ANNUAL REVIEWS

Selection Neglect and Political Beliefs

Matt Brundage,[1,2,*] Andrew T. Little,[1,*] and Soosun You[1,*]

[1]Department of Political Science, University of California, Berkeley, California, USA; email: andrew.little@berkeley.edu, ssysoosun@berkeley.edu

[2]Yale Law School, Yale University, New Haven, Connecticut, USA; email: matt.brundage@yale.edu

ANNUAL REVIEWS CONNECT

www.annualreviews.org

- Download figures
- Navigate cited references
- Keyword search
- Explore related articles
- Share via email or social media

*These authors are listed alphabetically

Keywords

Abstract

Individuals, including researchers, often have to form beliefs about the political world from nonrepresentative samples—e.g., their friends, what they see on TV, or content on social media. Substantial evidence indicates that many struggle to account for this selection problem and generally form beliefs as if what they observe is representative. In this review, we provide a formal typology of how this phenomenon of selection neglect affects political beliefs. We identify three types of selection neglect: homophily leads individuals to believe others' traits and beliefs are closer to their own; the squeaky wheel effect biases beliefs toward more visible or vocal groups; and the man bites dog effect leads to excessive belief in extreme or unusual events. Selection neglect is a unifying way to understand disparate literatures on perceptions of the economy and demographics, beliefs about others' beliefs, partisan media, and social media. Much empirical research is consistent with biased beliefs driven by selection neglect but rarely directly tests this mechanism outside of lab settings. We discuss how future research can provide more direct evidence.

1. INTRODUCTION

This review proposes a common framework for understanding a variety of political misperceptions. As any teacher or student of statistics or research design knows, most people struggle to understand how samples may not be representative of wider populations. People often form beliefs as if "what you see is all there is" (Tversky & Kahneman 1974). Individuals who do not account for the fact that what they see is not representative may form incorrect beliefs due to this error, known as selection neglect (Koehler & Mercer 2009, Jehiel 2018). At its core, this paper is about unrepresentative samples. Much of statisticians' work on survey design, causal inference, and missing data aims to detect or mitigate this problem (e.g., Rubin 1974, Rosenbaum 2010, Little & Rubin 2019) and, more recently, to expose the corresponding limitations and dangers of big data when used without an eye toward unrepresentativeness (Meng 2018, Bradley et al. 2021). Our focus is more on individuals as "intuitive statisticians" (Nisbett et al. 1983) or "everyday econometricians" (Barron et al. 2019) who are prone to selection neglect.

Selection neglect could have major consequences for fundamental questions in political science. How do individuals form political beliefs and policy preferences? Do elected politicians represent their constituents' interests? How do cable news and social media affect political knowledge? These questions have spawned a range of important literatures in all subfields of political science.

In Section 2, we explain and formalize three varieties of selection neglect that are common in political settings. The first variety is homophily: People interact more frequently with others who are similar to them. Without adjusting for this, people will tend to think that the population as a whole is more similar to them than it actually is. The second is the squeaky wheel effect: Some individuals and groups (e.g., the wealthy, the highly educated) are more socially visible or have their opinions broadcast more. The third is the man bites dog effect: Unusual or extreme events and perspectives tend to be more memorable and covered by the media, making them seem more common than they truly are. By providing this typology of three forms of selection neglect, we identify a unifying way to understand perceptions of the economy and demographics, beliefs about others' beliefs, partisan media, social media, and more. We thus enable researchers to learn from and build upon others' seemingly disparate findings related to social and political phenomena.

Next, we discuss some challenges for detecting selection neglect (Section 3). Use of observational data entails the usual problems: Those in different information environments tend to differ in other ways. Even with a research design capable of detecting the causal effect of (biased) information, as in an experiment, it is hard to tell how someone should update their beliefs without knowing exactly what information they possess about the selection process.

Suppose, for example, an observer is randomly assigned to receive information from a biased news source that reports only favorable information about a particular political party, and she subsequently reports more positive views of that party. One explanation of this outcome is selection neglect—the observer is unaware of the bias of the news source and updates her beliefs as if it were reporting fairly. Another observationally equivalent possibility, however, requires no selection neglect. Perhaps the observer is fully rational and is aware that the source might be biased. Despite this knowledge, she might develop more positive views of the party if she underestimates the magnitude of the bias. Some experimental work addresses this problem by making the selection problem explicit, offering a straightforwardly correct way for subjects to update their beliefs (Section 4). Such work strongly supports the selection neglect explanation.

The core of our review examines five clusters of papers on how selection neglect shapes politically salient beliefs and behavior (Section 5): economic perceptions, demographic perceptions,

Table 1 Examples of selection neglect by source and variety

Variety of selection neglect	Personal experience	Media portrayal
Homophily	Segregation (e.g., Newman et al. 2015a)	Targeted advertising; selective exposure (e.g., Knobloch-Westerwick et al. 2008)
Squeaky wheel	Opinions that are more likely to be expressed; politician beliefs about constituents (e.g., Broockman & Skovron 2018)	The rich, coastal elites; stereotypical portrayals (e.g., Kim 2023)
Man bites dog	Partisan views; extreme events (e.g., Settle 2018, ch. 5)	Terrorist attacks, plane crashes; focus on extremists (e.g., Mernyk et al. 2022)

second-order public opinion, partisan media and propaganda, and social media. For example, homophily is useful for thinking about economic misperceptions and their effects on policy preferences (Cruces et al. 2013, Sands & de Kadt 2020), and the squeaky wheel effect may help us better understand how the media operates (Jacobs et al. 2021, Kim 2023).

Overall, there is strong empirical evidence that (*a*) in controlled laboratory studies, individuals struggle to adjust for biased samples when making inferences; (*b*) such biased samples are pervasive in political settings; and (*c*) exposure to biased information is correlated with (and sometimes causes) changes in beliefs and actions. Accordingly, it is plausible that selection neglect is a primary driver of biased beliefs that affect behavior in real political settings. However, few if any studies directly test this. We conclude (Section 6) by discussing how the theoretical analysis in Sections 2 and 3 can guide future empirical work to provide such evidence.

2. THE VARIETIES OF SELECTION NEGLECT

We distinguish between three varieties of selection neglect according to the different ways that some pieces of information become more observable than others.

Table 1 provides an overview of the three varieties of selection neglect defined above: homophily, the squeaky wheel effect, and the man bites dog effect. The table highlights two central but nonexhaustive sources of biased information within each variety: personal experiences (e.g., observations of friends and neighbors) and media portrayals.

Below, we formalize these varieties of selection effects. These formalizations help us connect the theoretical expectations we have for the three varieties of selection neglect to the empirical research that implicitly or explicitly searches for evidence of selection neglect across social and political phenomena.

Consider a population of people that is characterized by a trait x_i (e.g., their income, education, or political ideology). In reality, each $x_i \in X \subseteq \mathbb{R}$ is drawn from a distribution with density function $f(x)$.[1] Some signals, or people with certain traits, are more likely to be observed than others—again, often via personal experiences or media portrayal. Observability can also vary within that subset (e.g., if those with certain political opinions are more vocal than others).

Let $p(x)$ represent the probability that a realization x is observed. Then the density of observed signals is proportional to the true density times the probability of observation: $\tilde{f}(x) \propto_x f(x)p(x)$.[2]

---

[1]Continuous distributions tend to be easier to work with for the examples we use, but similar ideas work for discrete distributions as well.

[2]The "proportional to" relation allows us to drop the normalizing constant, which is not a function of x. The exact density is given by $\tilde{f}(x) = \frac{f(x)p(x)}{\int_{x' \in X} f(x')p(x')dx'}$.

Intuitively, the relative frequency of people with trait x in the observed sample will be higher when this value is more prevalent in the population [higher $f(x)$] or more likely to be observed [higher $p(x)$]. Each variety of selection neglect corresponds to a distinctive $p(x)$ function, reflecting the different ways that some signals become more observable.

2.1. Homophily

I live in a rather special world. I only know one person who voted for Nixon. Where they are I don't know.

—Pauline Kael (Shenker 1972)

Homophily often arises from personal experience: We tend to live by and work with others who are similar to us politically, demographically, and otherwise. Homophily also arises from media portrayals, as when individuals deliberately seek out media consistent with their prior beliefs. Targeted advertising and online media algorithms may exacerbate this pattern.

For a formalization, consider an observer who has a trait x_o, who is more likely to observe realizations of other x_is that are close to x_o. In general, we can capture homophily with any $p(x)$ function where p is higher for others who are closer to x_o. For example, suppose the real distribution of traits is normal with mean μ and variance σ^2, and suppose the probability that an observer with trait x_o observes another has the property

$$\log p(x_i; x_o) = k - \frac{h}{2}(x_i - x_o)^2,$$

where $h \geq 0$ weights the strength of the homophily in o's network. When h is high (e.g., if people live in more politically homogeneous neighborhoods or consume more ideologically homogeneous news), the probability of observing x_i drops off more sharply when the trait is more different.[3]

As derived in the **Supplemental Appendix**, the observed distribution is normal with mean

$$\tilde{\mu} = \lambda\mu + (1 - \lambda)x_o$$

and variance $\lambda\sigma$, where $\lambda = \frac{\sigma^{-2}}{\sigma^{-2}+h}$.

Per this model, three notable trends will emerge if individuals do not correct for homophily in their personal networks and media consumption when drawing population-level conclusions. First, they will tend to think that the average trait of others is closer to their own than it truly is. They will think that the average trait is a weighted average of the real population mean (i.e., the truth) and their own trait, where the latter gets more weight as homophily h is stronger. As a result, those on the lower end of the distribution will tend to overestimate their position relative to the mean, while those on the higher end will underestimate their relative position. Second, individuals will underestimate how many people are very different from them, since homophily decreases the variance in the perceived distribution. Third, homophily will exert a larger influence when the underlying distribution has a high variance.[4] For example, if there is little variance in media reporting on a topic, then all will observe a similar distribution regardless of their views. In contrast, in a more segmented media landscape with a wider variety of slants, it is easier for people on the extremes to find sources aligned with what they think. In Section 5, we review various empirical findings consistent with the homophily model (e.g., Engelhardt & Wagener 2018, Knell & Stix 2020).

---

[3]The $k \leq 0$ term is a constant that weights how likely the observer is to encounter others in general. Since only relative frequency of observation matters, this term does not affect the observed distribution.
[4]Formally, $\frac{\partial^2 \tilde{\mu}}{\partial h \partial \sigma} > 0$.

2.2. Squeaky Wheels

> The Representative knows his constituents mostly from dealing with people who do write letters [and] who will attend meetings.
>
> —Miller & Stokes (1963, p. 54)

A second variety captures situations where higher or lower values of a certain trait are more likely to be observed, regardless of the observer's position. As the saying goes, the squeaky wheel gets the oil. For example, Miller & Stokes (1963) find that politically active constituents are an unrepresentative bunch; they are comparatively rich, old, politically extreme, and extroverted. This affects what politicians and ordinary citizens hear, whether in person or via media, where certain views are more likely to be aired, particularly in the context of partisan or government-controlled outlets.

A simple way to formalize this notion is to assume trait x_o's observability is increasing in x_i (this is without loss of generality, since we can always relabel the trait to be $-x$) and suppose the observed distribution is proportional to $p(x)f(x)$ for some strictly increasing $p(x)$. This has the natural effect of increasing the average of the observed trait, particularly if the p function is "steep," corresponding to a more heavy skew in what information gets observed (see the sidebar titled Formalizing the Squeaky Wheel Effect).

In Section 5, we review various empirical findings consistent with the squeaky wheel model. For example, in a squeaky wheel vein, news often closely mirrors the economic situations of the rich while largely neglecting those of the poor (Jacobs et al. 2021).

2.3. Man Bites Dog

> You never read about a plane that did not crash.
>
> —Aphorism in journalism

Extreme or unusual events are often more likely to be reported (or remembered). Per one journalistic saying, "Dog bites man is not news; man bites dog is news" (Nimark 2014). An analogous situation can arise via personal experiences if, say, the politically extreme are more vocal about their views, or just more likely to discuss politics in general.

One way to formalize this idea is to assume observability is increasing in the distance to the most common event: $|x - x^*|$, where x^* is some measure of central tendency. That is, events that are further from x^* are more extreme and will be more frequently observed. For example, if we

think of x^* as being a moderate political opinion, with lower or higher values of x being more liberal or conservative opinions, then it may be natural to assume that $p(|x - x^*|)$ is increasing if more extreme views are more noteworthy or "interesting."[5]

In Section 5, as with the other two varieties of selection neglect, we review various empirical findings consistent with the man bites dog model. For example, foreign policy views can be distorted by overemphasizing the most extreme, flashy scenarios over the more common or likely ones (Kanwisher 1989).

2.4. Related Concepts and Theories

Selection neglect is related to several other influential ideas. For instance, a widely used concept in psychology is "naïve realism": the commonly held belief that our own perception of the world corresponds to reality, whereas others succumb to greater irrationality, bias, or a lack of information (Griffin & Ross 1991). By overestimating their own objectivity, individuals fundamentally misunderstand their environments and, ironically, they develop precisely the sorts of biases and incorrect beliefs that they exclusively attribute to others.

Another literature focuses on the availability heuristic (individuals' tendency to over-rely on information that quickly comes to mind) and other phenomena related to selection neglect in memory, which psychologists have long recognized as potential sources of biases in beliefs (e.g., Tversky & Kahneman 1973, Kunda 1990). What facts come to mind also plays a central role in the influential "Receive Accept Sample" model of public opinion (Zaller 1992; for a formal treatment, see Gennaioli & Shleifer 2010).

The sources and consequences of biased beliefs are also key themes of behavioral economics (Rabin 1998, Benjamin 2019). The broad kind of belief bias we are studying fits into a growing literature where actors have mis-specified models, meaning a misunderstanding about their environment that leads to incorrect beliefs (e.g., Bohren 2016, Esponda & Pouzo 2016).[6] A different strain of this literature on discrimination often uses ideas related to selection neglect, in domains such as policing (Hübert & Little 2023).

Several recent papers model specific kinds of selection neglect. In an example of theoretical and experimental work on the squeaky wheel effect (Enke 2020), subjects aim to guess the average of some randomly drawn variables, but some observations (either above or below the average) are censored. Hirshleifer (2020) models similar effects of selection neglect that occur where social processes shape economic behavior. When consumers over-rely on more visible signals of consumption rather than nonconsumption, they overestimate others' consumption patterns and subsequently choose to consume more (Han et al. 2019); a similar pattern emerges with observations of investment strategy outcomes in different social networks (Han et al. 2022). Bowen et al. (2021) and Weatherall et al. (2020) study social learning models, where some individuals do not

---

[5]In a sense, this is just a version of the squeaky wheel where the trait is extremity. A more distinctive way to think of this variety is that some traits or events are more likely to be observed or reported on precisely because they are rare. In this case it may be natural to write the probability that x is observed as $p(f(x))$, where p is strictly decreasing. If $f(x)$ is symmetric and single peaked around x^*, then these two approaches end up being the same, as more extreme values are more rare. The **Supplemental Appendix** contains a formalization that can capture either notion. In either case, this kind of selection will generally lead to higher variance distributions, since more extreme values get broadcast more. More generally, rare events will seem less rare than they really are. As shown in the appendix, this effect matters more when we look at events that are rarely observed in general.

[6]A related bias is correlation neglect, where individuals do not account for the fact that correlated pieces of information (say, the opinions of two people who read the same news source) are less informative than independent signals (Levy & Razin 2015, Ortoleva & Snowberg 2015).

share information that goes against their preferences, and receivers do not account for this. These models focus on network structure, and these biases may prevent learning the truth.[7]

3. IDEAL TESTS AND CHALLENGES

An ideal test for selection neglect is a setup where both the researcher and the subject know the selection bias in a sample, and hence the researcher can directly detect whether the subject neglects the selection. Several experimental tests discussed in this section are close to this ideal, providing strong evidence that selection neglect is a major driver of incorrect beliefs in such a setting.

However, we ultimately care about whether selection neglect affects real-world political beliefs. We cannot observe the specific thought process a person employs to arrive at their perception of, say, their placement along the national income distribution. Absent mind-reading, we are left with some general inferential challenges that are worth discussing before we get into the details of specific studies. Perhaps most important, it is hard to distinguish between the effect of seeing higher signals and being in an environment where higher signals are more visible.

It will help to illustrate this with a simplified version of the inference problem we study. Suppose a group of people indexed by i observe an individual signal equal to

$$s_i = \bar{x} + b_i.$$

Think of $\bar{x}$ as the "real" population mean of the trait and $b_i \in \mathbb{R}$ as a bias term capturing the fact that our observer may see higher or lower traits more often.

Suppose that a researcher observes b_i and the posterior belief about $\bar{x}$ held by each individual. For example, think of b_i as representing how rich a neighborhood individual i lives in, and s_i as the information they have about the typical wealth in their country more broadly. Based on this information, the subject reports (e.g., in a survey) their belief about the average income in their country. We may be interested to know if people who live in richer neighborhoods—and hence generally have higher b_i—have different beliefs on average about the national state of affairs. In effect, we are asking if individuals can correct for the selection effect caused by the homophily of their personal networks.

If the individual in question also knows b_i, this is a simple problem: The signal minus the bias is equal to the real population mean.[8] In other words, the individual will properly learn $\bar{x}$ no matter what the bias, and these will be uncorrelated.

A way to think about selection neglect here is to suppose the subjects update as if the signal were given by $s_i = \bar{x}$, i.e., they neglect the bias.[9] If so, their belief will be equal to $\bar{x} + b_i$, which is increasing in b_i. Therefore, a positive correlation between b_i and beliefs about $\bar{x}$ could be driven by selection neglect. This argument holds even if the subject partially filters out the bias, i.e., updates as if their signal were $s_i = \bar{x} + \nu b_i$ for some $\nu \in (0, 1)$.

However, another possibility is that individuals are aware that what they observe might be biased, but they do not know exactly what the bias is. A simple way to capture this is to assume that they believe (correctly or not) that b_i is normally distributed with mean 0 and variance σ_b^2. Similarly, the prior belief about $\bar{x}$ is normally distributed with mean μ and variance σ_x^2. The posterior belief

---

[7]In addition, Golub & Jackson (2010) study learning on a network where sharing is not strategic, but where not correctly accounting for the origin of information can inhibit convergence to the truth.

[8]We could also add a systematic error term, which does not fundamentally change the argument. It is still a standard problem of Bayesian updating, and subjects will have correct beliefs on average.

[9]In a model where the bias is a strategic choice, Ashworth & Bueno de Mesquita (2014) call this "failure to filter."

of individual i has mean

$$\lambda s_i + (1 - \lambda)\mu,$$

where $\lambda = \frac{\sigma_x^2}{\sigma_x^2 + \sigma_\varepsilon^2}$. But conditioning on the realization of b_i (as the researcher can do if they have more information about the bias), we can write this as

$$\lambda(\bar{x} + b_i) + (1 - \lambda)\mu,$$

which is increasing in b_i. For example, those who live in richer neighborhoods will tend to think the country's population is richer if they do not know how unusual their environment is. The slope of this relationship is weaker than in the pure selection neglect case (since $\lambda < 1$), though most empirical tests simply check the sign rather than using a more specific benchmark.

More generally, if the researcher has any information about the bias in what an observer sees, this will correlate with the beliefs even if the subject updates perfectly. That is, selection neglect may be hard to distinguish from selection uncertainty. This ambiguity will be a common theme in the work discussed in Section 5. For example, exposure to right-leaning media can systematically shift the audience's beliefs in a conservative direction (DellaVigna & Kaplan 2007, Broockman & Kalla 2023). The mechanism could be that the audience is (*a*) unaware of the bias of these sources or (*b*) aware of the bias but uncertain about how strong it is.

Some of the experimental work discussed in the following section solves this problem by explicitly telling subjects the bias in what they observe. However, in observational studies, where we typically do not know whether individuals are aware of how biased their samples are, it is hard to disentangle these two possibilities.

4. EXPERIMENTAL WORK ON THE MECHANISM

Selection neglect is not as widely discussed as other forms of belief bias, such as motivated reasoning, confirmation bias, or overconfidence. However, the experimental evidence that selection neglect leads to major deviations from rational benchmarks is arguably as strong as, if not stronger than, any of these. In this section, we discuss experiments that primarily aim to detect selection neglect (though some work we discuss in Section 5 is experimental as well).

These studies typically present subjects with a situation where a selection problem is possible to figure out, if not explicitly stated. Many if not most subjects still tend to interpret data in a naïve fashion, i.e., as if they are representative.

In a study by Enke (2020), subjects were tasked with estimating the average of randomly drawn numbers, and were sometimes only shown the below-average or above-average draws. Subjects were given monetary incentives to provide correct answers. Roughly half essentially reported the "naïve average" without adjusting for this selection. Lifchits et al. (2021) used a more natural task: Subjects made incentivized bets about whether a startup company would succeed, given information about whether a founder was a college dropout or graduate. Subjects were shown examples of successful companies with one type of founder and not the other, and were told that this was how the examples were chosen. Given this selection process, the examples shown should have had little if any impact on beliefs, but they exerted a large impact on the kind of companies subjects bet on.

Another strand of the literature examines endogenous selection problems, where the bias in samples arises due to choices participants make. Two recent experiments show that investment decisions are shaped by whether participants only observe the results of projects that are implemented by those with access to private information (Esponda & Vespa 2018, Barron et al. 2019). A Bayesian should adjust for the fact that this private information is usually favorable when investments happen. However, subjects generally behave as if the success rate of past projects is an

unbiased estimate, consistent with the theoretical predictions of Jehiel (2018) (and, more broadly, Kagel & Levin 1986, Eyster & Rabin 2005, Esponda 2008).

What drives heterogeneity in selection neglect? Several studies explicitly encourage participants to think about the information they do not see (e.g., Enke 2020) or otherwise make the selection process more transparent (López-Pérez et al. 2022), which generally decreases errors. Others use more subtle cues, like telling subjects they are only seeing the performance of two out of 30 mutual funds run by a company in an advertisement rather than just telling them they are seeing the performance of two funds (Koehler & Mercer 2009). Koehler & Mercer (2009) also find that those who score higher on a statistical reasoning test do a better job of adjusting for selection when cued to do so. Jin et al. (2021) find that giving direct and repeated feedback can help mitigate selection neglect in the context of a disclosure game (where a sender may choose to withhold information from a receiver).

While the papers discussed in this section allow for precise detection of selection neglect, we are ultimately concerned with how much it affects real political beliefs. In the next section, we review several empirical literatures on biases in beliefs and behavior that may be driven by selection neglect.

5. POLITICAL EXAMPLES AND IMPLICATIONS OF SELECTION NEGLECT

In this section, we review five clusters of papers on how selection neglect shapes politically salient beliefs and preferences: (*a*) economic perceptions, (*b*) demographic perceptions, (*c*) second-order public opinion, (*d*) partisan media and propaganda, and (*e*) social media. We discuss the quality of evidence that selection neglect occurs in each setting, as well as the apparent or likely political implications of selection neglect therein. Although more research is needed to connect the experimentally identified mechanism in the research described above to the mostly observational findings described below, selection neglect emerges as a likely mechanism driving politically salient beliefs and preferences across myriad contexts.

5.1. Economic Perceptions

For citizens to have coherent preferences over policy and hold elected officials accountable for their stewardship of the economy, they need to have some sense of economic reality. Where do they lie in the income distribution? How well did the economy perform under the incumbent politician? Economic perceptions like these are frequently drawn from the two sources of information detailed in **Table 1**: personal experiences and media portrayals. Selection neglect can affect these perceptions and, in turn, affect individuals' policy preferences and behaviors like voting. **Figure 1** shows a general causal diagram that summarizes the relationships explored by papers on economic and demographic perceptions.

Figure 1

Causal diagram for a variety of studies on economic perceptions (Section 5.1) and demographic perceptions (Section 5.2).

5.1.1. Personal experience and local context.

Personal experiences, especially the objective local economic conditions people observe (often in highly segregated neighborhoods or other contexts), potentially affect beliefs about local economic conditions and thus beliefs about national economic conditions.[10] If selection neglect occurs in the cognitive process of learning about economic conditions from one's personal experiences, it will typically be one of two varieties: homophily (the traits of others in an economically segregated environment tend to be similar to one's own traits) and squeaky wheel (some cues are more visible regardless of one's own standing).

Several studies explore the relationship between personal experiences in one's local context and perceptions of one's relative economic status. In Argentina, Cruces et al. (2013) find that an individual's objective economic position in the income distribution of their locality is correlated with their perceived position along the national income distribution, suggesting that residents might be over-relying on local cues to approximate their status in the nation at large. Other studies identify correlations that are similarly consistent with what we would expect if people over-rely on local cues. For example, low-income respondents tend to overestimate their position in the income distribution and high-income respondents tend to underestimate their position (Engelhardt & Wagener 2018, Knell & Stix 2020), consistent with the model in Section 2.1.[11]

Misperceptions rooted in these personal experiences may also affect policy preferences and behavior. In the Argentina study, for example, among respondents who initially overestimated their relative economic position, those who randomly received information about their true income rankings demanded more redistribution (Cruces et al. 2013). Similarly, Ogorzalek et al. (2020) find that a person's position on their local income distribution is correlated with their voting behavior on national issues, independent of their position within the national distribution. Individuals with higher income rank within their racial and ethnic identity groups are less likely to support redistribution, regardless of their actual income position (McClendon 2018).

Personal experiences in one's local context also appear to shape other national-level economic perceptions and policy beliefs. For example, studies on local inequality find a positive relationship between objective subnational inequality or economic diversity and perceptions of inequality (Newman et al. 2018) and class consciousness (Newman et al. 2015a). Results on whether this affects perceptions of national inequality are more mixed; some studies find a positive relationship (Xu & Garand 2010) while others find null effects (Minkoff & Lyons 2019). Perceptions of inequality rooted in personal experience also may shape policy preferences. Sands & de Kadt (2020) find that local inequality, both observational and experimentally introduced, is positively correlated with support for a tax on the wealthy.

Similar findings exist with respect to perceptions of racial inequality in the United States. Americans tend to underestimate current levels of racial inequality, and this misperception is correlated with their personal economic situation (Davidai & Gilovich 2015, Kraus et al. 2017). These misperceptions of national-level racial inequality also appear to be rooted in perceptions of local racial inequality, which is systematically lower than national-level racial inequality

---

[10]Beliefs about local conditions could also affect beliefs about any broader economic conditions (e.g., state or international conditions). Consistent with most of the work reviewed, we focus on inferences about the national level.

[11]Related work studies the causal effect of better information. For example, Perez-Truglia (2020) provides a natural experiment in Norway where the government publicized tax returns, thus increasing income transparency. Consistent with prior misperceptions driven by selection neglect (but also with other mechanisms), following this change, low-income respondents tended to report that they were poorer than they reported in the years before the change, while high-income respondents tended to report that they were richer—both estimating their positions more accurately than before.

(Brundage 2023). These findings together suggest that selection neglect may shape perceptions and help explain why Americans tend to underestimate the extent of racial inequality.

5.1.2. Media portrayal. Some evidence suggests that media portrayals shape economic perceptions. Whereas personal experiences seem to shape perceptions primarily via the homophily variety of selection neglect, the apparent effects of media portrayals more frequently resemble the squeaky wheel or man bites dog variety.

In a squeaky wheel vein, news often closely mirrors the economic situations of the rich while largely neglecting that of the poor (Jacobs et al. 2021). Moreover, some of the most heavily watched shows in the United States (e.g., *Shark Tank*, *America's Got Talent*) highlight rags-to-riches narratives. Kim (2023) documents observational and experimental evidence that these shows' viewers have more optimistic beliefs about economic mobility and the "American Dream."

Media bias may also lead to skewed views about international economic issues. For example, trade deficit increases receive more coverage than decreases (Guisinger 2017, ch. 7). Similarly, Brutger & Strezhnev (2022) find that investor-state investment disputes receive more press coverage in countries that are being sued; their survey experiment suggests that such biased coverage could lead to a backlash against trade agreements with these provisions.

Selection neglect is a plausible explanation of the findings on the relationship between personal experiences or media portrayals and economic perceptions. Future research should more directly test the mechanism (see Section 6 for suggested methods).

5.2. Demographic Perceptions

Selection neglect is also likely to affect demographic perceptions and, in turn, policy preferences and behaviors like voting. Just as beliefs about economic reality affect preferences over economic policy, beliefs about demographic reality (e.g., the size, status, and characteristics of different racial and ethnic groups) affect preferences over policies related to redistribution, discrimination, and immigration, among other important political consequences.

Consider, for example, the racial threat hypothesis: that White people feel threatened by racial and ethnic diversity and respond by adopting more hostile racial attitudes or voting behavior. A long tradition of scholarship in political behavior tests this hypothesis by analyzing the relationship between local racial or ethnic group population sizes and the corresponding voting behavior or attitudes of White people (Key 1949, Enos 2017). The observed racial threat response need not be driven by selection neglect; in his classic study of White voters in southern counties, Key (1949) hypothesized that they perceived the electoral threat of local Black voters gaining political power in their region. However, selection neglect may play a key role in other cases. White residents might take their local sample as representative of greater population-level demographic trends, which could inform their threat response as measured via racial attitudes and voting behavior.

Like economic perceptions, demographic perceptions are a natural domain for selection neglect to affect beliefs because perceptions are frequently drawn from the two sources of information identified in **Table 1**: personal experiences and media portrayals. Since most people live in racially segregated environments (i.e., homophily), they likely observe an unrepresentative sample of members of different demographic groups. Media portrayals are similarly unrepresentative, often in ways that can be captured by the squeaky wheel mechanism. Individuals engaging in selection neglect will erroneously take these depictions as representative of different groups' size, status, or characteristics at the population level, potentially affecting policy preferences and behavior.

5.2.1. Personal experience. Wong (2007) provides a strong example of the belief channels in **Figure 1** using data from the United States, finding positive correlations between three key

variables represented in the causal diagram: objective local context (racial and ethnic groups' share of the local population at the primary sampling unit level), beliefs about local context, and beliefs about national context (group shares at the national level). State-level studies find similar albeit weaker relationships between objective state-level conditions and national-level perceptions (Gilens 2003). Other studies focus on intermediate causal arrows in **Figure 1**, finding positive correlations between objective local demographics and beliefs about local demographics (Wong et al. 2012), and between beliefs about local demographics and beliefs about national demographics (Alba et al. 2005).

Still others find suggestive evidence that perceptions and misperceptions driven by local context affect policy preferences and behavior. Alba et al. (2005) find that beliefs about both local and national context are correlated with a range of attitudes toward immigrants and other minorities. In their study of local immigration and economic conditions, Newman et al. (2015b, p. 123) find that local context and beliefs about local context are correlated with national-level political attitudes. This study also takes a useful step of checking whether subjects are, as the authors put it, "receiving the treatment" (i.e., reporting local conditions that reflect local realities). The authors find that local perceptions "overwhelmingly mediate the effect of these objective contextual factors on relevant economic and immigration attitudes."

5.2.2. Media portrayal. News, entertainment, and other forms of media tend to provide an unrepresentative depiction of different groups. Media consumers exhibiting selection neglect may take these depictions as representative of different groups' size, status, or characteristics at the population level.

Here, selection neglect is often of the squeaky wheel variety. The archetypal media misrepresentation involves a disproportionately prevalent and thus more visible trait (often a stereotype) in the sample of members of a demographic group, relative to the trait's prevalence in that group's actual population.

Descriptive evidence suggests that media depictions of various groups are indeed unrepresentative. Racial and ethnic minorities in both news and entertainment media are often underrepresented relative to their share of the population (Mastro & Greenberg 2000, Monk-Turner et al. 2010). They are overrepresented in negatively valenced TV roles such as criminals, compared to the real-world percentage of criminals who are minorities (Dixon & Linz 2000). Similar patterns of misrepresentation abound in print media (Gilens 2003, Covert & Dixon 2008). Minorities are also disproportionately depicted as having more negative traits than their White counterparts in both entertainment and news media (Entman 1992, Oliver 2003, Besana et al. 2019, Fritz et al. 2021). Somewhat different from the typical pattern is the model minority myth: that Asian Americans either do not experience racism or have entirely overcome racist obstacles to their collective prosperity (McGowan & Lindgren 2006). This belief is often attributed to media depictions that disproportionately feature Asian Americans as "success stories" (Wing 2007).

Unrepresentative depictions have consequences. In experimental settings, the race of the depicted suspect in a news clip affects attitudes toward crime (Gilliam & Iyengar 2000), exposure to well-liked as opposed to neutrally evaluated Black exemplars affects attitudes toward discrimination (Bodenhausen et al. 1995), counterstereotypical print news stories about Black people affect racial attitudes (Power et al. 1996), and the race of the depicted crime suspect in a news segment affects stereotype evaluations (Peffley et al. 1996). Kuo et al. (2020) find that the model minority myth regarding Asian Americans may cause individuals to overestimate Asian–White wealth equality: Participants who are primed to think of low- (high-)status Asian Americans are less (more) likely to overestimate Asian–White equality.

Media portrayals also invite a homophily problem. Evidence suggests that people tend to opt into media environments where the depicted people and their circumstances are systematically more similar to themselves. For example, a study tracking respondents' news story selection found Black readers significantly more likely to select news stories featuring Black people (Knobloch-Westerwick et al. 2008, Appiah et al. 2013). This is one form of a broader category of selective exposure in media consumption (Appiah et al. 2013). Weaver (2011) identifies a similar pattern in consumption of entertainment media.

Overall, these findings are consistent with the core predictions from the formalization of the homophily model (explicitly or implicitly inferring that reference groups observed in their personal experiences are representative of the broader population) and the squeaky wheel model (beliefs excessively weighted by groups that are more visible). Of course, these findings are all consistent with alternative explanations. Regarding the studies on personal experiences, those who live in different kinds of neighborhoods and states may also differ in other dimensions. Further, as discussed in Section 3, it is hard to say how much these relationships are driven by selection neglect as opposed to selection uncertainty, i.e., rational updating with uncertainty about bias.

5.3. Second-Order Public Opinion

Citizens and politicians often form beliefs about the beliefs of others, which we call second-order public opinion. In this section, we discuss how selection neglect affects these beliefs and why it matters, first for politicians and then for citizens more broadly.

5.3.1. Politicians' beliefs about constituents.
Canonical theories of democratic representation posit that politicians generally aim to support their constituents' preferred policies (e.g., Przeworski et al. 1999). Many theories of politician behavior include uncertainty about constituent preferences (e.g., Calvert 1985), but most assume that politicians' beliefs are unbiased. A growing body of evidence suggests otherwise. These findings are consistent with a model of politicians engaging in selection neglect.

Politicians' sources of information about constituent preferences (e.g., polling, media sources, and discussions with constituents, advisors, and other political elites) entail the opportunity for selection neglect to lead to biased beliefs. Politicians hear from constituents with the time, resources, and political interest to contact their representatives (Miller & Stokes 1963). At least among a sample of some Western European politicians, they view such contact as a much better source of public opinion than polling (Walgrave & Soontjens 2023). Further, the method by which constituents attempt to influence politicians may affect how politicians receive their opinions (Gause 2022, ch. 3).[12] Depending on the context, this could lead to several forms of bias. For example, those with more resources and a greater financial stake in political decisions have more ability and desire to connect with their representatives, which could generate a bias towards probusiness and economically conservative views. Similar biases could arise from the fact that political elites themselves tend to come from wealthier rather than working-class backgrounds (Carnes & Lupu 2015).

Recent empirical findings are consistent with these speculations. US state legislators systematically believe that constituent opinion is more conservative than it is (Broockman &

---

[12]Looking beyond politicians themselves, Enos & Hersh (2017) find that those who work on political campaigns tend to be overly optimistic about their candidate's prospects. This is consistent with our homophily model, as volunteers and campaign staff spend much time with each other. Hertel-Fernandez et al. (2019) find that legislative staffers overestimate constituents' conservativeness, offering evidence that these misperceptions are driven by egocentric bias and contact from lobbyists.

Skovron 2018). Their data further suggest this might be driven by selection neglect. First, Republicans are more likely to contact their representatives. Second, these biases are most extreme on the issue of gun control, an issue with intense lobbying on the conservative side and an even larger asymmetry in who contacts politicians (in the terminology of the model of Section 2.2, a "sharper" p function). Third, those who have previously held office have less accurate beliefs about the opinions of their constituents, perhaps driven by interactions with an unrepresentative sample of their constituency. Pereira (2021) similarly finds that Swedish members of parliament are more likely to misperceive majority opinion within their party when high-status voters have different views than the majority—but encouraging Swiss politicians to consider their constituencies as a whole reduces error in predicting opinion.

5.3.2. Leaders' misperceptions, groupthink, and foreign policy. In the realm of international relations, some posit that leaders' biased second-order beliefs can cause poor foreign policy choices. Leaders may misunderstand the selection process driving the signals they receive from advisors and other leaders. For example, some formulations of the spiral model of conflict point to systematically biased second-order beliefs about other leaders' intentions in aggressive posturing (Jervis 1976). On the advisor end, leaders rely on others who may be more hawkish than they are or just tell the leaders what they want to hear. Lake (2010) highlights this factor as a potential cause of the second US–Iraq war.

Selection neglect might drive a range of other foreign policy outcomes. In the man bites dog variety, foreign policy views can be "distorted by overemphasizing the most extreme scenarios at the expense of less flashy but more likely ones" (Kanwisher 1989, p. 655). Moreover, groupthink can drive misperceptions that may lead to other foreign policy disasters (Janis 1983).

In a striking example of groupthink, members of Weather Underground "deliberately marginalized those with competing perspectives and alienated large numbers of even sympathetic [Students for a Democratic Society] members" and, perhaps unsurprisingly, seemed sincerely convinced that terrorist activity would be popular among (or at least "awaken") the wider population (Tsintsadze-Maass & Maass 2014, p. 742).

5.3.3. Citizens' beliefs about each other. Citizens also often rely on personal experiences and media portrayals to make inferences about other citizens. Individuals' own political attitudes and behaviors are often shaped by their perceptions of others' beliefs and attitudes. This is particularly true in any strategic setting where the individuals' optimal choice depends on the actions (and hence beliefs) of others. For example, individuals may be more inclined to contribute to some public goods when they think others are similarly committed to doing so. Mildenberger & Tingley (2019) find that US and Chinese citizens dramatically underestimate their fellow citizens' concerns about climate change; correcting these beliefs increases support for climate policy action. Similar dynamics can lead to stubborn spirals of distrust and inaction, if, for example, all are excessively pessimistic about other parties' willingness to uphold democratic principles. Mernyk et al. (2022) find that correcting misperceptions of out-party support for violence reduced respondents' own support for partisan violence.

Another prominent example of this concerns partisan misperceptions. Partisans tend to hold incorrect beliefs about supporters of the rival party, such as (*a*) overestimating the difference between their political adversaries' views and their own (Robinson et al. 1995, Chambers & Melnyk 2006, Levendusky & Malhotra 2016), (*b*) overestimating their adversaries' willingness to take extreme actions (Chambers & Melnyk 2006, Yudkin et al. 2019, Lees & Cikara 2020, Ruggeri et al. 2021, Mernyk et al. 2022), and (*c*) overattributing them with negative or stereotypical qualities (Ahler & Sood 2018, Moore-Berg et al. 2020, Ruggeri et al. 2021, Pasek et al. 2022). Notably, those with the greatest misperceptions are more partisan, consume more media,

and post more political opinions on social media (Yudkin et al. 2019). They are more likely to be exposed to squeaky wheel and man bites dog media environments, as well as homophily-ridden partisan circles and social media environments, all of which may disproportionately amplify views that are relatively uncommon in the broader public.[13]

Inaccurate second-order beliefs may similarly shape the strength of various ideological movements, often yielding socially undesirable outcomes. For example, many people living under repressive communist governments hold antiregime beliefs but underestimate how widely held their beliefs are—and are only willing to publicly reveal their true preference upon learning this (Kuran 1997). Documenting a similar pattern of behavior, Bursztyn et al. (2020b) find in Saudi Arabia that men underestimate other men's support for women working outside the home, due partly to social norms preventing some people from disclosing their views. In the experimental setting, when these beliefs are corrected, men are more likely to help their wives search for jobs. In another salient political example, across several experiments, Bursztyn et al. (2020a) show that the rise of Donald Trump's popularity increased individuals' willingness to publicly express xenophobic views.

5.4. Partisan Media and Propaganda

The previous sections contain many examples of how selective reporting by media can shape the beliefs and behavior of people through selection neglect. Next, we expand on a particularly important example of this: biased media, which (on purpose or not) favors particular politicians or parties. As with previous examples, if consumers are aware of the bias in the media they observe and correct for it, this need not lead to systematically incorrect beliefs. Selection neglect in this context entails not fully adjusting for media bias. As a result, selection neglect opens the possibility for biased news sources to persuade people to hold beliefs and take political actions that match the preferences of the broadcaster.

The literature on broadcast media in comparative politics and international relations typically studies the effects of propaganda or state-run news in autocratic contexts (Enikolopov et al. 2011, Adena et al. 2015, Cho et al. 2017). As radio and television waves cross borders, broadcasts from one country can even affect behavior elsewhere (Kern & Hainmueller 2009, DellaVigna et al. 2014, Peisakhin & Rozenas 2018).

Within the United States, much of this literature studies the effect of Fox News, the most widely watched news channel with a clear conservative bent.[14] Some studies leverage staggered rollout (DellaVigna & Kaplan 2007) or channel positioning (Martin & Yurukoglu 2017) to generate plausibly exogenous variation in exposure to Fox News, typically studying voting behavior as an outcome. This literature finds that exposure to partisan media has moderate to strong persuasive effects. Less clear is why.

Broockman & Kalla (2023) provide evidence that a mechanism related to selection neglect, which they call "partisan coverage filtering," could play a major role. They paid heavy Fox News consumers to watch CNN for a 4-week period and performed a content analysis of these networks' coverage over that period. They find strong differences in what the networks cover, creating a selection problem where networks pick topics (e.g., Fox focusing on Black Lives Matter protests and

---

[13] Studies also find that partisan misperceptions tend to be larger on issues and values that people deem central to their party (Chambers et al. 2006, Chambers & Melnyk 2006). This is consistent with a selection neglect interpretation if issues of central value to partisans are discussed more by the media and among people in their social network.

[14] An exception is Velez & Newman's (2019) study on the effect of exposure to Latino television.

CNN focusing on COVID-19) and aspects of topics (e.g., CNN focusing on shortcomings of the Trump administration's handling of the pandemic while Fox News highlighted the more positive aspects) that fit in with their slant or the desires of their viewers. Viewers who start watching CNN change their beliefs about the biases of Fox News, consistent with not having adjusted for this bias before (though this could reflect unawareness of bias as well).

Other studies examine the effect of media in shaping beliefs and responses to the spread of the COVID-19 pandemic. Bursztyn et al. (2020c) does this by examining how individuals respond to exposure to different content within the Fox News network. They show that among Fox News viewers, the ways in which different shows covered the pandemic led to divergent behaviors. Ash et al. (2024) further find that individuals' actions—such as buying protective goods and staying at home—closely mirrored the specific contents covered by shows on the channel.

The potential influence of biased media on health outcomes extends beyond the COVID-19 pandemic. Using a randomized controlled trial involving a mass media intervention—specifically, an MTV series titled "MTV Shuga"—in urban Nigeria, Banerjee et al. (2019) find that exposure to the series affected attitudes, knowledge, and behaviors related to HIV/AIDS, such as getting tested for HIV.

Despite many strengths, this work does not directly pin down selection neglect as the driver of persuasion by biased media. As discussed in the formalizations in Sections 2 and 3, these results could be explained by selection neglect, rational updating with uncertainty about bias, or short-term priming effects (see Lenz 2009 for a discussion of the latter two explanations).

5.5. Social Media

A final domain where selection neglect could play an important role is social media. Three key patterns make social media a particularly troubling source of information for those concerned with the effects of selection neglect.

First, there is selection in social media platform uptake and use. Mellon & Prosser (2017) found that Twitter (now X), for instance, was disproportionately used by younger, more liberal, and more politically interested individuals in both the United States and United Kingdom.

Second, there is selection in the views people choose to state publicly. Those with more extreme political views have tended to post more about politics on Facebook (Settle 2018, ch. 5) and Twitter (Barberá & Rivero 2015). This creates a man bites dog effect that could make the population appear more extreme and polarized than it really is.

Third, there is selection in the posts that are most likely to be shared and algorithmically amplified. A feature of several social media platforms is that individuals not only post but also decide what content posted by others to share or retweet. Political posts with certain features, such as high emotional content, are more likely to spread (Brady et al. 2017). Survey respondents report being much more likely to share news that is congruent with their political ideology, but only somewhat more likely to share news that is actually true (Pennycook et al. 2021). These biases appear to affect the information people observe on social media and subsequent beliefs. Settle (2018) argues that a unique aspect of Facebook compared to other media is that those who primarily use it for nonpolitical purposes end up getting exposed to political views they would not otherwise see. Since the content being posted is relatively extreme for dog bites man reasons, this can in turn increase actual polarization. Levy (2021) finds that the Facebook algorithm is less likely to give users news from counter-attitudinal sources, and that what people observe affects subsequent political attitudes.

Notably, these three patterns interact and can feed off one another, particularly if social media users face social and algorithmic pressure to present majority-preferred views. Suppose half of a

population holds belief A while the other half holds belief B. However, a sizable but not extreme majority of one social media platform's users (say, two-thirds) believe A. If two-thirds of the platform users who believe B just keep quiet while two-thirds of the A believers state their views, then the expressed views will be even more lopsided, with four-fifths of posted opinions expressing A. This could subsequently spiral even further, leading to more extreme disparities in expressed views despite no difference in the general population (see Golub & Jackson 2010 for a model of a related process).

6. FUTURE DIRECTIONS

A common theme emerges from all of the literatures reviewed in Section 5: Selection neglect is a plausible explanation for the patterns of (incorrect) beliefs and behavior, but so are other biases, or even subjects updating rationally while uncertain about the representativeness of their experiences. For example, several empirical results that are consistent with both motivated reasoning and selection neglect as the underlying cognitive mechanism include the finding that partisans believe that almost twice as many out-party members hold extreme views as they do in reality (Yudkin et al. 2019).[15] This misperception is found over a wide array of issues, including immigration, gun control, racism, sexism, and police. Future work can do a better job of determining when selection neglect is important for understanding political beliefs.

6.1. Better Theorizing

As Section 3 shows, disentangling the predictions of biased learning and rational updating can be tricky. Formal models can improve clarity on this front, but even without them, it is worth thinking through whether a pattern of beliefs could be explained by a reasonable theory of rational inference. A benefit to writing formal models—which in this context will often just mean applying Bayes' rule and so need not require extensive expertise—is that it may also provide more subtle predictions that are helpful for empirical tests. For example, the model in Section 3 shows that selection neglect causes individuals to respond more sharply to changes in their environment than does Bayesian updating, a distinction that could be useful in experimental settings.

6.2. Experimental Work with Political Applications

Well-tailored experiments can help identify the prevalence of selection neglect in political applications. Such experiments might entail designs similar to those discussed in Section 4 but with political applications. Experimental evidence of selection neglect in the case of economic perceptions, for example, might involve a treatment providing information about the richest/poorest residents of an area, where the outcome variable is the respondent's estimates or perceptions of the distribution of wealth in that area. It would be valuable to learn whether selection neglect influences beliefs more or less in political domains.

6.3. Individual Heterogeneity

Another strategy would be to identify people who are more susceptible to selection neglect and test whether effects are more pronounced in this subgroup of individuals. In their experimental work, Koehler & Mercer (2009) find that those who score higher on a statistical reasoning test do a better job of adjusting for selection when cued to do so, which suggests that individuals can be

---

[15]Further complicating things, Little (2022) shows that motivated reasoning is often hard to distinguish from Bayesian updating, for reasons outside of those discussed in Section 3.

differentiated on their level of susceptibility to selection neglect. A potential next step would be to see if people who exhibit more selection neglect in general problems also have more incorrect beliefs in political domains.

6.4. Corrections

A final direction for future research would be to identify methods of correcting misperceptions rooted in selection neglect. A natural approach to this would be a population information treatment, intended to expose individuals to the truth about the population-level characteristic, thus removing the need to draw inferences about a population based on one's sample of observations. However, such a treatment should lead to more accurate beliefs regardless of what led to error in the first place.

Still, such corrections may be relatively more effective for errors driven by different causes, and existing work suggests there is substantial heterogeneity in the effectiveness of corrective information. For example, information might less effectively correct misperceptions when it threatens one's worldview or self-concept (Nyhan & Reifler 2019) or one's ideological or partisan attachments (Nyhan & Reifler 2010). Future research might test the effect of information about population-level traits on individuals whose perceptions are more clearly rooted in selection neglect, since some of these perceptions might be more amenable to change than those rooted more squarely in ideological beliefs, prejudice, or self-concept.

Finally, recall that some of the experimental work cited in Section 4 shows that drawing more attention to selection problems may decrease selection neglect (Enke 2020, López-Pérez et al. 2022). Along with doing more work in this vein with political beliefs, it would be natural to see if this kind of intervention can diminish bias in the political domain as well.

DISCLOSURE STATEMENT

ACKNOWLEDGMENTS

LITERATURE CITED

Adena M, Enikolopov R, Petrova M, Santarosa V, Zhuravskaya E. 2015. Radio and the rise of the Nazis in prewar Germany. *Q. J. Econ.* 130(4):1885–939

Ahler DJ, Sood G. 2018. The parties in our heads: misperceptions about party composition and their consequences. *J. Politics* 80(3):964–81

Alba R, Rumbaut RG, Marotz K. 2005. A distorted nation: perceptions of racial/ethnic group sizes and attitudes toward immigrants and other minorities. *Soc. Forces* 84(2):901–19

Appiah O, Knobloch-Westerwick S, Alter S. 2013. Ingroup favoritism and outgroup derogation: effects of news valence, character race, and recipient race on selective news reading: ingroup favoritism and outgroup derogation. *J. Commun.* 63(3):517–34

Ash E, Galletta S, Hangartner D, Margalit Y, Pinna M. 2024. The effect of Fox News on health behavior during COVID-19. *Political Anal.* 32(2):275–84

Ashworth S, Bueno de Mesquita E. 2014. Is voter competence good for voters? Information, rationality, and democratic performance. *Am. Political Sci. Rev.* 108(3):565–87

Banerjee A, La Ferrara E, Orozco-Olvera VH. 2019. *The entertaining way to behavioral change: fighting HIV with MTV*. NBER Work. Pap. 26096

Barberá P, Rivero G. 2015. Understanding the political representativeness of Twitter users. *Soc. Sci. Comput. Rev.* 33(6):712–29

Barron K, Huck S, Jehiel P. 2019. *Everyday econometricians: selection neglect and overoptimism when learning from others*. WZB Disc. Pap. SP II 2019-301, Wiss. Berl. Sozial., Berlin

Benjamin DJ. 2019. Errors in probabilistic reasoning and judgment biases. *Handb. Behav. Econ. Appl. Found. 1* 2:69–186

Besana T, Katsiaficas D, Loyd AB. 2019. Asian American media representation: a film analysis and implications for identity development. *Res. Hum. Dev.* 16(3–4):201–25

Bodenhausen GV, Schwarz N, Bless H, Wänke M. 1995. Effects of atypical exemplars on racial beliefs: enlightened racism or generalized appraisals. *J. Exp. Soc. Psychol.* 31(1):48–63

Bohren JA. 2016. Informational herding with model misspecification. *J. Econ. Theory* 163:222–47

Bowen R, Dmitriev D, Galperti S. 2021. *Learning from shared news: when abundant information leads to belief polarization*. NBER Work. Pap. 28465

Bradley VC, Kuriwaki S, Isakov M, Sejdinovic D, Meng XL, Flaxman S. 2021. Unrepresentative big surveys significantly overestimated US vaccine uptake. *Nature* 600(7890):695–700

Brady WJ, Wills JA, Jost JT, Tucker JA, Van Bavel JJ. 2017. Emotion shapes the diffusion of moralized content in social networks. *PNAS* 114(28):7313–18

Broockman DE, Kalla JL. 2023. *Consuming cross-cutting media causes learning and moderates attitudes: a field experiment with Fox News viewers*. OSF Preprint. **https://osf.io/jrw26/**

Broockman DE, Skovron C. 2018. Bias in perceptions of public opinion among political elites. *Am. Political Sci. Rev.* 112(3):542–63

Brundage M. 2023. *How income segregation distorts perceptions of racial inequality*. OSF Preprint. **https://osf.io/ gebpf/**

Brutger R, Strezhnev A. 2022. International investment disputes, media coverage, and backlash against international law. *J. Confl. Resolut.* 66(6):983–1009

Bursztyn L, Egorov G, Fiorin S. 2020a. From extreme to mainstream: the erosion of social norms. *Am. Econ. Rev.* 110(11):3522–48

Bursztyn L, González AL, Yanagizawa-Drott D. 2020b. Misperceived social norms: women working outside the home in Saudi Arabia. *Am. Econ. Rev.* 110(10):2997–3029

Bursztyn L, Rao A, Roth CP, Yanagizawa-Drott DH. 2020c. *Misinformation during a pandemic*. NBER Work. Pap. 27417

Calvert RL. 1985. Robustness of the multidimensional voting model: candidate motivations, uncertainty, and convergence. *Am. J. Political Sci.* 29(1):69–95

Carnes N, Lupu N. 2015. Rethinking the comparative perspective on class and representation: evidence from Latin America. *Am. J. Political Sci.* 59(1):1–18

Chambers JR, Baron RS, Inman ML. 2006. Misperceptions in intergroup conflict: disagreeing about what we disagree about. *Psychol. Sci.* 17(1):38–45

Chambers JR, Melnyk D. 2006. Why do I hate thee? Conflict misperceptions and intergroup mistrust. *Pers. Soc. Psychol. Bull.* 32(10):1295–311

Cho JE, Lee JS, Song B. 2017. Media exposure and regime support under competitive authoritarianism: evidence from South Korea. *J. East Asian Stud.* 17(2):145–66

Covert JJ, Dixon TL. 2008. A changing view: representation and effects of the portrayal of women of color in mainstream women's magazines. *Commun. Res.* 35(2):232–56

Cruces G, Perez-Truglia R, Tetaz M. 2013. Biased perceptions of income distribution and preferences for redistribution: evidence from a survey experiment. *J. Public Econ.* 98:100–12

Davidai S, Gilovich T. 2015. Building a more mobile America—one income quintile at a time. *Perspect. Psychol. Sci.* 10(1):60–71

DellaVigna S, Enikolopov R, Mironova V, Petrova M, Zhuravskaya E. 2014. Cross-border media and nationalism: evidence from Serbian radio in Croatia. *Am. Econ. J. Appl. Econ.* 6(3):103–32

DellaVigna S, Kaplan E. 2007. The Fox News effect: media bias and voting. *Q. J. Econ.* 122(3):1187–234

Dixon TL, Linz D. 2000. Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *J. Commun.* 50(2):131–54

Engelhardt C, Wagener A. 2018. What do Germans think and know about income inequality? A survey experiment. *Socio-Econ. Rev.* 16(4):743–67

Enikolopov R, Petrova M, Zhuravskaya E. 2011. Media and political persuasion: evidence from Russia. *Am. Econ. Rev.* 101(7):3253–85

Enke B. 2020. What you see is all there is. *Q. J. Econ.* 135(3):1363–98

Enos RD. 2017. *The Space Between Us: Social Geography and Politics*. New York: Cambridge Univ. Press

Enos RD, Hersh ED. 2017. Campaign perceptions of electoral closeness: uncertainty, fear and over-confidence. *Br. J. Political Sci.* 47(3):501–19

Entman RM. 1992. Blacks in the news: television, modern racism and cultural change. *Journal. Mass Commun. Q.* 69(2):341–61

Esponda I. 2008. Behavioral equilibrium in economies with adverse selection. *Am. Econ. Rev.* 98(4):1269–91

Esponda I, Pouzo D. 2016. Berk–Nash equilibrium: a framework for modeling agents with misspecified models. *Econometrica* 84(3):1093–130

Esponda I, Vespa E. 2018. Endogenous sample selection: a laboratory study. *Quant. Econ.* 9(1):183–216

Eyster E, Rabin M. 2005. Cursed equilibrium. *Econometrica* 73(5):1623–72

Fritz N, Malic V, Paul B, Zhou Y. 2021. Worse than objects: the depiction of black women and men and their sexual relationship in pornography. *Gender Issues* 38:100–20

Gause L. 2022. *The Advantage of Disadvantage: Costly Protest and Political Representation for Marginalized Groups*. Cambridge, UK: Cambridge Univ. Press

Gennaioli N, Shleifer A. 2010. What comes to mind. *Q. J. Econ.* 125(4):1399–433

Gilens M. 2003. How the poor became black: the racialization of American poverty in the mass media. In *Race and the Politics of Welfare Reform*, ed. S Schram, J Soss, R Fording, pp. 101–30. Ann Arbor: Univ. Mich. Press

Gilliam FD, Iyengar S. 2000. Prime suspects: the influence of local television news on the viewing public. *Am. J. Political Sci.* 44(3):560–73

Golub B, Jackson MO. 2010. Naïve learning in social networks and the wisdom of crowds. *Am. Econ. J. Microecon.* 2(1):112–49

Griffin DW, Ross L. 1991. Subjective construal, social inference, and human misunderstanding. *Adv. Exp. Soc. Psychol.* 24:319–59

Guisinger A. 2017. *American Opinion on Trade: Preferences without Politics*. New York: Oxford Univ. Press

Han B, Hirshleifer D, Walden J. 2019. *Visibility bias in the transmission of consumption beliefs and undersaving*. NBER Work. Pap. W25566

Han B, Hirshleifer D, Walden J. 2022. Social transmission bias and investor behavior. *J. Financ. Quant. Anal.* 57(1):390–412

Hertel-Fernandez A, Mildenberger M, Stokes LC. 2019. Legislative staff and representation in Congress. *Am. Political Sci. Rev.* 113(1):1–18

Hirshleifer D. 2020. Presidential address: social transmission bias in economics and finance. *J. Finance* 75(4):1779–831

Hübert R, Little AT. 2023. A behavioral theory of discrimination in policing. *Econ. J.* 133(655):2828–43

Jacobs AM, Matthews JS, Hicks T, Merkley E. 2021. Whose news? Class-biased economic reporting in the United States. *Am. Political Sci. Rev.* 115(3):1016–33

Janis IL. 1983. *Groupthink*. Boston: Houghton Mifflin. 2nd ed.

Jehiel P. 2018. Investment strategy and selection bias: an equilibrium perspective on overoptimism. *Am. Econ. Rev.* 108(6):1582–97

Jervis R. 1976. Deterrence, the spiral model, and intentions of the adversary. In *Perception and Misperception in International Politics*, pp. 58–116. Princeton, NJ: Princeton Univ. Press

Jin GZ, Luca M, Martin D. 2021. Is no news (perceived as) bad news? An experimental investigation of information disclosure. *Am. Econ. J. Microecon.* 13(2):141–73

Kagel JH, Levin D. 1986. The winner's curse and public information in common value auctions. *Am. Econ. Rev.* 76(5):894–920

Kanwisher N. 1989. Cognitive heuristics and American security policy. *J. Confl. Resolut.* 33(4):652–75

Kern HL, Hainmueller J. 2009. Opium for the masses: how foreign media can stabilize authoritarian regimes. *Political Anal.* 17(4):377–99

Key VO. 1949. *Southern Politics in State and Nation*. Knoxville: Univ. Tenn. Press

Kim E. 2023. Entertaining beliefs in economic mobility. *Am. J. Political Sci.* 67(1):39–54

Knell M, Stix H. 2020. Perceptions of inequality. *Eur. J. Political Econ.* 65:101927

Knobloch-Westerwick S, Appiah O, Alter S. 2008. News selection patterns as a function of race: the discerning minority and the indiscriminating majority. *Media Psychol.* 11(3):400–17

Koehler JJ, Mercer M. 2009. Selection neglect in mutual fund advertisements. *Manag. Sci.* 55(7):1107–21

Kraus MW, Rucker JM, Richeson JA. 2017. Americans misperceive racial economic equality. *PNAS* 114(39):10324–31

Kunda Z. 1990. The case for motivated reasoning. *Psychol. Bull.* 108(3):480–98

Kuo EE, Kraus MW, Richeson JA. 2020. High-status exemplars and the misperception of the Asian-White wealth gap. *Soc. Psychol. Pers. Sci.* 11(3):397–405

Kuran T. 1997. *Private Truths, Public Lies*. Cambridge, MA: Harvard Univ. Press

Lake DA. 2010. Two cheers for bargaining theory: assessing rationalist explanations of the Iraq war. *Int. Secur.* 35(3):7–52

Lees J, Cikara M. 2020. Inaccurate group meta-perceptions drive negative out-group attributions in competitive contexts. *Nat. Hum. Behav.* 4(3):279–86

Lenz GS. 2009. Learning and opinion change, not priming: reconsidering the priming hypothesis. *Am. J. Political Sci.* 53(4):821–37

Levendusky MS, Malhotra N. 2016. (Mis)perceptions of partisan polarization in the American public. *Public Opin. Q.* 80(S1):378–91

Levy G, Razin R. 2015. Correlation neglect, voting behavior, and information aggregation. *Am. Econ. Rev.* 105(4):1634–45

Levy R. 2021. Social media, news consumption, and polarization: evidence from a field experiment. *Am. Econ. Rev.* 111(3):831–70

Lifchits G, Anderson A, Goldstein DG, Hofman JM, Watts DJ. 2021. Success stories cause false beliefs about success. *Judgment Decis. Making* 16(6):1439–63

Little AT. 2022. *Detecting motivated reasoning*. OSF Preprint. **https://osf.io/b8tvk/**

Little RJ, Rubin DB. 2019. *Statistical Analysis with Missing Data*, Vol. 793. Hoboken, NJ: Wiley

López-Pérez R, Pintér Á, Sánchez-Mangas R. 2022. Some conditions (not) affecting selection neglect: evidence from the lab. *J. Econ. Behav. Organ.* 195:140–57

Martin GJ, Yurukoglu A. 2017. Bias in cable news: persuasion and polarization. *Am. Econ. Rev.* 107(9):2565–99

Mastro DE, Greenberg BS. 2000. The portrayal of racial minorities on prime time television. *J. Broadcast. Electron. Media* 44(4):690–703

McClendon GH. 2018. Applications. In *Envy in Politics*, pp. 42–140. Princeton, NJ: Princeton Univ. Press

McGowan M, Lindgren J. 2006. Testing the model minority myth. *Northwestern Univ. Law Rev.* 100(1):331–78

Mellon J, Prosser C. 2017. Twitter and Facebook are not representative of the general population: political attitudes and demographics of British social media users. *Res. Politics* 4(3):2053168017720008

Meng XL. 2018. Statistical paradises and paradoxes in big data. (I) Law of large populations, big data paradox, and the 2016 US presidential election. *Ann. Appl. Stat.* 12(2):685–726

Mernyk JS, Pink SL, Druckman JN, Willer R. 2022. Correcting inaccurate metaperceptions reduces Americans' support for partisan violence. *PNAS* 119(16):e2116851119

Mildenberger M, Tingley D. 2019. Beliefs about climate beliefs: the importance of second-order opinions for climate politics. *Br. J. Political Sci.* 49(4):1279–307

Miller WE, Stokes DE. 1963. Constituency influence in Congress. *Am. Political Sci. Rev.* 57(1):45–56

Minkoff SL, Lyons J. 2019. Living with inequality: neighborhood income diversity and perceptions of the income gap. *Am. Politics Res.* 47(2):329–61

Monk-Turner E, Heiserman M, Johnson C, Cotton V, Jackson M. 2010. The portrayal of racial minorities on prime time television: a replication of the Mastro and Greenberg study a decade later. *Stud. Popular Cult.* 32(2):101–14

Moore-Berg SL, Ankori-Karlinsky LO, Hameiri B, Bruneau E. 2020. Exaggerated meta-perceptions predict intergroup hostility between American political partisans. *PNAS* 117(26):14864–72

Newman BJ, Johnston CD, Lown PL. 2015a. False consciousness or class awareness? Local income inequality, personal economic position, and belief in American meritocracy. *Am. J. Political Sci.* 59(2):326–40

Newman BJ, Shah S, Lauterbach E. 2018. Who sees an hourglass? Assessing citizens' perception of local economic inequality. *Res. Politics* 5(3):2053168018793974

Newman BJ, Velez Y, Hartman TK, Bankert A. 2015b. Are citizens "receiving the treatment"? Assessing a key link in contextual theories of public opinion and political behavior. *Political Psychol.* 36(1):123–31

Nimark KP. 2014. Man-bites-dog business cycles. *Am. Econ. Rev.* 104(8):2320–67

Nisbett RE, Krantz DH, Jepson C, Kunda Z. 1983. The use of statistical heuristics in everyday inductive reasoning. *Psychol. Rev.* 90(4):339–63

Nyhan B, Reifler J. 2010. When corrections fail: the persistence of political misperceptions. *Political Behav.* 32(2):303–30

Nyhan B, Reifler J. 2019. The roles of information deficits and identity threat in the prevalence of misperceptions. *J. Elect. Public Opin. Parties* 29(2):222–44

Ogorzalek T, Piston S, Puig LG. 2020. Nationally poor, locally rich: income and local context in the 2016 presidential election. *Electoral Stud.* 67:102068

Oliver MB. 2003. African American men as "criminal and dangerous": implications of media portrayals of crime on the "criminalization" of African American men. *J. Afric. Am. Stud.* 7(2):3–18

Ortoleva P, Snowberg E. 2015. Overconfidence in political behavior. *Am. Econ. Rev.* 105(2):504–35

Pasek MH, Ankori-Karlinsky LO, Levy-Vene A, Moore-Berg SL. 2022. Misperceptions about out-partisans' democratic values may erode democracy. *Sci. Rep.* 12(1):16284

Peffley M, Shields T, Williams B. 1996. The intersection of race and crime in television news stories: an experimental study. *Political Commun.* 13(3):309–27

Peisakhin L, Rozenas A. 2018. Electoral effects of biased media: Russian television in Ukraine. *Am. J. Political Sci.* 62(3):535–50

Pennycook G, Epstein Z, Mosleh M, Arechar AA, Eckles D, Rand DG. 2021. Shifting attention to accuracy can reduce misinformation online. *Nature* 592(7855):590–95

Pereira MM. 2021. Understanding and reducing biases in elite beliefs about the electorate. *Am. Political Sci. Rev.* 115(4):1308–24

Perez-Truglia R. 2020. The effects of income transparency on well-being: evidence from a natural experiment. *Am. Econ. Rev.* 110(4):1019–54

Power JG, Murphy ST, Coover G. 1996. Priming prejudice: how stereotypes and counter-stereotypes influence attribution of responsibility and credibility among ingroups and outgroups. *Hum. Commun. Res.* 23(1):36–58

Przeworski A, Stokes SCS, Stokes SC, Manin B. 1999. *Democracy, Accountability, and Representation*, Vol. 2. New York: Cambridge Univ. Press

Rabin M. 1998. Psychology and economics. *J. Econ. Lit.* 36(1):11–46

Robinson RJ, Keltner D, Ward A, Ross L. 1995. Actual versus assumed differences in construal: "naïve realism" in intergroup perception and conflict. *J. Pers. Soc. Psychol.* 68(3):404–17

Rosenbaum PR. 2010. *Observational Studies*. New York: Springer

Rubin DB. 1974. Estimating causal effects of treatments in randomized and nonrandomized studies. *J. Educ. Psychol.* 66(5):688–701

Ruggeri K, Većkalov B, Bojanić L, Andersen TL, Ashcroft-Jones S, et al. 2021. The general fault in our fault lines. *Nat. Hum. Behav.* 5(10):1369–80

Sands ML, de Kadt D. 2020. Local exposure to inequality raises support of people of low wealth for taxing the wealthy. *Nature* 586(7828):257–61

Settle JE. 2018. *Frenemies: How Social Media Polarizes America*. New York: Cambridge Univ. Press

Shenker I. 1972. 2 Critics here focus on films as language conference opens. *N. Y. Times*, Dec. 28. **https://www.nytimes.com/1972/12/28/archives/2-critics-here-focus-on-films-as-language-conference-opens.html**

Tsintsadze-Maass E, Maass RW. 2014. Groupthink and terrorist radicalization. *Terrorism Political Violence* 26(5):735–58

Tversky A, Kahneman D. 1973. Availability: a heuristic for judging frequency and probability. *Cogn. Psychol.* 5(2):207–32

Tversky A, Kahneman D. 1974. Judgment under uncertainty: heuristics and biases. *Science* 185(4157):1124–31

Velez YR, Newman BJ. 2019. Tuning in, not turning out: evaluating the impact of ethnic television on political participation. *Am. J. Political Sci.* 63(4):808–23

Walgrave S, Soontjens K. 2023. How politicians learn about public opinion. *Res. Politics* 10(3):20531680231200692

Weatherall JO, O'Connor C, Bruner JP. 2020. How to beat science and influence people: policymakers and propaganda in epistemic networks. *Br. J. Philos. Sci*. 71(4):1157–86

Weaver AJ. 2011. The role of actors' race in white audiences' selective exposure to movies. *J. Commun.* 61(2):369–85

Wing JY. 2007. Beyond black and white: the model minority myth and the invisibility of Asian American students. *Urban Rev*. 39(4):455–87

Wong C, Bowers J, Williams T, Simmons KD. 2012. Bringing the person back in: boundaries, perceptions, and the measurement of racial context. *J. Politics* 74(4):1153–70

Wong CJ. 2007. "Little" and "big" pictures in our heads: race, local context, and innumeracy about racial groups in the United States. *Public Opin. Q.* 71(3):392–412

Xu P, Garand JC. 2010. Economic context and Americans' perceptions of income inequality: economic context and perceptions of income inequality. *Soc. Sci. Q.* 91(5):1220–41

Yudkin D, Hawkins S, Dixon T. 2019. *The perception gap: how false impressions are pulling Americans apart*. OSF Preprint. **https://osf.io/preprints/psyarxiv/r3h5q/**

Zaller JR. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge Univ. Press