

Federal Judicial Center  
In Session: Leading the Judiciary 34  
Interview with Woo-kyoung Ahn  
July 26, 2023

Woo-kyoung Anh: We are not biased because we are selfish or we are unintelligent. We make these errors because we have evolved to be this way. We want to save our energy, protect our client group, and we don't want to take a risk.

Craig Bowden: Today on *In Session, Leading the Judiciary*, we talk with Woo-Kyoung Ahn. Professor of psychology at Yale University and author of *Thinking 101: How to Reason Better to Live Better*. According to Ahn, we are all susceptible to thinking errors not because we're stupid, selfish, or immoral but because our brains are hardwired to make quick decisions in order to keep us safe.

Sorting new things into old boxes can save us time, but can also lead to misguided decision-making in the short term and stifle innovation while costing us time, energy, and money in the long run. Through awareness, critical thinking, and practice we can overcome these biological biases to achieve better outcomes for ourselves and our organizations.

Cognitive psychologist Woo-Kyoung Ahn's thinking course at Yale helps students examine the thinking errors that cause many of the problems they face every day. It's not only one of the

university's most popular courses, but it also inspired the book we are discussing today.

Ahn received Yale's Lex Hickson Prize for Teaching Excellence in the Social Sciences in 2022. Her research on thinking biases was funded by the National Institutes of Health. She is a fellow of the American Psychological Association and the Association for Psychological Science.

Special thanks to today's host Lori Murphy, Assistant Division Director for Executive Education at the Federal Judicial Center. Lori, take it away.

Lori Murphy: Woo-Kyoung, welcome to the podcast. We're so happy to have you.

Woo-Kyoung Ahn: Thank you for having me.

Lori Murphy: It's a pretty bold statement to say that cognitive psychology and the work that you do can make the world a better place. You start the book out that way. You end the book saying, yeah, I'm pretty sure that it can. So what does that mean to you?

Woo-Kyoung Ahn: Cognitive psychology covers all aspects of human cognition such as thinking, memory, language, learning, perception, and decision-making. In particular, I study how people think. My own thinking got better as I did the research on this. Hopefully, I can share these lessons with other people and they can apply it to their own lives.

I think we commit a lot of thinking biases. What does it mean to be biased? I think it means that we can talk about how we can be fair to other people and also to myself as well. There's no magic wand, but it's a work in progress so we can hopefully move on to a more and more fair world.

Lori Murphy: And yet you also say that the book is not about what is wrong with people. Help me understand this seeming contradiction.

Woo-Kyoung Ahn: So let's consider confirmation bias because it's one of the most well known biases. It's basically what the name says, we have a tendency to confirm what we already believe. As an example, if you believe that John is guilty, then you may look for evidence to prove that John is guilty. Even when you're presented with ambiguous evidence, you may interpret it as supporting John's guilt.

This can occur even if you are a highly intelligent person and if you strive to make the most impartial judgments. It happens because we have evolved to think this way. For example, you are a gatherer. You go to a forest and you find delicious fruits. So now you have a hypothesis that that specific forest has delicious fruits. So next time, when you need fruits, what did you do? You go to the same forest rather than trying different forests. That's exactly how the confirmation bias works. Right? If you believe that the first forest has great

fruits, you go back to that because it's less risky and it saves our energy.

Bloodletting is my favorite example of confirmation bias. In traditional medicine, people practiced bloodletting. Which is that, whenever people get sick, they let the bad blood out and they hope that would cure the people. That was used in western society. People used bloodletting for over 2000 years. George Washington presumably died of bloodletting when he had a throat infection.

So the question is how could these people believe in bloodletting so long and the reason is, whenever people got sick, people believed bloodletting works so they try it. Then most of the time people just spontaneously recover. So based on that confirming evidence alone, they believed that bloodletting works.

What they should have done is that, when a person gets sick, they should not try the bloodletting and see what happens. It feels risky. Right? If you already believe that bloodletting works, if you believe that's an effective method, how would you not try it? So even if we have a good intention of curing people, and helping people out, we end up committing a confirmation bias and let the bloodletting prevail.

Lori Murphy: So we do this all the time in organizations if a policy or a procedure seems to work. We just keep doing it

and looking at the evidence that confirms our belief that this is working when it sounds like what you're saying is we should actually test against that in some way.

Woo-Kyoung Ahn: Exactly. So that's where leadership comes in. So even if people feel that it is safe to just get by with what has been working, there's no guarantee that that's the best method. There can be actually a better method. Also sometimes it might have been a bad method. Right? Just like the bloodletting, it killed George Washington. So the method you are using could have been actually hurting your organization.

Lori Murphy: You mentioned that even very smart individuals can be susceptible to confirmation bias. In the judiciary, we have a lot of long-tenured, very learned, and skilled leaders and individuals. In the book, you say that sometimes being smart makes it easier to fall prey to confirmation bias or other thinking biases. Can you talk about that?

Woo-Kyoung Ahn: I talk about two studies in the book. One is that the participants were Stanford students. Some believed in the death penalty. Others did not believe in the death penalty. When they were presented with just the simple descriptions of the studies about the relationship between how the death penalty increased or decreased the murder rates in a state, they more or less agreed with what the evidence said.

But then when they were presented with the details of the studies, like methods or how the data were collected during what period, these smart students could explain away the evidence that presumably counteracted the opposite to what they already believed. So once they see the details, they could say, well, this evidence or what's so-called evidence is not really valid because of so-and-so problems. Smart people can actually do this in a more creative way so they could commit more confirmation bias.

The other studied Republicans and Democrats. They were presented with very complex numbers, data and they had to figure out the causal relationship between two variables. If these two variables are totally neutral stimuli, like using a certain particular skin lotion and a skin rash relationship, then there was no difference between Republicans and Democrats whatsoever. So people who are good at quantitative reasoning did better than people who are worse at quantitative reasoning. So it's just a matter of how good they are with the numbers.

But then when exactly the same data were presented in the context of gun control and crime rates, then people who are bad with numbers are still bad regardless of whether they believe or not. But people who are good with the numbers use their quantitative reasoning skills only when the conclusion would support their political views. If it looks like it's not going

to support their views, they didn't bother to put in any effort to figure out what's going on with the numbers.

Lori Murphy: Wow. So being smarter actually can help us dig our heels in a little bit more and even be more susceptible to confirmation bias.

Woo-Kyoung Ahn: Exactly. Yes.

Lori Murphy: Let's talk about some other thinking biases or problems before we talk about some ways to counteract them. What is the fluency effect? Why does it exist? How does it show up? Et cetera.

Woo-Kyoung Ahn: So fluency effect is very simple. If it looks easy, then you think it is easy. It works most of the time. Right? If a recipe requires only three ingredients, you think you can make that cake. And if you watch TikTok, they create chopped salad in 30 seconds, then you think you can do it because it looks easy. But we can be oftentimes misled by this apparent fluency.

In one study the participants were asked to answer a bunch of why questions. Like why is the sky blue, and why is there a leap day, and so on. For half the participants, they're allowed to search the Internet for the answers. The other half they were not. Then after they did all these, there was a second phase. Now this time they're presented with a completely new

set of why questions. Like why are there holes in the Swiss cheese, or why does a dog eat grass, and so on.

This has nothing to do with what they already did in the first part. But then when they were asked to estimate how confident they were in answering these questions, those who did the Internet search in the first part were much more overconfident than those who didn't. Because just accessing all this Google information in an Internet search, it created an illusion to them that they can access this knowledge easily so they feel like they can answer any questions.

This is where things can go wrong. So fluency is a very good cue in judging how well we can do something, but it can also carry over to totally unrelated or irrelevant tasks as well.

Lori Murphy: Why do you think the fluency effect is so pervasive?

Woo-Kyoung Ahn: Because it works most of the time. In real life, if you can easily mentally simulate in your head, then it is something that you can do. Let's say you had not been riding a bicycle for many decades and you have to now decide whether you want to rent a bike during some trip. You kind of run it in your head and it feels fluent, then you know you can still bike. Right?



So we use this so-called metacognition all the time to make a judgment on whether we can do something. That's a very important part. However, it can go wrong in many ways. For example, if you are hiring someone and you have a job opening in your department and the position requires excellent analytic skills. You interview a candidate and she speaks very fluently and confidently. This can inaccurately cause you to believe that she also possesses superior analytic skills even though this fluency has only to do with the speaking skills.

In real life, most of the time people who speak very fluently also are kind of very highly intelligent and they're very skillful. So we can kind of conflate these two things and make a wrong judgment as a result.

Lori Murphy: Being competent in one area seems to assure us that we are competent in a completely unrelated area even if that may or may not be the case.

Woo-Kyoung Ahn: Exactly. So here is my other favorite study on this. People were asked to estimate how well some stocks will do. The stocks with names that were easy to pronounce were predicted to do better than the stocks that have unpronounceable names. They found this even with the ticker code. It's just a random abbreviation of the share names. Whether that ticker code is pronounceable or not also affected

people's judgments about how well that stock is going to perform.

Lori Murphy: In our world of education, we find in programs we do that leaders can easily talk about what they might do or say to a colleague or someone who works for them. Then they find that it is much harder when they have to actually practice using the words to say it to the colleague or the person who works for them. Is that the fluency effect at work?

Woo-Kyoung Ahn: Exactly. It happens all the time to me. I mean, you know, I'm teaching the same content every year. Right before the lecture of course I know what I'm going to talk about and it creates an illusion that I can speak very eloquently. But I still have to kind of articulate at least the first two slides. I have to speak aloud what I'm going to say before I go to the classroom. Otherwise, if I get stuck at the beginning, if I start not speaking fluently, students get turned off and so on. It gets to a vicious cycle. So you really have to practice things out loud.

Lori Murphy: Let's shift to talking about another thinking problem, the planning fallacy. It seems a little bit like wishful thinking in terms of how we plan when it comes to budgets, and projects, and whatnot. So help us understand what the planning fallacy is.

Woo-Kyoung Ahn: Planning fallacy is we have a tendency to underestimate how long a task will take or how much it's going to cost. The one thing that's for sure in life is that there is always something happening and we forget to consider those obstacles. This happens everywhere to anybody. I mean, believe me, when I was trying to revise my lecture on planning fallacy, I committed a planning fallacy there. I thought it was going to take about three days. It took like three weeks for me.

So the reason why it happens is that when we plan we think about what's needed. It's step A, B, and C. We're going to do A, B, and C. We can also estimate how much money it's going to cost. When you think about only those things, it feels like the plan will be executed. That's the whole point of the plan.

So we just figure out that you've got to do A, B, C, and D and then that's all we need to do. But then in life there's always something. So my solution to this is that I just double my estimate because, as a reasonably smart person, I'm really good at rationalizing that it's going to go well and this time it's going to be different. So I just always double my estimate. When someone also tells me they're going to send me something by a certain day, I just assume that it's going to be at least 24 hours late. In that way, I can actually figure things out a lot more smoothly.

Lori Murphy: I love that. Build in not just for the known obstacles, but the inevitable life happens obstacles.

Woo-Kyoung Ahn: Yeah. Exactly. Exactly. That's the thing. When we are planning things, we tend to focus only on the task. But there are many other things in life that happen that have nothing to do with the task.

Lori Murphy: Our audience is very aware of that. By the end of the day, the thing you set out to do never happened because of all the things that came your way. So I think this planning fallacy is really relevant to our audience.

One of the things in the judiciary and probably in any organization we bump up against is the concept of we've always done it that way.

Woo-Kyoung Ahn: So of course confirmation bias is, you know, a good reason. Right? But then there's also what is known as a loss aversion. So loss aversion is something that the pain that you feel from losses feels greater than the pleasure that you get from the gains. So loss looms larger than gains.

For example let's say, Lori, you like a box of dark chocolate and you also like a bottle of red wine. You equally like them. But if I give you a box of chocolate and then I ask you would you like to trade this with a bottle of wine, then you might say no. But then on another occasion, if I give you a

bottle of wine first and then ask you would you like to trade this with a box of chocolate, you might also say no to that.

The reason why this happens is that people tend to value what they own more than what they don't own. So because of that, if there's this certain method that we've been using in the organization, then it's something that they own. To switch to a new method feels like you are losing what you've been doing. There will be a cost in switching to a new method. There's also uncertainty and people hate uncertainty. There's a risk and so on.

But one way to overcome this is to pretend as if you have not been using any of these. If you have a choice between method A and method B, what would you have chosen? That's one way of reframing the situation. If there's a more benefit of using a new method, then you should definitely switch to it.

But we also have a tendency to focus more on the cost and negative information. So let's say you are traveling and you use Yelp to find out which restaurant to go to for dinner. There is like 90 percent of the reviewers say it's a great restaurant, but then there's one reviewer that said there was a hair in the food. Then that one negative review can kill your appetite right there even though 90 percent of the reviewers said it's an amazing restaurant.

Just like that, when you think about the cost of switching to a new method, that negative information can actually kill all the benefits you could have gained by switching to a new plan. That is called a negative bias. We tend to focus too much on the negative information. Here we should also really think about the cost and benefit analysis really, really carefully so that we don't get overwhelmed by the negative information.

Lori Murphy: How do I as an individual get the perspective to overcome this negativity bias and this loss aversion you talk about.

Woo-Kyoung Ahn: Understanding that people are sensitive to cost, they overweigh the negative information. That means that that person might need extra incentive to switch to the new method.

The other method is, you know, I use an analogy to cleaning up a closet. When you have a bunch of overcrowded closets, it looks like you can always rationalize, okay, I'm going to wear this on some occasions. I will lose that last 10 pounds, I'm going to get into that one. So you cannot throw away anything because of loss aversion. Right?

But instead you dump everything on the floor and pretend as if you are shopping all over again. So if someone is going to give you this pencil skirt that you cannot fit into, would you take it even if it does not cost you anything? I would say

no. Why would I take it right at that point? So you are changing the loss frame into gain frames. If I started all over again, would I have done it that way?

Lori Murphy: I love that. If we were making this decision today, would we make it based on the information we have? But it sounds like our brains are hardwired to look for the negative. And I'm just curious why is that.

Woo-Kyoung Ahn: One theory is this. Back in the old days we did not have that many resources around us. Any loss could be a matter of life or death. So we have to be super sensitive to the loss. And gain is, yeah, that's good. But that doesn't really change your life right away. So maybe we were evolved to be sensitive to the loss information.

Lori Murphy: Something else you mentioned in the book was framing a question in two opposite ways. Can you elaborate on that?

Woo-Kyoung Ahn: This is one of my favorite studies. So participants in the study -- this was actually like a judge. They were asked to pretend that they were a judge making a custody decision. Half the participants were asked to choose which parent the custody should be awarded to, and the other half were asked to make the same decision but it was awarded in a different way. Which parent should be denied custody?

When they use the award phrase in the question, they tend to focus more on the positive features of the parents. But then when they use a denial question, then they tend to focus more on the negative features of the parents. I mean what's the correct answer here? To me, it feels like you just have to frame the question in two different ways. So should we adopt method X or should we reject method X? So if you just frame it in both ways and kind of somehow average your intuitions, hopefully there will be less bias judgments.

Lori Murphy: What strikes me about that is it's really one word often. It seems almost that we're really counteracting several of the thinking biases that you mentioned which is really powerful.

Woo-kyoung, talk about perspective-taking being important and also insufficient by itself. So help us understand why perspective-taking is important, why it's insufficient, and how reframing might be a piece of this puzzle.

Woo-Kyoung Ahn: When it comes to factual information, fact-checking is the most important solution. Just trying to take perspective is not going to work. The reason is this. We are overconfident in thinking that we understand what other people are thinking.

In one experiment, participants had to judge whether their friend was being sarcastic or serious. So let's say my



daughter, who is very feminist, she says a *Barbie* movie. What a wonderful idea, right? Is she serious or is she being sarcastic? When it comes as a text message to me, I have to judge whether she's being serious that she wants to watch the *Barbie* movie with me this weekend or not.

Then people are actually only at the chance level. Even if it comes from someone who we knew really, really well, they were at 50/50. It is kind of a humbling experience because, you know, I feel like I know what she meant. I'm pretty sure she's sarcastic. And she also thinks that I understood what she intended to say. Right?

But when we did the fact-checking, it was completely wrong. She really wanted to see the *Barbie* movie because it's so well made. She never had a Barbie, by the way, growing up. So I would have never guessed it, but I can be overconfident in my guess about what she wants. So we have to really believe this effect. We have to believe that we are overconfident in mind reading. We have to really ask the other person a question.

So the way I use it in my work life is that, even if it's a very clear meaning -- so I have personal meetings with my graduate students all the time. We lay out our next steps for the experiments and what needs to be done. In my mind it's really clear what the graduate students should do by the next

meeting, but we still write it out in a Google doc and share it. Otherwise, I have no way of checking whether the graduate student really understood what's expected for the upcoming week.

Lori Murphy: It seems like this is the root of so many communication missteps between individuals, is assumptions. So we need to ask and you also say we need to tell more explicitly.

How can leaders encourage the inclusion of different perspectives and ideas so that we combat these to the extent possible these thinking biases and we get the best out of our people?

Woo-Kyoung Ahn: This now goes back to the very first question you asked, probably the second question, which was how can people have thinking errors or thinking biases when they're not really wrong. Understanding that I think is the most important step. That's one of the main themes that I wanted to carry through the book, is that we are not biased because we are selfish or we are unintelligent. We make these errors because we are evolved to be this way. We want to save our energy. We want to conserve our clan. We want to protect our client group and we don't want to take a risk. We want to be loss-free and so on.

But these things happen because of the way we were built. For example, I believed all my life that a yellow traffic light is yellow. It was not until when my son was four

years old and asked me why is the yellow traffic light called a yellow traffic light. I thought what kind of question is this. And he said, mom, just stop and look at it. It's orange. Then I realized finally that the yellow traffic light is orange in color. Believe me. Just go look at it, it's orange.

But it was not that I was dumb or I had any stake in this issue. It's just that since everybody called it yellow, I saw it as yellow. So once we understand that, then hopefully people with different views could be more understanding. It's just the way that -- you know, they might see things differently because of the way that they grew up, because of the situation they are in. It's not that they're less intelligent. It's not that they're more immoral than we are. It's just a different perspective.

Lori Murphy: What else would you like our listeners to know?

Woo-Kyoung Ahn: Well, another thing is there's no magic wand in fixing the thinking problems. Also just simply knowing that people can make these mistakes. There's not a solution either. You really have to practice it. Just like exercise, diet, and so on. You really, really have to work hard.

Lori Murphy: Woo-kyoung, where can we learn more about you and your work?

Woo-Kyoung Ahn: My book is called *Thinking 101: How to Reason Better to Live Better*. My email address is woo-kyoung.ahn@yale.edu. I actually do reply to emails.

Lori Murphy: We can verify that. Yes, you do. Well, thank you, Woo-kyoung Ahn. It's been a pleasure and we learned a lot today.

Woo-Kyoung Ahn: Thank you.

Craig Bowden: Thanks, Lori, and thanks to our listening audience. To hear more episodes of this podcast, visit the Executive Education page at [fjc.dcn](http://fjc.dcn) and click or tap podcast. You can also search for and subscribe to this podcast on your mobile device.

*In Session, Leading the Judiciary* is produced by Shelly Easter. Our program is supported by Angela Long, Anna Glouchkova, and the entire Studio and live production team. Thanks for listening. Until next time.

This podcast was produced at U.S. taxpayer expense.

[End of file]

[End of transcript]