Episode #2: Marc Ettlinger

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Laurel Sutton: Hello, and welcome to another Linguistics Careercast, the podcast devoted to exploring careers for linguists outside academia. I'm your host, Laurel Sutton. Today's interview is with Marc Ettlinger. He's a linguist who is currently employed as a Linguistic Engineering Manager at Meta in California. He received a BA in Mechanical Engineering from Rutgers University and a PhD in Linguistics from UC Berkeley in 2008. Since then, he's been employed in the public and private sector as a linguist specializing in data research and analysis for machine learning, NLP systems, and AI. His contact information via LinkedIn is listed in the show notes. The topics we'll be covering today include things like neuroscience, engineering, government work, job hopping, research, data science, and the psychological journey into industry. And now, here's our interview.

Welcome, Marc Ettlinger. Thank you so much for coming on the podcast to talk about your career. So I want to give you space to talk, and I would love it if you could start with linguistics or maybe even go further back to engineering and tell the story of how you got into linguistics and what it meant to you studying at Berkeley and then why you decided to go into industry.

Marc Ettlinger: Yeah, absolutely. Yeah, and I think it's some of the, my pre-linguistics history is relevant to my ultimate career path, so I'll definitely share about that. So as a kid, I was sort of always interested in artificial intelligence and computers and things like that, so I went into engineering at Rutgers, partly on the advice of my father. He had said that if you do an engineering degree, it opens up a lot of possibilities, even if you don't want to be an engineer. And he turned out to be correct, so I appreciated that advice. And I had no idea when I graduated what linguistics was. It was a book that I read — *Gödel, Escher, Bach* by Douglas Hofstadter — that got me interested in the human mind and things like that. So after working as essentially a software engineer for a few years, I read that book and decided to go back to grad school, which at the time was actually, it was tricky for me to do that coming from a non-linguistics background, applying to linguistics programs. But that's maybe a story for another podcast on how to get into linguistics. And yeah, so I ended up at UC Berkeley. And originally I was going to do kind of syntax, semantics, cognitive linguistics, but then I found the whole quantitative aspect of phonology, phonetics and phonology, to be really appealing.

Laurel Sutton: Let me just ask, what made you decide to go to Berkeley rather than someplace that has more of a tech reputation like MIT, for example?

Marc Ettlinger: So I didn't get into the MIT linguistics program, but I did get into some other programs like at Brown, and Rochester has the Brain and Cognitive Sciences Department. I think what appealed to me there was, for one, my best friend had moved to San Francisco. I had worked for a number of years in New York City. And so picking a school that was a place that I also wanted to live was important to me. And also Dan Slobin, who is a professor of psychology at Berkeley, has used the quote, which is that, you know, whatever you think of the specific linguistics department at Berkeley, the school, the entire university is a great place to study linguistics and language and cognition. So Berkeley has a lot of incredible linguists or linguist-adjacent people in the psych department, in the computer science department. You know, that includes folks like Jerry Feldman in computer science and Dan himself and Susan Ervin-Tripp, and all these wonderful people studying language spread out across the whole school. And of course I was, you know, given my sort of interest in, initial interest in artificial intelligence, I wanted to work with George Lakoff, you know, in the program that he was doing on that sort of cognitive linguistic side.

Laurel Sutton: So you were there, you got your degree, you finished, you got your PhD. And what was it like when you were trying to decide what the next step was going to be?

Marc Ettlinger: Yeah. So definitely, you know, as I'm sure lots of people have experienced, the job market is very deeply unpleasant. I had been on the sort of the tenure track job market three, four, five, maybe five times, starting at Berkeley. But then also what I did end up finding was an opportunity to do a postdoc in neuroscience at Northwestern. And maybe the key lesson there, which sort of presages, I think, a lot of how things unfolded for me after that, was, it was through connections. So I talked to sort of as many people as I knew, people on my committee, people I had worked with, you know, on projects, asking around for what postdocs might be available. And so I ended up at Northwestern, basically through a connection, I knew a former Berkeley alum who was a professor at University of Chicago, who knew this guy at Northwestern who was looking for postdocs. And so that's how I found that opportunity. But then all the other postdocs I applied to as well were kind of through connections. So, you know, University of Indiana was where my advisor had done his postdoc. I had done some work with some folks in the computer science department at Berkeley on just a project, just a paper that we submitted. And that was a postdoc opportunity. And then, you know, my advisor was working with someone at UCSF and they had a postdoc there. So all the sort of places where there was some promise was all through sort of connections. I applied to many postdocs, you know, blindly. I think there were job boards where you could find that sort of stuff, but it was mainly ultimately through connections where I ended up in postdoc. And again, sort of potentially presaging a persistent theme, I ended up at Northwestern because that was a place that I would be happy to live. Chicago is a great city. My wife had connections to Chicago. So there was a postdoc opportunity in New York City, which I loved as a city, but just that was not going to be feasible for a family. So I ended up at Northwestern for three years doing a T32 postdoc, which is basically like a training postdoc, in neuroscience. So then I became not just a linguist, but a neuroscientist as well, which I loved. You know, I loved the opportunity to learn new things, expand my knowledge, and neuroscience is an incredibly fascinating field.

Laurel Sutton: So while you're doing this, you know, you're thinking about where you're going to go and looking at places to live — and I'm really glad you mentioned that thing about deciding where you want to be, because I think that is a huge factor that people never, ever talk about when you're looking for what's going to be next after grad school. The reality, of course, is that most jobs are going to dictate that as a first-year faculty, you know, you're living in Oklahoma or, you know, not that that's a bad place to live, but if you are at school at Berkeley, and then you see that the options for living are not in California or on the coast, and that you're going to have to move to someplace that might not align really well with your life goals or your politics or whatever, it's a huge factor, and it didn't used to be like that, right? 50 years ago, you had more of a pick of where you could live that aligned with the job opportunities, and now it's just not the case at all. Were you thinking at all about going into industry, or were you still really focused on academia at that point?

Marc Ettlinger: I was definitely primarily focused on going into academia. Unlike some folks, I had to make… Some people kind of go directly from undergrad into grad school, or they'll just take like a year off, just to, you know, kind of work a bit. I had made a sort of conscious decision to go back to graduate school, and so in doing so, I had to think about why, very explicitly about why, I had a very comfortable life in New York, very good career path ahead of me. And so I made the decision to go back to grad school. I sort of thought about it as follows, which is that: “If nothing comes of this after, will I still be glad that I went to graduate school?” And I decided that I was. I wanted to have the five, six years to learn about something that I was really, really interested in, and if it didn't result in me becoming a professor, that was okay. And so I went into grad school with that perspective. And thankfully so, because, you know, as I'm sure everyone listening to this realizes how imbalanced and broken the labor market is for academia. And so, you know, I definitely was applying to tenure-track jobs at the outset. As I mentioned, you know, I think it was on the job market three, four years. And I… Speaking of geography, one of the, I remember one of the opportunities for phonology was in Saskatoon.

Laurel Sutton: Oh, wow.

Marc Ettlinger: Saskatchewan. And every, every job I applied for, I ran by my wife. We had two little kids as well. And I did not end up applying to the Saskatoon phonology job. But as, you know, any time I was kind of applying to postdocs or anything else, I always sort of tried to think about what a backup plan would look like. And so I was oftentimes applying to industry jobs as well.

Laurel Sutton: Interesting. Okay.

Marc Ettlinger: Yeah. And none of them clicked. Like I don't, I think I had some, you know, an on-site interview for at Google basically as a data scientist, but before like data science was a thing. And my statistics knowledge was definitely not, you know, not adequate for that. And it was also sort of before the trend of like a lot of academics moving into industry. So I did apply for a few things here and there, and so it was at the back of my mind as an option, but nothing… The first couple of times, nothing clicked in that department.

Laurel Sutton: So it looks like you also did some government work, right? That was the next step?

Marc Ettlinger: Yeah, so after my postdoc, I did a two-year postdoc, applied, it was applying for tenure track jobs and extended the postdoc by a year. And, you know, there were no permanent positions. There were some, you know, other postdocs or visiting assistants, professorship jobs that were like one or two years that were options after my three-year postdoc. But for family, I couldn't drag my family to some place in the country for a one-year job with a wife and two kids, two little children. It was just not a responsible decision. And so again, through connections, I found an opportunity at the Department of Veteran Affairs doing research, neuroscience research, on the neuroscience of language, essentially. And so that's one job career path that, you know, people should definitely look into. You know, I know some people that have sort of been successful and stayed along that path where there's a lot of organizations where you can continue to do research and basic research that, there aren't too many that are just pure linguistics. But if, for example, you're interested in the neuroscience of language, you know, there's things like the VA and then at certain universities, they'll have like research professor opportunities where you can work through your whole career. It's different than tenure track. There is pros and cons, but it's sort of — academia-adjacent. You're doing a lot of the same stuff, but then without the teaching and then spending a lot more time on grants. So I did that at the VA for five years, five, six years. It was great. You know, I got to continue to do research, but, you know, there were some not-so-great things working for the federal government, and especially in the Bay Area. And then also, you know, you're subject to the whims of grant funding in certain situations. So that was the situation there. But there's… You know, you should look at, you know, there's VAs all around the country. Some of them that do sort of language-oriented research. There's the Oregon Health Sciences Institute, I believe it's called. They hire a lot of like, you know, have phoneticians studying, you know, audiology and things like that. You know, UCSF has research professors doing stuff on neuroscience and language. And then out east, you know, I think there's some organizations, you know, like related to University of Maryland. I think they changed their name, but it used to be CASL, C-A-S-L, which is again, like a research organization that's sort of academia-adjacent where you can basically, you know, using government grants, NIH, NSF grants, and sort of fund a career where you continue to do applied linguistics research.

Laurel Sutton: Yeah. We had a session at our LCL last summer where we had some folks from different areas of the government come and talk about the work that they'd been doing. And it's a lot more than most people think, right? They tend to think either of kind of the work that you do sort of medical-adjacent or translation work, maybe for the Department of the Defense or, you know, the FBI, but there's a whole slew of other stuff that's in there if that's the kind of work that people want to do. And as you say, a lot of it is associated with doing research because there's actually funding for it within the government. So even if the research projects are not quite what you'd be doing in academia, there's still research projects, and you're crunching data, and you get to write proposals and try to pitch ideas that you think would be useful. So I think the range of opportunities for linguists in government has expanded quite a bit now, especially that the parts of the government that hire know what linguists are — like, it's not that you're just a polyglot or a translator — like: “Oh, yeah, linguists know about language.” And I think too, there are opportunities now just starting to open up for forensic linguists or people who are more skilled in evaluating discourse when it comes to things like justice and law, which there really didn't used to be. You know, when you look at the history of how language gets analyzed in a legal perspective, the fact that linguists haven't been included since the beginning is like a crime. I mean that literally. But it's starting to happen now, which is really awesome, although difficult work for people, as I have heard kind of anecdotally, and we're going to have a guest on later who's done some of this, and he said, it can be really, really difficult, right? Like looking and reading trial transcripts and seeing what happens. So that's part of the emotional burden that comes with certain types of jobs and also something that people need to think about as they go into different areas of industry.

Marc Ettlinger: Yeah. I mean, obviously you need to be very flexible. You know, that's one of the big distinctions is, in academia, you follow your own muse, whereas if you're essentially working for someone else, whether that's the government with a sort of funding agenda or a company, an industry, you have to be flexible with what you research.

Laurel Sutton: Yeah.

Marc Ettlinger: Yeah, and I think the CASL, that CASL organization, one of, I think they had at some point dozens of linguists who were experts on L2 acquisition.

Laurel Sutton: Oh, wow. Cool.

Marc Ettlinger: You know, the military is very interested in figuring out how they can get people to learn languages. And, you know, there were linguists that were trying to measure aptitude for learning languages and things like that. And so, you know, that again, in addition to sort of medical and forensic and legal, language learning is a robust area that, you know, the government and related agencies are very interested in finding linguists who can do that.

Laurel Sutton: Very cool. So I now want you to talk about the rest of your career, because you've had a number of different jobs, I would even say a bunch of jobs. And one thing that often comes up when we're talking with students and people who want to go into industry is getting them to recognize that having a sequence of jobs is good. Right? I think academia tends to make you think, well, like, “Well, I have to get a job I love and stick with it for the next 20 years.” And if you “job hop” — I'm putting that in quotes because I don't think it really is hopping — but if you move from job to job, your potential employer doesn't look at that as a bad thing. It's not that you were hard to please or you are unreliable or anything like that. It's learning, right? Like you're moving through your career, you're learning different things, you're finding different goals. And I think you're a great example of someone who's moved through different phases with different companies, and each thing has been just a step on the path. It's not that leaving a job meant you failed it. Right? That's the academic point of view. You do a thing, you don't stick with it, that's failure. And that's absolutely not the way it is in industry.

Marc Ettlinger: Yeah. And I think that's just reflective also of the U.S. job market as a whole.

Laurel Sutton: Yes.

Marc Ettlinger: Certainly, my father had two jobs.

Laurel Sutton: Yeah.

Marc Ettlinger: And all my friends, including people who wouldn't touch academia with a 10-foot pole and those that were in academia, pretty much everyone I know has maybe maximum six, seven, eight years at any one job. I think it's just more the norm in the U.S. job market now to hop after two, three years. And for someone like me, that's good, because I get bored working on something.

Laurel Sutton: Sure. I feel you. [laughs]

Marc Ettlinger: So when you say, “What alternate, alt-ac career path have you followed?” my answer is all of them. I've done all the things. I've done postdocs, I've done government, I've done industry, I've done entrepreneurial. And each time, I've had the opportunity to shift. So I was doing linguistics, then I was doing neuroscience, then I was doing healthcare neuroscience, which was different than academic neuroscience. Then I was doing data science, then I was doing language in industry, and then entrepreneur startup stuff. And that suits me perfectly. I love learning new things.

Laurel Sutton: Yeah. Well, you can touch briefly on the other jobs that you have, but I think it'd be great if you can focus on the last three things now, apparently. So Google, personal AI, and then your new gig.

Marc Ettlinger: Yeah. And I guess there's one point I do want to make. I've definitely seen a lot of changes in the paths that are open to people over the... Let's see, I graduated in 2008. You probably have seen even more of an interesting history, but I graduated in 2008, finished my postdoc in 2011. So over the past 10, 11 years, there's been a significant change in the opportunities that are available. I think about it in three waves. The first wave was back in the 2000s and late 2008, 2011, where the opportunities that were available to linguists were very limited. Very few people had trodden that path, and most of the opportunities were specific to, it seemed to be specific to linguistics. So there was companies like Lexicon Branding, where they wanted your sort of linguistics ability. There was places where if you sort of worked on archival work and things like that, like the Long Now Foundation, they were... The person who went there, Laura from my program, she had been working on linguistic archival and documentation. And then there was companies like H5, kind of legal document stuff that were looking for people with specific corpus linguistics expertise. So there had to be a very... In the sort of first wave, there generally had to be like a pretty close match of like what you studied and then the job that you were going to apply for. Then sort of the second wave coincided with not just the linguistics, but a lot of other fields, just a surplus of very smart, well-trained people without opportunities in academia. And they were able to find opportunities that weren't necessarily directly tied to their field of study, but just reflected the fact that they were smart, hardworking, generally had good quantitative or qualitative research skills that companies were beginning to see were valuable. And so those were some of the kind of the early data scientists. And I think it's interesting that the field of data science kind of came about at this same time, but there wasn't necessarily a clear trodden path, but there were people who were doing very complex statistical analyses who then could sort of work doing that similar stuff in industry. And same thing with qualitative research, people who had extensive fieldwork experience and sort of qualitative research experience were then being, sort of doing qualitative research, nothing to do with language or linguistics, but they had that acumen. And then around the same time, there were all these boot camps that started opening, specifically often around data science, that were geared towards PhDs, although it could be for anyone. And that was to sort of give people from academia the little bit of extra expertise and knowledge to translate their quantitative skills into industry. And that was sort of the wave that I was part of where I had some decent quantitative skills, but I would have had no idea how to do it in industry. And then people weren't necessarily looking for linguists per se, they were looking for data scientists. So that was kind of the second wave. Then the third wave is, now that there's been dozens and hundreds of people who've sort of gone on that path, now industry is just looking for smart people in general. And I'm not saying it's easy, but I'm saying now it's like this well-worn path where if a company is looking for — and we can speak about what types of roles match kind of the academic profile — but if there are people looking for qualitative researchers to be product managers or quantitative researchers to be data scientists, or people who understand things about sociological and anthropological behaviors of human beings for those types of roles, companies will now look directly to academia to fill those roles. They'll oftentimes even put on the job postings, "Master’s required, PhD preferred." And so I think now we're in this kind of third wave where, from those kind of first couple waves where things were much less clear, I think there's a much more well-trodden path for people to go down to sort of find these opportunities.

Laurel Sutton: Yeah, I totally agree with you. There are so many more opportunities I think we've seen just in the last five years. It's been really recent. And also on the softer side as well, I have seen many more opportunities opening for linguists in marketing and places where facility with language expertise in language, not in a quantitative way, but in a more squishy way where you're using it to achieve an end, and who better for that than a linguist, because you know that the choice of words, the choice of tone, all of those things have to be very, very carefully selected. And now that, as you say, it's not just that you're a linguist, it's that you have this expertise, and for the people who are looking, the key for them is to be able to frame that expertise in a way that people in industry can understand, right? Like don't look for jobs that have “linguist” in the title, but look for the ways that you can talk about your particular deep, unique knowledge about language, and that's what's going to get you in.

Marc Ettlinger: Absolutely, yeah. Yeah. And, but also there are now people looking specifically for linguists.

Laurel Sutton: Yes, yes, that's true. And that's very different.

Marc Ettlinger: So in the past you would put “linguistics” in the search and nothing would come up, at least now a few things. But now, you know, also you shouldn't just put linguistics, but depending on what type of linguistics you do, you might want to put “psychology,” or “neuroscience,” or “discourse analysis,” or “rhetoric.” You know, you might want to put a kind of broader range of search terms as well.

Laurel Sutton: For sure. Okay. So let's talk about the last part here, up to the present. Take us up to the present.

Marc Ettlinger: Yeah. So as my research funding was coming to an end — oh, and back on the original theme, the reason why I ended up at that specific VA was because it was back in the Bay Area. And again, that was kind of done, I found that opportunity through connections. And so again, kind of life, life factors were the kind of key priority. So I was back in the Bay Area, which is great for tech opportunities. As my funding was winding down, I was in a bit of a panic state, I will admit. But luckily I had a little bit of a buffer. You know, the research position wasn't great, and, you know, I was applying for lots of jobs in tech, but again, sort of, things weren't necessarily clicking. But then I was going to meetups. Again, this is kind of that phase two that I was talking about. I was just going to meetups, and I heard about one of these boot camps. I applied, and I got in, and so it was this two-month boot camp that allowed me to sort of say, "Hey, I'm a data scientist." And so then once I had that — and, you know, there's, it's an in-depth, there's a lot of factors to discuss whether you should do these boot camps. There are things about them that are great; there are things about them that are not. Given how much, how popular they are now, there's a lot of them that are not as reputable as others. There's a, you know, cost issue as well. Luckily I was able to get a fellowship. But basically at the end of that, I was now able to say, "Hey, I'm a data scientist." So then I was able to find an opportunity in ad tech, you know, as a data scientist. I had a couple opportunities. That was the one I opted for. And there was a linguistics component to it, but some of the other opportunities I had were just pure data science, nothing to do with language at all. I guess the one key lesson here is that it was not necessarily something I saw myself doing forever, but it is very, very valuable to have that one industry job on your resume.

Laurel Sutton: Mm-hmm.

Marc Ettlinger: There, there is, rightly or wrongly, some trepidation when folks from industry are looking, you know, hiring people from academia. There's sort of the open question of whether, you know, the person is suited to the industry environment in terms of work behavior.

Laurel Sutton: Totally. Huge, huge issue. Yeah.

Marc Ettlinger: And to some degree it's warranted, but maybe not as warranted as, you know, the trepidation that exists. But so having that one thing on your resume that says, "Hey, I could work a nine-to-five job. I could do what you tell me. You know, I'm not going to have one foot out the door, you know, for sort of any academic opportunities." Just showing that commitment and acumen to sort of work in industry. “I can, you know, work in groups. I can get along with colleagues,” you know, and things like that. Having that on your resume is huge. And sort of once you have that, that first job, again, might not be your dream job, but that then opens up a tremendous amount of opportunities for you.

Laurel Sutton: Yeah. Yeah, absolutely. I'm so glad you mentioned that, and it's definitely something that's come up in my business as a small business owner when I'm hiring people. That's absolutely something I take into consideration, whether people come from academia or not, is, “How is this person going to function in the office? You know, are they going to be able to get along with their coworkers?” And I admit that when I am looking at people who are in academia and haven't had a quote “real job,” I worry about it a little bit because it's different, right? Like you got to hit those deadlines and you got to do things on your own, but yet you have to work in groups, and you can't take as much time as you want, perhaps, to do the things that you want to do. So I agree with you that the trepidation exceeds the actual concern, but it still is a concern and being able to show that you can work in an environment with other people is incredibly important.

Marc Ettlinger: Yeah. And I think there's a definitely a culture thing worth mentioning as well. There certainly is a cultural bias within academia against working in industry. It is ingrained, I think, to some degree in students. It is definitely not age-related. I've seen this amongst young academics, maybe a bit more prevalent in older academics, but certainly amongst younger academics it exists as well, where there's a, you know, kind of a looking down upon or a sneering towards people that leave academia and go into industry. And so when you're in industry hiring people, you don't know if this person coming to you, you know, hoping to work for you is thinking about this opportunity as like a step down or something they really don't want to do or a consolation prize. If you're hiring someone, you don't want to feel like you're their consolation prize because they, you know… And so whether… And one of the things that's important to talk about in the open is the psychological journey that it takes to go from academia to industry, because it is significant and it'll vary from person to person. Some people, you know, are very eager to leave academia right away, and they know it's not for them. And some people like myself, there was a psychological adjustment I had to make where I probably did think about, you know, industry as a bit of a consolation prize for, you know, as juxtaposed with an academic career. Luckily, I've sort of learned a lot about the choices that I've made and very happy with the decision I made, but it's definitely a psychological adjustment. The time that it might take you to make that psychological adjustment, it might take some time, but regardless of how long it takes you, you certainly need to project this, you know, that you're not just taking this industry job, you know, because it's, you know… You need to have, you know, the right sort of attitude around it. And I think, again, showing that you've done, worked in industry already is sort of one very clear way of showing that, you know, you're, you know, happy to be in industry.

Laurel Sutton: Yeah. It gets back to a little bit before when we were discussing this idea, you know, the idea of moving from job to job. And I think very much the academic, I'm speaking very generally of — especially in America, but I think it exists other places too — the idea that if you don't get an academic job, you failed, right? That it's on you. It's not the situation. It's not that there aren't any jobs, you know, it's that you failed, and therefore that industry job, which might be the best thing that could ever happen to you, is a consolation prize. So it's like a weird dynamic when you're coming out of academia that way. On the one hand, you're feeling like you're failing, and on the other hand, you still have, as you say, this ingrained snobbery, like, “Well, I guess I have to take this job now for a lot of money and good benefits.”

Marc Ettlinger: [laughs] Yeah.

Laurel Sutton: You know, it's a very bad place to be mentally to think that you're failing and you're taking something that's beneath you. And that's not the way it is at all. Like, you've been lied to. It's not like that.

Marc Ettlinger: Yeah. And I mean, it's, it's okay to think about it and acknowledge that you did fail, but the, hopefully throughout one's life, you actually have lots of failures, and what you think is the best route is, you could have been deeply wrong about that, and that failure could be a blessing. And, you know, try to have this attitude that failure is an opportunity to learn lessons. And, you know, again, people are, you're going to fail eventually, and so, you know, getting it out of the way, having lots, lots of practice at failing is good because it sort of softens the blow. Every human goes through it, you know, in every part of their life, and, you know, being able to have a psychologically healthy attitude about that to sort of take the failure, learn your lessons, move on, make new decisions, it's a very important part of the journey.

Laurel Sutton: Yeah. And I think too, the failure part of it, you have to extricate it from like your identity. It's not, “You are a failure.” It's just that this thing didn't work out, so move on and go to the next thing. And that's especially true for linguists of color. There are, I would say academia is far worse for people of color than industry is. I have been told this, so it's not my own experience speaking here, but it can be incredibly difficult. And if you're not white and you fail in academia, it's probably institutional racism and not you specifically.

Marc Ettlinger: Yeah. I mean, it's always sort of interesting. That's definitely true. And we can talk about some of the pros and cons of industry. I've always been very… Well, there's issues in the industry as well with racism.

Laurel Sutton: Yeah, absolutely.

Marc Ettlinger: Certainly within tech, certainly within my corner of tech. But I think there's a lot more willingness to acknowledge that there's a problem, which I think is the first step towards solving it. And so I think that's important. And yeah, I think, you know, trying to think about why you failed is obviously important. You know, it's sometimes, it's always a combination of external and internal factors. Certainly, I could have imagined a way in which, you know, I could have succeeded in academia, you know, if I’d focused more on publishing earlier, things like that. And — it's not “but”; it's “and” — it's a terrible market and there's a lot of randomness, right?

Laurel Sutton: Yeah.

Marc Ettlinger: The papers, there's so much randomness. I think about it like academia, acting, sports, right? There's just like, there are these industries where the supply of labor is so much higher than the demand, and when that happens to such an extreme, just by, the signal of who's good and who's not get swamped by the randomness. You know, you can't control that. Certainly, it's not as hard to make it in academia as it is in sports — although, who knows, maybe it is. You know, when there's such an imbalance, a lot of luck comes into play. In academia, you know, you can enumerate in a million different ways. If you had a high-profile publication versus not, how do you get high-profile publications? Well, there's three random people that assess whether you should get published or not. And, you know, who are those people? And, you know, all down the line, right? There's just a lot of randomness. And so, yes, sometimes there's internal factors that contribute to failure, but then obviously there's external failures, structural problems, but then also just luck. And, you know, there's nothing you can do about that. So acknowledging kind of all those factors, I think, psychologically was very important for me.

Laurel Sutton: Yeah. I agree with everything you've said. And it comes down, I think, to the difference that, like you were just saying, there are so few opportunities in academia that all of these things that come together means it's not going to be you. And in industry, there are far more opportunities, so you don't get this one? Well, there's more. There's more to go on in academia. That just isn't the case most of the time. You just run out of opportunities. There aren't any jobs to apply for that you would be suited for. And in industry, usually there's more and you can move on and try something else.

Marc Ettlinger: Yeah, absolutely. And so we're jumping ahead chronologically here, but I recently, so I co-founded a startup, and things did not work out. I essentially lost my job. And I was very worried. I had to find a new job. I was two weeks… I was given two weeks and had a very small severance, and I was very worried about finding a new opportunity. I thought it could take me six months, nine months, because that's oftentimes how long it takes to find a new job, especially if you're searching from scratch. And I have a mortgage. I have kids. My wife does 1090… contract work, so I was providing the insurance. And so it was a very scary place to be. And to your point, I was able to find a job in six weeks.

Laurel Sutton: Wow.

Marc Ettlinger: From scratch.

Laurel Sutton: That's amazing.

Marc Ettlinger: The things ending at the startup took me by surprise. I was completely unprepared. But what that speaks to is exactly your point, is that it's just, even though we're about to hit a global recession, the economy's crashing, and it might not be the best time to look for a job, and there's layoffs and hiring freezes in tech, the equation is reversed. There's more jobs than people that can fill those jobs. And that's just a totally different vibe, and it's a much better vibe. And so, yeah, that's definitely true in industry.

Laurel Sutton: Yeah. So can you talk about your new gig?

Marc Ettlinger: Yeah, absolutely. So I'm starting in a week from Monday, and I'll be working at Meta, formerly Facebook. And I'll be working on basically taking… There's a big focus on the metaverse and things like that, so basically putting NLP, natural language processing, natural language understanding, into the metaverse so that you can navigate your way through the metaverse using language and having a lot more language capability in that interactive space where people will be interacting with each other.

Laurel Sutton: Are you working on a team? Are you leading a team?

Marc Ettlinger: Yeah, I'll be leading a team. I'll be a manager of a team of — I'm not sure the exact number — four to eight, which is similar to my role at Google. Yeah, it's within this kind of larger Reality Labs, which is the kind of larger group. And then within that, there's just a large NLP organization. And my focus will be on internationalization, which is sort of making it work for not just English, but all the other languages around the world.

Laurel Sutton: Oh, very cool. Are all the people on your team linguists?

Marc Ettlinger: I don't know yet.

Laurel Sutton: Ah, okay.

Marc Ettlinger: We can do a maybe quick follow-up to attend to the podcast. But probably not. But there is, at companies like Google, Amazon, Facebook, Apple, basically all the companies that have these digital assistants, there are a lot of linguists that are sort of hired to sort of build these things out. I don't know who the roster of people you'll have on the podcast, but I remember when we did the in-person thing at Berkeley, Russell Lee-Goldman was… He was one of the early people hired at Google and then sort of ended up working on the Google Assistant. There are about 150 linguists at Google now, a lot of them working on the digital assistant. There's several dozen at Facebook, again, kind of working on similar projects. Amazon, they seem less inclined to hire linguists, it seems. But again, there's at least several dozen working on the Assistant. And then Apple as well, I know a handful of people that again are linguists that are hired specifically in part for their language and linguistic skills to work on these language-oriented technology.

Laurel Sutton: One thing we've heard from a couple of folks who were sometimes the only linguist working on a team at a company is that — you were talking about adjusting to working in a business environment, and it's also the adjustment of working with non-linguists on what are essentially linguistic projects. So you really have to gauge how you talk to people and the kind of words that you use, because it's really easy to slip back into linguistic jargon, and if people aren't linguists, they're going to have absolutely no idea what you're talking about. So there's a working-together-with-non-linguist learning curve as well.

Marc Ettlinger: Yeah, absolutely. And I think, luckily, in a lot of situations, I wouldn't say most, but in a lot of situations nowadays, that bridge has already been made, which is great. So if you were to start at Google working on the Assistant right now, you wouldn't have to do any of that from scratch. There's been five years of kind of building those bridges where now Google understands, the head of NLP at Google understands the importance of linguists in the organization. That is reflected in the culture of the organization, and you can just model your communication style off of the dozens of other people that sort of have a similar job to you. But yeah, certainly if you're the one linguist or the first linguist at a company, it's important to — and this part can be stressful — is to sort of prove your worth. And that's true of any job. My wife, she does design, UX/UI design. Most people don't understand the importance of good UX, user experience, user interface design, and she has to repeatedly kind of convey that. And so I think, and she has to avoid jargon and all that kind of stuff. Oftentimes she's the only UI designer. And so I think it's just a common challenge that people have in any multi-team, what do they call it? Cross-functional team situation. And yeah, that's definitely something that linguists have to learn. Same as everyone else.

Laurel Sutton: Yep, exactly. I know people who have worked at Amazon, and the field of UX and UI is also really good for linguists right now because I think companies are recognizing that linguistics is a really important part of it in terms of processing the words. And even if it's visual, there's still some linguistic knowledge and perception that's built into it. So we're seeing a lot more jobs opening up now in UX and UI for linguists, which is great.

Marc Ettlinger: Yeah, absolutely. UX research, like kind of the research side as well. That was definitely some of the early opportunities I looked at, because they are looking for people who can do, try to understand human behavior at a both qualitative and quantitative scale. And so not all linguists, but certainly a lot of linguists are trying to look at human behavior and find generalizations about it, figure out how to describe it, quantify it, and understand it. And yeah, that's essentially in some sense what UX and UI, especially UX and UI research is. So that's definitely a great opportunity. There was something else I was going to say, but yeah, definitely it's a field… Oh, the other thing I was going to say is like, what skills, definitely I think worth talking about what skills I have found, I was trained with in linguistics that ended up being useful. And so certainly, that's one for UX and UI research is, again, understanding at a qualitative and quantitative level, human behavior. And when you're in job interviews, being able to convey that is very important, why doing fieldwork on a Indonesian language provides you with the skills to sort of sit down and do a qualitative interview with a user, right? Very similar skill set. So that's kind of one important skill set that's valuable. Certainly any quantitative skills you picked up doing your PhD, which includes statistics and modeling and things like that. I think another very important, valuable skill that I think to some degree is specific to linguistics that I think is relevant for tech is, if you remember in linguistics class, a lot of classes, whether it was phonology or syntax, is, someone would propose some sort of hypothesis, some formal model of how something works, binding and control or constraint ranking or something like that to say like, "Okay, this is how this formal system is best represented." And then there's kind of this instinct that at least I learned and I think a lot of linguists learn as well, which is to kind of internalize that formal system and try to think of the exceptions. What are the things that break that formal system?

Laurel Sutton: Yep.

Marc Ettlinger: Thinking of the edge cases. “Here's the word that violates your model. Here's the sentence that violates your model,” and therefore we have to adjust the model. This might seem like kind of a weird niche skill, but that actually ended up being kind of one of the most valuable skills that I sort of picked up in linguistics that has helped me with building language products or any sort of product in tech, because you need to sort of think about what you're building and then think, "Okay, what are all the edge cases? What are all the things that are not going to work?" And I think it's a way of thinking that academia and maybe in general... I think academia trains that pretty generally as well. Right? Someone presents something, you got to come up with the thing that breaks it.

Laurel Sutton: Yep.

Marc Ettlinger: So that I think kind of instinct and behavior is, again, sort of a very valuable skill that academics and especially linguists bring to industry as well.

Laurel Sutton: Yeah, agree. One other thing, which I think you probably will agree with is, in my line of work, doing taxonomies. I don't even think about it because we did so much of it as a linguist. I mean, that's what you do all the time is you're organizing language. And even in naming, which is as squishy as you can get, being able to sort the way things are named into taxonomies — incredibly helpful. And my experience is that people are... They think you're doing magic. It's like, "No, it's just a taxonomy,” but this is how it works. And pointing out where things can be confusing. I was just thinking, advising clients is like, "Well, you have two different areas of your website and one's called a hub and one's called a center. That's not good. Those things mean exactly the same thing." And typically it's like an engineer person who's like, "But they're different words." It's like, "Yeah, but they mean the same thing." And then you have to kind of walk through why it's a bad idea based on human behavior and how people perceive things to do it that way. So just being able to have those skills that you learn and they're sort of ingrained, right?

Marc Ettlinger: Yeah. I mean, it's important to sort of look within and think about those things that you have learned that you think are just instincts or just kind of natural ways of thinking that are valuable. Another one is like experimentation. Coming up with... This is not all linguistics, but if you're doing psycholinguistics or phonology and certain types of experimental syntax, experimental pragmatics, is, you have an instinct of how to set up an experiment and what controlling it, how to do a controlled experiment and how to look at the results, and not… You don't want to put too many confounds. You don't want to try to test too many things at once. It is very common in industry to do A/B tests, that's what they call it, just to test things. And it's amazing how, if you've never trained as a scientist, how people don't do it in a rigorous way. And so certainly a lot of linguists will have expertise acumen and to some degree an instinct in how to set up an experiment, which is again sort of a very valuable skill that linguists bring to industry.

Laurel Sutton: Yeah. I think not enough emphasis is placed on these sort of meta skills that you just get as a linguist. And as you said, you don't think about it, but it's there. And these are things that most people may have in some capacity, but they often don't apply it to language, and that's where the real value comes, and that's your value-add as a linguist is applying all this stuff to the way human beings use language.

Marc Ettlinger: Yeah. And I think it's very important to introspect in yourself, in your own career, your own academic study on what those things are, and think, be explicit about not just in interviews and not just your resume, but even when you're looking for jobs as well, just thinking about what you can do well and what jobs are a good match for that. And also understand how other people might talk about those skills that you have. You could be a field worker, and you might not know that that maps onto what other people call “qualitative researcher.” And so that is something, I think it is helpful to sort of talk to others in industry to sort of understand that mapping between these things that you are excellent at and what they might call it on a job description.

Laurel Sutton: Yeah. Absolutely. So we're coming to the end of the hour, and we have talked about so many great things. This is so valuable. I'm glad that you mentioned the fact that networking has been so important in your career because it's something that I think we need to convince people of. LinkedIn, man, it's a drag, but it's the way you're going to build your network and get to know people and reach out. And I always tell people who are looking at industry, ask. Just ask for people to help. You were saying before we started recording that you've talked to lots of people to share your experiences and your story. And you do that because you want to help other people, and that's the way it works. So people should, if they're looking, make a connection on LinkedIn, reach out, do an informational interview, just ask for someone's experiences. And in 99% of the cases, people who are linguists in industry will be more than happy to help because we didn't have this when we were starting out, and it's just a great benefit to get other people's opinions and experiences. It will help so much along the way.

Marc Ettlinger: Yeah, absolutely. And sort of alluding to something we discussed earlier is that a lot of times you just have to get used to things not working out, to connections that you reach out to not panning out. Either you might not hear back or you have a conversation that leads nowhere. Unfortunately, it's like kind of a numbers game. For my recent job search, for example, I would say at this point in my career, I have a lot of connections and I'm very grateful for that. But for this job that I was able to find, I basically had to reach out to dozens of people, including multiple people at the same company. And two or three of them would not work, didn't pan out. I even had conversations, but there was no job at the end of that tunnel. So it's a numbers game. You just got to kind of reach out to as many people as you can, and then one out of 10 or one out of 20 or one out of 30, that will be the one that worked out. And you just can't know that ahead of time. You just kind of have to… And that's just how connections work. It's something that I didn't know. I thought you just know one person, and then they hook you up with the job. But to some degree, it's a bit — there's randomness in that process as well.

Laurel Sutton: Totally random. And also, it's a long game. In my professional life, someone told me of an opportunity and somebody that I met professionally probably 15 years ago popped up and said, "Hey, this might be good for me." And I know him and he was good. And I was like, "Sure, I'll be happy to put you in touch with the person who's doing it." And he's not my friend. He's just a guy that I know. He does good quality work and he seems like he'd be a good fit for the job. And that was from meeting him once 15 years ago. So you never know when stuff like that can happen. So it's always good to keep expanding your network and meeting different people and just remembering that there's people out there that you can tap, and it doesn't cost you anything, and most people will be happy to help if they can.

Marc Ettlinger: Yep. Absolutely.

Laurel Sutton: Any parting words of advice? You've given so much advice to everybody who's listening so far. Anything we haven't mentioned that you want to get in there?

Marc Ettlinger: I guess the last thing I would just add is that people should feel free to reach out to me. I received a lot of help on my path, especially in those early days. Someone helped me discover what these boot camps were. I had a lot of conversations with some people from academia that made that transition that helped, gave me a ton of advice, and so I'm very eager to pay it forward. I've spoken to many people and hopefully it's been helpful, and I'm certainly open… I'm one of those people that are super open to have informal conversations about offering any advice I can for making that transition.

Laurel Sutton: That is great. Well, thank you, Marc. Thanks for taking the time to talk with me, and I definitely will follow up with you in a bit and you can tell me how your new job's going.

Marc Ettlinger: Yeah, absolutely. And again, thank you, Laurel, for doing something like this. I think it's invaluable to the community and I hope people get a lot out of it. I'm sure they will. And so that's a credit to you for doing something like this.

Laurel Sutton: Thanks. It is necessary. And again, thank you for being part of it.

Linguistics Career Launch 2021 was a one-month intensive program intended to familiarize linguistics students and faculty with career options beyond academia, in business, tech, government, and nonprofit organizations. Videos of all our recorded sessions are available on our YouTube channel. LCL 2021 was organized by Nancy Frishberg, Alexandra Johnston, Emily Pace, Susan Steele, and Laurel Sutton. You can get in touch at linguisticscareerlaunch@gmail.com.