On programming as activism

Computer scientist, game designer, and artist Ramsey Nasser on video games as an art form, writing open-source software under capitalism, and creating a programming language as a form of protest.

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As told to Rebecca Hiscott, 3091 words.

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What got you interested in programming and video game development?

I had the privilege of growing up with a computer at home, which was a little unusual for my generation in the part of the world I grew up in. I was born in the States, but I spent the first five-ish years of my life in Istanbul, where my father was working. My dad is a lawyer, but he's always been a tinkerer. In the late '80s, when I was growing up, he was all about computers and programming. He had a PC at home, an old, hard drive-less, floppy drive-driven DOS computer, and he had books on Basic. He was teaching himself how to program, and he basically sat me on his lap while he was doing it.

I started tinkering when I was eight or nine years old with my dad's Basic programming books, and I would play games with him as well. And it naturally led to, "I can see how really basic programs are made. But I'm playing these games with my dad, and they're also made in a similar way." And it got me asking questions like, "Well, how are games made?" I can't really remember a time in my life when I wasn't thinking about programming in one way or another.

What's something you wish someone had told you, or you wish you'd known, when you first started out in the field?

Less about the field, but more about the open-source movement and hacker culture. The idea of hacker culture is what really grabbed me. I remember in undergrad, when I was studying computer science, they told us that at one point you'll become a manager and you'll never have to program again. I was horrified. I love the actual act of programming. So all the stories I'd read online about the MIT AI lab and hacker culture and the open-source movement really resonated with me. I wanted to write code for the sake of writing code, and share it.

[But] I wish any of that rhetoric had had a labor consciousness to it. It's very unclear how you're supposed to keep doing open-source work under capitalism. It took me decades to understand how to continue to write software that is meaningful to me under capitalism, and I still don't really know how to do it. I just understand that it's hard, and that the conversation was absent when I was coming up in open source, and I really wish it wasn't.

Open source is really cool when it's like, "I'm writing some code, and you're writing some code, and we're sharing it with each other," and it has this quasi-anarchistic feel to it. That happens, to an extent. But it's also, "I'm writing some code, and Uber is in the room, and Uber is using my code, and they're not really giving back to society." And Facebook is there, and they're assaulting democracy. You're sharing your stuff, and there isn't really any mechanism to deal with who you're sharing it with and what they have to do in return.

What aspects of your work pay the bills, and what do you do just for fun, or just because you're passionate about it?

For most of the last decade, I've paid the bills by doing freelance interactive creative coding: vaguely game-like projects, public installations, sometimes actual video games for a variety of clients. There's an interactive wall at the University of Dayton that I programmed. There was a piece at the Barbican museum [in London] showing off some eye-tracking hardware. It's not my practice, but it's adjacent to it.

The last two years of my life have been a bit of an exceptional case. In 2018, one of the open-source projects I worked on attracted the attention of an investor, against all odds. So since 2018, I've been running a company with my collaborator based on some seed money our investor has given us—not quite to work on the open-source tech, but to build stuff on top of it. I think [my current situation is] a fluke. I don't really expect it to happen a second time.

But even given the opportunity, there are certain things I would avoid doing for money. A lot of my games have been sort of market-hostile. Not on purpose, necessarily, but because there's a trade-off where, if you're getting paid to do something, you're subject to market forces, and you need to adapt whatever your creative vision is to match those market forces. Some people are good at that. My younger sister is a sculptor and a painter, and part of her practice is finding the intersection between what she wants to do and say and what people are willing to pay her to do and say. When I make games, or what I consider art, it's very personal. I don't care if someone would give me $10 for this or $15 for that. That's not where my mind is. I just want to make something. Everything else in my life is funding that so I have the space to do the thing for myself.

Yeah, it's hard to imagine a world where the App Store would publish the game where you smack fascists with a purse, or the one where you question the ethics of shooting a Nazi.

That's exactly what I mean. I was interested in making that and putting it out there. I was not interested in convincing someone to give me permission to do it. But there's a trade-off, too: I'm very free and I can do the art that I want to do, but there's a cap on the scale of those projects. If I have an idea for a game, if there's this pure self-expression that I want to do but it'll cost a quarter of a million to produce, I can't do that.

What sorts of things motivate you to create a new game or a new programming language?

Dialogue 3-D was basically a joke. It's a running joke in the industry that there are two kinds of bad guys you can kill indiscriminately in a video game and no one will care: zombies and Nazis. But then all of a sudden Richard Spencer gets punched and whoever is asking questions. So it was based on frustration around that, and a joke around what *Wolfenstein* would look like if it was made today. So sometimes it's not really glamorous or profound.

Sometimes it's making something I want to see in the world. A game I made last year called *Restricted Airspace* is basically the aesthetics of *Star Fox*, one of my favorite games of all time, in a world that looks like 1890s Beirut or Damascus. I grew up with both of those visual vocabularies, but I've never seen those two things in one place. Making a game is a way to create that.

Programming languages are born more out of frustration with existing tools. Any programming language is an invitation to think in a particular way, and the better programming languages expand your mind by inviting you to think in new ways. The clumsier ones will just box you in. When I feel myself butting up against the edge of a programming paradigm, that's where ideas for new programming languages come out. The practical ones, at least—the languages that aren't art projects.

Speaking of programming languages as art projects, I was fascinated by the language you created in Arabic. As an English speaker, it just never occurred to me that programming essentially forces English on everybody. Have you always been interested in calling out those blind spots in your field?

Yeah. The very first thing I did on a computer was try to type Turkish commands into it. So, in the way that existence is resistance, just being from a non-Western background and participating in this field is a vantage point. There have been Arabic programming languages in the past. I think some people have described mine as the first Arabic programming language, which is off by about 30 years, but it is unique in that it's the first Arabic

programming language created deliberately as a sort of act of protest.

The methodology is the same—it's still an engineering artifact, it's a real programming language—but the goal isn't to solve this cultural problem. It's an appreciation of what a difficult problem it is to solve. What you just said is the whole point of the piece: "I never realized that this was the case." That's it. I don't think it was clear to me when I was younger that there was any value in building something to shine a light on a problem, short of actually solving it.

When you're working on a project, how do you know when it's done?

Oh, god. It's always easier on the commercial side because at some point you either run out of time or money. In the past, I have submitted to festivals and talks to give myself a concrete deadline. I'll submit a talk about something that doesn't really exist, and then I'll have to finish it by that time.

I [recently] wrapped up a project unprompted. It's basically this observation that Google never sent their [Street View] vans into any Arab countries, but they did send them into Israel, to Jerusalem, and into some illegal Israeli settlements. There are parts of the Jerusalem Street View where you see the wall. It's a wall dividing a population, and it's just presented in these banal, boring Google Street View images. The piece is 20 locations —occupied.land is the URL—and you click through them.

That project took five years, and it was a totally different thing [at first]. It was going to be a Twitter bot, and it was going to be a road trip around America. It took a long time, but I don't think it was wasted time. It took on multiple forms before it became the thing it finally became, and I knew this is what it was supposed to be. But I could have spent another five years just clicking around Google Street View finding new locations, and I felt very tempted to do that. It's good that I didn't make a stupid road-trip Twitter bot five years ago. I'm glad I waited and I turned it into something I'm much more proud of.

I think it's about recognizing the difference between, am I delaying because there's some instinct in me that thinks there's something deeper here, or am I delaying because I'm an anxious boy? Those voices in your head sound the same, but they're coming from very different places. It's not always easy to tell them apart, but I think [it comes with] time and age and experience. Sometimes you really should wait, sometimes it's not ready and you need more time to make it more meaningful. And sometimes it's good and you need to pull the bandage off.

What's your relationship to social media? How do you incorporate it into your creative practice?

In the past I would use Twitter as a feedback mechanism or a punctuating mechanism. If I'd get to an interesting point in a game, I'd take a screenshot and tweet it, and some people would save it or respond to it. That feels nice. Some of this stuff can be quite lonely, especially when I'm working alone. At Parsons and Eyebeam, we would do crits for each other. You'd stand up in front of your classmates or your city-mates and show them what you did, and they'd tell you what they thought. Outside of a fellowship or a school, it's hard to get that. Social media has been a janky version of that for my practice.

It's harder now. Because of the state the world is in, I don't know how to feel about my timeline being like, "Please vote out American fascism. Also, my native country is in revolution and our economy is collapsing. Also, there's a pandemic. But here's some bytecode." It feels like it's in poor taste. Tech has a tendency to do this—it collapses these contexts into this single channel because it's more efficient, it's easier to code or whatever. But yeah, throwing out screenshots of my bullshit into the stream feels weird.

What has changed in your work since the pandemic started, and since the racial justice uprisings?

The pandemic and the racial justice uprising in America are actually the third thing on my plate. Starting in October, in my own country of Lebanon, we started our own revolution. That hasn't let up, despite economic collapse and the pandemic. There are videos of people all across Lebanon marching for change against our ruling class in masks, socially distancing as best as they can.

For me, the pivot point is around October 2019, when a lot of my attention and creative and technical resources started to be redirected toward the Lebanese revolution. I was there in December in person to march with my people. From afar, I've been doing technical work and technical support for some archiving initiatives.

The pandemic and the uprising here basically saturated whatever time I had to pursue a personal practice. Any time that's left over is [devoted to the] Lebanese revolution, the pandemic, and showing up for the uprisings here, because I am Lebanese American and both of these places are places that I consider my home, so showing up for both of them is very important.

The effect on me as a creative is one of saturation. My art practice basically doesn't exist at the moment. I was running mask deliveries around New York City because I have a motorcycle, so I was more mobile than most. I became active in the grassroots personal protective equipment delivery that's been happening in the city, so I delivered a few hundred masks to front-line workers in basically all five boroughs. And then showing up for marches and vigils while continuing to do Lebanese revolution work. It's just a total redirection of resources and attention. I mean, I love what I do, I love video games and I love creative technology, and they are still my deepest passions, but it's just not what the moment calls for.

Is technology figuring into the activist work you're doing, or is it more about putting boots on the ground physically?

It's a little of both. In the States, it's been a lot of just trying to show up on the ground as much as possible, trying to be a body in a space at marches and vigils.

The work that I'm doing for the Lebanese revolution is something I'm not very public about, but there are efforts to archive all of the social media content that's coming out of the revolution. And that is a massive technical project. Because I'm so far from Lebanon, that was a way I could contribute to the efforts and to making sure those stories are never forgotten. And that is, in fact, a pile of code. I built that in collaboration with archivists and activists on the ground. When you're a programmer, you're sort of a hammer looking for a nail, and you end up turning things into nails that are not nails. But there are journalists and researchers who have confirmed to me that this is useful and something people will want down the line.

The revolution is on the scale of the uprising against racial injustice in America. Lebanon and the Levant in general are historically feudal societies where you have patriarchal, inherited leadership positions that generally have sway over a particular ethnic group in a particular area. That's the way it's been since before the Ottoman empire. When we gained independence in the '40s, we became a republic, but it's the same families [in power]. Some of the families are 400, 500, 600-year-old families that predate the Ottoman empire. It's an uprising against this thousand-year-old system of ruling a population. Things are happening on the ground that I didn't think I would see in my lifetime.

But then, on the flip side, I'm retweeting everything that I see, and I don't have a huge Twitter following, but I've had multiple people who follow me tell me that if it wasn't for my account, they wouldn't even know that a revolution is happening in Lebanon. Twitter.com/ra should not be your go-to source for news on the Middle East. It absolutely broke my heart. And it sort of revealed to me that my visibility comes with responsibility, and I try to use it as best I can to bring those stories out, so that people know this is happening in addition to recording it for posterity.

What's keeping you grounded right now?

It's maybe cliche and basic, but we have a big, goofy dog at home. She's a big, shy German shepherd. Having this intelligent, joyful creature around that isn't on Twitter and isn't checking the news—she gets that things are different and that we're more stressed out, but every feeding time is feeding time, and whatever rut I'm in, I've got to feed the puppy. The routines that come with taking care of a creature like that, and just her joyfulness and playfulness… I don't know where I'd be emotionally without that. I also live with my partner, so I'm not alone. I have someone to talk to who's not a smear of pixels, and I'm also extremely grateful for that.

I will add that showing up to actions and volunteering have been extremely [grounding]. I mean, you do it because it’s useful to a cause you care about, but it has been emotionally grounding in that when I think about this moment later in life and tell stories about this moment, I don’t want my own story to be that I did nothing when I could have done something.

Five sounds from Lebanon I turn to when I need healing:

Soap Kills, the trip hop band I was into in high school

The bone-shaking Rima Khcheich

This instrumental masterpiece from a young Ziad Rahbani

The eternal Fairuz. How do I pick just one?

What every Lebanese wedding sounds like

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