Why Our Usual Approach to Political Belief Formation Resembles a Juror Reaching a Verdict after the Prosecutor's Opening Statement:

The American Trial System as an Analogy for Epistemically Rational Political Belief Formation

Ever wonder how people you know -- even highly intelligent and highly educated people -- reach such strong conclusions about a myriad of constantly rotating political issues after consuming only very limited, and very one-sided, information? Ever wonder why they seem so doggone confident their conclusions are correct, even when you are quite sure they are not? Ever wonder why, when a new political scandal surfaces (roughly every week, it seems), they virtually always conclude that the politicians belonging to the party they are aligned with are innocent, and that the politicians from the other party are guilty? Ever wonder how people with little background in science and minimal familiarity with the scientific method reach such strong conclusions about scientific issues that have become political, even going as far as calling those who reach different conclusions "anti-science," or "science deniers?"

The Science of Epistemic Rationality, the science of how we form our beliefs and whether our beliefs are true, offers significant insight into the processes we use to form our political beliefs (essentially, we use short-cuts that are highly error-prone), versus the processes we should use, if objective reasoning and the achievement of objective truth are the goals.

In explaining this science, I could use a wide range of political beliefs as examples, but for the purposes of this essay, consider two of the political scandals the media has recently been obsessed with. Specifically, if you typically vote Democrat, consider one of the crimes of which Donald Trump has recently been accused, and if you typically vote Republican, consider one of the crimes of which Joe Biden has recently been accused (If you are typical, you have probably already concluded that the politician you favor is innocent, and that the politician you disfavor is guilty.)

In explaining the key processes we utilize when we form our political beliefs, and in attempting to help virtually all people understand the deep, permeating bias inherent in their political belief-forming processes, I find it's helpful to use the American trial system as an analogy. This is a system designed with the intent of maximizing the probability that objective truth has been discovered and that an accurate verdict is reached. You'll soon see that the way

political beliefs are usually formed is analogous to a juror announcing their conclusion and walking out of the courtroom after the prosecution's opening statement!

As a thought experiment, consider the trial system for someone accused of a crime in the United States. Once again, imagine that the leader of the political party you disfavor has been accused of a crime, and that the media sources you turn to imply over and over that the politician is guilty. Let's say your favored political news source has interviewed witnesses and legal experts, has uncovered evidence, and has woven expert soundbites and evidence into a highly convincing the-politician-is-guilty narrative. Based on this narrative and others to which you have been exposed, you have basically made up your mind that the politician is, in fact, guilty.

Continuing the thought experiment, now let's say that for the sake of ensuring a fair trial, the trial venue is changed -- to your town, coincidentally -- and you are selected to sit on the jury!

On the first day of the trial, the extremely intelligent and highly polished prosecuting attorney with an Ivy League pedigree delivers an incredibly convincing opening argument that the politician is, in fact, guilty. Her argument is impeccable, and it completely and totally confirms your existing opinion. You rise from your seat in the jury box, announce you are voting *guilty*, and walk out of the court room before the defense attorney even has a chance to speak.

Is this appropriate? Most of us would say no, of course not; walking out of the courtroom after hearing only one side's opening argument is not appropriate. In fact, it's dangerous. However, this is how you reached your conclusion in the first place – an opinion in which you were highly confident – before it was announced that the trial was coming to your town, and that you would be sitting on the jury. In fact, it's how the significant majority of us form almost all of our political beliefs, ranging from whether particular politicians are honest and competent, to which political party has the best ideas, to whether a specific policy proposal is likely to achieve the desired benefit, to whether a particular military action is justified.

A reasonable model for Epistemically Rational Reasoning, defined as reasoning in such a way that objective thinking and the odds of discovering objective truth are maximized, includes:

1. Begin by asking yourself: am I attempting to build or bolster an argument, or am I attempting to arrive at objective truth? These are very different goals, requiring very different thought processes.

- 2. Make a conscious effort to stay as open-minded and objective as possible. Resist the temptation to simply defer to the first intuitive answer that pops into your mind. And attempt to separate yourself from your exiting beliefs, convictions, worldview, and political ideology; from your favored party's political platform; and from the beliefs of those you associate with.
- 3. Carefully gather evidence and arguments from the most credible sources on each side of the issue.
- 4. Assimilate and analyze the information gathered, including using "specialized" forms of thinking as indicated, such as probabilistic reasoning, scientific reasoning, and statistical reasoning.
- 5. Spend a significant amount of time reflecting, and just thinking.
- 6. Reach a conclusion you treat as a working hypothesis, as opposed to a firmly established fact gripped in a tightly clenched fist. In other words, maintain an open mind, and remain open to adjusting or even changing your belief as often as evidence and superior arguments lead you to do so.

A situation for which objective reasoning and the discovery of objective truth are considered critical is the establishment of an individual's guilt versus innocence regarding the commitment of a crime. The United States' trial system, as mentioned above, is designed for this purpose. Since we watched our first legal drama on television, took in our first legal thriller at the movie theater, or perhaps read *To Kill a Mockingbird* in high school, we have been conditioned to believe that in the courtroom, maximizing the odds of reaching an accurate and unbiased conclusion requires:

- A jury selection process that attempts to weed out those who already have strong preconceived notions.
- A judge, to make sure the evidence presented is accurate and fair, and to make sure the accepted trial process is followed.
- Opening statements (generally not involving witnesses or evidence). The prosecution goes first, followed by the defense.
- Presentation of cases, with the prosecution followed by the defense, including evidence presentation, witness examination, witness cross examination, and redirect examination.

- Closing arguments, by the prosecution and then the defense.
- Jury instructions. Following the closing arguments, the judge "charges the jury," or informs them of the appropriate law and of what they must do to reach a verdict.
- Jury deliberation, whereby all sides of the issue are actively debated, and individual jurors are exposed to differing perspectives, opinions, and conclusion they may disagree with.
- A verdict appeals process, if the defense has reason to believe that the proceedings were unfair and/or that the proper law was not correctly applied (An appellate court does not consider new evidence.).
- The ordering of a new trial, if new evidence that might have influenced the verdict is later discovered.

As shown in Tables 1A and 1B, the U.S. trial system and the approach we *should* use in the formation of epistemically rational political beliefs are quite similar. They should be, since the goals are the same: maximizing objective thinking and the odds of discovering objective truth. The issue of whether the discovery of objective truth truly is our primary goal when we form our political beliefs is the subject of a future essay (spoiler alert: it's usually not!). The important point here, though, is that most of us rarely if ever follow such an approach when we form political beliefs, ranging from our overarching political ideology, to our worldview, to our deep political convictions, to our "day-to-day" political beliefs concerning issues ranging from presidential scandals, to the likely impacts of recently proposed bills, to political wrangling over the budget, to whether or not a recent military action was justified. When most people form political beliefs most of the time, they don't use a process such as the six-point process shown earlier in this essay and in Table 1A, because doing so is very time-consuming. It's also difficult, requiring the expenditure of a great deal of mental energy. And, as I recently argued at the 2023 annual meeting of the Human Behavior and Evolution Society, it's not natural (link).

So what do people do instead when they form political beliefs? Almost always, political beliefs are formed via the use of judgment heuristics.

Judgment heuristics are mental shortcuts – such as deferring to our intuitions, using "common sense," listening to our "gut feelings," and relying on "rules of thumb" -- that allow us to come to conclusions quickly and without putting in much work. As I'll explain, however, this type of

reasoning is associated with bias, and with multiple other forms of "mis-thinking" that impede objective thinking and the discovery of objective truth.

Before I go on, in case you (like most people) initially find the concept of judgment heuristics confusing: You are utilizing judgment heuristics when you come to conclusions without performing deep analysis, without searching for and analyzing the best evidence and arguments you can find on both sides of an issue, and without then spending time reflecting on the information you have gathered. In other words, you have probably utilized one or more judgment heuristics if you have come to a conclusion regarding a complex political issue without utilizing a truth discovery process resembling the six-point process provided earlier in this essay (and in Table 1A). If you are typical – and yes, even if you are highly intelligent and highly educated -- you have probably utilized judgment heuristics for almost all of your political beliefs!

When you accept the first conclusion that pops into your mind, when you defer to your gut feelings or insist that for a particular issue, deep analysis and open-minded reflection are unnecessary because common sense is all that is needed, you are utilizing judgment heuristics. To simplify, you can think of utilizing judgment heuristics as simply deferring to your intuitions. Your intuitions, though, are not as accurate as you think they are.

In attempting to understand our usual approach to political belief formation, again consider the following cyclically recurring, complex question: *Is a particular politician guilty of the crime of which they are currently accused?* Before you go on, again consider a scandal or crime the media is currently breathlessly obsessed with, either one involving the political leader you favor, or one involving the political leader on the other side of the political aisle. Forms of mis-thinking associated with heuristics-based belief formation include:

1. We *substitute*. In approaching the above question, we in essence address simpler, much easier substitution questions, such as *Do I think this politician is a good person? Do I support and trust the political party to which this politician belongs? How do I feel about those who are doing the accusing? How worried am I about the prospect of the party I favor losing power, and the other side taking over? What conclusions have my friends reached? What have I heard most recently from my trusted political information and*

- opinion sources in the media (the ones that almost always tell me good things about the party I favor, and bad things about the party I disfavor)?
- 2. We answer the substitution questions that is, we form our belief in a manner that is highly susceptible to *cognitive biases*. Cognitive biases are errors we make when we use heuristics-based processing to form our beliefs. Psychologist and Nobel Prize in Economics winner Daniel Kahneman and his research partner Amos Tversky revolutionized the ways in which we think about human judgment by describing how we utilize judgment heuristics to reach our conclusions, and by describing many of the biases that occur when we reason this way.

The most significant of the cognitive biases when it comes to political thinking is *myside* bias. The new political beliefs we form are highly influenced by our existing convictions, those deep opinions, attitudes, and beliefs for which we have emotions and even our sense of self-identity involved, such as our beliefs about abortion, religion, systemic racism, gun control, climate change, equality and equity, and perhaps most importantly, which political party is most worthy of our support. Our conviction-level beliefs, attitudes, and opinions all influence the new beliefs we form.

Myside bias is a form of motivated reasoning. We want certain beliefs – those that line up nicely with what we already believe – to be true. And we want to believe them. Far more often than not, myside bias leads us to automatically conclude that if a politician accused of a crime belongs to the party we support, they are innocent, and vice versa. Myside bias explains why we so often think the coach of our child's sports team should have given our own child more playing time. It's why we so often feel the referees were biased against the team we favor. Myside bias explains why we generally see political leaders on our side as all good, while seeing the other side's leaders as all bad. It explains why we so often believe our own side's conclusions about complex scientific issues we barely understand. It explains why we generally support the military actions our political party supports, and why we generally oppose military interventions supported by the other side (unless, of course, our side supports the intervention as well). Myside bias is why we generally believe that any new law or policy proposed by politicians on our side of the political aisle is likely to be successful, while believing that the policies favored by the other side are destined to fail. It explains why we so often attribute favorable economic

circumstances to our side's leaders, and unfavorable economic circumstances to the other side. It helps explain why we so often form very strong beliefs about highly complex and controversial issues after consulting only the information sources that support our side.

Abundant data, such as that from Keith Stanovich and his research partners, reveal that the highly intelligent and highly educated are at least as susceptible to *myside bias* as are those without elite-level intelligence and advanced degrees – and perhaps more so! (Consider reading Stanovich's 2021 masterpiece *The Bias that Divides Us: The Science and Politics of Myside Thinking*. It's a slow, somewhat difficult read, as it's written for academicians who already have a strong background in heuristics and biases, but in my opinion, it's one of the most important books ever written).

Another critically important cognitive bias is referred to by many different names, so I simply refer to it as *the tendency to form new beliefs biased by the beliefs of our associates*. People of all levels of intelligence are highly influenced by this bias as well.

- 3. Once we have formed our belief, we *think backward*, building an argument by gathering confirmatory evidence in support of the belief we have formed. We think it's the other way around that we formed our belief in response to the evidence we have gathered but it rarely is. We decide that is, we form a belief and we then gather confirmatory evidence to create a neat new belief-plus-supporting-evidence-and-other-reasons argument that makes sense to us, that is coherent with our existing beliefs and convictions.
- 4. We *ignore conflicting evidence and arguments*. In creating our beliefs and belief arguments, we simply ignore evidence and arguments that would cause us to consider an alternative conclusion, and we write off sources that might provide it as unreliable and dishonest. We now have the sense of satisfaction that we *know*, and we typically feel no need to question or explore further.
- 5. We become quite confident yes, *overconfident* in the belief and the narrative (argument) we have formed. As long as the story makes sense to us, and as long as it is coherent with the beliefs we already have, we *know* we are right. The level of confidence we have, however, is much greater than the level of confidence we should have, given the approach we have used to arrive at our conclusion.

Confidence, it turns out, comes from having created a coherent story that makes sense to us, with little or no conflicting information. It comes from having a set of beliefs that fit together well. However, while a high level of confidence in one's beliefs is generally associated with the illusion of knowing, it has little to do with whether objective truth has been achieved. A high level of confidence is often even a warning sign that one does not understand the complexity of one's subject matter, and that one does not understand one's own belief-forming approaches and limitations!

6. We develop *belief perseverance*. That is, we cling ferociously to the belief we have formed, we refuse to entertain any evidence and arguments that might cause us to reconsider, and we steadfastly refuse to even consider changing our minds.

Our worldview and overarching political ideology, usually based heavily on the views of those most influential in our lives during our late teens and early twenties, are generally formed similarly (though genetics appears to play a role as well). And yes, we use the non-reflective, heuristics-based approaches outlined above when we determine which information and opinion sources we deem accurate and trustworthy, with *myside bias* weighing heavily. If a politician or political information source reinforces our political beliefs, convictions, worldview, and ideology, we tend to consider the source as competent, reliable, and truthful; and even assume its goals are aligned with our own. Meanwhile, we simply write off sources favorable to the other side as incompetent and untruthful, and we often assign malevolent motives.

It's relatively easy to see the above forms of mis-thinking in those we disagree with. It's *extremely difficult* to see them in ourselves.

Table 1C shows the approach we usually take for political belief formation. Take a moment and compare it to the epistemically rational model and the US trial system outlined in Tables 1A and 1B. The approach shown in 1C, obviously, is much, much different than the approaches shown in 1A and 1B.

Still not convinced that Table 1C applies to you, or that heuristic-based reasoning is truly inferior? Be honest with yourself: When is the last time you used anything that even resembles the six-step truth discover process outlined earlier (and in Table 1A)? Maybe back in college or graduate school? Maybe never?

On the other hand, when is the last time you were presented with a new complex political issue (perhaps an emerging presidential scandal), you immediately assumed that the president you favor is innocent or that the president you disfavor is guilty, and you then turned to a media source you *knew* would confirm your suspicion and provide ammunition for your argument? Probably within the last week? And yes, you were able to expend minimal time and mental energy, to feel confident in your belief, to maintain membership in your group and achieve other social goals, and to feel good about yourself.

When we form our personal political beliefs, we generally pay attention only to evidence and arguments that support our existing political views. When we receive information that meshes well with our pre-existing opinions, we simply believe it. For political beliefs, there is no system that forces us to take additional steps, no system that forces us to keep an open mind, no system that forces us to seriously consider the arguments of the other side, and no system that forces us to reconsider the belief we have formed when new evidence later surfaces.

Almost all of us form almost all of our political beliefs in a matter analogous to walking out of the courtroom after hearing only the side that supports our existing views. In the courtroom, we are conditioned to believe in and utilize a much more extensive, a much more epistemically rational, process. For the formation of political beliefs, we are not. And so we don't.

(See Tables 1A, 1B, and 1C, next page)

Table 1A Epistemically Rational Approach	Table 1B – The U.S. Trial System	Table 1C Heuristics-based Approach (Utilizing Our Intuitions)
Begin by asking yourself: am I attempting to build or bolster an argument, or am I attempting to arrive at objective truth? These are very different goals, requiring very different thought processes.	The trial process is specifically designed to facilitate the achievement of objective truth.	We have many subconscious, instrumental goals that supersede the discovery of objective truth. These are summarized on the EpistemicCrossroads.com website (home page).
2. Make a conscious effort to stay as open-minded and objective as possible. Resist the temptation to simply defer to the first intuitive answer that pops in to your mind. And attempt to separate yourself from your exiting beliefs, convictions, worldview, and political ideology; from your favored party's political platform; and from the beliefs of those you associate with as you draw your conclusion.	The jury selection process attempts to weed out jurors who already have strong pre-conceived notions about guilt versus innocence, and those who seem unable to be objective. After the closing arguments are made (see below), a judge provides instructions to the jury, and typically reminds jurors to base their conclusions solely on the evidence presented.	We usually begin by utilizing judgment heuristics (intuitions) to form our beliefs, whereby our beliefs are biased by our existing convictions (<i>myside bias</i>), as well as by the beliefs of our associates.
Carefully gather the best evidence and arguments from the most credible sources on each side of the issue.	Cases are presented by the prosecution and defense teams, including evidence presentation, witness examination, witness cross examination, and redirect examination. Closing arguments are then delivered.	Once we have formed our belief, we think backward, building an argument by gathering confirmatory evidence in support of the belief we have formed. We ignore evidence and arguments that would cause us to consider an alternative conclusion, and we write off those who provide them as dishonest and unreliable.
4. Assimilate and analyze the information gathered, including using "specialized" forms of thinking as indicated, such as probabilistic reasoning, scientific reasoning, and statistical reasoning.	The jury deliberation process involves jurors meeting to openly discuss arguments, testimony, and evidence	Does not generally occur.
5. Spend a significant amount of time reflecting, and just <i>thinking</i> .		Does not generally occur.
6. Reach a conclusion you treat as a working hypothesis, as opposed to a firmly establish fact gripped in a tightly clenched fist. In other words, maintain an open mind, and remain open to adjusting or even changing your belief as often as evidence and superior arguments lead you to do so.	The verdict can be appealed if the proceedings were not fair or if the law was not correctly applied. A new trial can be granted if new evidence presents itself.	We develop belief perseverance. That is, we cling ferociously to the belief we have formed, we refuse to entertain any evidence and arguments that might cause us to reconsider, and we steadfastly refuse to even consider changing our minds.