We Have Met the Enemy and He/She Is Us
October 30, 2014

CECILIA A. CONRAD. Thank you. I'm a little bit taken by surprise because I thought we were doing the discussion first. But I only had one slide and it was a picture of that Pogo cartoon. Just because I wasn't sure how many in the room were familiar with the Pogo cartoon. There's a very famous cartoon, it shows Pogo and someone other character in the common strip. And they're walking across the forest and they talk about, you know, how wonderful nature is but that it's really hard to walk across the forest. And then there's a picture that shows that they've dumped all kinds of trash and other stuff there. And Pogo looks and he says, "We have met the enemy and he is us." And that line has been replicated in many, many different ways. And it's one of the things that I want to address today. But that was going to be my only slide was to show you that. Because when I picked that title, I knew there would be an age range in the room [laughter]. And some of you would not know Pogo.

I also should take a moment to issue a disclaimer. Nothing I'm about to say represents the official position or opinion of the MacArthur Foundation. These are my own stories that I'm going to tell. And I'm going to tell a lot of stories as part of my discussion today.

So the other thing I'll just note is that I know that there are people in the room that have heard some of these stories. And I apologize for repeating them, but I hope you haven't heard all of my stories. I think Fernando may be the only one at risk of that. We worked together a long time. When I was still an assistant professor at Barnard, I served on the college's Middle States Reaccreditation Committee to write its final report. The day we worked to draft the section on the diversity, the Vice President for Academic Affairs read a brief statement that he had drafted, which I will title "The Case Against Recruiting Minority Faculty". He made three arguments. First, he challenged the idea that students require mentors from the same racial and ethnic group.

He asked how far would we take this? Do we have to have Korean American to mentor the Korean American students? Do we have to have an Armenian American to mentor the Armenian American students?

I'll set aside for a moment the fact that in my mind one of my most important roles as a role model was to the white students who had never had a black person in front of their class before. Set that aside. His second argument was that minority faculty are not necessary to diversify the curriculum. He said, "You know, most of the research that we could introduce in these classes has actually been done by whites." And, third, because minority faculty are in short supply, he argued, they command outrageous salaries and are too expensive. At the end of his presentation, all eyes turned to me [laughter], the only person of color in the room and at that time, the only U.S. born person of color on the permanent faculty. I smiled sweetly. And what I like to think of as a superb example of what writer Jill Nelson has called "The Thin Line Between Tomming and Mau Mauing," I said, "Bob, I have one question. What schools are paying these outrageous salaries and how do I sign up"? [laughter] Bob's soliloquy on diversity highlighted themes that continue to be reflected in discussions around affirmative action and diversity. And there, I said affirmative action. Let that be, the record show, that it has been said at this conference today. He questioned whether there were any benefits to diversity. He referenced scarcity suggesting that the real problem lay with the inadequate number of blacks and Latinos with the required education skills and certifications. And he undermined any argument on compensatory justice by referring to the outrageous salaries. What he didn't talk about was the fact that the college had a revolving door when it came to minority and even women faculty. And I shortly left, too, for an outrageous salary someplace else. We came, we stayed for a few years, we left. Sometimes for another academic job, sometimes not. And

though the college had an admirably diverse student body, it had a persistent gap like other selective liberal arts colleges, in traditional metrics of academic performance. But in retrospect, Bob's argument was quite radical for the time because he dared to ask what's in it for us? What he didn't ask is how are we complicit?

Today, I want to ask both of those questions. What's in it for us and how are we complicit? To answer that first question, I want to challenge the narrow conception of benefits of diversity embodied in Bob's case statement. To propose something that's already been proposed today, the lack that the lack of diversity and economics has a negative impact on the quality of economic science. Or I might state this affirmatively. A more diverse economics profession would improve the quality of economic science. We heard this from Chairman Yellen earlier today. We've heard it echoed several times. And it reminds me of a kind of moment, ah-hah moment that I had earlier in my career. I think I was still at Barnard at the time. And there might be one or two of you who was there with me.

A small group of social scientists, mostly economists of color, were invited to spend a day at the CIA. Were any of you there? Were you? You were there. And the whole message of this day, the reason we were invited there, because it seemed quite mysterious, was that they had concluded that unless, that they had missed important world events and trends because of the lack of diversity on the CIA staff. And that in order to recruit a more diverse workforce, they were going to have to change their image with faculty like us. So they spent a day showing us data and all kinds of other things that were available at the CIA. And at the very end of it, we all got envelopes with crisp, new $100 bills.

[Laughter.]

It was a very strange experience. But the CIA was doing this long before the economics profession had come to embrace the same idea.

My answer to the second question is already previewed in the title of this talk. We have met the enemy and he is us. And I plan to advance two propositions. The first is that an increase in diversity is going to be achievable only if we are willing to widen our analytical frame beyond the notion of individual deficits on the part of women, blacks, Latinos, to encompass issues of contents, pedagogy, climate, disciplinary rhetoric, and culture. And the second proposition is that one systemic reason for the lack of diversity is the incompatibility of disciplinary rhetoric and culture, our belief systems, with the outsider perspective and experience of many women, blacks, and Latinos. And we haven't even mentioned American Indians. I should add them there, too. Let me warn you beforehand that this is not a technical or research talk. The data I present will be experiential. I draw from my own experiences, from the experiences of my undergraduate students, from the experiences reported to me by participates in the AEA Pipeline Project and others. I will occasionally reference or integrate research findings as appropriate but many of those have already been covered earlier today. Let me also say that I have made an effort to modify stories if needed in order to disguise the identity of the informants, except for my own, I'll out myself.

So let me begin with my first assertion. That the lack of racial, ethnic, and gender diversity in economics has a negative impact on the quality of economic science. It is really difficult to ask the counterfactual. Would economics would be different if it were more diverse? I've started to think about some kind of natural experiment that might exist where there's this alternative universe where economics is diverse and so on. We could try and get at this by comparing the quality of economic research to the quality of research in some other more diverse

field, but I'm sure that economists would balk at that. We can also look, as I will in a moment, a bit at the contributions of economists who come from sort of outside the mainstream. But I think we're going to end up relying a lot on some of the evidence that exists and it's already been cited today, that shows an emerging consensus that cognitive diversity within a community can lead to higher creativity in innovative problem solving. And I've been paying a lot of attention to this research in kind of my new job. Because my job, contrary to popular belief, is not to find geniuses, it's to find exceptionally creative people. The idea that cognitive diversity, aids in problem solving and knowledge creation is not new. But I am not sure that it's wholly embraced within our discipline.

The idea that economic science could be better, might be equally controversial, notwithstanding the kind of beating we've taken over the past 10 years or so. A recent performance with respect to understanding macroeconomic fluctuation clearly leaves room for improvement. The other challenge is that this research on cognitive diversity, it sort of doesn't exactly explicitly address the question of racial, ethnic, and gender diversity. They may not always line up perfectly with cognitive diversity, and that's a topic I want to return to a little bit later. But they are likely to be strongly associated. In largely theoretical work, Scott Page with others has shown that under some circumstances, diversity can trump ability and problem solving and in prediction. And when he talks about diversity there, it's diversity at multiple levels. It's diversity in the way you see a problem, so the way you formulate a question. It's diversity in the types of evidence that you look at. It's diversity in the ways in which the methodologies you might use. And it's also diversity in the ways in which you frame cause and effect. And those multiple levels of cognitive diversity are likely to be strongly correlated with your life experiences, with the situations that you've seen with your economic status. So there is a reason

to believe that there is a strong relationship between those. We've heard a little bit about some of the evidence on this regard earlier today. One experimental study by McLeod, Lobel, and Cox compare the performance of two work groups on a brainstorming task. The ethnically diverse group produced ideas judged to be more effective and feasible than the ideas produced by the homogeneous group. The more homogeneous group, however, was more cohesive. And as was noted earlier, the more heterogeneous group was not likely to rate themselves as more creative than the homogeneous group. So there is a tension there between the greater creativity of diverse groups and this tension when you get people with different identities together in a room together and ask them to work well. I was reminded of a case I had in a class at Pomona where I had assigned group projects. And I had long ago learned my lesson about group projects in that I no longer allowed students to form their own groups. And I did this because I had had situations where students tended to form their groups along racial and ethnic lines. And that because, you know, we have minority students, that meant the minority student was frequently the odd person out. Perhaps the extreme version of this is that I once had a Japanese student come to me almost in tears because the groups had formed and the only other Asian students were Korean, and they would not allow the Japanese woman to join their group. When I suggested to her that she join forces with the one black student in the class, it was like something had never occurred to her. So I formed this group, and I deliberately had mixed people up in terms of gender, race and, actually at the Claremont Colleges, campuses. And the group immediately started having friction. I would get one of them to come to my office. The men in the group are sexist, they are trying to assign us the clerical work. And one of the guys in the group would come and say, you know, the women in the group don't really know what they're doing. And this back and forth of this group that went on continuously. But they produced the best project of the semester. And

when I asked them to assess the contributions of individual members, it was really interesting because one of the best things about the project was this graphical work they had done to illustrate their data. And the male students wrote, "Well, Jenny didn't do much. All she did was the graphical work to illustrate the data". So this is a bit broader notion of a benefit of diversity than the one that my dean had kind of outlined. Because he was focused solely on the idea that individuals with specific identities may have a greater tendency to do research related to those identities. And, indeed, Mason, Darity, and Myers had found an overrepresentation of black authors in citation studies of racial inequality. Many of the contributions were actually from sociologists. It wasn't just black economists. There's some work on gender discrimination that suggests that hardly anyone wants to use the word discrimination. Certainly not in the title. But women are more likely to actually acknowledge that it makes this once they get into the body of the paper. The difficulty, of course, is that a black scholar who devotes her attention solely to issues of race and gender, is then likely to find herself the subject of criticism that her research is not mainstream, that she has published in radical journals such as "Feminist Economics", "the Review of Black Political Economy". Or she might hear the criticism voiced by one of my colleagues. One day at lunch, he turned to me and he said, "The trouble with you black scholars". Now, you know, anything that begins with that phrase is not going to be good [laughter]. "The trouble with you black scholars is you spend too much time studying your own belly buttons". I reject this criticism. One of the contributions of diversity to economic science is the fact that diverse perspectives ask these different questions and see evidence differently, and come up with new and different ideas, ways of looking at the world. Sometimes they don't get credit for those new ideas, it's invisible. But they do exist. And I had just some notes I made here which is not meant to be comprehensive. And so please if I've left somebody out, I don't

want to hear about it later. But I know, for example, the development of notions of care labor and some of the contributions of women economists, people like Nancy Folbre, feminist economist, and thinking about how we can categorize the notion of care labor as a different strategy, a different form of labor than the kind of physical work we've thought of before. An issue that I think will become more prominent as we look at issues of healthcare workers and the Ebola and the debate over that now. I think about the work that Marcus Alexis did on interdependent utility as an alternative way of framing work on discrimination. I think about Oaxaca and his work on racial decomposition of wages. I think about the work that Sandy Darity and Sam Myers did very, very early when everyone else was saying that the 1970s were like this banner year for the reduction of racial inequality. They were one of the first to point out that zero earners were being left out of the picture. And that some of what looked like progress wasn't progress at all. So there are lots of ways in which having this diversity, I think, is important for expanding our economic knowledge. I want to shift now to my second issue. The issue of are we complicit? And I have argued, and I'm asserting, that we will make the economic science more diverse, make economists more diverse, the profession more diverse, if we move beyond the individual deficit frame to address issues such as climate, pedagogy, and rhetoric. Now the most often cited reason for the absence of blacks and Latinos and, indeed, women as well in economics, is the lack of mathematics preparation or quantitative skills. And we've talked about this earlier. And there is no doubt that that is a contributing factor that makes it difficult to succeed in the introductory classes and that we know it makes it difficult in graduate programs. We can debate as we did just a moment ago as to how much it's required for success in the economics profession at all. But I want to, just for a moment, I want to set that issue aside for just a moment because I don't think it's the whole story. I think that we could tomorrow

create a whole new, a huge number, you know wave a magic wand, and make a whole group of people become experts in math and develop them as math majors without them necessarily choosing economics as a field. The remedy that many colleges have looked at is this very much focused on the individual deficit model. They have located the lack of success in the retention of faculty of color and women in poor time management skills. You should have said no to service on that committee. You shouldn't spend so much time talking to students. They have attributed the achievement gap to students, to poor math or writing skills. And the institutions, to their credit, make moral commitments to address those deficits among its students with academic support, summer bridge programs, and so on. And that support is incredibly important. If someone had taught me how to use a microscope before I signed up for plant biology, my freshman year would have been a lot happier. But I think it's important to ask, dig a little deeper. And we've seen research that people have done on comparisons across institutions. And that research has mostly kind of come to the conclusion that there's some kind of mismatch, that if only black students had gone to a different school, they would be more successful. I think there is another way we can think about these comparisons across institutions that could be instructive. And I want to kind of give an example of that. Let's suppose, for a moment, that mathematics training is what sort of drives the proportion of blacks and women in particular science fields. And we could array fields based on their mathematics intensity. We might expect that if we looked across a set of institutions that were very similar in terms of their admissions criteria, in terms of their demographics, in terms of all of those aspects, that we should find across all those campuses, a similar kind of pattern. In terms of arraying the sciences, biology's likely to have the most because it may be the least, well, historically, it was the least mathematic intensity, now it's becoming quite intensive. And you array it all the way up. So I performed this kind of

experiment with a group of liberal arts colleges while I was the dean at Pomona. I put together data on majors and diversity and I was hoping to use it to motivate departments to talk about these issues. But one of the things that struck me as I looked across the data, is that other than seeing a kind of common pattern in terms of an association between level of math intensity and the racial and ethnic diversity, what I found is that on some campuses, physics had a high proportion of black students and chemistry and biology didn't or math didn't. On another campus, it might be the chemistry. And then another campus, it was math. And another campus, it was neuroscience. Across the board. And what that made me start thinking about is if you look across these campuses for a moment, there could be a kind of critical mass phenomenon, as we talked about. But one has to ask, what's driving that critical mass across these things? And I think the only thing that really we can point to that varies across these campuses is the department and classroom experience. The kind of experiences people are having that makes us want to ask, why is physics being successful on this campus and math successful on these other campuses? What can we learn from that situation? I'm reminded of a conversation that I overheard once while I was in the admissions office at Pomona. I was just sitting there and nobody knew I was there. And these two white male students came in, and they were sitting in the waiting area. And on the table in front of us, there was a brochure. So one student picked it up and read the title aloud. And the title was "Straight Talk About Being a Student of Color at Pomona College". And he looked puzzled. And he turned to his friend and he said, "Do you think they have a different experience than we do"? And the answer is yes. Qualitative surveys of undergraduate students of color and of women have identified factors unrelated to individual skill deficits that contribute to inhospitable classroom environments. Instructors who fail to make eye contact, who engage in small talk with their white male students in a class, but not in

others, not with others. A colleague of mine once admitted that he/she, won't state the sex, did not call on students of color when they raised their hands to answer questions because she thought they wouldn't have the right answer. Textbooks and course content that exclude the economic experiences of minorities and women. Professions of color blindness and gender blindness. And the failure to acknowledge that these concepts are embedded in economic models. Concepts of well being that exclude issues of freedom, liberty, civil rights. And the negation of the personal experiences that many students have had with discrimination. I was thinking about this issue in particular in light of our last discussion. If you think about priming things that might activate stereotypes, imagine if your daily experience of the course content in a class is one that constantly says your group has lower wages because they're lower skill. Your group has high unemployment because they're lower skill. That sort of activation of stereotype may be a daily experience. And that discrimination really doesn't matter, doesn't happen. Either doesn't matter, doesn't happen, or doesn't persist. Let me just give you a couple of stories. Here's one from one student at an elite institution. In a seminar about the social welfare state, I asked my professor a question regarding discrimination in the location of subsidized housing. I knew such discrimination existed. In my hometown, a group of residents fought a project to build subsidized apartments, arguing that people who needed subsidized housing didn't deserve our community. My professor, a top expert on California's welfare system, dismissed my question, claiming that no such housing discrimination exists. It is very difficult to study problems with faculty that don't acknowledge their existence. Another student attended a seminar given by a visiting speaker, was forever disillusioned with economics, when the speaker commented that slaves were better off than free whites in the South without further elaboration of the definition of better off being used. What disturbed her most was the failure of the faculty

in the room to question the statement. It was left to her to challenge it in the seminar. For graduate students in the Pipeline Project, study groups were frequently the problem. At one institution, a graduate student spoke to a professor about his difficulties in the class. And the professor said, "You'll never make it if you aren't in a study group. It's your responsibility to join one." What the graduate student felt uncomfortable saying to the professor was that he/she had tried to join a study group but had been largely, but the study groups had largely been formed along linguistic groups, much like my undergraduate experience and the only other native English speaker had rebuffed his attempts. A productive relationship that this student had formed with an international student ended when the other students from this student's country, China, was pressured by his peers not to share any information with the black student. At another, a black graduate student who eventually left without a PhD was left out when study groups were formed, but assertively, maybe somewhat aggressively, tried to join a group by finding out the time and place of their meetings and just showing up. She described a painful experience of tracking down groups that constantly relocated without telling her. Before coming here, I spent a little time reviewing my records from when I ran the mentoring program. And I would particularly focus on the students who had left without the PhD in economics. And I should note that many of the students who left without a PhD in economics ended up in other fields getting PhDs in public policy, in sociology, or getting law degrees. And one of the things that I found among the factors, so the reasons people left were varied. Sometimes it was stress related health problems, related to, I think, the stress of being in those graduate programs. But other times, it was simply the notion that what they wanted to do, that the ways in which they thought, that they felt they brought a cognitive diversity to borrow that term, that was not welcomed within the department or program. So I was left feeling that some of the students who

were bringing the most diversity were the ones who could not survive. And let's suppose that you do survive graduate school. And you arrive in your classroom as a faculty member. You confront another kind of challenge. And this actually kind of ties in, I think, with another issue that we don't necessarily talk about a lot. And that is the social dynamics of who chooses to be an economics major and what that means for the environment. My first year of teaching, I was teaching an introductory economics class at Duke University. And I had three young men in the class who were dominant voices in the conversation in the room and who seemed to be on a personal mission to challenge everything I said. Sort of, I've later now read, because I read about the experience of other women of color and other women in classrooms, and it's kind of a hazing experience. So it was like daily a struggle. And I would go back and I didn't really feel like there was anyone I could talk to in the department. The one other woman in the department was on leave that year. There weren't many other people at the university to talk to at that point. So I was kind of just suffering and trying to figure out how was I going to deal with this. One day, though, as luck would have it, these three young men decided to go to a senior colleague. I will name, Martin Bronfenbrenner, because his name is important to this story. And they went to him because they expected a sympathetic voice. And they said that they resented being taught by, quote, an obvious affirmative action hire. Now, this is the important moment in this story, because I've seen this handled the wrong way many times since. And here's a situation where it was handled the right way. His response to the two students, and maybe he could have been a little less snarky, was he had taught at Wellesley where I had been an undergrad. And he said to them, "Well, let me see, gee. You know, I taught her as an undergrad and I've had both of you in my classes. And she was an A student and you're a B minus". You know, but, basically, the message that he gave was that I have every confidence in the ability of this professor. And then

he came to see me. And he said, I hear you're having some trouble in the class. And I, like, yes! And I told him the whole story. He says, okay, here's the problem. You're making the material too clear.

[Laughter]

I'm not sure what this says about our profession. He said, "You're making it too clear, and they're starting to think that they know as much as you do". He said, "So I want you". I said, "You know, it's an introductory class". "I want you to go in the room tomorrow, and I want you to find any excuse possible and I want you to fill the board with calculus". So this goes back to the math as the obstacle, right. I said, "But it's intro, there's no calculus required". "I don't care, go in there, any question, answer it with calculus" [laughter]. And I did that. I did that, and it worked. Those guys quieted down. One day, one of them tried to say something to me about, well, you said something different yesterday. And I turned to his friend who was sitting next to him, I said, oh, really? Did I? Do your notes say that? And he looked at me, and he says, "No" [laughter]. All right. But what was right about that, and what I've seen not done so well, is that departments have the opportunity to address head on the perceptions of students about the faculty who come in. And they do that by, I call it establishing your rep before you get there. And I don't know that this was a conscious design on the part of Brofenbrenner. I suspect it wasn't. But it was, for me, an illustration of exactly the ways in which we can manipulate the environment. Much as we just heard with some of those psychology experiments. We can manipulate the environment to make it more hospitable by how we create, how the information we disseminate about the way we talk about our students. This anecdote in the study group stories and some of the stories from my undergraduate students reflect, in fact, this important issue of the group dynamics among economic students, by the kind of environments we create in

our classroom determines the kinds of students we attract. Certainly at the undergraduate level. And when I talk to my undergraduate students, one of the things that sometimes drives them away from study of economics is actually not the course. It's the other people in the class. And their attitudes and the ways in which the class dynamics are played out. The other point I want to make is that what we sometimes identify as skill deficits, may actually be the cognitive diversity that is so critical to creative problem solving. The argument, one of the arguments for widening the analytical frame is that it leads you to an expanded set of remedies. Remedies over which we might actually have some control. Rather than trying to address deficits in kindergarten through 6th grade mathematics education. We've heard some examples today from other disciplines. I want to just call out a few others just to show you the variety of ways in which disciplines have tried to look inward as opposed to just exclusively focused on the skill deficit issue. There is a program for women in mathematics, the EDGE program, that gets together women students, it's actually very diverse, so it's women of color and European women. For a couple of two, three weeks before they start a graduate program in mathematics, and in addition to some sort of math workshopping and problem solving, they also have a curriculum that's designed to help students anticipate and devise strategies to respond to some of the micro aggressions they're likely to encounter. We've heard earlier about experiments that show that stereotype threat can be mitigated with really small interventions. So, for example, in many of the sciences right now, there is this recognition that if you prime people with successful members of a group who have done work in that particular scientific field, that it's a form of the kind of sort of the affirmation. Yes, you belong, here's someone like you who's successful. So if you've been to any lectures recently, you'll notice that they have started to introduce pictures of the scientists who've worked on research projects. And by introducing those pictures, it also makes

them much more consciously aware of whether or not they are including a diverse array of scientists when they talk about the work that they're doing. And we heard a bit earlier about implicit bias for search committees and admissions committees. And then I want to add a lesson from the corporate world that we heard come through several times here. One of the things the corporate world has found is that the kind of diversity training that they typically do doesn't really have a big effect. But what does have an effect is that if you make the evaluation of supervisors contingent on the work they've done to increase the diversity of their workforce. So thinking about what ways can you introduce accountability metrics so that people have an incentive to actually learn about implicit bias, learn about all those other things, so that they may do a better job. One of the things that I wanted to comment on earlier when we were talking about the implicit bias research that Jo did. It amazes me that there are people today who would get a survey that showed them a Jennifer and a John who wouldn't immediately figure out [laughter], that, you know, gee, the right answer is. As we have heard this morning, some of these issues apply across the sciences. However, I want to argue that economics is especially challenging for students of color and women because of an incompatibility between disciplinary culture and rhetoric and the outsider experience. And that's my third and last point. I've mentioned color blindness and gender blindness paradigms which are built into many of the economic models and which do not resonate with most of us. I've mentioned particularly the meme of discrimination that doesn't exist, doesn't persist, or doesn't matter. I wanted to talk a little specifically about unemployment, but Bill Sprigs beat me to that earlier today. That's one that always, I mean, even today kind of like irritates when I listen to discussions of unemployment that pepper particularly the undergraduate curriculum. We get more nuance when we get to graduate school but talking about it, because what it tends to convey is that the

people that you know who don't have jobs, and, I think if you just look at the statistics, there are a lot of African Americans who know people who are unemployed, just because of the number of unemployed African Americans. If you know their personal stories and then you have a textbook that gives you explanations for the unemployment that don't line up with those stories at all, you know, lack of education, this person has a PhD. They don't have work experience -- this person has been a vice president at several different companies. So you can imagine the ways in which that kind of disconnect makes that classroom feel like a foreign place. Sociologist, Michele Lamont in her book "How Professors Think", observes that economists, and I should just, if you haven't seen this book, she does this ethnographic research with grant making panels that are interdisciplinary panels. And if you ever want to be an academic administrator, you should read this, because she characterizes the philosophers, the political scientists. It's kind of hysterical, actually. But she notes that economists display an especially high degree of epistemological cohesiveness, that they tend to define quality in a very same way and come up with consistent rankings of proposals. And this actually benefits them in these interdisciplinary panels. Because the other groups are always disagreeing with each other and the economists are very clear. One, two, three, four. It may benefit us in those disciplinary panels, but there's a question as to whether it undermines our ability to incorporate new ideas. Very conscious of a debate in economics about whether we are an evolutionary science or not. And there's some evidence that economics has changed. I'm thinking about some of the work that David Colander has done. But there's also evidence as compared with most other social sciences or scientists, we are amazingly rigid. And that rigidity has a consequence. And now I want to circle back, in fact, to the reasons for wanting diversity in the first place. The process of surviving in economics, the so called making of an economist process, tends to impose this disciplinary culture. A student

learns the language of economists, and in order to survive, abandons preexisting identities, ideas, approaches, ways of asking questions. At least temporarily. Some of us just bury it till we get tenure [laughter], but that means that some of the most creative thinkers are weeded out. Those that bring the cognitive diversity that's so important are frequently weeded out. So in doing so, we undermine the benefit of diversity that I talked about at the start. I want to finish with just one more story. I have time? Okay. All right.

And this last story is just, I want, I'm very aware that I have now spent a little bit of time essentially giving you a litany of complaints about the economics profession. And it reminds me of a situation I once encountered where I had, we had a new school superintendent in Claremont. A wonderful man, he decided that he was going to learn, he wanted to learn about the schools. He asked people in town, who are the people in town I should talk to about the school system, about what they see as the strengths and weaknesses? Somebody sent him to me. So he comes to my office. And he says, "You know, I want to know. I understand you had a son who went through the school system. What is your impression of it"? And I was like, "I'm so glad you asked". And I proceeded to detail all the sort of really the situations that emerged. The ways in which a black male student was treated differently from other students in the class. About the time he was escorted with an armed guard out of his AP history class because someone thought they smelled magic marker on him and thought he had done graffiti somewhere. I talked about the ways in which there were hidden obstacles to gateway courses that you had to kind of, you weren't told about. Like they changed the time for AP calculus and didn't tell him. Things like that. So I went through this long list, and I was, you know, agitated. Because this was my opportunity. And just like this is my opportunity now to kind of let it all out. And at the end of the conversation, he looked at me and he said, "Whatever happened to your son? Did he go to

college" [laughter]? And I had to sit there and go, "Yes, he went to Stanford". So, but the point there is and the point that I tried to reiterate with him is that he's a survivor. And the people we have in this room are survivors. And it's incumbent upon the survivors, though, to tell the full story, to tell about those who don't make it along the way. Because we're not going to increase diversity unless we have a lot more survivors. So three points. We can improve economic science by having an increase in diversity. We need to focus more on what we can change, and that is ourselves. And we need to embrace cognitive diversity once we succeed in attracting people into the field. Thank you.

[Applause]

[Inaudible]

Yes?

AUDIENCE MEMBER. I'm wondering if I can get you to reflect a little bit more on this notion that it isn't about math, a lack of math, but, in fact, the creation of inhospitable departmental cultures that may explain some of the differences between economics and other math intensive disciplines. And I'll use another personal example that I don't know how close it will cut to the bone. I have one of my twin daughters is a sophomore at Pomona.

CECILIA A. CONRAD. Oh!

AUDIENCE MEMBER. She should be the ideal economics student. She's interested in development, she's studying Arabic, she's spent a summer or two in Cameroon. She has 800s on the math part of the SAT. And I say, "Are you interested in taking an economics course initially"? And the answer was no. And it was no because, to paraphrase, economics is male, economics is for athletes, and economics is Republican. And she said, I'm not any of those things. And that's a problem. It's a problem because the classroom atmosphere is inhospitable.

She's now taken a couple and overcome that. But she would still characterize the culture in economics as being profoundly different than the culture in even mathematics or physics or chemistry or biology. And that's something we can change.

CECILIA A. CONRAD. Yes.

AUDIENCE MEMBER. And we ought to change.

CECILIA A. CONRAD. So, let me talk a little bit more about that. Because first, I'm going to acknowledge math is an obstacle. Math is an issue, we've got to do something about math. We need more people who have that kind of training and background. But it does seem that if you look across departments, and it's some places, it's economics, some places, it's physics, and so forth. What you'll find as common ingredients is first of all, you have a faculty member who's taken ownership of the issue. And that taking of ownership of the issue sometimes is as much as just making an effort to say something, to recognize the presence, to not make students invisible in the classroom. One technique we were talking about is wise criticism. And one of the techniques that worked with me when I was an undergraduate and I've seen used effectively with students is simply, sometimes to write a note to a student that says you had a really interesting idea in this paper and I'd like to talk about it some more, would you stop by my office? As a way of kind of welcoming and belonging. So some of the variation is in that kind of personal interaction aspect of it. It's also the case that some of the disciplines have taken proactive steps by, for example, forming kind of study groups or clubs. Kind of building off of some of the successful experiments that Uri Triesman had at Berkeley and some other places. Where you kind of, you get the critical mass so that you feel like you belong because you have other people like you and the department supports that. It's not some kind of underground kind of group. Those groups can actually be a kind of counter weight to a culture that's present

particularly in economics programs where there is no business major. Because one of the issues is that if you have a business major, you get a different kind of culture in your undergraduate economics class than if you don't. But you need that kind of cohort, that support group that's actually interested in economics beyond the fact that it may get you a consulting gig or, you know, a Goldman Sachs position. And that undergrad, so as I was telling earlier, that undergraduate culture is a tricky one and one in which I think we need to do some more work on to understand ways in which we can overcome that.

AUDIENCE MEMBER. Actually, to add to your last point, I was going to add to your list of perceived barriers that economics is for students who want to become investment bankers.

CECILIA A. CONRAD. Yes.

CECILIA A. CONRAD. And we've, I think, we face that a lot. I'm in a school that doesn't have a business school. And so there's this perception of, well, I don't want to go into finance and banking. Maybe I liked introductory economics, but I don't want to be an investment banker, so I'm going to do something else. And, you know, how can we kind of change the perception of there are a lot of things that you can do within the discipline that are not just finance and banking?

CECILIA A. CONRAD. And one of the things I think that Amanda had on her graphic earlier was about thinking about the courses at the entry level, what the options are. In terms of offering courses that do show that economics has applications in a variety of areas. I used to teach a course on race and the U.S. economy. And I would attract students into economics through that course. I only required one previous introductory course. Some of those, and I took AP as the intro if they wanted. And it was interesting to see how students would see that economics had this broader applicability. They would then leave that course, go to another

course, get maybe disillusioned a little bit, have to be pepped back up again. But one of the dilemmas I always faced is when a student who came through that pathway would come and talk to me about their interest in a graduate program in economics, I would tell them many of the stories I just told you. I felt like it was important to kind of, this is what you're going to confront to have to survive. So there is this need and some of this shows up in some of the research, the sort of updated version of the making of economists. There's a piece about gender differences. And the fact that the absence, the sort of lore in the hierarchy that we put on policy applications, on real world applications in graduate courses, is another place where this inhospitability raises its head.

[Silence]

AUDIENCE MEMBER. Just to add to that, my daughters all took, I think they all took introductory micro economics. And I couldn't persuade them to take macro. I kept telling them that macro was more interesting. Now, all right, I'm biased, I'm a macro economist. But I do think that it raises an issue that maybe we should think harder about trying to make introductory courses more illustrative of how economics is used in the real world. And I think it's a little easier to do that with macro. I think maybe you could draw in more people. It seems like, they went to the University of Pennsylvania and to Yale. And I'm pretty sure both of those places, micro came first and then macro. I think maybe it's as simple as switching the order. I'm not sure why we feel like we have to show micro first. But I just think that [laughter] when you.

CECILIA A. CONRAD. Well, now, you know, I think there are schools that do it the other way so.

AUDIENCE MEMBER. Does it matter? I mean, I just feel like there's a lot more, I mean, I've taught some macro courses at both the intermediate and the introductory level. And I

feel like I could bring in a lot of real world illustrations. And my students would just snap to attention as soon as I'd start talking about how, yeah, I've worked at the Fed. And they loved to hear about that stuff. I think it's a lot harder with micro. That's just my opinion, maybe. But maybe the more general point is…

CECILIA A. CONRAD. Yeah, I think the...

AUDIENCE MEMBER. … try to make it, even at the expense of losing some rigor. That the point is if they're going to go into economics, they're going to get lots of rigor. But, you know, try and make it interesting.

CECILIA A. CONRAD. Well, you know, it also gets back to the point that Kay made about pathways. In computer science, one of the ways in which they have begun to address what are very low participation rates, historically of women, is by looking at the pathways from the introductory class. And one of the patterns they found was that many departments offered this kind of, you know, computer science for poets course. For lack of a better name. As a course for people who think they don't want to do computer science. Well, it turns out that that course would have lot of women students in it who would do well and who would be really interested in computer science, but had no pathway from that course to an actual computer science major. So rethinking the sort of pathways that we create for people to move into economics, and to acquire the math that's required maybe even after they have gotten interested and excited about economics. Because I think I've had many students who have studied math much more intensively after they decided it was useful for them in the economics course. Thinking about those alternative pathways into the major I think would be really useful. Or into graduate school as well.

JANICE SHACK-MARQUEZ. Thank you so much.

CECILIA A. CONRAD. Thank you.

[Applause]