

Tanya Domi: Hi, this is Tanya Domi. Welcome to The Thought Project, recorded at the Graduate Center of the City University of New York, fostering groundbreaking research and scholarship in the arts, social sciences and sciences. In this space, we talk with faculty and doctoral students about the big thinking and big ideas generating cutting edge research, informing New Yorkers and the world. Virginia Valian is a distinguished professor of psychology at Hunter College, and is a member of the doctoral faculties of psychology, linguistics, and speech language hearing sciences at the Graduate Center of the City University of New York. She directs the Language Acquisition Research Center and the Gender Equity Project at Hunter College. Welcome to The Thought Project, professor Valian.

Virginia V.: Thank you. I'm delighted to be here.

Tanya Domi: You are a renowned scholar on how women lag behind in the academy, but specifically on studies that you've personally have conducted or the center has conducted that reflect that men, one of them, men speak twice as often as women do at colloquiums, that recommendation letters inadvertently signal doubt about female applicants more than they do for men, and even in the case of a trans man perceived to be more scholarly and produces better work than his "sister" who was actually himself before he transitioned.

Virginia V.: Yes, that was a wonderful article. The last thing you mentioned by Ben Barres, the late Ben Barres, who was a neuroscientist at Stanford, and he wrote an article for nature, and one of the things that he commented on was the reaction to him after he had transitioned as a male compared to the reaction to him when he was a female. So he was a female math undergraduate at MIT, and at one point, he was the only person in his class who was able to solve a difficult problem, and the instructor asked him whether his boyfriend, because he was a woman at the time, who his boyfriend was, who had helped him get the answer because it was not conceivable that he as a girl could possibly be able to solve the problem.

Tanya Domi: You are a renowned scholar on how women lag behind in the academy. Specifically, you have participated and been author and coauthor of studies that reflect that men speak twice as often as women do at colloquiums, that recommendation letters inadvertently signaled doubt about female applicants more than they do for men, and even in the case of a trans man perceived to be more scholarly and produces better work than his "sister" who was actually himself before he transitioned. So do you ever feel like a Cassandra on this topic in which you have dedicated a major portion of your career, you are repeatedly substantiating and documenting you and your colleagues at the center of the lag and obvious discrimination. How do you feel about that concept?

Virginia V.: When I give talks, I like to give a lot of data, and I generally have to pause about 20 minutes in to say, "I know this is really depressing." and then there's a slight chuckle from the audience, but it is depressing, but there has been progress,

and as a university professor, I think I'm dedicated to the idea that people can learn over time. So things still are too slow for women compared to men and for underrepresented minorities compared to the majority, but they are better than they used to be. I do find that we have to keep demonstrating that there's a problem. So if I talk about a study that was done in 2010 for example, people will say, "But that was 2010," or, "That was 2012, or, "That was 2014" or even, "That was 2016."

Tanya Domi: Sure.

Virginia V.: And so I have to keep updating the studies that I refer to in order to make clear to people, yes, despite what we might hope for, it is still happening now.

Tanya Domi: So speaking of which, you were recently published in Nature on the addition of two women who were awarded Nobel Prizes in chemistry and physics, the hard sciences. As you point out, the last time a woman received a Nobel in physics was 1963, I was actually in third grade, and before that, 1903. You estimate, given that track record, we would expect another winner in 2068. So why are you so hopeful? Why are you so hopeful?

Virginia V.: So 2068, that is pretty long from now. You and I won't be alive than to see that, and that was a bit of a joke because the lag initially was 60 years, and then it was 55 years. So I was saying, "Okay, the next one will be 50 years assuming we cut five years off each time." But jokes aside, I do think that an increasingly positive aspect is the number of professional organizations that see the underrepresentation of half the world as a major problem that they need to do something about, and they are trying a lot of different initiatives and projects to make change happen faster. And I think the sheer amount of attention to the problem is increasing, and we have some reason to think that having more attention does help change. A study by the Rand Corporation several years ago found that organizations that had a lot of initiatives that were designed to improve diversity were better, were more successful in increasing diversity than those that had fewer initiatives, and such organizations were more successful than organizations that concentrated on family friendly policies.

So specifically targeting diversity was, in a lot of different ways, was something that bore fruit. So I think one reason to be optimistic now is, as I said, that more and more organizations are targeting diversity and are trying a lot of different experiments for how to move the needle faster and further.

Tanya Domi: Well, there's so many popular media outlets covering education, for example, a study that you participated in and was published in the proceedings of the National Academy of Sciences last year documented that 69 percent of men were more likely to speak at colloquia as opposed to 31 percent of women. This issue has definitely crossed over into popular discourse, and I can share with you that I have colleagues in Washington D.C., many of which who work in the

government or in the district on issues of national security and foreign policy, and they now are referring to these panels as man panels.

Virginia V.: Uh-huh, man panels.

Tanya Domi: Yes, man panels. And they were really women. You're seeing women really start to stand up and say, "No, you can't have an all male panel, or you can't have an all white panel, you've got to have some diversity." Tell us about this study. It's fascinating.

Virginia V.: Yes. This was a study. It was led by Christina Trower and Michelle Hebl from Rice University looking at six different areas within academia ranging from the humanities to the natural sciences, and looking at the top 50 universities in those fields and who was on the colloquium lists over a one-year period. So this was something over 6,000 different talks that were analyzed, and in analyzing the data, we also looked at not just what was the percentage of women in those fields, but what was the percentage of women in those fields at similar institutions. So you might think, okay, most women are not at high prestige institutions, so they're not going to be as invited to give talks as people who aren't at a high prestige institution. So we controlled for the percentage of available women, and another question that people bring up is, well, maybe women aren't so interested in talking, and so maybe they just say no more often, or they don't think it's as important as men do.

In a separate survey that we had, men and women equally said they thought giving talks was important, and they said they equally accepted invitations when they receive them. So we don't think there's an issue of either quality, although of course, we have no way of directly measuring quality except by those status of the schools that people are at, but we don't think it's a question of either choice on the part of women or quality on the part of women, but rather that when people think about who's going to be a good colloquium speaker, their thoughts naturally go to men because of the extent to which we associate men with professional competence. But when you say to people, "Let's see whether there are women who are equally qualified as these men who might also be good speakers," then when you direct people's attention, they're usually able to think of women, and they're better able to make a balanced list.

Tanya Domi: And to that point, some findings in this study indicated that, and I'm not surprised that a colloquia female chair makes all the difference in who gets selected because the study indicated that 49 percent of those female chairs actually selected, 49 percent of the time, selected women.

Virginia V.: I had my own personal experience of this. For a while, I ran the colloquia in the linguistics program here at the Graduate Center, and one thing I paid attention to was, are we inviting an appropriate percentage of female speakers? We have a lot of female students, which is an additional reason that you want to have female speakers because it signals to the student body that they can aspire to

be successful in linguistics. I ran a very successful series, If I Say So Myself, and it was balanced, and then I stopped doing it, and the position was taken over by other people. And then we started having some colloquium series that were all male until I stepped in and said, "Are you thinking about what you're doing here?" And then it became rebalanced as they did start thinking about balancing not just the area of linguistics, but also who was speaking.

So I think it's likely that if you don't pay attention, you're going to repeat the mistakes that you've made before. But if you do pay attention, always emphasizing quality, and that's something that Abigail Stewart and I in our book, *An Inclusive Academy: Achieving Diversity and Excellence*.

Tanya Domi: Yeah, that came out last year. Yes.

Virginia V.: Actually, it came out this year.

Tanya Domi: Oh, I apologize.

Virginia V.: That's okay.

Tanya Domi: Okay, good.

Virginia V.: So we emphasized that you want to achieve diversity and excellence, and that you don't have to sacrifice excellence in order to achieve diversity, and even thinking that you do is already suggesting that you don't think that, for example, women are as capable and talented in their given field as men are. So we emphasize, yes, we want the absolute best people, but we're not always in a position to know who they are or to correctly evaluate them when we do see them.

Tanya Domi: Yeah. So I have personal experience in this area too, and I do convene at Columbia University. And what's really a great pleasure is that when you get all women panels, just because they are that good. And in the area that I focus on in, in southeastern Europe, there's a lot of men, but there are more and more women, and we definitely pay attention to this. It's very, very important, and really appreciate the study. And speaking of which, were you the founder of the center for gender, yeah, Ed Hunter.

Virginia V.: The Gender Equity Project. Dena Rabinowitz, who is currently the interim chancellor of the City University, and I founded it together. We received a \$3 3/4 million dollar award from the National Science Foundation. We were one of nine schools nationally to receive this award, which was the first time it was given, and the idea that NSF had was that their previous attempts to increase the representation of women in science had not been ideal because they had focused on the woman, on fixing the woman, giving the woman more money, more resources, and that instead, what you needed to do was fixed the institution.

Tanya Domi: The structure.

Virginia V.: And so they developed these \$3 3/4 million dollar awards called Institutional Transformation Awards, which the National Science Foundation is still giving out. And the idea was, let's look at the policies and procedures that these institutions have that do or do not make it more likely that women will be hired, but they will be promoted that they will be retained. So let's look at offer letters, for example. Are the letters that are sent to women making them offers? Are they as positive, do they have as much money? Do they offer as many resources as the letters sent to men, and other kinds of institutional practices.

Tanya Domi: It's money well spent. As a matter of fact, just this past week, Margaret Chin, who, has been mentored in your program, actually testified before the United States Supreme Court on the Harvard admissions case, and she called it on Twitter like a high mark of her career. So there's just wonderful, wonderful people in the CUNY system, and particularly, this project, and in your contributions here at the Graduate Center. You were talking about letters, and back to that study about letters that more or less were more effusive, more praiseworthy of male candidates versus female candidates. Tell us a little bit more about that study.

Virginia V.: That study was inspired by a groundbreaking study by [Trix 00:18:19] and Sanka who were anthropologists. They analyzed letters of recommendation that were written for successful applicants for medical school faculty members, and they found that letters for men were longer, had more, what they called standout adjectives, adjectives like brilliant, outstanding, superb, and fewer of what they called grindstone adjectives, hardworking, meticulous, careful, and had fewer, what they called doubt racers. Things like, she has a somewhat challenging personality, or she excelled at every task that she chose to take on. So these are the kinds of statements that make a reader think twice about whether they want that sort of person, and those doubt racers, although rare for all candidates, because letters in the United States tend to be overwhelmingly positive, they were more common for females than for males.

So when you put all that together, men are smarter, they don't have to work as hard, and they don't have as many doubts raised about them, men are going to seem better than women do. In the study that you are referring to where the lead investigator was Juan Madeira, we looked specifically at doubt racers and we had a better way of coding the data= than the first study did. So we were able to look at different types of doubt racers, and we were able to quantify how often they were present. And it was not only still the case that doubt racers were more common for women than for men, but when we asked a separate group of faculty to look at paragraphs in which we either inserted a doubt racer or didn't, we found that indeed, people rated people who had those doubt racers more negatively than they rated people who didn't have those doubt racers.

Tanya Domi: Doubt racers.

Virginia V.: So very small things that you might do, and a letter can have large consequences for what happens to that person. And other studies in addition to ours have shown that in general, letters and evaluations for men are more positive than letters and evaluations for women.

Tanya Domi: So, speaking of evaluations, there's been studies done, and I'm speaking of studies about college students who tend to describe male faculty in the same adjectives you just previously offered as brilliant and knowledgeable, while females are seen as being bossy and annoying. That seems to track, even though we're not talking about your studies at the moment, but that trend seems to track with your research. What would he have to say about that?

Virginia V.: Yes, you can do your own little experiment. I do this sometimes in class. There's a professor at Northeastern University, Ben Schmidt, who has an interactive website that allows you to analyze Rate My Professor.

Tanya Domi: Oh yes, Rate My Professor.

Virginia V.: So it allows you to analyze by gender the evaluations that are made of male and female professors in different areas. So you can put in a given word like "brilliant," and you can see both how often it's used depending on the field. So it's used much more frequently and philosophy for example than it is an accounting, and you can also look at how often is it used for men versus women. So in every field, there are more adjectives. There's more use of the adjective "brilliant" for men than there is for women, and you can also do the same with "funny." So men are funnier than women are, and as someone who thinks she's pretty funny, I take great exception to that. And then you can put in words like "mean." So women are meaner than men as far as students are concerned. They're also kinder. So we have ideas about what men and women are like and what they're supposed to be like. So as Madeline Heilman and other psychologists say, schemas are ideas about what people are like. They're descriptive and they're also prescriptive.

Tanya Domi: Very interesting.

Virginia V.: So women and interesting women are supposed to be kind, and they are kind often, but when they're not kind, when they're simply authoritative, and perhaps strict, that's seen much more negatively than a man exhibiting the same behavior as seen. So a man who's strict and lays down the rules and abides by the rules, well, he's just being a man. But when a woman does it, she's violating the demand to be kind.

Tanya Domi: And the prescriptive. Yes, the demand. Very interesting. I'm thinking of Hillary Clinton right now and other women politicians. Actually today, we are six days out from midterm elections that could be shaped by unprecedented outcomes

of elected women to office, having had a 500 percent increase in candidacies. Your center has a study right now, an ongoing study, an online experiment to investigate the attribution of feminine and masculine traits and their relation to voting patterns, and this is very interesting idea, and we look forward to having you come back and sharing those findings.

Virginia V.: Thank you. I'd be delighted to.

Tanya Domi: Thanks for tuning into The Thought Project, and thanks to our guests, distinguished professor Virginia Valian of Hunter College and the Graduate Center of the City University of New York. The thought project is brought to you with production engineering and technical assistance by Sarah Fishman. I'm Tanya Domi. Tune in next week.