Disrupt Yourself Podcast

EPISODE 175: MARY L. GRAY

Welcome to the Disrupt Yourself podcast. I'm Whitney Johnson. Here we discuss strategies and advice on how to climb the s curve of learning in your career and life, which means disrupting who you are now to slingshot into who you want to be.

Every day we're interacting with technology. It has become such an integral part of our lives that we actually plan blackout days, days when we go off the grid so we can take a break from it. Think about that a minute.

It's so intertwined in our lives; it's become more and more complex so we can do more things with it. In fact, there are layers of technology we don't even think about, and those layers are built by people we may not have considered. For example, there are folks behind the scenes making sure artificial intelligence works, there are people piecing together bits of graphics for our favorite platforms. Our guest today is Mary L. Gray, Ph.D. Someone who has thought deeply about the people doing the work behind the scenes in tech, so much so she did the research, mined the data and co-wrote a book about it.

It's called Ghost Work How to Stop Silicon Valley from Building a New Global Underclass. That's a daunting title with a lot of weight to it. We'll talk about that. But Mary is not only critiquing tech, what we've considered the gold standard of disruption, she's also living her own disruption story and navigating new S curves. She's a senior principal researcher with Microsoft, a faculty affiliate fellow at Harvard's Berkman Klein Center for the Internet and a faculty member at Indiana University. She's written for The New York Times, The Washington Post, Nature and The Economist. At heart, Mary is an anthropologist, and she leverages that to learn how technology makes people be seen and heard in their everyday lives, especially those in the margins. Let's get right to it.

Whitney Johnson: You study how people interact with technology on a day to day basis, and in particular people who are marginalized or may not have quite as much, it's not sort of a part of their everyday lives.

Mary L. Gray: Yeah, I'm interested in the cases where someone was likely not the first person a technologist thought of when they came up with the technology that they built. So, we give the example of a mobile phone. You know, mobile phones have become ubiquitous. But if you live in a rural part of the United States or any place where there isn't strong bandwidth or it's expensive, then the idea that you would run video through your mobile as a way to communicate things like how to fix your tractor, it's a bad idea. And it was clearly not thinking about someone who is going to have really constrained access to technologies that would equip them to use the Internet and, you know, the very small screen available on their phone to do something critical to them moving on with their day. We don't think about who's going to be disenfranchised by the assumption that, well if you have it, you need it. If you want it badly enough, you'll pay for it. No one was thinking where exactly are the pipes for the Internet? What happens if you live on the other side, literally or figuratively, of the tracks and it doesn't come to you? And those are the questions that I think are so critical for us to investigate, mostly because what we don't tend to do is look at what are people doing when they're faced with that reality. They in many cases don't just give up. They start doing incredibly creative, resilient things to deal with limits that have been put in front of them.

Whitney Johnson: You're tackling some really interesting issues. The side of disruption, I would say, that often gets lost as we're talking about innovation. If you had to draw a thread from when you were a young girl to where you are today, are there any, any pieces of your childhood self that would say, yup, that makes complete sense that Mary's doing what she's doing today?

Mary L. Gray: It's funny because I often feel like I can build that linear path, I can picture a trajectory. And in some ways, when I think about, you know, the little girl, me, I don't think I would have imagined I'd be where I am today. So, so starting at the very beginning, I grew up in a small town, an agricultural town in the Central Valley of California. And I think I was surrounded by really hardworking, good people and at the same time fairly limited examples of what my world could look like. So, at a fairly early age, for no reason, I really can divine, I was fascinated by other places, fascinated by other ways of doing things in the world. I was that kid, I'm sure you were that kid, too, who sat down and read the encyclopedia because I just thought it was just so interesting, all these different things. To some surprise to my, my mom, who raised my sister and myself and worked doggedly as a nurse, I wanted to go to college, and she was very encouraging of me going. And I think we in my family, that was not typical. And I think for the most part and she pretty much said as much she thought it was a really good way to put off working. So, she often said, like, stay in school as long as you can once you start working so you.

Whitney Johnson: So, you don't have to work

Mary L. Gray: ...so you don't have to work. So, you know, my first year or two in college, which was quite disorienting, I moved to, to a California University of California at Davis State School, amazing public university. And I feel incredibly fortunate in hindsight that I was even able to, to, to make it there. It was a time when there were these things called Cal Grants that funded students who were, you know, achieving in school but didn't have the means to go to university. Really, one of my first classes was an intro introduction to anthropology. And I, I fell in love with that topic. It fed my really deep interest in what are other ways we could imagine being in the world that that really

defined my course. And so, the trajectory I've been on really since the earliest I can remember is imagining other ways of being in the world.

Whitney Johnson: Is that how you would define anthropology, Mary?

Mary L. Gray: Oh, that's a great question. I think there are many ways to define it as a discipline, as a scholarly enterprise. And at the end of the day, I think there's so much of my training in that discipline that are about seeking out how much groups of people, cultural forces, can constantly reshape reality. So, yeah, I think the pursuit of anthropology, which is the study of everyday lives, the study of the somewhat informal ways in which we organize, the way we see the world, that it constantly brings up what's possible. There's a great anthropologist at University of Pennsylvania who has said that anthropology is the study of the possible. And I just I love that way of thinking about it.

Whitney Johnson: And when you describe it that way, that fits and squares so well with how you described your childhood. It's a study of what's possible. You then got a Ph.D. in communications. So, can you draw can you draw that line for us?

Mary L. Gray: Yeah. I mean, maybe a deep irony is that the time that I was coming up in anthropology and finished my undergraduate and anthropology and American studies, I was also really coming out as a young person who identified, and this is the early 90s. So, it was a moment when identifying as queer rather than lesbian, gay, bi, trans was a thing. And so, I was coming out at a very particular political moment, quite literally coming into a very particular political moment. And I really wanted to study the connections between technology's place in identity. And in a basic way, I think in some ways in an autobiographical way, I wanted to understand how did I come from this place that had no words for how I now identified? I knew it was not a brutal, ugly, you know, kind of unilaterally hostile place to, to, to queer differences, because I grew up with, you know, community members who were - this really amazing parent to one of my best friends whose partner in hindsight was living with them. And that was just, you know, Sue's friend. So I feel like I, I really wanted to understand what it meant to come from a place that didn't have language for the identity I was choosing now and what difference the Internet particularly would make to accessing new ways of connecting with communities who otherwise are seen as something that live in cities. That's a really specific research question that was very much connected to my political interests. And at the time, my colleagues and mentors in anthropology told me I would likely not be able to find mentorship and training if I wanted to study technology like the Internet, study LGBT identities, and particularly if I wanted to look at rural parts of the United States, which seemed like a an interesting place to take this question. And quite literally, they told me, just leave Anthropology, you won't be able to do that work here. And I found this amazing communication department that was much more interested in thinking about the technical, social, cultural force of communication and technologies, that was open to me studying this question from an ethnographic anthropological lens. And my, my immediate mentors, Susan Lee Starr, Jeff Foucher, are some of the most amazing scholars in what's known as science technology studies. I needed to fashion what is often called an interdisciplinary approach to thinking about our relationships and the what comes with shaped and shaped by shaped through our communication technologies and and then from, from that what's made possible, but also constrained by what we're the environments in which we find ourselves.

Whitney Johnson: That leads us to this book that you've written that you've spent years researching. It's called Ghost Work. Tell us what ghost work is. Let's start there.

Mary L. Gray: Yeah, my co-author said Arthur and I were looking for a term that would be provocative, would in many ways capture what we felt was an approach to work that

seemed on the horizon - and it really is not meant to describe - let me tell you what it isn't. It's not a particular kind of job. It's not a particular kind of worker. It's meant to describe work conditions where the value of a person's contribution to a task or project is not just devalued or stepped over but is literally erased from what you see as an end consumer or a business. Turns out there are myriad examples of this throughout tech that we wanted to study. And as we started studying those moments of drawing on people's insights to train artificial intelligence or to boost computational processes, we were seeing that in many of those cases, the companies creating these technologies were often moving very quickly to sell the magic of the software and not talking about how reliant their services and technologies were on people.

Whitney Johnson: So, you say the ghost work is, there's all this work that's happening, tasks get sourced and scheduled and distributed and completed. They're done in minutes. And you're saying this is not just being done by computer, it's also being done by human. Let's understand what the entire process looks like exactly. Is that correct?

Mary L. Gray: Exactly. I just finished a very long project about the rural United States. And when I left that project, thinking about opportunities for work and for the future of work was it was very much on my mind. I mean, that was what I took away from that research, was how much the lack of economic opportunity exacerbated the antagonism toward not just LGBT people, but any sort of difference. I mean, this predates our elections in 2016. I left that field work feeling like, there's such a lack of awareness of what is economically happening to our country right now. I wanted to understand how does artificial intelligence work. I had no idea, I was like, how do they make this thing? This was the moment when there was a lot of talk about big data and how that was going to disrupt everything. We were going to have all of this data that would effectively mean we we'd have answers to questions we didn't have to ask anymore, the data would just kind of make self-evident what directions we needed to go. Then I started asking computer scientists, so how do you develop artificial intelligence? And they described this process called human computation, where they would take large datasets that were often imperfect. They were buying them from, you know, any source they could find. It's, you know, anything that we as end users on the Internet are creating through our social media exchanges. And then they would hire people to look at the materials and make sure that their training data to model algorithms was as accurate as possible. And they're taking this approach that says, let me have a person folded into the process of evaluating how I might answer this question quickly. And so, we're kind of modeling people making these decisions. And that's what fascinated me, is that when I'd ask a computer scientist, so who are these people you hire to do the labeling and to, you know, model for you how to answer certain questions? I met folks who said "I don't really know who they are, that's what's so great about this."

Whitney Johnson: Interesting

Mary L. Gray: And actually, the thing that really caught me for this project, I met folks who said, I don't know and I'm afraid to find out because I don't actually know what their lives are like. And maybe they're really in awful circumstances. That was like I have to I have to find out who these people are.

Whitney Johnson: So that was the question, who are these people? So, I would love for you to tell us a story of someone who right now is, is doing that ghost work.

Mary L. Gray: It turns out there's such a range of people who participate in these labor markets and on these platforms. And so, we met moms. You know, parents stay at home parents who were managing childcare with, with young kids and they didn't have other childcare options. So, you know, folks like parents like Ausra and people like Carmella

who effectively turn to this work as a way of controlling their schedules. And they really those women particularly really stick with me because I can see how much the traditional employment of a shift job, most of what's available to them are service jobs in their towns, are going to provide minimum wage. It's not because they're uneducated, in many cases, the majority of the people we were interviewing had at minimum, some college degrees, if not a four-year degree. It was they were lacking job opportunities and that had everything to do with most of the job growth we have is in service sector work that does not pay well - and hasn't historically paid well because these are often contract jobs that are attached to specific projects that have a deadline. They're not a career trajectory. They're not 40 years at the same firm. They are about taking shiftwork, wage work at a new retail store that will hopefully get its legs but may not.

So for the parents I met, there was so much about what they were doing that had to do with organizing work around their lives - and being able to take advantage of the opportunity to earn an income and making the calculus, you know, cost benefit analysis of, well, what would they have to spend in both child care and in commuting to make the same amount of money. And for them, they were deciding, OK, I'm going to find these work opportunities. In some cases, I met workers who were building up portfolios by creating doing graphic design, doing writing and submitting that through platforms because there are now platforms for everything when it comes to knowledge work of being able to do work that will give you the ability to build up a portfolio in event planning, in website design, in writing. So, you know, to meet individuals who were doing precisely that and then also see, you know, what other kinds of constraints they were working with precisely because they were then not going to have access to any other kinds of benefits that do come with traditional work. That can mean being able to have protection if that workplace goes under and being able to have unemployment. There's no unemployment benefit attached to on demand work. So, if that platform no longer has work available and this is where you've spent the majority of your time, then it's quite possible if that platform goes under you, you have nothing that's going to give you a bridge to the next project. That's the structure of this work, is that it's a project driven, but there's no safety net that's in place for this kind of contingent work.

So, let me zoom out and point to how historically we've been building towards and backing ourselves into this corner. From the earliest days, and the phrasing we have for this is the paradox of automation's last mile, most of the industrial revolution and the amazing shift to technologies as a way to mass produce so much in our day to day and to make it affordable to everyday consumers, begins in the seventeen hundreds and into the eighteen hundreds of organizing people's lives around economic activity that's that's at a factory floor. Like we're moving people, literally moving people from subsistence agriculture, from family farms to wage work in a factory. But along the way, technology is enabling that; technology is effectively creating ways to organize labor so that it can become efficient and we can mass produce goods.

Whitney Johnson: Yeah.

Mary L. Gray: But technologies always fall short. So, one of my favorite examples of this is thinking about the mass production of textiles like shirts. You know, by the time we have large mills that are able to produce clothing so that it can be cheaply made and cheaply sold, but that also means that people have access to these materials, we also can see the places where the loom can't finish a shirt that has a button or a flourish on it. Quite literally in the industrial era, those shirts that we wanted to make a bit different, so they weren't just, you know, the same old shirt would be taken to family farms along with the buttons and the bows and families, the entire family would sit around a table and attach the flourish to the shirt. That's what made the final product. It's called

piecework. We've always had some piece work in the background of our move through history; of, you know, innovating and automating work. And much of that piece work is considered peripheral, it's considered less valuable than the main production line, if you will. So that moment of piecework people were paid pennies to stitch up something that was actually arguably to the consumer, something incredibly valuable, the thing that distinguished the shirt. So, we're consumer driven society for the most part through history, we've been moving towards service economies. If we all take seriously, we're really an information society. Knowledge, information sharing, creativity, that's what we buy and sell now. Experience. Learning from each other. That's driving our economies globally. Think about what you consume in your everyday life, and that is what's driving a lot of job growth and opportunity. But much of that kind of work is organized as contract labor. It's organized as hiring somebody for an event and having to hire many people to organize an event. And when the event is over, the work is done, and you move on to the next event. I think events are really interesting illustration of this point. Historically, we've not valued bringing somebody to a project and then when the project's done, letting them go. And the best way to describe this is most of our labor law is organized, comes out of the 1930s and 40s, when the jobs we wanted to safeguard and protect were the jobs on the factory floor. They were the full time nine to five jobs predominantly held by men who were imagined to be the breadwinners. Like all of the cultural stories we have about who should be in the workplace are organized and really reinforce a very specific model of who's valuable.

Whitney Johnson: So, is a lot of the piece work that's being done today, this automation's last mile? The humans on the other side of the software are not developing it but making it the data usable. Are they predominantly women?

Mary L. Gray: No, actually, I think that's what's fascinating is from our research, it's really clear that women, men, folks who identify as other genders, the entire range of ages from you know, we met people as young as 17 to people post retirement in their 70s doing this work. And it's precisely a reflection, if you look globally of how diverse our economic activities. There's diverse humanity like, you know, where people need to earn a living. Much of what they're doing is earning a living through informal economies, through service to each other globally. Like we're used to thinking of a setting where most of our economic activity is organized by wage work, by salary. And you go into a job and you walk out of that job. That's not what most of the world looks like. And it turns out that many of the people doing today's piece work, this information service work, look a lot like our reflection of the need for economic activity, the reflection of working people around the world. What's changed is that we have a more educated global population because education has been made more available. That's a great thing. I think the biggest challenge is that we've told ourselves a story that education is effectively a steppingstone to better economic opportunities and specifically access to employment. That doesn't turn out to be a linear path. It's now necessary, not sufficient.

Whitney Johnson: One of the things I hear you saying is that technology is continuing to evolve. We as consumers are getting more and more service oriented, and yet much of the service that is being provided is not being actually valued. And so, so your concern is, is that we're not valuing it and then not valuing it is showing up in lots of different ways, including safeguards for people who are doing this service. And it looks very different than what it may have looked like or actually, the people who are providing that service have never been compensated properly. And you're concerned that it will continue to be that they're not compensated properly. And as more and more the economy becomes more gig oriented, this is going to be a bigger and bigger challenge and possibly lead to even more of a disparity in terms of wealth creation. Am I leaping too far ahead?

Mary L. Gray: No, you hit it on the head because the biggest problem with our orientation to work is that we implicitly think that the full-time employee is the valuable employee and someone who's on contract or contingent is secondary. And we now live in a world where there's really no obvious difference between those two individuals other than luck and privilege. When it comes to knowledge work, it's entirely possible that the person who has the full-time job has it because of who they knew. That's always been true, that is deeply true now. And I can't say enough, most of what makes for that past of good working conditions has had to do with having organized labor advocating for good work conditions. Where did organized labor spend its energy? On the factory floor. You know, we never found a way to look at how do we ensure good working conditions no matter where you work or who you work for.

Whitney Johnson: For the person sewing the buttons?

Mary L. Gray: Yeah, we just never ask the question because we thought and this to me is the most important part, is because we thought that job was going to go away any time. So, it's you know, it's so fleeting. Why do we need to care about that person? And to a point you made earlier, Whitney, it's that we don't know how to value service. We just don't. We know how to value making stuff, and there's very much a gendered reality here. We know how to value physical labor because we had a lot of people working hard to advocate for valuing it. It wasn't the market that put a decent wage and good working conditions in the factory. It was the market that got rid of child labor. It was social policy. And a lot of, you know, we still haven't gotten rid of child labor. It takes a lot of due diligence to fight for the social policies we want for working people.

Whitney Johnson: So, I'm a business owner, a lot of people who are listening to this are business owners. What recommendations would you make to them? They've heard what you're saying, and they want to make sure they're being mindful and take some action so that we stem the tide at least within our corner of the universe.

Mary L. Gray: Yeah, I think the most important thing that business owners can do is think about themselves. And often they are that entrepreneur who's self-employed, imagine what you would need and want in place for your loved ones if they were venturing out and were never going to be anybody's employee. What would secure their capacity to do good work? Because often a business owner doesn't think of themselves as an employee. But what are they? They're self-employed. They might also have employees, and that means they can set a benchmark for how they treat their employees. But if the reality is, we're going to be peers who work with each other to finish a product or finish a service or deploy some sort of project, then as peers, what do we need in place to make our relationship as peers work smoothly?

Well, the main thing I need to know is that you're healthy, but hopefully is painfully obvious to everyone is that it is in all of our economic interests to have public health in place that ensures everybody's healthy. There's always been a business need for that, but in the United States particularly, we've thought that's something that the employer should pay for. In a world in which we're driven by contracts that come and go and we're always working on projects. And in many ways we're more self-employed and business owners of our own establishments than employees of someone else, what we need in place are some essential benefits that make our working world habitable and sustainable so that I would always be able to know that my partner, my peer or my client, if I'm a business owner, is able to participate in this economic activity. Like those are the questions we need to be asking ourselves right now. And, you know, we could, we could think of it, as Ford did back in the day when he believed he needed to make his cars at a price point that his workers could afford. You know, that adage is very interesting because if we fast forward to now, what we all need is to think a bit like Ford

	and imagine we all want the capacity to be able to buy and sell from each other. What's going to ensure that?
Whitney Johnson:	One of the things that you talk about in the book is that it's ultimately notwithstanding the title, *How to Stop Silicon Valley from Building a New Global Underclass*, you said that really this is a book about hope. So can you just close us out with sharing a few thoughts on that idea of how this book in this topic for you is about hope?
Mary L. Gray:	My hope is that no matter where someone works, what they work on, who they work with, that their work is seen and valued, that we really come to realize how much people contribute and advance us in whatever we do. We never do it alone. So, what it means to fully value people's contributions to our, our own accomplishments.
Whitney Johnson:	I love that. Mary L. Gray, thank you very much for joining us today. It's been a pleasure.
Mary L. Gray:	Oh, my pleasure. Thank you so much, Whitney.

What a wonderful sentiment Mary shared with us about the hope she sees in her research. But she does leave us with a bit of work to do to help that come to fruition. We may not be able to or even want to stop the trend of moving to more contract gig or even ghost work. It fits people's schedules well and allows us to be more nimble around the traditional workday. But it is up to us to make sure that it doesn't cost too much on the back end and then it doesn't take too much of a toll on our colleagues, employees and family members. So, what do we do? She spoke specifically to those of us who are business owners. She says we need to set benchmarks. We need to put ourselves at our employees' desks, if you will, and think what would we need if we were them to secure our capacity to do good work. What does that look like? How do we make that happen? Those are big questions that we don't often ask about contract employees.

Finally, what I really liked about Mary's story is how she came to challenge the big fish of disrupters, the tech industry, and is now tasking us with a challenge as well. Mary grew up surrounded by a strong support system in rural California, where she cultivated her curiosity by pouring over encyclopedias, the Internet of her youth. She started early looking for a different way to do things. This young disruptor set an S curve of questioning that has brought her here, making sure the people in the margins are being considered as one of the largest sectors in the world pushes forward.

Thank you again to Mary L. Gray for being our guest, if you want to learn more about her work, check out her site, MaryLGray.org, or you can buy her book at GhostWork.info. Thank you to our team. Jennifer Brotherson, Sarah Duran, witty job, Virginia Kivlighan, Melissa Rutty and Nancy Wilson. I'm Whitney Johnson, and this is Disrupt Yourself.