that members of this group meld their personal attribute agenda in a different manner as a result of exposure to partisan media? In other words, for this group, are partisan media particularly successful agenda-setters? Our analysis of directional and accuracy goals is suggestive. The agenda-melding perspective represents an important conclusion to the psychological explanations we’ve offered. The media people use, the goals and orientations that motivate their media use, and the depth of information processing that occurs when encountering media information all combine to create individual agenda-setting effects.

Conclusion

Agenda setting has come a long way from McCombs and Shaw’s (1972) demonstration of a correlation between the issues emphasized in the media and the issues identified as important by the public. The basic hypothesis has garnered substantial support across forty years of research and numerous extensions have been tested. In this article, we analysed the psychological underpinnings of agenda setting. After the early discovery of the Need for Orientation, research on why agenda setting occurs stalled. As the media environment has evolved, and as it increasingly requires people to actively seek information, scholarship has returned to the psychological factors that moderate and explain media selections and effects. The recent surge in scholarship connecting agenda setting with psychological perspectives on information selection and processing guided our review. In Figure 6 below, we summarize the emerging psychological model. This figure is an important contribution, as it summarizes a theoretical framework for studying the psychology of agenda setting. Although some components are well established, such as the link between agenda setting and Need for Orientation, others are mere hypotheses requiring additional testing, such as the relationship between motivated reasoning and agenda setting.

The way in which people process mediated information conditions the agenda-setting effects that result. Research suggests a dual path model. Some casually engage with the media while others are more deliberative. The extent

of information processing is related to Need for Orientation; those more passively using media have lower NFO than those actively using media. Further, those with Moderate-Active NFO use partisan media more than those with High NFO. Based on this pattern, those with Moderate-Active NFO may be motivated by directional goals and those with High NFO by accuracy goals. The strength of agenda-setting effects thus depends on information processing, goals, and media selection.

This can be thought of as a causal model where orientations and motivations result in a certain mediated experience, which in turn causes agenda-setting effects. Those with Low and Moderate-Passive NFO process mediated information passively and use the media relatively infrequently, resulting in limited agenda-setting effects. Those with Moderate-Active NFO, driven by directional goals, engage in effortful processing of media content and seek more partisan outlets. This combination can result in a particularly potent agenda-setting effect

when partisan media emphasize issues and attributes aligned with one's political identity. Finally, those with High NFO, driven by accuracy goals, will seek and engage in effortful processing of mainstream media messages, which then will produce high levels of first-level agenda-setting and moderate second-level agenda-setting effects.

Overall, this article had three objectives. First, we summarized contemporary research on the psychology of agenda-setting effects with an emphasis on the dual information processing paths and media selection. Second, we offered several empirically- and theoretically-derived directions for future research. Connections between agenda setting and motivated reasoning, for example, need further attention (see Lee, 2013). Third, we have provided the most comprehensive model to-date of the psychology of agenda setting. We hope that this piece serves to set the agenda for continued attention to the psychology behind agenda-setting effects.

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Figure 6. A summary of “dual path” agenda-setting research.

MEDIA EXPERIENCE			
Casual Exposure → Awareness		Deliberate Exposure → Awareness + Comprehension	
INFORMATION PROCESSING			
Accessibility bias		Active inference (Takeshita)	
Subconscious processing		Active information seeking (Bulkow, Urban and Schweiger)	
Agenda cueing		Agenda reasoning (Pingree and Stoycheff)	
Presentation cues important		Content cues important	
Low NFO	Moderate-Passive NFO	Moderate-Active NFO	High NFO (Camaj)
		Directional Goal	Accuracy Goal
MEDIA USE			
Mainstream low	Mainstream low	Mainstream high	Mainstream high
Niche low	Niche low	Niche high	Niche high
		Niche > = Mainstream	Mainstream > Niche
FIRST-LEVEL AGENDA-SETTING EFFECTS			
Low	Low	High	High
SECOND-LEVEL AGENDA-SETTING EFFECTS			
Low	Moderate	High	Moderate

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