How Journalists Can Foster Humble Inquiry in their Work and their Readers

Musa al-Gharbi[1]

Abstract: On its face, journalism is a project that requires humble inquiry: reporters have to speak on matters that are fluid, complex, dynamic, and ambiguous – they have to turn in the "first draft of history" even as the "facts" continue to evolve. They must also convey "the facts" in a manner that is concise, compelling, and accessible to non-specialized audiences, often working under tight deadlines, and engaging with stakeholders who have their agendas, which may diverge from those of the readers, the publication, or the journalists themselves. Put simply, this is very difficult work. And "getting it right" often requires a willingness to check one's assumptions, recognize and admit errors, and subordinate one's vision and preferences to those of editors and audiences. This chapter will describe some failures and opportunities of news media to promote humble inquiry. It will discuss how journalists may foster HI in their own work and how journalists can encourage HI in their readers.

Forthcoming in:

Humble Inquiry: New Perspectives on Intellectual Humility **(eds. Nathan Ballantyne, Jared Celniker & Norbert Schwarz). Cambridge, UK: Cambridge University Press, 2026.**

In his vocation lectures, Max Weber noted that journalism is, in many respects, more demanding than social science. In his estimation, significantly higher levels of intellectual and character virtues are required to do the work well.[2] Reporters are routinely forced to speak on matters that are fluid, complex, dynamic, and ambiguous. They must turn in the "first draft of history" even as "the facts" continue to evolve -- often working under tight deadlines. At the same time, they have to convey "the facts" in a manner that is concise, compelling, and accessible to non-specialized audiences. Ideally, their stories would seem relevant and fair to readers irrespective of their political, moral, and religious commitments, their sociocultural position, and other factors.

In any event, cultivating "the facts" requires journalist to engage with a broad array of stakeholders. A story on an officer-involved fatality, for instance, may require seeking perspective from the police, from

the family and friends of the deceased, from witnesses of the incident, from scholars who specialize in criminology, criminal justice policy, and adjacent issues, from advocates who are trying to fight crime or reduce police violence and politicians attempting to assuage or respond constituent concerns about what transpired. Each of these stakeholders will have their own agendas – agendas that will often diverge from those of readers, the publication, or the journalists themselves. Journalists have to maintain relationships with these stakeholders without uncritically parroting their claims. They must adjudicate between conflicting perspectives to deliver a coherent and reasonably complete picture of contemporary events within a tight wordcount. Journalism, in short, is difficult work.

"Getting it right" often requires a willingness to check one's assumptions, recognize and admit errors, and subordinate one's own vision and preferences to the needs and priorities of editors and audiences. Good journalism requires humble inquiry. As Marty Baron, former executive editor of the Washington Post, put it,[3] "There are people who think they know the answers before they embark on the reporting, and I think that's a problem for our profession. We need to go into stories with an open mind and a recognition that we don't know everything. In fact, we don't know all that much, and we may not even know what we think we know."

Humble Inquiry And Intellectual Humility

Humility is conceptualized and measured in many different ways across scholarly domains.[4] For the purposes of this essay, one key distinction is important: *Intellectual Humility* (IH) is generally discussed as a trait or disposition of individuals. *Humble Inquiry* (HI), on the other hand, is a set of practices and behaviors tied to producing, analyzing or disseminating truth claims.

Humble Inquiry does not require practitioners to, themselves, be intellectually humble. Institutional rules, norms and standards can encourage or impose the *practice* of humble inquiry irrespective of the personal traits or dispositions of knowledge producers.[5] HI includes:

1. Acknowledgment of one's own fallibility and the limits of one's own knowledge, abilities and experiences – including and especially when trying to persuade others of truth claims or defend one's own position.
2. Attempting to test the accuracy of one's beliefs or claims by seeking out and engaging with alternative perspectives and countervailing facts
3. Being receptive to learning from, and being corrected by, others – to include those whose methods, worldviews, dispositions and experiences diverge sharply from our own.

4. A willingness to admit error and adjust one's beliefs and behaviors upon recognizing one has likely erred.

These behaviors are relatively rare – including among those who *self*-identify as "intellectually humble."[6] Humans' cognitive defaults orient us towards perceiving, interpreting and describing the world in ways that flatter our self-image, affirm our preexisting worldview, and advance our interests. Cognitive sophistication and specialized knowledge tend to exacerbate these tendencies rather than ameliorating them.[7] Humble inquiry, then, despite its modest name, is a significant achievement. And it is, most commonly, a *collective* achievement.

Rather than stemming from heroic individual virtue, humble inquiry is most typically achieved with, through, and for others. It's a product of professional norms that discipline our impulses, institutional structures that favor transparency and accountability, or social dynamics that foster openness, trust, collaboration, experimentation and iterative improvement. Yet, because scholarship on humility and knowledge has so far been concentrated in the fields of philosophy and psychology (rather than, say, sociology), most research to date has been focused on traits and dispositions rather than practices and institutions.

Fortunately, although IH and HI are importantly distinct, there is broad overlap between the types of *practices* that define humble inquiry and the *behavioral outcomes* associated with intellectual humility. This convergence allows us to reasonably speculate on the potential effects of humble inquiry for the profession of journalism. It will also allow us to draw empirically-grounded inferences on how to promote humble inquiry in (and through) journalism.

Humble Inquiry as a Topic of Journalistic Concern

Although intellectual humility has been celebrated as a virtue for centuries, it only became a subject of serious scientific inquiry in the 2010s.[8] Despite rapidly-growing interest in the relationship between humility and knowledge production, there has been little scholarly work exploring how journalists and news organizations can better exemplify and promote humility in inquiry. Reviewing all publications in the top disciplinary journals since 2010,[9] not one single article has been published to date on the topic. This is striking because journalism, more than most other fields, could benefit strongly from increased humility in inquiry.

For instance, the field of journalism has long been defined by commitments to objectivity and inclusivity. However, contemporary U.S. journalists are forced to operate in cultural contexts defined by increased polarization and mistrust. Humility could help journalists more successfully navigate this challenging landscape: as a measured trait or

disposition, intellectual humility is one of the few psychological features that can mitigate MySide Bias.[10] Those higher in intellectual humility are more likely to seek out and constructively engage with opposing views.[11] They have less negative responses to disagreement and dissent.[12] They are less likely to be affectively polarized (i.e. to hold negative views about people whose views and commitments differ from their own),[13] and they exhibit greater willingness to form cross-cutting ties.[14]

Intellectual humility and humble inquiry are not incompatible with moral or epistemic conviction. The humble inquirer attempts to gain mastery over relevant skills and literatures before arriving at a view. However, this neither entails nor implies remaining in a permanent state of ambivalence or indecision.[15] Although greater measured intellectual humility *is* broadly associated with a moderation of political positions, the intellectually-humble often have strong moral and religious views.[16] That said, they often display a quietism about their deeply-held convictions[17] – perhaps because they are less troubled by ambiguity, uncertainty and disagreement than most other people (and therefore do not feel the same urgency to dispel others' doubts or debunk alternative views).[18] These are all tendencies that resonate strongly with longstanding commitments in the field of journalism to accuracy, rigor and serving a broad swath of society.

Humble inquiry is not just useful for journalists; it can also be immensely valuable for audiences too. "The facts," as conveyed by journalists, will often conflict with readers' antecedent beliefs and defy their personal life experiences. Being able to recognize and make use of these facts requires audiences to be alive to their own limitations, fallibility and ignorance. However, news consumers must also be conscious that the "first draft of history" is intrinsically partial, i.e. there is a lot of pertinent information readers are *not* presented with in any particular piece of reporting. "The facts" are often provisional as well: subject to revision as the story develops and new information comes to light. Audiences must also bear in mind that journalists are people too, subject to most of the same limitations and shortcomings as everyone else.[19] A recognition of this shared humanity can allow audiences to more easily extend charity and grace to journalists in the event of mistakes while avoiding undue credulity. Engaging in humble inquiry would help readers strike a healthy balance between being receptive to challenging and new information while remaining vigilant to potential omissions, errors and oversights.

To engage in humble inquiry is to be open-minded… but not so open-minded that one's brain falls out.[20] Those who are intellectually humble are simultaneously 1) more open than most to information that challenges their priors and, 2) less likely to embrace political misinformation, fake news or conspiratorial ideation.[21] To the extent that journalists and media outlets can successfully model, encourage readers to engage in, humble inquiry -- this could

simultaneously help increase the impact of good journalistic research and reporting (because readers would be more likely to update their beliefs and adjust their behaviors in accordance with inconvenient facts) while undermining the appeal and influence of less credible or reliable influencers, pundits, and demagogues.

At present, however, there are many factors that interfere with journalists demonstrating humble inquiry or producing work that effectively promotes these tendencies in readers. Here, I will drill into two specific challenges: homophily and audience capture.

The Problem of Homophily

Each of us has partial and situated knowledge. We're all fallible and often biased in our perceptions, emotional evaluations, causal attributions, and reasoning. There are limitations in our abilities to perceive, intellectually understand, or practically accomplish many things. Mere awareness of these shortcomings doesn't, itself, eliminate them – often it can instead lead to greater overconfidence in our own objectivity. The good news is, we aren't forced to contend with these problems by futility trying to pull ourselves up by our own bootstraps. Instead, under the right circumstances, it's possible to *collectively* transcend our own *individual* cognitive limitations and vices. In contexts where inquirers approach questions with different sets of knowledge and experiences, different material and ideal interests, using different methods, and drawing on different theoretical frameworks and value systems, we can produce something *together* and *over time* that approaches objective, reliable and comprehensive knowledge. Journalistic and scientific fields alike tend to be structured around this model of the human condition.

However, the practices and structures that define these fields only work as intended when there *is* genuine diversity across various dimensions. In the absence of substantive diversity within a field, the same systems, norms and institutions that are supposed to help us overcome our limitations and biases can instead exacerbate them. They can stifle dissent and innovation. They can lead to collective blind spots and misinformation cascades. It can become easier to discriminate against, or create a hostile atmosphere towards, those who diverge from the dominant view. In contexts like *these*, important details and possibilities can be right in front of people's faces, but it can be almost impossible for anyone to "see" them – leading affected stakeholders to be overconfident and self-righteous despite being demonstrably and unambiguously wrong.[22]

Contemporary U.S. journalists are today drawn from a narrow and idiosyncratic slice of society. Not only are journalists highly unrepresentative of the public along the lines of ethnicity, religion, class, geography, ideological lean and political affiliation but, in many respects, they have grown markedly *less* representative in recent decades.

Simultaneously, the audience for news outputs of all kinds has become increasingly narrow and idiosyncratic too. There is a growing parity between the people consuming the news and the people producing it. Both journalists and their audience are increasingly likely to be highly-educated, relatively affluent, urban and suburban, white or Asian, ideologically left-leaning and affiliated with the Democratic Party.[23] These parallel trends in the constitution of both news producers and audiences has led to significant changes in which stories are covered and how various issues are talked about.[24]

As a function of the growing social distance between the primary producers and consumers of news v. everyone else, contemporary journalism often produces a distorted picture of the social world – particularly as it relates to the people and communities that are underrepresented in the media. Rather than helping audiences see others more clearly studies have found that the more people consume news media, the *less* accurate perceptions they tend to have about their fellow Americans (and the more negative those perceptions tend to be).[25]

Yet, despite reporting on underrepresented stakeholders and less advantaged communities prejudicially (if at all), a plurality of reporters believe they do a good job representing the marginalized and disadvantaged in society. By a 2:1 ratio, the U.S. public disagrees.[26] Americans who are less urban, less affluent, less-educated and non-white are especially likely to feel that journalists neglect and misrepresent people like themselves and communities and beliefs they hold dear.

This is not just an epistemic problem for journalists; it's also a financial problem. Insofar as stakeholders feel like the media is not "for" people like them, they tend to tune out – reducing the circulation of, engagement with, and impact of news media outputs.[27] These dynamics also pose a challenge for the legitimacy of reporters and media organizations: research in the U.S. and around the world routinely confirms that when people feel like they don't have a voice or a stake in institutions – and *especially* when they feel like the people who run those institutions are actively hostile towards people like them – the natural impulse is to try to dismantle, defund, delegitimize, marginalize and otherwise resist these institutions and mistrust their outputs. It doesn't matter what the institution is: when people come to view an institution this way, they respond with suspicion paired with avoidance or confrontation.[28] The result is a self-reinforcing cycle of epistemic arrogance for all parties involved.

Those who belong to the band of society that produces and consumes the news tend to have their prejudices and antecedent beliefs consistently validated by mainstream institutions. When they're wrong, they often persist in error, and feel highly-confident about their beliefs, because they're rarely subjected to serious challenge or complication. Perspectives from the stakeholders who could most readily see,

and most strongly challenge, institutionally dominant views are largely absent from taking part in "the Discourse."

Critically, those who avoid the news or define themselves against the mainstream consensus often model hubris as well. In virtue of mistrusting establishment voices, they become more likely to stick with their gut in defiance of inconvenient facts, or else embrace fringe voices who confirm *their* antecedent beliefs and affirm *their* preferred narratives.[29] Indeed, the populations that are less likely to be represented in the news, consume the news at high rates, or trust the news (ethnic and religious minorities, less educated, urban and affluent constituents, et al.) *also* tend to be worse at discerning real news stories from fake ones whilst simultaneously being more overconfident in their abilities to discern.[30]

Put simply: the growing insularity of the news media undermines the epistemic health of journalists, news junkies, and news avoiders alike – pushing each towards intellectual hubris in different ways and for different reasons.

The Problem of Audience Capture

Vox co-founder Matthew Yglesias has stressed that when people complain about "the media," they're ultimately complaining about the audience.[31] For-profit media organizations tend to slavishly conform with the "revealed preferences" of their audiences to maximize reach and revenues. Nonprofit journalism often adopts similar tendencies, because they're competing with for-profit journalism for finite reader attention even as changes to the funding landscape are putting increased pressure on nonprofit news outlets to pursue "earned revenue."[32]

Most contemporary journalists work for companies whose solvency is contingent upon subscriptions or advertisements.[33] Advertisers tend to condition whether and how much they are willing to pay a news outlet based on the size, composition and engagement of its audience (with "engagement" measured by factors like clicks, time on website, and social media shares). Both revenue models -- advertising *and* subscriptions -- are typically geared oriented towards giving readers more of whatever they want in order to enhance the bottom line.

It isn't just executives who feel compelled to contend with these financial pressures and incentives, but also editors of sections and even individual reporters. This is because media outputs have become increasingly "unbundled." Rather than focusing on selling a package of content – for instance, a physical newspaper, published daily, that contains primary reporting about local issues, national issues, and international affairs alongside op-eds, classifieds, weather, recipes, comics, and so on – contemporary customers can easily zoom in on particular articles online, or go to particular sections, without passing through articles on other topics.[34] Many news outlets offer subscriptions to particular subsets of articles, allowing, for instance,

access to recipes or games while leaving most other articles behind paywalls.

A key consequence of "unbundling" is that rather than thinking about outputs holistically, sections and stories are often analyzed independently of one-another, with resources and staffing getting redirected away from less profitable reporters and divisions, to be invested in those with better numbers. In the pursuit of these goals, media companies collect significant quantities of reader data and platform metrics which are used to inform coverage decisions.[35]

One pattern that has become clear as a result of this disaggregation is that opinion, sports, lifestyle and entertainment drive significantly more readership than international or investigative reporting. Not only do these latter sections generate more traffic, their stories are also significantly cheaper and faster to produce. Consequently, media companies are increasingly favoring this content at the expense of other sections.

Meanwhile, a growing data-driven consensus has emerged that audiences are most likely to read stories that are timely, entertaining, dramatic, conflictual and/ or surprising,[36] and that readers strongly prefer parsimony and simplicity.[37] Research has found that news organizations' metrics-driven catering to preferences like these has pushed news organizations to deprioritize stories that are complex, deep or demanding and to shelve reporting seems objectively important but unlikely to enjoy wide circulation.[38]

In a nutshell, driven by consumer data and changing profit incentives, media companies are restricting their content and practices in a manner that is fundamentally antithetical to humble inquiry. Indeed, at present, news production, consumption and sharing often reflects and exacerbates intellectual hubris instead.

Empirical studies find that news junkies are typically little more informed than others on matters of fact.[39] To the limited extent that engaging with the news is associated with more substantive knowledge, it corresponds with heightened overconfidence too.[40] Critically, although news consumption, across formats, is associated with higher overestimation of one's knowledge,[41] sharing articles on social media seems to supercharge hubris. In fact, even when people haven't actually *read* a particular news story, the mere act of sharing it tends to spuriously make them feel more knowledgeable about the topics discussed therein.[42] Across the board, heavy consumption and sharing of news tends to be driven more by political hobbyism – engaging in political research and discourse for the purposes of self-aggrandizement, entertainment, validation of one's identity – than as a means of informing substantive civic engagement or the pursuit of concrete and practical goals.[43]

To the extent that journalists and news organizations may aspire to exemplify and promote humble inquiry rather than

fueling overconfidence and tribalism, they must grow more comfortable with frustrating reader desires for 1) clean narratives, 2) consuming stories quickly and with minimal effort, and 3) walking away from news stories feeling more knowledgeable and confident than you were before reading them.

Humble inquiry requires telling stories with nuance and leaning into complexity. Reporting that exemplifies HI will often unsettle reader assumptions and challenge their antecedent beliefs. Rather than providing easy answers, humble inquiry helps stakeholders better understand how much they *don't* know about important events and issues, or how fallible their perceptions may be.[44] Because most news organizations are for-profit enterprises, they may bristle at producing this type of content, under the assumption that violating revealed audience preferences would be bad for business. However, there is reason to believe that, in fact, creating more friction for news consumers may help enhance media companies' bottom lines.

Evidence has been accumulating for some time that contemporary news may be overoptimized to readers' revealed preferences. For instance, although readers often claim to want more positive news, negative stories significantly outperform in terms of readership and circulation.[45] On average, stories with negative headlines, cynical or divisive framing, and catastrophizing tendencies tend to get more clicks and shares than those that don't.[46] In response to these consumption patterns, media organizations have been providing more and more content that expresses and evokes negativity.[47] This has become a problem because, although any *individual* article may perform better if it leans into negativity, if *all* of the news is relentlessly negative, people begin to avoid the news altogether.

Studies consistently find that news avoidance is on the rise and seems to be tied to the negativity of media outputs.[48] Relentless negativity, social criticism and debunking also undermines public trust in journalism -- including and especially among populations whose communities, values and perspectives are already underrepresented in the field.[49] Put simply: although positive stories would, individually, tend to perform poorly relative to negative pieces, a higher rate of positive and neutral pieces would likely result in increased readership and trust overall.

In a similar vein, although stories that are divisive and sensationalistic are more likely to be read by those who are already deeply engaged with the news, these same types of headlines and stories alienate those who consume and trust media less.[50] Once again, media organizations could conceivably broaden their base by being less optimized on their most frequent readers.

Insofar as institutions are, in fact, overoptimized, they would stand to benefit both commercially and reputationally by creating more friction between their outputs and their existing core audience's revealed

preferences for brevity, simplicity, certainty, and sensationalism.

Reforms to Promote Intellectual Humility in Media (and the Public)

The interrelated problems of homophily (among journalists and between journalists and their audiences) and audience capture tend pose significant challenges for the practice and profession of journalism. However, it may be possible for journalists and media organizations to make reforms that can better exemplify and encourage humble inquiry while also increasing trust in mainstream media organizations, expanding their reach, and/or enhancing their revenues.

What might this look like in practice? Journalist Amanda Ripley has detailed one path forward in her viral essay, "Complicating the Narrative." [51] According to Ripley, reporters should lean into complexity more. They should amplify contradictions. They should seek to widen the lens of stories (beyond the default focus on a specific country or institutional context, a narrow time window, or a tight range of stakeholders). They should ask questions that get at actors' deep motivations and fundamental values. They should deliberately work to expose particular audiences to ideas, people and places they wouldn't otherwise experience (presented in a nuanced way). These are all great suggestions for fostering humble inquiry in journalism, and Amanda's essay serves as a good resource for how to implement these ideas in practice. There are a few other suggestions I might add to the list:

Reconsider the Inverted Triangle

Most who share a piece of journalism online never even click on the article; they share it based purely on the headline.[52] Even among those who click on links, read-through rates for articles are low. Most readers only consume the first couple paragraphs, ultimately spending less than one minute on an article. Even those who opt into longform stories typically spend only two minutes with those articles.[53] Resigning themselves to short reader attention spans, contemporary news organizations have leaned ever-more heavily into the "inverted pyramid" scheme of storytelling, wherein the most important information is presented first, in a maximally streamlined and compelling form, and then details, evidence and context are provided later, in the parts of essays that few people actually read.[54]

One consequence of this approach to storytelling is that readers can quickly gain undue confidence that they have a strong handle on current events – what's happening and why -- based on skimming topline claims that have not yet been substantiated or contextualized in the article (because audiences have not read through to the parts of the essay that provide the receipts, backgrounds and caveats).[55] In the cognitive and behavioral sciences, this false sense of understanding is described as the

"illusion of explanatory depth" – a phenomenon associated with greater polarization, hostility, and closed-mindedness.[56]

Rather than reinforcing illusions of explanatory depth, journalists may be able to push audiences towards epistemic humility (and associated virtues) by frustrating their desire to feel like they understand key events based on a few sentences. One way to do this might be for reporters to foreground what we *don't* know about a situation, alongside the topline facts and claims. Or, even as journalists convey key claims, they can explicitly stress from the outset that the situation being reported on is dynamic and our understanding of the facts and what they *mean* are likely to evolve as more information comes to light and the situation continues to unfold. Strategies like these could convey core details efficiently while also modeling humility among journalists and encouraging humility among readers, even if they don't finish the full article.

Alternatively, instead of frontloading the ideas and details journalists want readers to walk away with, articles can present a question or a puzzle whose answer is *not* provided in the early paragraphs – encouraging readers to read through the details, context and caveats in order to arrive at some kind of answer to the question put forward. Then, upon later presenting a tentative answer, essays can direct readers to further questions that remain unanswered, other types of answers different stakeholders have arrived at, or other resources they can consult for more information. Studies consistently find that stoking genuine interest in a question or puzzle leads people to seek out more information, to better process information that runs contrary to their priors and preferences, and to adopt intellectually humble attitudes more broadly.[57] An added benefit: curiosity is also associated with a greater desire to read more, and to read more fully, deeply and carefully.[58] Put another way: stoking curiosity is not just good for encouraging humble inquiry, it can also help media organizations increase readership and engagement.[59]

Reforms like these may seem more plausible and desirable if journalists and media organizations were less arrogant in assuming they know reader wants and needs (and if they had a less condescending view of prospective audiences).[60] Few in the media today expect much from readers, and articles are designed to demand as little as possible. Working from the assumption that audiences will rarely read far beyond the headline no matter what, articles are designed to facilitate and encourage skimming or clicking away after a paragraph. By taking for granted that readers don't want nuance or detail, they help condition readers not to expect those things. The simplicity-oriented reader becomes a self-fulfilling prophecy, as audiences are never pushed to work through texts more demanding of their time and attention. They are rarely put in a position where they have to build up stamina, nor are they encouraged to cultivate the habits of heart

and mind to embrace ambiguity, nuance and complexity. Instead, media organizations are moving away from text writ large in favor of audio, images and shortform video on the assumption that audiences don't have the appetite or ability to stomach anything else. One of the biggest problems with holding audiences in low estimation (and then trying to meet the audience where they supposedly are) is that journalists are often simply wrong about what their audiences really want.[61]

In fact, even as news media have aggressively pursued shorter, simpler, and less text-oriented content, audiences of news websites have been shrinking overall and growing more homogenous. Engagement with news content has been declining. Given that what media organizations are doing is clearly not working, it may be prudent for them to adjust their approach. Rather than trying to make news *less* distinctive from TikTok influencer content, newsrooms may be better served by greater differentiation – by leaning into what makes journalism distinctive from the other content readers are bombarded with. In a world of hot takes, short form, and algorithmic pandering, news organizations can deny readers easy answers, uncomplicated narratives and content that affirms their priors. They can decline to produce stories that require minimal investments of time, attention or effort. By expecting and demanding more of readers, they may get more out of them – epistemically, financially, and otherwise.

Reconsider and Revise the Use of Experts

Journalists often rely on experts to gain important context for stories and to test ideas they have been playing with.[62] When it comes time to write their article, they often quote experts and cite their work, both as a way of helping credit the folks who helped them on-background and to lend greater authority to the claims being made in the piece. However, the specific quotes used in media essays tend to be short, stripped of their initial context and placed into an alternative context -- at times in the service of arguments that the expert has never made and wouldn't agree with, or claims that go well-beyond the empirical evidence. In other cases experts, facilitated by journalists, overclaim of their own volition in order to advance preferred moral and political narratives under the imprimatur of science.[63] As a function of the growing homophily within and between knowledge economy fields (and their audiences), in practice, evoking "the data," "the science" and "experts" often amounts to affirming journalists' and consumers' antecedent views and prejudices in ways that gloss over inconvenient details, uncertainties and disagreements.

Empirical investigations have found that being presented with decisive expert opinions can exacerbate epistemic arrogance in readers. When told that scientists understand a particular phenomenon, audiences often assume that *they* personally understand that same phenomenon better in virtue of being presented with the expert view, even when

they have actually gained little-to-no substantive knowledge about the topic in question. This effect is especially pronounced when scientists endorse moral and political views, or advocate for policies, that agree with readers' own preferences.[64] In the cases where expert opinions strongly challenge readers' own, rather than moderating their positions on those issues, readers tend to simply dismiss the experts – a move that also reflects and exacerbates overconfidence.[65] In both cases, the use of experts tends to reinforce intellectual arrogance among readers.

The experts relied on in journalistic stories often model arrogance themselves, as well. As Phil Tetlock and others have shown, experts tend to be bad at making predictions. In fact, they're even worse at making predictions in their domain of expertise than outside it. And the more prominent they are, the worse they tend to be. It is precisely experts' intellectual arrogance that undermines their accuracy -- their prestige and expertise are precisely the problem – often rendering them less accurate than laymen or pure chance at predicting what will happen next.[66] Yet, despite their low reliability, experts continue to make very confident predictions, which are regularly amplified uncritically in the media.

Journalists rarely track expert prediction failures (which would allow them to avoid experts who are consistently wrong). They don't usually report on expert prediction failures either, to the extent that they notice them at all. Likewise, although journalists often report on new studies (and regularly overstate the strength and implications of findings), they almost never report on retractions or replication failures or meta-analyses that undermine previously reported narratives.[67] Statistical claims, when reported by experts and other authorities, are rarely questioned or interpreted but are simply and unproblematically presented by reporters as "facts."[68] To the extent that they're aware of them, journalists often avoid emphasizing the limitations of findings, uncertainty in models, disagreements within a field, etc. because they believe that emphasizing these details would undermine trust in science or compliance with expert advice.[69]

In reality, to the extent that it has any effect at all, communicating uncertainties, limitations, risks, and costs of expert opinions tends to marginally increase trust – including and especially among those who are predisposed towards mistrust of scientists and other authorities to begin with.[70] Trying to suppress or avoid these uncomfortable facts often undermines trust far more than reporting details that are inconvenient for a preferred narrative.[71] In any event, as communications scholar Kathleen Hall Jamieson put it, "It is not a journalist's job to make science look good but, rather, to report fairly and accurately on scientific work and hold the scientific community responsible for its failures."[72]

Journalists should be skeptical of all their sources – including experts. Scientists have biases, limitations and blindspots, just like everyone else. Experts often have

agendas in interactions with the press that may not be transparent or well-aligned with the mission of the journalist (qua journalist). For instance, when engaging with reporters, scientists often try to conceal many of the aforementioned inconvenient facts from journalists because they, too, (incorrectly) believe that reporting those facts would undermine trust and compliance.[73]

At the extreme end of these tendencies, cabals of prominent scientists have been exposed working to collectively manipulate public discourse in the service of moral and political goals by presenting claims to journalists that directly contradicted their own understanding of the empirical evidence.[74] Scientists are also known to try to (self)censor relevant information when they believe it could be used to either undermine causes and constituencies they support or empower those they despise.[75] Experts are likewise prone to emphasize the most extreme models in order to warn people about what *could* happen if people do not act as the scientists think they should, rather than emphasizing the *most likely* predictions in their models.[76] They often do this because they believe that more dire numbers and catastrophizing narratives will motivate people to action and enhance compliance. In fact, the opposite seems to be true.[77]

Scientists, however, are often not well-versed in empirically based practices from scientific literatures on persuasion, and they regularly overestimate their ability to manipulate others. These and other tendencies should lead journalists to avoid taking expert claims at face value or encouraging readers to adopt a non-critical approach to claims made in the name of "science," "data" or "expertise."

Stakeholders often rely on experts to speak beyond their available data because, in many cases, we cannot wait for perfect or complete information. Decisions must be made (for instance, about whether schools should remain open or closed during the pandemic), and the weight of those decisions is often heavy. In order to absolve themselves of responsibility for choices they make in these moments, leaders often justify their positions by appeal to experts.[78] Journalists often uncritically reinforce these narratives (obscuring the volition that stakeholders are exercising in these moments by presenting preferred actors' moral, political and economic moves as flowing naturally from "the facts," and framing opposition to these actors as rooted in ignorance or anti-intellectualism). Yet, these moments of radical uncertainty about "the facts" and what to do about them – these are precisely the situations where humble inquiry is most valuable.[79] What journalists *should* be doing in these moments is working to encourage more humility rather than attempting to shore up a false sense of certainty or consensus.

Journalism in general, and opinion journalism in particular, may be uniquely well suited to "facilitating appropriate uncertainty toward important questions that aren't settled by the available evidence."[80] For instance, in addition to conveying the best information available at present,

reporters can highlight what "the facts" *don't* or *can't* show. They can stress the provisional and limited nature of scientific evidence on developing issues. They can convey the deep uncertainty and fallibility of expert predictions. They can stress that "the science" can't tell us what to *do* about the facts: we can't "follow the science" towards moral and political conclusions, because those conclusions lie outside the realm of science per se. Journalists can foreground the moral and political issues at stake in many disputes, revealing that issues framed in empirical terms are often, in fact, "trans-scientific" (i.e. they're issues that can be framed in empirical or statistical terms but fundamentally turn on moral and political judgements).[81] All of this could help audiences better distinguish between circumstances where they should be more deferent to the expert consensus (i.e. matters of well-established empirical facts) versus areas of reasonable disagreement (i.e. claims about what "to do" about the facts, projections about the future, and so on) while better embodying journalistic ideals of holding authorities and their claims up to public scrutiny.

Embrace the Power of "We"

Journalists often focus on points of divergence and disagreement among stakeholders when there is, in fact, a lot of overlap and consensus. For the sake of drama and cleaner differentiation, they make groups appear farther apart (and more internally coherent) than they actually are. For instance, in polling and surveys, black and white respondents tend to have strong shared consensus. However, reporting on those polls will often focus on systematic differences on the margins in ways that make it appear as though black and white Americans are far apart (making it seem as though there is a "black" view and a "white" perspective and they are non-aligned) even when there is broad agreement. This flattening of nuance, complexity and diversity within groups – and heightening of difference between them – exacerbates intellectual hubris (and leads to much other social mischief besides).[82]

To help mitigate these tendencies, *before* getting into average differences between groups (often driven by a relatively small number of respondents at the wings of a distribution), it would be clarifying for reporting to begin by emphasizing what stakeholders agree on. Foregrounding points of commonality – shared values, common goals, superordinate identities, overlapping interests, intertwined histories – these can make it easier for people to get into any differences without feeling threatened. People tend to think about others and approach situations (e.g. interpreting ambiguous details or uncertain implications) completely differently if they understand themselves to be engaging with someone who is part of a "we" instead of a "them."[83]

It is much easier see others in their specificity and individuality when we conceive of them as one of "us" instead of as avatars of distant (or rival) groups. When we're dealing with others who are part of

our "we," stakeholders feel more social permission to change their minds in the face of strong counterevidence.[84] It is much easier to be humble with allies than potential adversaries.

Focusing on points of overlap before diving into differences could be a good business decision for media companies too: this type of messaging is more appealing to most Americans than focusing on division – including and especially among those who are less likely to consume or trust media outputs at present.[85] By speaking in terms of larger circles, they may be able to grow their base.

Conclusion

Intellectual humility is not just a characteristic of individuals. It can also be a feature of collectives (such as institutions or social groups) insofar as members of the collective help each other notice and respond to their individual and shared limitations and fallibility. In some respects, intellectual humility may be more readily and consistently achieved in collectives than individuals. Moreover, certain forms of institutional norms and structures can help facilitate intellectual humility in individuals – both within the context of intragroup interactions and deliberation and beyond.[86]

Critically, although humble inquiry (as an institutional practice) can help support intellectual humility (as a personal virtue), because HI is not reliant on IH, the bar for activation is much lower. Humble inquiry doesn't require anyone to change their fundamental dispositions or beliefs, it merely requires an adjustment to discourse and behaviors.

Within the field of journalism, humble inquiry could yield many benefits for reporters, media organizations and their audiences alike… even as the current deficit of humble inquiry imposes costs. Research has found that one of the best ways for professionals to enhance intellectual humility in the people they serve is to model it themselves.[87] However, insofar as political, cultural and economic elites model arrogance instead, this also tends to rub off on the public too.[88] Journalism matters. Precisely *because* journalism matters, it matters how journalists conduct themselves professionally. The habits of inquiry the field models and encourages have implications beyond journalism itself.

We began this essay by drawing a comparison between journalism and sociology. Towards the tail end of the 19th century, the line between the two was thin and porous. As a result of boundary work in both fields, each has more distinct values, practices and aspirations.[89] However, one thing the two fields continue to share in common is that neither is well-constituted, at present, to embody or promote humble inquiry. In social science, people often face strong incentives to overstate the strength, novelty and significance of their findings while minimizing the limitations and avoiding alternative interpretations of their data (and possible confounds).[90] In journalism, stakeholders currently face

norms and incentives to present information with maximum concision, authority and simplicity and to help readers walk away from articles feeling knowledgeable and confident.

Within social science fields, there has been a growing awareness of these problems. Movements to realign practices, norms and incentives have been bearing fruit and improving social scientific research.[91] Journalism has been slower to systemically recognize these challenges, identify potential interventions, and embrace reforms. However, should reporters, editors and media institutions place greater emphasis on demonstrating and encouraging humble inquiry, this would likely improve the quality, reach and impact of journalistic outputs. Perhaps it would do some civic good as well.

---

[1] Musa al-Gharbi is an assistant professor of communication, journalism and (by courtesy) sociology at Stony Brook University. Readers can connect to his email, social media, research and public writing via his website: musaalgharbi.com

[2] Weber, Max (2020). "The Politician's Work." *Charisma and Disenchantment: The Vocation Lectures*. New York, NY: New York Review of Books. See pp. 72-74.

[3] Mineo, Liz (2024). "Warning For Journalists: You're More Ignorant Than You Realize." *The Harvard Gazette,* 25 March.

[4] For an overview see:
Ballantyne, Nathan (2023). "Recent Work on Intellectual Humility: A Philosopher's Perspective." *The Journal of Positive Psychology* 18(2): 200-220.
Porter, Tenelle et al. (2022a). "Predictors and Consequences of Intellectual Humility." *Nature Reviews Psychology* 1: 524-536.
Porter, Tenelle et al. (2022b). "Clarifying the Content of Intellectual Humility: A Systematic Review and Integrative Framework." *Journal of Personality Assessment* 104(5): 573-585.

[5] Schwarz, Norbert (2022). "Humility in Inquiry." *The Journal of Positive Psychology* 18(2): 267-270.

[6] Costello, Thomas et al. (2024). "Intellectual Humility Questionnaires Fail to Predict Metacognitive Skill: Implications for Theory and Measurement." *PsyArXiv Preprints*. DOI: 10.31234/osf.io/gux95

[7] al-Gharbi, Musa (2024). "Smart People Are Especially Prone to Tribalism, Dogmatism and Virtue Signaling." *Symbolic Capital(ism),* 3 December.

[8] Porter, Tenelle (2025). "Intellectual Humility: On Recognizing Our Limits." *Advances in Experimental Social Psychology* 71: 135-179.
Bak, Waclaw, Bartosz Wojtowicz & Jan Kutnik (2022). "Intellectual Humility: An Old Problem in a New Psychological Perspective." *Current Issues in Personality Psychology* 10(2): 85-97.

[9] Based on impact factors and disciplinary reputations, the top scholarly journals on the field of journalism, reviewed for the purposes of this essay include: Journalism & Mass Communication Quarterly, Journalism, Journalism Studies, Journalism Practice, and Media, Culture & Society.

Despite the flurry of scholarly attention to intellectual humility (and adjacent formulations such as "humble inquiry") since 2010 – and despite the clear relevance of these phenomena to the enterprise of journalism -- none of these journals have published a single essay on the topic to date.

[10] Bowes, Shauna et al. (2021). "Stepping Outside the Echo Chamber: Is Intellectual Humility Associated With Less Political Myside Bias?" *Personality and Social Psychology Bulletin* 48(1): 150-164.

[11] Porter, Tenelle & Karina Schumann (2018). "Intellectual Humility and Openness to the Opposing View." *Self and Identity* 17(2): 139-162.

[12] Smith, Glen (2023). "You Know You're Right: How Intellectual Humility Decreases Political Hostility." *Political Psychology* 44(6): 1319-1335.

[13] Bowes, Shauna & Arber Tasimi (2025). "How Intellectual Humility Relates to Political and Religious Polarization." *The Journal of Positive Psychology* 20(4): 569-581.

[14] Sgambati, Tyrone & Ozlem Ayduk (2023). "Intellectual Humility and Political Polarization: An Exploration of Social Networks, Attitudes, and Affect." *Political Psychology* 44(4): 807-828.
Stanley, Matthew, Alyssa Sinclair & Paul Seli (2020). "Intellectual Humility and Perceptions of Political Opponents." *Journal of Personality* 88(6): 1196-1216.

[15] Krumrei-Mancuso, Elizabeth et al. (2020). "Links Between Intellectual Humility and Acquiring Knowledge." *The Journal of Positive Psychology* 15(2): 155-170.
Porter, Tenelle et al. (2020). "Intellectual Humility Predicts Mastery Behaviors When Learning." *Learning and Individual Differences* 80: 101888.

[16] Bowes, Shauna & Arber Tasimi (2024). "Intellectual Humility and Belief Extremity: Evidence for Curvilinearity?" *Social Psychological and Personality Science* 16(1): 56-69.
[17] Hannon, Michaeal & Ian Kidd (2023). "Political Conviction, Intellectual Humility and Quietism." *The Journal of Positive Psychology* 18(2): 233-236.
[18] Leary, Mark et al. (2017). "Cognitive and Interpersonal Features of Intellectual Humility." *Personality and Social Psychology Bulletin* 43(6): 793-813.
[19] Although, in general, journalists are not much different than ordinary people, there may be some respects in which they have unique virtues and vices. For instance, compared to the general public, journalists are significantly more likely to be anxious, depressed or neurotic:
Reichel, Chloe (2019). "How Journalists' Jobs Affect Their Mental Health: A Research Roundup." *The Journalists Resource,* 30 July.
Anni, Caitlin w/ Uku Vainik & Rene Mottus (2025). "Personality Profiles of 263 Occupations." *Journal of Applied Psychology* 110(4): 481-511.
[20] Haggard, Megan et al. (2018). "Finding Middle Ground Between Intellectual Arrogance and Intellectual Servility: Development and Assessment of the Limitations-Owning Intellectual Humility Scale." *Personality and Individual Differences* 124: 184-193.
Peters, Katie, Cody Turner & Heather Battaly (2025). "Intellectual Humility Without Open Mindedness: How to Respond to Extremist Views." *Episteme.* DOI: 10.1017/epi.2024.63
[21] Bowes, Shauna & Arber Tasimi (2022). "Clarifying Relations Between Intellectual Humility and Pseudoscience Beliefs, Conspiratorial Ideation, and Susceptibility to Fake News." *Journal of Research in Psychology* 98: 104220.
Koetke, Jonah et al. (2021). "Intellectual Humility Predicts Scrutiny of COVID-19 Misinformation." *Social Psychology and Personality Science* 13(1): 277-284.
Koetke, Jonah et al. (2022). "Fallibility Salience Increases Intellectual Humility: Implications for People's Willingness to Investigate Political Misinformation." *Personality and Social Psychology Bulletin* 49(5): 806-820.
[22] For a roundup of the empirical literatures on these points see:
Al-Gharbi, Musa (2024). "Smart People Are Especially Prone to Tribalism, Dogmatism and Virtue Signaling." *Symbolic Capital(ism),* 3 December.
[23]For a roundup of data and resources on these points see "Tempest in a Teapot" (pp. 191-195) and "Rich, White, and Blue" (pp. 170-182) in:
al-Gharbi, Musa (2024). *We Have Never Been Woke: The Cultural Contradictions of a New Elite*. Princeton, NJ: Princeton University Press.
[24] Yglesias, Matthew (2020). "What's Wrong With the Media." *Slow Boring,* 19 November.
[25] Yudkin, Daniel, Stephen Hawkins & Tim Dixon (2019). "Media Consumption" (pp. 26-35) in *The Perception Gap: How False Impressions Are Pulling Americans Apart.* New York, NY: More in Common.
Gorvett, Zaria (2020). "How the News Changes the Way We Think and Behave." *BBC,* 12 May.
[26] Gottfried, Jeffrey et al. (2022). "Journalists and the Public Differ on How Journalists Are Doing, How Connected They Are." *Pew Research Center,* 14 June.
[27] Fletcher, Richard (2021). "Perceptions of Fair News Coverage Among Different Groups." *Reuters Institute,* 23 June.
Arguedas, Amy et al. (2023). *News for the Powerful and Privileged: How Misrepresentation and Underrepresentation of Disadvantaged Communities Undermine their Trust in News*. Oxford, UK: Reuters Institute.
Park, Sora et al. (2024). "The Relationship Between News Trust, Mistrust and Audience Engagement." *Journalism.* DOI: 10.1177/14648849241299775.
[28] For a roundup of some of the research on these points see:
Al-Gharbi, Musa (2022). "Who Is Vaccine Hesitant and Why?" *Symbolic Capital(ism),* 23 February.
[29] Barker, David, Ryan Detamble & Morgan Marietta (2021). "Intellectualism, Anti-Intellectualism, and Epistemic Hubris in Red and Blue America." *American Political Science Review* 116(1): 38-53.
Hohe, Edward (2024). "Red vs. Blue Hubris: Clarifying the Relationship Between Partisanship and (Anti)Intellectualism." *Party Politics* 30(6): 1169-1176.
[30] Angelucci, Charles & Andrea Pratt (2024). "Is Journalistic Truth Dead? Measuring How informed Voters Are about Political News." *American Economic Review* 114(4): 887-925.
Lyons, Benjamin et al. (2021). "Overconfidence in News Judgements Is Associated with False News Susceptibility." *Proceedings of the National Academy of Sciences* 118(23): e2019527118.
[31] Yglesias, Matthew (2023). "The Biggest Problem in Media is the Audience." *Slow Boring*, 30 March.
[32] Fink, Katherine (2025). "Nonprofit News Leaders Are Struggling to Stop Leaning on Foundations that Say They Should Branch Out More." *The Conversation,* 20 May.
[33] Prager, Stephen (2024). "For-Profit Journalism is Unsustainable." *Current Affairs,* 7 June.
[34] Bisceglia, Michele (2023). "The Unbundling of Journalism." *European Economic Review* 158: 104532.
[35] Kiesow, Damon (2018). "How to Collect and Use the Right Data About Your News Audience." *American Press Institute,* 2 October.
Nielsen, Rasmus & Federica Cherubini (2016). *Editorial Analytics: How News Media Are Developing and Using Audience Data and Metrics*. Oxford, UK: Reuters Institute.
[36] Harcup, Tony & Diedre O'Neill (2016). "What is News? News Values Revisited (Again)." *Journalism Studies* 18(12): 1470-1488.
[37] e.g. Shulman, Hillary, David Markowitz & Todd Rogers (2024). "Reading Dies in Complexity: Online News Consumers Prefer Simple Writing." *Science Advances* 10 (23). DOI: 10.1126/sciadv.adn2555.
[38] Furst, Silke (2020). "In the Service of Good Journalism and Audience Interests? How Audience Metrics Affect News Quality." *Media and Communication* 8(3): 270-280.
[39] Martin, Justin & Krishna Sharma (2023). "What Do Newsjunkies Consume and What Do They Know? Two Studies on Intrinsic Need For Orientation, News Diets, and Political Knowledge." *International Journal of Public Opinion Research* 35(1): edad002.

Humble Inquiry: New Perspectives on Intellectual Humility (eds. Nathan Ballantyne, Jared Celniker & Norbert Schwarz). Cambridge, UK: Cambridge University Press, 2026.

[40] Asano, Taka-aki (2023). "Media Choice and Response Patterns to Questions About Political Knowledge." *International Journal of Public Opinion Research* 35(2): edad017.
[41] Kang, Taewoo, Kjerstin Thorson & Chankyug Pak (2025). "Truth Default or Generalized Skepticism? The Role of Overconfidence in the Relationship Between Social Media News Use and Traditional Media Use." *Social Media + Society.* DOI: 10.1177/20563051251315255.
[42] Ward, Adrian, Jianqing Zheng & Susan Broniarczyk (2022). "I Share, Therefore I Know? Sharing Online Content – Even Without Reading It – Inflates Subjective Knowledge." *Journal of Consumer Psychology* 33(3): 469-488.
[43] Hersh, Eitan (2020). *Politics Is For Power: How to Move Beyond Political Hobbyism, Take Action, and Make Real Change*. New York, NY: Simon & Schuster.
[44] Plaisance, Patrick (2014). "Humility and Hubris." *Virtue in Media* (pp. 145-172). New York, NY: Routledge.
[45] Soroka, Stuart & Stephen McAdams (2015). "News, Politics, and Negativity." *Political Communication* 32(1): 1-22.
Soroka, Stuart, Patrick Fournier & Lilach Nir (2019). "Cross-National Evidence of a Negativity Bias in Psychophysiological Reactions to News." *Proceedings of the National Academy of Sciences* 116(38): 18888-18892.
[46] Choi, Jihyang, Sang Yup Lee & Sung Wook Ji (2020). "Engagement in Emotional News on Social Media: Intensity and Type of Emotions." *Journalism & Mass Communication Quarterly* 98(4): 1017-1040.
Robertson, Claire et al. (2023). "Negativity Drives Online News Consumption." *Nature Human Behavior* 7: 812-822.
[47] Rozado, David, Ruth Hughes & Jamin Halberstadt (2022). "Longitudinal Analysis of Sentiment and Emotion in News Media Headlines Using Automated Labelling with Transformer Language Models." *PLoS ONE* 17(10): e0276367
Trussler, Marc & Stuart Soroka (2014). "Consumer Demand for Cynical and Negative News Frames." *The International Journal of Press/ Politics* 19(3): 360-379.
Hopkins, Daniel, Yphtach Lelkes & Samuel Wolken (2024). "The Rise and Demand for Identity-Oriented Media Coverage." *American Journal of Political Science* 69(2): 483-500.
[48] Robertson, Craig (2025). "People Are Turning Away from the News. Here's Why it May Be Happening." *Reuters Institute for the Study of Journalism,* 21 February.
Toff, Benjamin, Ruth Palmer & Rasmus Nielsen (2023). *Avoiding the News: Reluctant Audiences for Journalism*. New York, NY: Columbia University Press.
[49] Tom Rosenstiel et al. (2021). *A New Way of Looking at Trust in Media: Do Americans Share Journalism's Core Values?* Chicago, IL: The Media Insight Project.
Arguedas, Amy et al. (2023). "News for the Powerful and Privileged: How Misrepresentation and Underrepresentation of Disadvantaged Communities Undermine Their Trust in News." *Reuters Institute for the Study of Journalism,* 18 April.
Stein, Randy & Caroline Meyersohn (2024). "Whose Pants Are on Fire? Journalists Correcting False Claims are Distrusted More Than Journalists Confirming Claims." *Communication Research* 52(6): 747-777.
[50] Trexler, Andrew (2024). "The Paradox of Consumer Demand for Under-Informative News." *OSF Preprints.* DOI: 10.31219/osf.io/59upd
[51] Ripley, Amanda (2018). "Complicating the Narrative." *The Whole Story,* 28 June.
[52] Sundar, S. Shyam et al. (2024). "Sharing Without Clicking on News in Social Media." *Nature Human Behavior* 9: 156-168.
Gabielkov, Maksym et al. (2016). "Social Clicks: What and Who Gets Read on Twitter?" ACM SIGMETRICS Performance Evaluation Review 44(1): 179-192.
[53] Haile, Tony (2014). "What You Think You Know About the Web is Wrong." *Time,* 9 March.
Mitchell, Amy, Galen Stocking & Katerina Matsa (2016). "Long-Form Reading Shows Signs of Life in Our Mobile News World." *Pew Research Center* 5 May.
[54]For more on the history and purpose behind the inverted pyramid structure see:
Pottker, Horst (2003). "News and Its Communicative Quality: The Inverted Pyramid – When and Why Did It Appear?" *Journalism Studies* 4(4): 501-511.
For more on its contemporary use and perceived value see:
Schade, Amy (2018). "Inverted Pyramid: Writing for Comprehension." *Neilson Norman Group,* 11 February.
[55] Park, Cheong-Yi (2001). "News Media Exposure and Self-Perceived Knowledge: The Illusion of Knowing." *International Journal of Public Opinion Research* 13(4): 419-425.
[56] Chesterfield, Alex & Kate Coombs (2019). "To Fight Polarization, Ask 'How Does That Policy Work?'" *Behavioral Scientist,* 25 November.
[57] Kahan, Dan et al. (2017). "Science Curiosity and Political Information Processing." *Political Psychology* 38(S1): 179-199.
Guzman, Monica (2022). *I Never Thought of It That Way: How to Have Fearlessly Curious Conversations in Dangerously Divided Times*. Dallas, TX: BenBella Books, Inc.
[58] Kidd, Celeste & Benjamin Hayden (2015). "The Psychology and Neuroscience of Curiosity." *Neuron* 88(3): 449-460.
Leslie, Ian (2015). *Curious: The Desire to Know and Why Your Future Depends Upon It.* New York, NY: Basic Books.
[59] However, it's critical to note that not all forms of curiosity are created equal: interest curiosity is associated with openness paired with discernment. Deprivation curiosity, however, seems to encourage openness to the point of credulity. See:
Zedelius, Claire, Madeleine Gross & Jonathan Schooler (2022). "Inquisitive But Not Discerning: Deprivation Curiosity Is Associated with Excessive Openness to Inaccurate Information." *Journal of Research in Personality* 98: 104227.
[60] Nelson, Jacob (2021). *Imagined Audiences: How Journalists Perceive and Pursue the Public*. Oxford, UK: Oxford University Press.
[61] Robinson, James (2019). "The Audience in the Mind's Eye: How Journalists Imagine Their Readers." *Columbia Journalism Review,* 26 June.

[62] Albaek, Erik (2011). "The Interaction Between Experts and Journalists in News Journalism." *Journalism* 12(3): 335-348.
[63] Croce, Michel (2025). "Expert Interviews, Good Questioning and the Epistemic Duties of Journalism." *Episteme*. DOI: 10.1017/epi.2025.24

Humble Inquiry: New Perspectives on Intellectual Humility (eds. Nathan Ballantyne, Jared Celniker & Norbert Schwarz). Cambridge, UK: Cambridge University Press, 2026.

[64] Journalists are often criticized because, although they tend to center the consensus positions of experts in their reporting and marginalize more marginal views, they don't tend to describe or emphasize the level of consensus within a field within their reporting. However, presenting readers with claims of expert consensus may not help them understand an issue more deeply – it may lead them to a more superficial yet confident level of understanding. In fact, research has found that those who tend to adopt positions contrary to the scientific consensus tend to have more substantive knowledge about the topics in question than those who just embrace the consensus position. However, those who embrace the consensus position often assume they have more knowledge than they do (and underestimate the knowledge of others relative to themselves) in virtue of aligning themselves with what they understand to be the consensus position in the field. See:
Sloman, Steven & Nathaniel Rabb (2016). "Your Understanding Is My Understanding: Evidence for a Community of Knowledge." *Psychological Science* 27(11): 1451-1460.
Merkley, Eric (2020). "Are Experts (News) Worthy? Balance, Conflict, and Mass Media Coverage of Expert Consensus." *Political Communication* 37(4): 530-549.
Kahan, Dan et al. (2012). "The Polarizing Impact of Science Literacy and Numeracy on Perceived Climate Change Risks." *Nature Climate Change* 2: 732-735.
[65] Kahan, D. (2015). "What is the 'science of science communication?'" *JCOM: Journal of Science Communication* 14(03), Y04.
[66] Tetlock, Philip (2017). *Expert Political Judgement: How Good Is It? How Can We Know?* Princeton, NJ: Princeton University Press. For a roundup of subsequent studies replicating and extending Tetlock's findings see al-Gharbi 2024 (full reference in footnote 7).
[67] Dumas-Mallet, Estelle et al. (2017). "Poor Replication Validity of Biomedical Association Studies Reported by Newspapers." *PLoS ONE*. DOI: 10.1371/journal.pone.0172650
Resnick, Brian (2016). "What Journalists Get Wrong About Social Science, According to 20 Scientists." *Vox,* 22 January.
[68] Cushion, Stephen, Justin Lewis & Robert Callaghan (2016). "Data Journalism, Impartiality and Statistical Claims." *Journalism Practice* 11(10): 1198-1215.
[69] Schipani, Vanessa (2024). "Journalism and Public Trust in Science." *Synthese* 204: 56.
[70] Kerr, John et al. (2022). "Transparent Communication of Evidence Does Not Undermine Public Trust in Evidence." *PNAS Nexus* 1(5): pgac280.
Gustafson, Abel & Ronald Rice (2020). "A Review of the Effects of Uncertainty in Public Science Communication." *Public Understanding of Science* 29(6): 614-633.
Van der Bles, Anne et al. (2020). "The Effects of Communicating Uncertainty on Public Trust in Facts and Numbers." *Proceedings of the National Academy of Sciences* 117(14): 7672-7683.
[71] When people are confronted with claims of a strong scientific consensus that runs contrary to their moral and political leanings, they typically respond by trusting scientists less rather than rethinking their values, worldviews and alignments. Emphasizing consensus is often counterproductive for politically polarized issues, if the goal is to persuade people "on the other side." See:
Dixon, Graham & Austin Hubner (2018). "Neutralizing the Effect of Political Worldviews by Communicating Scientific Agreement: A Thought-Listing Study." *Science Communication* 40 (3): 393-415.
[72] Ordway, Denise-Marie (2021). "Reporting on Scientific Failures and Holding the Scientific Community Accountable: 5 Tips for Journalists." *The Journalist's Resource,* 8 June.
[73] Peters, Hans (2013). "Gap Between Science and Media Revisited: Scientists as Public Communicators." *Proceedings of the National Academy of Sciences* 110(S3): 14102-14109.
[74] Silver, Nate (2023). "Journalists Should Be Skeptical of All Sources – Including Scientists." *Silver Bulletin,* 21 July.
[75] Clark, Cory et al. (2023). "Prosocial Motives Underlie Scientific Censorship by Scientists: A Perspective and Research Agenda." *Proceedings of the National Academy of Sciences* 120(48): e2301642120.
[76] Yglesias, Matthew (2022). "People Need to Hear the Good News About Climate Change." *Slow Boring,* 10 February.
Brown, Patrick (2023). "I Left Out the Full Truth to Get My Climate Change Paper Published." *The Free Press,* 5 September.
[77] For a good review of the literature on these points (with direct links to empirical research) see:
Markowitz, Ezra & Lucia Graves (2020). "After 2020, We Need to Talk About Catastrophe." *Washington Post,* 30 December.
[78] MacAulay, Margaret et al. (2023). "Analyzing 'Follow the Science' Rhetoric of Government Responses to COVID-19." *Policy & Politics* 51(3): 466-485.
[79] Grossman, Igor & S.G.B. Johnson (2025). "Cultivating Wisdom Through Metacognition: A New Frontier in Decision-Making Under Radical Uncertainty." *Journal of Applied Research in Memory and Cognition*. DOI: 10.1037/mac0000235
[80] Soysal, Zeynep (2025). "An Epistemic Role for Opinion Journalism." *Political Philosophy* 2(2). DOI: 10.16995/pp.23009
[81] For elaboration and examples of trans-scientific issues see:
al-Gharbi, Musa (2020). "Book Review: The Crisis of Expertise." *Symbolic Capital(ism),* April 14.
[82] Cowan, Nelson et al. (2019). "Foundations of Arrogance: A Broad Survey and Framework for Research." *Review of General Psychology* 23(4): 425-443.
[83] Van Bavel, Jay & Dominic Packer (2021). *The Power of Us: Harnessing Our Shared Identities to Improve Performance, Increase Cooperation, and Promote Social Harmony.* New York, NY: Little Brown Spark.
[84] E.g. Feinberg, Matthew & Robb Willer (2019). "Moral Framing: A Technique for Effective and Persuasive Communication Across Political Divides." *Social and Personality Psychology Compass* 13(12): e12501.
Dornbusch, Linda, Mark van Vuuren & Menno D.T. de Jong (2024). "Moving Beyond Us-Versus-Them Polarization Towards Constructive Conversations." *Democratization* 32(1): 96-122.
[85] For instance, a study by Jacobin and YouGov found that working class voters across racial and other lines strongly prefer policies and messaging that are universalistic and appeal to unity and commonalities as opposed to frames that focus on division. Identitarian frames were especially unpopular. See:
Abbott, Jared et al. (2021). *Commonsense Solidarity: How a Working Class Coalition Can Be Built and Maintained*. New York, NY: Jacobin.
[86] Krumei-Mancuso, Elizabeth et al. (2025). "Toward an Understanding of Collective Intellectual Humility." *Trends in Cognitive Science* 29(1): 15-27.

Humble Inquiry: New Perspectives on Intellectual Humility (eds. Nathan Ballantyne, Jared Celniker & Norbert Schwarz). Cambridge, UK: Cambridge University Press, 2026.

Parnamets, Philip, Jay Van Bavel & Mark Alfano (2025). "Consolidating the Measurement of Intellectual Humility: The Collected Intergroup Intellectual Humility (CIIH) Scale." *PsyArxiv Preprints*. DOI: 10.31234/osf.io/ug756_v2.

[87] Leary, Mark (2022). "Intellectual Humility as a Route to More Accurate Knowledge, Better Decisions, and Less Conflict." *American Journal of Health Promotion* 36(8): 1401-1404.

[88] Lynch, Michael (2018). "Arrogance, Truth and Public Discourse." *Episteme* 15(S3): 283-296.

[89] Anderson, C.W. (2018). *Apostles of Certainty: Data Journalism and the Politics of Doubt*. Oxford, UK: Oxford University Press.
Gans, Herbert (2018). "Sociology and Journalism: A Comparative Analysis." *Contemporary Sociology* 47(1): 3-10.

[90] Hoekstra, Rink & Simine Vazire (2021). "Aspiring to Greater Intellectual Humility in Science." *Nature Human Behavior* 5: 1602-1607.
Ritchie, Stuart (2021). *Science Fictions: How Fraud, Bias, Negligence and Hype Undermines the Search for Truth*. New York, NY: Metropolitan.

[91] Grossman, Matthew (2021). *How Social Science Got Better: Overcoming Bias With More Evidence, Diversity and Self-Reflection*. Oxford, UK: Oxford University Press.