CHEMICAL HERITAGE FOUNDATION

ADAM GARBER

Imagining Philadelphia's Energy Futures

Transcript of a Research Interview
Conducted by

Roger Eardley-Pryor

Philadelphia, Pennsylvania

on

7 August 2017

(With Subsequent Corrections and Additions)

ACKNOWLEDGEMENT

This oral history is one in a series initiated by the Chemical Heritage Foundation in partnership with PennFuture, PennEnvironment, the Energy Coordinating Agency, Citizens Climate Lobby, and Planet Philadelphia on G-Town Radio. The series, titled "Imagining Philadelphia's Energy Futures," documents the personal perspectives of Philadelphia citizens interested in impacts on their city from energy use and climate change. The series records individual histories and then asks participants to imagine the future of Philadelphia, particularly with regard to energy production and use.

The "Imagining Philadelphia's Energy Futures" project is made possible, in part, through funding from Philadelphia's Climate and Urban Systems Partnership.

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Climate & Urban Systems Partnership

THE CHEMICAL HERITAGE FOUNDATION
Center for Oral History
Release Form for Research Interview

Title of the Research Study: "Imagining Philadelphia's Energy Futures"
Principal Investigator: Roger Eardley-Pryor, PhD, Chemical Heritage Foundation, REardley-Pryor@chemheritage.org
Co-investigators: Zakia Elliott, Penn Future, elliott@pennfuture.org; Sandi Pope, Penn Environment, sandi@pennenvironment.org; Thomas Flaherty, Energy Coordinating Agency, ThomasF@ecasavesenergy.org; Sarah Davidson, Citizens Climate Lobby, sarahcdavison@gmail.com
Emergency Contact: (name, address, phone and email): Roger Eardley-Pryor, PhD; Chemical Heritage Foundation, 315 Chestnut St., Phila. PA 19106; ph: 513-659-8301; REardley-Pryor@chemheritage.org

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You, **Adam Garber**, are asked to participate in an interview with **Roger Eardley-Pryor**, representing the Chemical Heritage Foundation (CHF), on **August 7, 2017.** If you participate, your oral history interview will be made part of CHF's collections and will be available for educational, non-commercial use. This document is intended to inform you fully of what you are being asked to do and of your rights as an oral history participant. If you choose to participate, your recorded oral history interview will be transcribed and used in an educational workshop exploring storytelling, future visioning, and deliberation; possibly included in a local Philadelphia radio show and podcast featured on G-Town radio; and stored on a public website documenting the project, which will remain online as a model for local educators to host classroom workshops envisioning Philadelphia's energy futures.

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Support for this Oral History Project

"Imagining Philadelphia's Energy Futures" uses a narrative approach that encourages deliberation, storytelling, and creativity to imagine a future where Philadelphia uses, produces, and relies on renewable energy. The project is made possible by through the Climate & Urban Systems Partnership (CUSP).

Questions or Concerns

If you have any questions or concerns about participating in the creation of this oral history before or during the recording of the interview, or about the processing of the transcript, please contact the Director of the Institute for Research at the Chemical Heritage Foundation.

Jody A. Roberts, PhD
Director
Institute for Research
P: +1.215.873.8281
F: +1.215.629.5281

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After you have read the information contained within this release form, and Roger Eardley-Pryor offered to answer any questions or concerns about this document or the interview, please consider whether you would like to sign this agreement. If you are interested in participating in this research interview and consent to the process as described above, please sign below.

(Signature)_____
Adam Garber

(Date) 8/7/17

(Signature)_____
Roger Eardley-Pryor

(Date) 8/7/17

(Signature of Parent/Guardian of Interviewee if under 18)_____
Parent/Guardian of Interviewee

(Date)_____

This research interview is designated **Free Access**.

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> Adam Garber, interview by Roger Eardley-Pryor Philadelphia, Pennsylvania, 7 August 2017 (Philadelphia: Chemical Heritage Foundation, Research Interview Transcript # 0147).

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Center for Oral History
315 Chestnut Street
Philadelphia, Pennsylvania 19106

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INTERVIEWEE

Adam Garber was born in Atlanta, Georgia in 1983. He has three sisters, including a twin, and both his parents have PhDs. Adam and his family were very involved in their synagogue and Atlanta's Jewish community. At the same time, Adam attended private Protestant Christian elementary, middle, and high schools. Adam studied philosophy at St. John's College in Annapolis, Maryland. While working summers with Georgia PIRG on air quality issues, he considered himself politicized by politician's efforts to limit pollution controls despite public desire for clear air. After college graduation, Adam worked for two years with New Jersey PIRG to help pass state-level clean energy policies. He then accepted a position with PennEnvironment, an environmental non-profit in Philadelphia, where he become Deputy Director and has worked for nearly a decade.

INTERVIEWER

Roger Eardley-Pryor is a historian of contemporary science, technology, and the environment. His work explores ways that twentieth and twenty-first-century scientists and engineers, culture-makers, and political actors have imagined, confronted, or cohered with nature at various scales, from the atomic to the planetary. Before earning his Ph.D. in 2014 from the University of California Santa Barbara (UCSB), Roger was a National Science Foundation graduate fellow at UCSB's Center for Nanotechnology in Society. After earning his Ph.D., Roger taught courses at Portland State University, at Linfield College in Oregon, and at Washington State University in Vancouver, Washington. In Philadelphia, Roger accepted a postdoctoral research fellowship in the Center for Oral History at the Chemical Heritage Foundation (CHF). Roger co-designed, earned funding for, and managed this place-based oral history project titled "Imagining Philadelphia's Energy Futures."

PROJECT

"Imagining Philadelphia's Energy Futures" is an oral history and public education project about energy, climate change, and the future of Philadelphia. The project uses a narrative approach that encourages deliberation, storytelling, and creativity. It asks the following questions: As climate change reconditions our lives, city, and planet, how do Philadelphia citizens imagine using and producing energy in the year 2067, or 2140, or 2312? And how might the personal histories of these citizens shape the ways they imagine Philadelphia's energy futures?

The project consists of oral history interviews with a small but diverse set of Philadelphia citizens. The oral history interviewees were selected in collaboration with the project's partners: the Chemical Heritage Foundation, PennFuture, PennEnvironment, Energy Coordinating Agency, Citizens Climate Lobby, and Planet Philadelphia on G-Town Radio. The majority of each oral history interview records a participant's personal history. Next, interviewees share their visions of energy use and production in Philadelphia by imagining three time periods in the future. The future time periods are the year 2067, fifty years from the

present; the year 2140, nearly one hundred twenty five years from the present; and the year 2312, nearly three hundred years from the present.[1] Content from the oral history interviews then serve as the basis for further storytelling, future visioning, and deliberation in a public educational workshop held at the Chemical Heritage Foundation in October 2017.

"Imagining Philadelphia's Energy Futures" is based on the idea that discussing visions of the future can help individuals and groups construct and articulate meaningful stories about the current challenges they confront, identify potential solutions to those challenges, and reflect on how these might influence themselves and their community as a whole. Research on ways to enhance societal capacity for governing complex energy transitions reveals that narrative and storytelling helps facilitate improved engagement and decision-making among mixed groups. Stories and narratives enable the incorporation of contributions from different groups of people to build collective frames of reference. In light of our need to transition to renewable energy sources, narratives offer communication strategies and practices that can help promote broader engagement and participation in energy choices, more diverse kinds of policy information and input, and greater capacity to imagine and invent new energy futures.[2]

Imagining and discussing Philadelphia's energy futures allows city residents to imagine—and inhabit, in their minds—multiple, alternative visions of the future that may result from choices made today. Energy plays a powerful role in any city's techno-economic systems, yet energy use and production is also inseparable from a city's social systems and environmental relationships. When Philadelphians imagine renewable and distributed ways of using and producing sustainable energy in the future, they are not just imagining new techno-economic systems. They are also re-imagining the ways social relations and political power works in their lives. And they are re-imagining interrelationships to our local, regional, and global environments.

"Imagining Philadelphia's Energy Futures" was funded, in part, by Philadelphia's Climate and Urban Systems Partnership (CUSP). The CUSP approach to climate change education emphasizes local, relevant, and solutions-focused methodologies. The oral history interviews and public education workshop for "Imagining Philadelphia's Energy Futures" takes place in Philadelphia with local Philadelphians. The project is relevant in wake of the recent failures by Philadelphia's energy industry and the city's environmental activists to find any compromise on a vision and framework for Philadelphia's energy future.[3] Collaboration to achieve Philadelphia's systemic energy transition to renewable sources must be broad-based and

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[1] The years 2140 and 2312 were selected to complement Kim Stanley Robinson's science fiction novels. See Kim Stanley Robinson, *New York 2140* (New York: Orbit, 2017); and Kim Stanley Robinson, *2312* (New York: Orbit, 2013).

[2] Clark A. Miller, Jason O'Leary, Elizabeth Graffy, Ellen B. Stechel, Gary Dirks, "Narrative Futures and the Governance of Energy Transitions," *Futures* 70 (2015): 65-74; Rob VanWynsberghe, Janet Moore, James Tansey, and Jeff Carmichael "Towards Community Engagement*:* Six Steps to Expert Learning for Future Scenario Development," *Futures* 35 (2003): 203-219; Jana-Axinja Paschen and Ray Ison, "Narrative Research in Climate Change Adaptation: Exploring a Complementary Paradigm for Research and Governance," *Research Policy* 43:6 (2014): 1083-1092.

[3] Katie Colaneri, "Philadelphia Fails to Find Common Ground on 'Energy Hub,'" *StateImpact Pennsylvania*, March 11, 2016: https://stateimpact.npr.org/pennsylvania/2016/03/11/philadelphia-fails-to-find-common-ground-on-energy-hub/. See also the minutes of the meeting of the Delaware Valley Regional Planning Commission Board Committee from January 28, 2016, http://www.dvrpc.org/Committees/Board/2016-01.pdf, accessed February 25, 2017; "Philadelphia Energy Vision Working Group," *Raab Associates, Ltd.*, last updated January 13, 2016, http://www.raabassociates.org/main/projects.asp?proj=134&state=Services (accessed February 25, 2017).

inclusive. This project seeks to produce and re-produce, on a small and manageable scale, efforts to build a shared vision of that renewable energy future, from the bottom up, with local Philadelphians. “Imagining Philadelphia’s Energy Futures” is solutions-focused in that formulating and sharing visions of the future can help individuals and groups make meaning of contemporary challenges they confront; it can help determine possible solutions to those challenges; and it can help individuals and groups consider ways that certain solutions might impact their lives and their community as a whole.

INTERVIEWEE: **Adam Garber**

INTERVIEWER: **Roger Eardley-Pryor**

LOCATION: **Philadelphia, Pennsylvania**

DATE: **7 August 2017**

EARDLEY-PRYOR: All right, this is Roger Eardley-Pryor with another of the Imagining Philadelphia's Energy Futures interviews. I'm here with Adam Garber. Today is August 7, 2017. We are at 1429 Walnut Street. And Adam, would you mind spelling your last name?

GARBER: Garber, G-A-R-B as in boy-E-R.

EARDLEY-PRYOR: Great, Adam, when were you born?

GARBER: I was born in 1983 in Atlanta, Georgia.

EARDLEY-PRYOR: Atlanta.

GARBER: Piedmont Hospital.

EARDLEY-PRYOR: Had your family lived around Atlanta for a while?

GARBER: Yeah, I'm a third generation Atlantan. My parents were both born and raised there, and my grandparents all moved to Atlanta at the early twentieth century with their families from different places.

EARDLEY-PRYOR: Why?

GARBER: There's actually a really large Jewish community in Atlanta, so part of it, I think, was that. Atlanta actually has one of the larger Jewish communities outside of New York City. And it has forever, and I don't really know why that is. It seems weird. [Laughter.] But so I think they moved there partially because of the Jewish community, and then just sort of a weird set of different, I think, reasons. Like, my dad's father, his dad was a wandering eyeglass maker,

optician. So he had like a wagon that went town to town, and they lived in Atlanta, and then he grew up actually in the Jewish orphanage home there. His mom had tuberculosis. His dad passed away. My grandma on that side moved from Norfolk. My other grandma moved from North Dakota.

EARDLEY-PRYOR: Wow, all over, down in Atlanta.

GARBER: And my grandfather on my mom's side moved from New York from Brooklyn, so sort of all over, but they all actually came from Poland-Russia area sort of, along the border basically. They sort of never knew each other, but they're all basically from the Poland-Russia area.

EARDLEY-PRYOR: Interesting. Were they all part of that wave of immigration from the 1880s?

GARBER: Yeah, I think so. They were all part of the Jewish immigration. They don't talk—I don't know. There's not a lot of family history, but I'm guessing because of pogroms and other things like that they left, but before the World Wars, before World War II, I think some after World War I, some before, mostly before World War I.

EARDLEY-PRYOR: What are your parents' names?

GARBER: Marian and Stephen.

EARDLEY-PRYOR: How did Marian and Stephen meet?

GARBER: They—that is a good question. See now this is going to really stump me. I'm going to be in trouble on this. They met in grad school. They work in similar fields, both dealing with kids' educational needs. My dad's a psychologist. My mom's an education consultant. They both have their PhDs. And I think they met at some party or something originally. There's some story about my dad's roommate saying if my dad wasn't going to ask her out he was or some funny story about that. [Laughter.] And they were at—I think in grad school. My dad was in grad school at Georgia State. He went to undergrad at University of Pennsylvania. My mom went to Washington University undergrad, and she was a teacher afterwards and then eventually got her PhD.

EARDLEY-PRYOR: And they were both down getting their degrees at Georgia State?

GARBER: My dad was, and I guess my mom wasn't. Maybe she was a teacher at the time. She actually went back to school after my dad got his PhD.

EARDLEY-PRYOR: She was like, "It's my turn."

GARBER: Yeah. Yes, after she helped him—his back went out at some point, and so she ended up typing most of his thesis, doing dictation in the old days. So it definitely was her turn.

[Laughter]

EARDLEY-PRYOR: That's awesome. Do you have other siblings?

GARBER: Yeah, I have three sisters, little bit like Goldie Locks. I have an older sister who lives in New Jersey. I have a twin sister who lives in Brooklyn, and I have a little sister who still lives in Atlanta.

EARDLEY-PRYOR: You have a twin sister?

GARBER: Yeah.

EARDLEY-PRYOR: Wow. So okay, so you were born into that mix. So it's the older sister, you and your sister are twins, and then the youngest?

GARBER: Yeah, so there's about—my older sister's seven years older than me. My little sister's nine years younger than me. So it's a pretty big spread.

EARDLEY-PRYOR: Yeah, eleven years older and nine younger. All right, did you grow up in Atlanta?

GARBER: Yeah, I grew up. I lived there till I went to college and mostly in the summers through college.

EARDLEY-PRYOR: Tell me about it. What are some of your memories of growing up?

GARBER: Memories of growing up, well, let's see.

EARDLEY-PRYOR: Like, were you and your sister always in the same room? Were you guys put in matching outfits all the time?

[Laughter.]

GARBER: It wasn't that bad. I remember when we moved into the new house. We lived in the same house since I was about two, and I clearly remember the day we no longer were in the same bedroom. We were in the new house, and my room's ready for me to move into, and they moved me out, and I was very upset because I couldn't share a room with my sister any more.

EARDLEY-PRYOR: At two years old you remember this? **<T: 5 min>**

GARBER: Yeah. I mean, some memory—slash—probably been told the story fifty thousand times. So probably the scientists would say you don't really remember that. You just heard the story too many times. But yeah, so I remember that, and then we all lived in one house, so we lived since—my parents still live there. So we've always lived in, basically since we were two, in the same house. We actually all had our own bedrooms in like upper middle class neighborhood. It's inside the perimeter in Atlanta. It's technically not in the—it's technically not part of the city anymore because it seceded. It's called Sandy Springs.

EARDLEY-PRYOR: It seceded?

GARBER: Yeah, it was a very bitter fight. It's a neighborhood within the perimeter but sort of on the outer edges, so it feels like suburbia almost. Or what you would think of suburbia for Philadelphia, so very green, lots of woods, yards. It's an old—it's not a McMansion—it's like an old—it was originally a farm house, actually. And then it was converted into this sort of modern house in the—there's probably like twenty houses on our block, I think, or something. It's pretty wooded, pretty spread out, not walkable.

But I do actually remember as a kid we used to walk. There's a park about probably a mile and a half, two miles away, and as kids we would walk to the park, Chastain. We'd get ice cream at the park, and we'd wander around the park. It was sort of weird because there was—and I think we wouldn't do it anymore because there's no sidewalk. It's pretty hilly, and these

days people go flying down those streets. So now I wonder, why would we be allowed to do that? Why was that ever safe? But we used to walk to the park from the house about two miles.

EARDLEY-PRYOR: Now when you say we—so what are your sisters' names?

GARBER: My sisters are, Ariel's my twin, Amy's my older sister, and Aubrey's my little sister, so all A's.

EARDLEY-PRYOR: And Auburn, did you say?

GARBER: Aubrey.

EARDLEY-PRYOR: Aubrey, cool, so when you say "we" used to walk, was that you and Ariel or Amy involved in that too, or Aubrey as well?

GARBER: It's mostly me and Ariel and either our parents or we had a housekeeper, Doris. She's been with us since I was always one and a half.

EARDLEY-PRYOR: Did she help raise you?

GARBER: Yup.

EARDLEY-PRYOR: What's her name?

GARBER: Doris.

EARDLEY-PRYOR: Doris, awesome.

GARBER: She helped raise us, and she's still with us. Usually my parents or Doris would walk down after you got home from pre-K or on the week—no the weekends she wasn't around, so that would be mom and dad. But we'd walk to the park and get ice cream and whatever else.

EARDLEY-PRYOR: Yeah, that sounds like a pretty idyllic, bucolic kind of childhood.

GARBER: It was. I mean, I think I was pretty lucky and pretty blessed. And it's—when you talk about childhood, it's sort of notable. I grew up—my grandfather, Popau, was, as I said earlier, he grew up in an orphanage—Jewish orphan home—and he was very successful, a very successful business man. And he would sort of would talk a lot about what it was like growing up. But then we had this very different experience, obviously, of like, just totally anything you needed basically, which I feel blessed to have had. But was very different than a lot of people.

EARDLEY-PRYOR: Was your grandfather like, "We used to walk twenty miles up hill, both ways," that sort of stuff?

GARBER: Yeah, a little bit of that stuff. A little bit of that. More like anything to remind us that we were lucky. He was really lucky, actually. I mean, he got a fake scholarship to college, essentially.

EARDLEY-PRYOR: What does that mean?

GARBER: He got an athletic scholarship to college. He was not an athlete. The headmaster of the school he went to knew he wouldn't be able to afford to go to Georgia State, and had an athletic scholarship he could just give out and gave it to him so he could go. And he turned into a very successful accountant and business man and owned a lot of stuff in Atlanta. He did accounting for the entire Jewish community, as far as I can tell. But it was like this lucky thing. So he'd often talk about what it was like, and there are just these things that happen that would have probably ended up very differently.

EARDLEY-PRYOR: It sounds to me like the Jewish community was a strong part of your experience growing up, is that right?

GARBER: Yeah, we'd go to synagogue every Saturday. We were always extremely involved in the Synagogue, go to Saturday school. There were twice weekly after school classes, so Mondays and Wednesdays, I think, maybe? Or Tuesdays and Thursdays? Twice a week Hebrew lessons.

EARDLEY-PRYOR: That's a lot of time.

GARBER: Yeah, yeah, so twice a week you'd go—three times a week, essentially. You'd go to synagogue services, which, there were like kid services and lessons on Saturday. And then twice a week you'd mostly go in the afternoons. We didn't go to—I went to, actually, a Protestant private school.

EARDLEY-PRYOR: For high school?

GARBER: For middle school, high school, elementary school. **<T: ten min>**

EARDLEY-PRYOR: Oh, wow. Why?

GARBER: It is a very good school, and the public schools in Atlanta are not very good. I think my parents wanted us to have a very good education. And so we all went to different—well, so my sister and I started there, and then Ariel went to a different school for high school. And my older sister and my little sister also went to different private schools. My little sister went to Jewish day school, and my older sister went to another private school called Woodward. Yeah, I think the schools weren't very good at the time. Where we lived they weren't the best. They're better actually now. But yeah, then we'd go to Hebrew school.

EARDLEY-PRYOR: Why did you and Ariel go to different high schools?

GARBER: She wanted to go to a different high school.

EARDLEY-PRYOR: Just different experience?

GARBER: Yeah, Westminster is a preparatory school. And it's a little—I think it's different now, from what I know—but it's a little bit of a pressure cooker, a little bit of, yeah, a pressure cooker. It's very focused on the curriculum. You know, instead of those things that you sort of know about those private schools—I don't know how to describe it. I think that and a set of other things, sort of. At some point, she was looking for something different. So she ended up going to American International school and had a really great time there.

EARDLEY-PRYOR: Did you enjoy being at Westminster? Was that place where you thrived?

GARBER: Ah, well, it was a mixed bag. [Laughter.] It was like a mixed bag. I had a set of really close friends—and I'm still close with a set of them today—and a set of activities I did,

like debate. I was on the debate team. And there were some really great teachers there, but it was also a real challenge at times because of the nature of the school. And at times, because it was a Christian school, I had some really bad experiences over the years.

EARDLEY-PRYOR: You mean like being oppressed for being Jewish?

GARBER: Yeah. Yeah. There's two memories that stick out. One is, in middle school there was a rabbi teaching a math class, Rabbi Rosenthal. No. Rabbi Lebowitz? Anyway, he was teaching a math class, and a bunch of the teachers—technically you had to be Christian to teach at the school, which doesn't really have anything to do with math—and a bunch of the parents got really upset about it. And they actually got him, I think, fired. And then a bunch of other parents revolted over it, including my own, and said, "Look, you know, this doesn't have to do with religion. He's teaching math. He's not teaching his Old Testament." So that was really rough, and sort of—

EARDLEY-PRYOR: What came from that?

GARBER: They mostly stopped enforcing the policy, I think, around the teachers being Christian unless they were related to the course. So there was a—junior year, ninth grade maybe it was?—you took an Old Testament course. Ninth or tenth grade. And then, twelfth grade, you took a New Testament course. And I think those turned out really well. I had really good teachers for them. I had a teacher who taught Hebrew for the Old Testament course, and that made it really easy because I already knew it. And then the New Testament teacher was actually a former reverend, but he was very open. And we had a very mixed class of folks who were born-agains; we had a Wiccan; we had an atheist; we had some Jews; we had, I think, a Hindu. It was like a weird, somehow just fell together. And he was very open to thinking of the New Testament as like a literary document. So that worked out pretty well.

But my junior year, I think it was, there was a Christian emphasis week. There's yearly Christian emphasis weeks. And they decided to change it to religious emphasis week for the year to try to be more ecumenical. The first speaker was from Emory University. She was the chaplain at Emory—pretty well known in the area, a pretty good religious school at Emory. And she talked about universalism and being expecting of other people. And during the Q and A period she—this guy who ran the Christian fellowship on campus got up and started spouting like John 3:14 or whatever, and you know, all this stuff about like, "If you don't take in Jesus Christ, you're going to hell," basically. And she literally left the stage in tears. I mean, they were really harsh to her. And then when we were going—you had an hour afterwards. You could go to study hall, or you could go to study group. And the same guy, who I knew, he came and he said, you know, "Adam—"

EARDLEY-PRYOR: To you?

GARBER: Yeah, he saw me as we were going into one of the buildings, and he said, "You should come to my study group. You can be saved. Otherwise you're going to go to hell." And I said something like, "Jesus is Jewish, so at least I'll be in hell with him." And then I went to a different study group with my friend who was an Orthodox Jew, actually, which was a pretty good one. But it was like, you know—but that day actually like a third of the people in my class told me I was going to hell. Like, nicely told me I was going to hell. And I had known many of these people since I was like ten, eight, nine. **<T: 15 min>** And it was sort of this astounding moment like, "You've grown up with me. Why would you just…?" And they're like, "It's nothing about you. It's just, you're Jewish." So that was a shocking moment, I think.

EARDLEY-PRYOR: Yeah. How did you internalize those things as a child, or as a young man at that point?

GARBER: Yeah, how did I internalize those things? I mean, I think the thing I ended up really appreciating was there was just this small cluster of people who didn't think that way, adults. And sort of this ideal that there are these fundamentalists in the world that have this really extreme view. But a large chunk, I think, don't. And then—I don't know. I probably still haven't totally understood like, why did people who I grew up with since I was eight or nine suddenly think—and on this day? Why not just say I don't want to hang out with you or whatever? But to be honest, this stuff happened in Georgia sort of regularly. So it's sort of interesting. And I don't know if it's that different, but—

EARDLEY-PRYOR: It happened to you in Georgia?

GARBER: Yeah, I mean, in different ways. You always knew you were a little bit—as a Jew in the South—like a little bit of an outcast. So my best friend, Jamie, we went with his Christian—he was in a Christian group—and we went to play capture the flag one weekend at some camp in the middle of nowhere. It was capture the flag, and I was like "Oh yeah, that seems like fun." It's the Christian group, but it's just going to be capture the flag, overnight camping out, and whatever. It seems fun. So we got in trouble for playing capture the flag too loud, and so we ended up having a fire and hanging out. And then—they were all born-agains, or a bunch of them were—and they found out I wasn't Christian. They spent like three hours trying to convert me, which my friend Jamie found hilarious because we'd been friends forever, and he's not like that. But he just sort of thought it was hilarious to watch. So you sort of feel like, okay, suddenly it's a big deal.

Or growing up, I heard stories of my grandfather growing up. There was a Jewish country club called the Standard Club, but there were three well-known Christian country clubs.

And my grandfather, in the business community, was asked to go play poker—I mean, these are the stories you hear—so was asked to go play poker at the Peachtree Club, which was Christian only. And he said "Well, I can't go in. It's Christian only." One of his friends said, "Oh, it's okay, you can come in the back door."

And so, you grow up in this thing of like—it's not as overt as racism can be in the same way, because it's not as obvious, right? And maybe it's not as bad as it is today. There's this weird thing where there are moments where you sort of knew, "Oh, I'm not quite like everyone else. I am kind of different, and there will always be this thing, and what does that mean?"

EARDLEY-PRYOR: I guess I keep thinking, what does that mean for you? Is that something you then relied more internally on your family, you and your family grew closer? Or you just knew who you could know and could love you that way?

GARBER: I think I looked for people that didn't think that way, including Jews—who I think sometimes can be very insular at times in the Jewish community—and people that are just less religious or more open and didn't care that much about it. I don't have a ton of really close Jewish friends. But at the same time, I think my Judaism has become pretty important to me. So my wife and I don't have kids, but we've said when we have kids they will go to Synagogue. They will be raised Jewish. She's not Jewish, but that's fine. I think that being Jewish is therefore part of your identity. In some ways Judaism is partially religion and partially identity. So it's a little different than, I think, Christianity is in some ways.

EARDLEY-PRYOR: Yeah. Has the religious aspect been something that was important to you then, or is that something that's grown since?

GARBER: It comes and goes. It sort of comes and goes.

EARDLEY-PRYOR: When?

GARBER: I don't know. Like in college, when everyone else would go partying on Friday nights, I went to synagogue—for like three years straight.

EARDLEY-PRYOR: Why?

GARBER: Partially, I found a really great synagogue I really liked in Annapolis where I went to school. And partially, I just think I was looking for something a little different from the

school. There weren't a lot of Jews at the school—small school—and there wasn't a lot of Jewish connection. So I think it was just like, "Oh, I need some still connection to my Jewish community." But I don't go to synagogue regularly here [in Philadelphia]. So, on the same time. I don't know exactly what makes it come and go.

EARDLEY-PRYOR: Can you talk to me a little bit about what it's like growing up as a twin? As you're growing up and becoming a man and [developing] a sense of who you are as a self, as an individual, and yet you have this twin sister who you've shared so much with. Is that something that was challenging? Was that a benefit? **<T: 20 min>** What was it like being a twin?

GARBER: I think when you have a twin who's fraternal, it's probably more like just having another sibling. At least for us, I think it was. We weren't that close growing up. We got along fine, but we weren't close. We didn't do the same things. We didn't have the same friends. We didn't hang out that much. It wasn't really until after college probably that we got closer.

EARDLEY-PRYOR: Really?

GARBER: Yeah, so I think there weren't a lot of times—I mean we had to do our, we had a B'nai Mitzvah together. And we're sort of—

EARDLEY-PRYOR: What's it called when you have—

GARBER: A B'nai Mitzvah is when you have a boy and a girl together. It's just the plural, essentially.

EARDLEY-PRYOR: I've never heard it. That's pretty cool.

GARBER: And we—so there were things like that, but I think on a daily, weekly, yearly basis, I don't really remember thinking of it different than having—

EARDLEY-PRYOR: Just another sister?

GARBER: Just another sister, And I think, probably, some of that may relate to the fact that we were pretty financially stable and blessed. So there wasn't a lot of tension around like, "Oh,

she got this thing," or whatever. You didn't have that stuff happening. But we're pretty close now. She's got a little girl, so I'm going up in a few weeks for the baby naming.

EARDLEY-PRYOR: Oh wow! Oh, that's also new. You're a new uncle.

GARBER: Zadie. Yes, I'm a new uncle. Second time being an uncle. I have twin—my older sister has twins. They're about five.

EARDLEY-PRYOR: Wow, that runs in the family, doesn't it?

GARBER: Oh God, let's hope not.

[Laughter.]

EARDLEY-PRYOR: You mentioned that debate team was something you were involved in. Can you tell me a little bit about what that experience offered for you?

GARBER: Yeah, I got involved in middle school with the debate team, and I continued through high school with it. There were probably about ten to twelve of us, and we became pretty nationally competitive. So I did a lot of travelling to national tournaments for it, which was really interesting. I spent the summers going to camp for it and meeting people. It sort of became a big part of—the equivalent of a sports thing or something. So pretty close friends from it. I really enjoyed it in the moment, and I learned a lot from it. You were reading a lot of history and philosophy, and I like to read, so it really worked for me in that way.

And then, in retrospect there's weird things about debate, like the way it works, like the artifice of just making an argument versus actually believing the thing—just different than what I do today. So it's interesting to think about in reverse. Like, "Oh, you're just trying to make an argument whether you really think it holds merit or not. Just make the best argument you can," versus—which I think I realized at some point in college [when] I wasn't on the debate team anymore. That, "Oh, there's this weird thing happening." It's not about what you believe. It's just that argument. So I think, in the end, it sort of made me realize I didn't want to do something like that. I didn't want to become a lawyer who's just trying to make the argument or something like that, I think.

EARDLEY-PRYOR: Interesting. Tell me—the work that you do today, tell me about how you see that work.

GARBER: I mean, mostly I see it as, it is not a work or not a job. It is what I believe. I work for an environmental nonprofit in Philadelphia, PennEnvironment. And I've worked here for about ten years. I think of it as part of who you are. Mostly I tell people—when I talk to our members or something—I tell them I'm blessed because I get to do something I believe every day. And I get to get paid for it and make a living out of it. That seems like the best of all worlds, right? It's fighting for what you believe in, and luckily you get to make a career out of it. So beyond that, what else could you ask for in the world?

EARDLEY-PRYOR: That's a pretty great thing.

GARBER: Yeah.

EARDLEY-PRYOR: But debate team, at the time, it seems like a social—

GARBER: Yeah, it was a social community. It was an educational community, so probably first time I ever read Heidegger and Kant, which I read in college. I studied philosophy. A lot of reading of the news or reading current events, which I do today, obviously, thinking about how the political system works, which I did a lot of in college, and obviously do now in my daily job in a nonprofit, advocacy world. So I think probably, in the end, [it] probably gave me a lot of initial exposure to those different things that then became things I delved into deeper as time went on.

EARDLEY-PRYOR: So you went to a preparatory school in Atlanta, and it was clearly preparing you to go to college. That sounds like an assumed thing with two parents with PhDs.

GARBER: Yeah, yes, yes. [Laughter.] You've got to go to college at that point! I think that's true.

EARDLEY-PRYOR: So where were you thinking? In high school, where were you thinking you wanted to go? What kind of school were you interested in?

GARBER: I was trying to find a school that was actually basically the opposite of Westminster, something that wasn't about **<T: 25 min>** preparing you for the next step in life. What I found was I really loved learning. I really loved investigating things and diving in deeper. And I didn't really care always what the purpose was. Westminster was all a purpose: get good grades, learn the things you need to know so you can go to a good college, you can get a good job, so you can go do whatever. And then I really didn't like that sting, but what I did

like was I loved learning. I loved studying, and I loved reading, and I loved all that stuff. And so looking for a school that was sort of the opposite.

So I looked at a lot of small liberal arts schools with sort of alternative systems. So I looked at Hampshire College, which is a create-your-own-major school, I think in Boston, Massachusetts somewhere. Hamilton, which is a little more traditional, but in upstate New York. And then I ended up looking at this place called St. Johns College in Annapolis, Maryland, which is based on the Great Books program. So it's all based on reading the great books of the western world from Plato and Aristotle, to Heidegger and Kant. And in all the subjects, whether it's philosophy or biology starting with Galen and moving through Harvey, you name it. Physics, read the *Principia*, did all the proofs in the *Principia*, sort of all that stuff. And so, [I] went to this to have a conversation. We did a big trip as a family. It was me, my mom, my dad, and my sister. So we picked a bunch of schools in Boston [and] in the Washington D.C. area.

EARDLEY-PRYOR: Did your sister have different ideas of what she wanted from college? You sound like you were very clear on what you wanted.

GARBER: I think she did. She was looking for a bigger school, little bit medium sized. She was looking, I think, for a place that had a bunch of different options. She didn't really know, I think, what she was looking for in some ways. She ended up changing majors a bunch of times, which worked out well for her. So she did architecture and art history and something else. So she went to University of Washington in St. Louis.

EARDLEY-PRYOR: Oh, where your mom went.

GARBER: Yeah, as the case may be. And she really loved it. She had a great time. She met her husband there. She had a wonderful, amazing time. I think [it] worked really well for her looking for something with more of those options, but not like a massive state school or something.

EARDLEY-PRYOR: So you all went on this family trip to go explore the eastern coast schools?

GARBER: Yeah, we sort of did it as like, "Let's just go explore twenty different schools—not even the schools you're going to really look at—but twenty different schools with different things." So small schools, big schools. So we did U Mass, and we did American, and George Washington, and George—you know, like "Let's go look at a bunch of different types of schools to help you figure out." I think it was smart of my parents, of like "Then you'll know

what you're looking for and what you like and don't like. And we can look across the country to figure out what sort of things," right? I thought that was really smart of them.

And we went to this school, St. Johns, which I think my guidance counselor recommended? I think Mr. Boggs recommended it. We met the admissions guy, and we sat and we started talking, he's telling us about the school. And we literally almost missed—I was so fascinated and in love with this school, and my dad was so fascinated and in love with the school, I think he wanted to go—and we almost missed our flight home! [Laughter] And I got home, and it turned out that—I just had to go—and it was rolling admissions.

I went back a few weeks later for a prospective weekend, and I remember it. I remember going to the restroom at 3:00 am. And I walked out of the room at 3:00 am, and there were these two guys—who I met years later, Augustine and Mica. And they were sitting in the hallway—I don't know, two o'clock, 3:00 am—arguing what happens if you get rid of Euclid's Book Five, Proposition Four—or whatever it was—and what happens to the whole scheme? I can't remember what it was now. I was like, "Oh, these people are just arguing about math theory at like 2:00 am in a hallway, and that's what they think is fun." That seems awesome.

EARDLEY-PRYOR: Those are your people.

GARBER: Those are my people, right? [Laugher] And so I went home. I wrote, I think it was twenty pages of essays in two weeks. It was very intensive essay writing. Sent it off, got in in October, and I was accepted. Like, "I'm going, and that was that" And senior year was easy.

[Laughter]

EARDLEY-PRYOR: You knew what you were doing.

GARBER: Yeah.

EARDLEY-PRYOR: Fantastic. So tell me about that experience in college. Was it what you imagined it was going to be?

GARBER: It was. It was totally what I imagined it was going to be. **<T: 30 min>** It was people having deep discussions and debates about all sorts of, basically about the liberal arts—math, science, philosophy, literature, classics, you name it—and thinking through, together, what those mean about the world. And also it was learning how to think. So it was like, we had to learn ancient Greek in six months. If you can do that, everything else is easy. We had to figure out how, you know—we read Einstein. We had to figure out [and] redo his proofs, and he

likes to skip a lot of steps, unfortunately for everyone. If you read Einstein, you're like, "Okay, I got it." So it was all that thing.

The thing that was sort of interesting about it was, I wasn't political at all, and I got a—the one thing it wasn't, was it wasn't a political school. Actually, there was like a strain of "Don't be involved in the world while you're in college," which is really unusual for a college, a lot of times people get politicized. And I ended up getting a job canvassing my first summer in college—in Georgia, for Georgia PIRG, on air quality issues. And I became politicized. And I got—over the following three years, as I continued to do political work and advocacy on environmental and other issues on the side, you know, with some groups at school and on the side—I got more and more frustrated. Because it was like "Don't do this while you're in school." So that was the one thing .And I would have never thought that going in. It was this other experience that totally changed a little bit. So I still loved the school, and I really, I'm so glad I went. And then there was just this one piece that was really missing for me.

EARDLEY-PRYOR: So you begin work with Georgia PIRG on air quality issues the summer of your freshman year. As your schooling continued the rest of your years of undergrad, was that something that was kind of angsty? Was that something that was like, you were pushing for something different from the way the school worked? Or was it just summer time was the time to be politicized?

GARBER: I did some stuff at school, and there were some angsty, for lack of a—I don't know if angsty—I'm not a very angsty person—but you know, moments. So I did some environmental organizing on campus. And I did a ton of antiwar organizing, so this was in the lead up to the Iraq war, and—

EARDLEY-PRYOR: What years were you in college?

GARBER: I was in school from 2001 to 2005. And so this was the lead up to the Iraq War, like my sophomore—freshman-sophomore, really—year. And maybe the beginning of junior year is when we went to war, I guess. Somewhere around there.

I just had to find other avenues for it mostly, and then every once in a while, when it came to campus. So like when I tried to do some petitioning on campus or something there was something that happens that felt a little like, "Oh, these people don't get me," or something. So in that sense, I remember petitioning and someone telling me that Kant's categorical imperative meant they couldn't sign my petition about recycling. I was like, "What the—what are you talking about? It's a recycling petition!" [Laughter] You know, it was just sort of pretentious-y like, "Oh, we're just going to think about the world" answer. But mostly then, I just did it. I did more in the summer for sure. And then when I was on campus, I did some of it, but I did it usually through off-campus mechanisms or things like that.

EARDLEY-PRYOR: In what ways? What were the things you did?

GARBER: So I was pretty involved. After the canvas, I was involved with a group called Free the Planet that did a bunch of work on college campuses, mostly around getting corporations to clean up their environmental policies by pressuring them. I did some work with that, and then I did a ton on antiwar stuff. There were a bunch of antiwar groups. There was an antiwar group on campus. And then I got involved with the Maryland Antiwar Coalition—whatever the statewide student coalition was against the war. And I did a bunch of marches and organized a bunch of protests. I had a good friend who was also pretty politically involved, so we did a bunch of marches and rallies and protests sophomore, junior year together.

EARDLEY-PRYOR: Would you go down to DC? You were so close.

GARBER: Yeah, we'd go to DC for the protest. We'd bring a carload of people or two, all that kind of stuff. So enough to have that outlet at least, even if it wasn't a full-time thing like you might find at like another bigger school, or a school that was a little more political.

EARDLEY-PRYOR: Some of the things that stood out to me as you were talking about your college experience was thinking through things together. Is that something you still—it seems like that was important to you in debate team in high school, it was important to you in college—is that still something that resonates with you now?

GARBER: Yeah, I think on all this stuff—whether it's the theory, like trying to figure our Kant, or if it's like the politics today—they're big problems, they're complicated. And I don't think one person can solve them or figure out the solution or the best way forward. So I think having the argument of different people and coming to some joint resolution is important, And listening to people, and hopefully the best concept either percolates to the top. Or if you can't totally figure it out, let's figure it out together.

A lot of the stuff in school was doing that all as a team, because it's sort of—so the other thing to know about St. Johns is the professors don't really know—so professors have to teach all the subjects. So my freshman year, Mr. Smith, he was—he got his PhD in Montaigne. But he was teaching our lab course, which was mostly biology freshman year. **<T: 35 min>** He knows nothing about biology, but he had to figure his way through it. And so it's sort of this collaborative learning. And yeah, he knows a little bit more because he preps ahead of time. But there's not necessarily, just because you're the teacher or whatever, doesn't mean you know more than everyone else, necessarily, or you have the right answer. But it's about that intellectual process.

EARDLEY-PRYOR: Something else that struck me is the Georgia PIRG work you did that summer happened to be on air quality issues. Was that the spark for your environmental interests?

GARBER: It was. So there's a day. There's a day. We were working to clean up air quality in Georgia. So Georgia had some of the worst air pollution in the country, at the time. Old coal fire power plants that were allowed to put out unlimited amounts of smog-forming pollution under Clean Air Act. There's an effort to force them to clean up. And walking around, hot in Georgia, really bad air quality one day, and climb atop—Atlanta's very hilly. So I get to the top of this hill. I knock on this woman's door. I start talking to her about air pollution and the power plants and asthma. And I had an asthma attack on her doorstep. I recovered. I had my inhaler with me, which is not always usual. And after I recovered and all, I think it was at the end of the summer—there were sort of two things.

One, was just a very real realization that this isn't abstract. This is real people, and it's even my own life. It's me—I hadn't had asthma problems since I was like six or seven, it must be other people. And two, at the end of the summer, the politicians decided to allow these power plants to continue to basically spew unlimited amounts of this air pollution. And I was just couldn't believe it. Everyone I talked to wants clean air. Right? It doesn't really—it should just be everyone. There's not a lot of opposition from the public, so why are our politicians doing this thing?

And so that really was my two pieces that sort of politicized me: a real visceral experience with the health impacts, and this really visceral experience with the politics and the politicians sort of ignoring it, especially in a place like Georgia. So I ended up running the Atlanta, Georgia canvass office the following summer. And then when I graduated, I went to work for New Jersey PIRG for a few summers—for a few years—in New Jersey on clean energy policy.

EARDLEY-PRYOR: So after going to St. Johns in Maryland, is that what brought you to the northeast, the north—

GARBER: It's like a job, yeah. I was trying to stay in the Mid-Atlantic because I knew I liked it. I didn't want to go somewhere really hot in the south, and I didn't want to go somewhere really cold in the north.

EARDLEY-PRYOR: New Jersey fit the bill.

GARBER: Yeah, and mostly therefore New Jersey fit the bill. I stayed in New Jersey for two years. I like New Jersey. It's a nice state. I had to leave it.

[Laughter]

EARDLEY-PRYOR: So after running the Georgia canvassing office—the Atlanta canvassing office for PIRG—what were you doing specifically in New Jersey?

GARBER: I was doing two things. I worked on our energy policy for New Jersey PIRG. My first year, I mostly helped pass the state's renewable electricity standard to get 20 percent clean energy by 2020. So that's back in 2005, 2006. I helped pass that law. I helped build the support for it, working with businesses, media, labor unions. And then I helped—so I did a bunch of that. And then I helped actually do a bunch of the policy research around it, so that it was the strongest regulation possible. So both, sort of the politics and the substance of the policy. We passed that in early 2006.

EARDLEY-PRYOR: That's a huge victory.

GARBER: It was. It was a big deal.

EARDLEY-PRYOR: I mean today, solar—New Jersey is like the third most solarized state in the union in part because of that legislation.

GARBER: I know, yeah. That was my first policy victory. That was really my first thing. When I got there everyone—you know, it's New Jersey, they're environmentally friendly, but it wasn't like a priority for the governor. So I did all this work trying to get it up the priority list by working with coalition partners and using the media, highlight the benefits. And we were able to get it on Governor Corzine's—at the time—agenda. It was big. I mean, you're right. It's like everyone talks about New Jersey today. And sometimes I tell them I actually helped basically draft that law, which is really cool, when I was twenty-two.

EARDLEY-PRYOR: That's amazing.

GARBER: Yeah. So then, after that, I worked on a mixture of things, nothing as successful. Energy efficiency policy, and then closing Oyster Creek nuclear power plant, which just finally announced it was going to close. So that took a while. Those were my two other big policy areas

that I worked on. And some other random . . . I mean, there's other stuff. And then in the summer times, I ran canvas offices in north Jersey and central Jersey.

EARDLEY-PRYOR: So it was a full-time job with the PIRG. It wasn't just in the summer time canvassing. It was—

GARBER: No, it was full-year. We were on—so they run on a two-year fellowship to train future organizers and advocates. So it's like a mentorship program. Instead of classroom style trainings, with a class of about twenty to thirty people as well as a mentor, we were doing the work side by side, doing the advocacy and the organizing work.

EARDLEY-PRYOR: That sounds amazing. **<T: 40 min>** Tell me about building those coalitions with business and labor unions and writing the policy to help get that [renewable energy bill] passed. What was that experience?

GARBER: It was a little bit like getting thrown into the deep end. So you get this classroom training and whatever, and maybe you think you conquer the world, so—

EARDLEY-PRYOR: When you say that do you mean from college or you mean New Jersey PIRG gave you classes?

GARBER: Yeah, so we did like big, national, classroom-style trainings. So we do like two weeks of training. It's a mixture of overviews and briefings and practice. And then, as you're doing the work, you're working side by side with your staff director, who acts as like a mentor. But you're still the youngest person in the room because you're like twenty-two, and all these people have been doing this for like twenty years. And they're like, "What the f--- do you know?" … And you know, and I didn't have an engineering degree. I have a philosophy degree, so really, what the f--- did I know? [laughter]

There's a few memories that stick out in my mind. So I had been there for about two weeks, and we were going to this meeting—this presentation meeting for the labor council, I think, for north or central Jersey. So all the labor leaders. And we're in the car, and my boss Dina turns to me, and she goes, "Oh yeah, and are you ready to present at this thing that we're going to?" I was like, "I thought you were presenting it." She's like, "No, no, no, you're speaking. And then we're going to pass around the sheet for coalition sign ups on the bill." And I was like, "Okay."

So we get there—so we practice and prep in the car for thirty minutes and whatever. So we get there and we're talking—I think I was talking to Rick, is the guy's name, and he was

like, "Okay, so the order is, I'm going to kick us off. Then you're going to speak. Then the governor's going to speak." I'm like, "Wait, wait, wait. What? What?" So literally this is two weeks in. It's me. It's the mayor of Edison, New Jersey, who introduced the governor, and then the governor. And you know. But there's this moment, and a bunch of the labor leaders totally signed on and whatever. And then working with the clean energy businesses, and—

EARDLEY-PRYOR: Do you remember what you said?

GARBER: No.

EARDLEY-PRYOR: Were you so nervous?

GARBER: I don't remember. I mean, I'm sure I said something fine. And they're sort of all friends. It's Jersey, and they know Dina really well. I'm sure it was a little bit like—I'm sure it was not very good. You know, it's like three minutes. But I'm sure—whatever. But it's like totally thrown in the deep end, and then hopefully having some success.

EARDLEY-PRYOR: And you did.

GARBER: Yeah, I did. And then working with a bunch of the clean energy companies. You know, I'm still friends with a lot of those folks today. Pam, she runs an electric vehicle nonprofit now in New Jersey. They're—so that was the organizing side. My first press conference, I remember telling Dina she had to stay in the hallway. She couldn't come in for it.

EARDLEY-PRYOR: Why?

GARBER: Because it was nerve wracking! You don't want your boss standing there as you're speaking in front of the cameras for the first time. That's crazy. She listened from the hallway. She's very nice like that. I don't do that for my staff. They get to have me stand right there. [Laugher] But standing by these labor leaders, and clean energy business owners, and elected officials—that was probably like month two.

And then on the policy side, I didn't know a lot. So I had to read a lot, and then talking through it a lot. It was sort of this group-learning thing: of talking through it—with Dina and the rest of the experts at our team—of, what are the ramifications? And then we had really close ties—it was a regulation, so it wasn't legislation. And we had close ties with the regulators. So

working with them and being in meetings with them. Mostly, a lot of that was piping up, but then also observing.

And then I remember one of the things we focused on was what's known as the alternative compliance payment. So if you don't meet the—so the way the standard works is a utility company has to get a certain amount of energy from clean sources. The way they prove that is by showing they have a certain amount of renewable energy credits. If they don't meet that, they can also pay something called an alternative compliance payment, which then goes into a money fund to encourage more clean energy growth. And the problem is that if the compliance payment is too low, it creates a low market for the RECs [renewable energy credits], which hurts the payback period for clean energy solutions, because it's cheaper for the companies just to buy these alternative compliance payments. So in the first testimony on one of the public hearings, this was one of the real things that needed to get fixed because it was set at like a hundred bucks or something too low.

EARDLEY-PRYOR: So any fossil fuel company, they can just go ahead and pay that and not invest in— **<T: 45 min>**

GARBER: Clean energy, right. And it goes back to clean energy, but it's not as good as actually getting them, especially from the health-benefits side, and the pollution-reduction side. So we really honed in on this ideal that the alternative compliance payment needed to be three hundred dollars, which we thought was high enough that, basically, there's no way the RECs would ever reach it, and it would make more sense.

And so in the first public testimony, I—so I helped to organize the public hearing. I organized a lot of people—it was an official public hearing—to go to it. I got a lot of the businesses and labor unions to speak. And I signed up, of course, to speak first. So I spoke. And it's sort of like, here's the big vision and why we need this, and here's the policy thing you have to fix. And after I sat down, this guy Eric Stiles, who got up from New Jersey Audubon, and he said, "Ditto what Adam said." And then the guy at Sierra Club, Jeff Tittel, got up and said, "Ditto what Adam said." And so I was like, "Oh." They all just trusted that I knew the policy-thing well enough, and I moved them along enough. And so it also taught me this thing that all the things I've learned—about like, I can figure out the policy piece if I spend enough time on it—was true, which was pretty comforting. Because it's sort of what I think I got out of school more than anything else, and I think actually, what people should get out of school more than anything else. I think more and more people don't use their degrees in their day-to-day jobs most of the time. So getting the ability to just learn things and to be able to figure things out on your own is really just valuable. And then I had that experience, of course.

EARDLEY-PRYOR: Those were pretty powerful moments. So maybe we can take a quick break here before transitioning to how you came to Philadelphia and then what your visions are for the city.

GARBER: That sounds great.

[END OF AUDIO, FILE 1.1]

[START OF AUDIO, FILE 2.1]

EARDLEY-PRYOR: All right, let's continue here. So how did you end up—you were working in New Jersey for the New Jersey PIRG, doing all this amazing work, getting policies written and passed, and then other advocacy work around environmental issues. What eventually brought you to Philadelphia, and when?

GARBER: Yeah, really the job. So I—it was a two-year program. And I could have probably stayed on in New Jersey with them, but I was ready to leave the state. I really didn't—I never really thought about it till I was there, but I didn't like living in a place where I had to drive everywhere, basically.

EARDLEY-PRYOR: Where were you in New Jersey?

GARBER: I lived a few places. I lived in Trenton—don't recommend it. I lived in downtown Trenton. I really don't recommend it. I lived in New Brunswick, and I lived in Montclair, in the northern part of the state. But you know, you can—I was smart enough to find places where I could walk or bike a lot. But you also had to just drive a lot. And I sort of hadn't really thought about it—and that was [what it was] like when I was growing up too. So one thing was, I wanted to try to move and live in a big city. I don't like New York because I get a little claustrophobic with everything, kind of like, closing in. And then, like, some personal stuff. I had been engaged, and we broke up. And so I was like—

EARDLEY-PRYOR: While in New Jersey?

GARBER: Yeah, yeah, yeah, yeah. This woman I had been dating from college. We got engaged, and then we broke up when we were living together in New Jersey. And I just needed a clean break. And David Masur, the executive director where I now work, at Penn Environment, he had given me a call. PIRG and our [organization] now are all part of this larger network of groups. And so he had given me a call and said "I have a job. I want you to come be the field organizer in Philly." And eventually, I accepted that job and moved here. I had never really spent much time in Philly. I had been a few times. My dad went to college here, so I'd heard terrible horror stories about Philly from him. And he thought I was crazy.

EARDLEY-PRYOR: I thought you said your dad went to undergrad here?

GARBER: Yeah.

EARDLEY-PRYOR: Oh, to Penn?

GARBER: Yeah, he went to Penn at Wharton. He was here when Donald Trump was in school at Wharton. Yeah, he doesn't remember Donald Trump—I got that phone call from the Boston Globe. But he—Philly used to be really a crappy town. I mean, it was a dangerous—I think—city. It was really rundown. If you go back into the—this was, I guess, the seventies? Maybe early seventies, late sixties? And even, I think, until fifteen, twenty years ago, it was sort of a shell of its former self. And the week I actually moved to Philadelphia was the week that the [*Philadelphia*] *Inquirer* had "Killadelphia" plastered across the banner headline because we had hit the all-time murder record.

[Laughter]

EARDLEY-PRYOR: Welcome to the city!

GARBER: Exactly. Welcome to the city. And—

EARDLEY-PRYOR: What were your emotions about it?

GARBER: About that, or about—

EARDLEY-PRYOR: About moving to Philly? You have this new job. You have—

GARBER: I was excited. I mean, I was excited to be in a new place, to be in a big city. It's in some ways bigger, in some ways not, than Atlanta. It's sort of different. But you know, this iconic city. Everyone knows Philly. And it has more of that downtown feel—I lived in Center City when I first moved here—than most of Atlanta does. So I was really excited about it, I think, overall. I mean, I mostly just fell in love with the city. I came to love that, A) I could walk everywhere I wanted to and take public transit; that I could—that it was neighborhood-y. So it's like, big city—everything you want out of a city: big great amazing museums and art, you

know, great restaurants and food. Everything you sort of think of as a big city. But also, it feels like there's these neighborhoods and communities. They're smaller communities within communities, which maybe other big cities feel like that, but as far as I can tell they don't. So I love that about it. It's really totally become my home, and I imagine I will probably die here. I've just come to really love it.

EARDLEY-PRYOR: Oh, that's awesome. Tell me about the work that you've been doing in Philadelphia. Was there a steep learning curve to get used to a new place?

GARBER: It was sort of—it was, and it wasn't. The second time around everything's easier, right? Both because you're a little more confident—you know a little bit more how it works—and, yeah, you're just a little better. So yes, there is—because the politics are totally different, Pennsylvania versus New Jersey, totally different political landscapes. The issues you're working on are totally different. And the organization is sort of a different set-up. So that was a learning curve. But then I felt like I could just dive right in.

So I think when I first got here, I did a bunch of work organizing health professionals around air quality regs or climate change. And **<T: 5 min>** I sort of had moved away. So in New Jersey, I had done a lot more of some of the lobbying and advocacy work. I really didn't like that. I can do it, but I don't like to schmooze and the way that that is. And so here, I was really supposed to be the field person. So I was supposed to be about organizing and engaging and educating the public and allies among different partners. Really, building that political power was my mission. So I really enjoyed that and found that I really thrived in that. But I, sort of, was just thrown in and dived right on in. I think it was easier the second time.

EARDLEY-PRYOR: You mentioned different politics. What do you mean by that, here in Philly?

GARBER: We—so Pennsylvania is like a Rust Belt state in many ways. It's not totally a Rust Belt state, I know. It's purple-y. It's got this long fossil fuel history, right? So even among people that should be your allies, there's this sense of, "we need more coal or natural gas" or whatever. Versus New Jersey, [which] doesn't have that history, right? There's a chemical industry history. Like I went to events at refineries, right? So there isn't—it is, but the politics are across the spectrum, everyone's pro-environment for the most part, [that] kind of thing. And just more in agreement with the issues you're working on.

EARDLEY-PRYOR: Not so in Philly or in Pennsylvania?

GARBER: You know, there's definitely places. So in Philly and in the Philly suburbs, that's mostly still true. But the vast majority of the rest of the state—I mean, within pockets of course—it's definitely much more pro-fracked gas, pro-coal. And that controls a lot of what happens in Harrisburg, in the legislature. And so that was like what the—if you think of politics as "the art of the possible," the possible in Pennsylvania, what might be a good policy here, is like a crappy policy in New Jersey. And what might be a good policy here is probably an amazing policy in Georgia. [laughter] So you know, it's understanding how that plays out, and then what people care about.

And the second thing is, it's just bigger. Pennsylvania, much larger, bigger population, and bigger geography. And so I spent a lot of—probably the first five years—going to every corner of the state doing organizing. I spent—I've probably been to—I don't know, I've probably been to forty to forty-five of the counties of the sixty-seven counties at this point, doing work. And that's very different than New Jersey, which every day you basically—I could return to home. Maybe I'd have to drive like an hour and a half, but I'd always get back at home if I wanted to. Here it's like, "Oh, I might be five hours away."

EARDLEY-PRYOR: With those different circumstances—the fossil fuel history, the bigger size, the broader scope of the population—how has that changed your perspective on some of the issues that you work towards?

GARBER: I think one thing is trying to understand where people are coming from. So I think it's easy, when everyone's in general agreement, to say, "Okay, we're all headed in the same direction, and we may have some disagreements about how we get there." I think here, it's much more like there's diverging visions of the future in Pennsylvania, and they're quite different. Well, of course, I think mine's right, and I'm pretty sure it is. But I think trying to be able to listen to people and understand where people are coming from is really important, so that you can hopefully get them to move over time.

And then at the same time, sometimes just saying, "Yeah, we're not going to"—you know, there's a balance between listening and engaging, and saying "Yeah, that's fine, but you're just wrong, and I'm just going to move past you. I'm just going to ignore that." And so I think it's hard, because where do you draw that line? Do you go to deep coal country and make your mission to convert those folks to clean energy champs? That's probably, in my mind, a waste of time. But it doesn't mean you totally ignore them, right? And so what that line looks like, I think, is a challenge in a state like Pennsylvania. And that's different than New Jersey, let alone California or Massachusetts, probably.

EARDLEY-PRYOR: So if politics is the art of the possible, is the art of the possible how to find that middle ground and how to make both sides happy?

GARBER: No, I don't think it's about that. I think that is a pitfall. I think the ideal that everyone should be happy or that that middle ground is—there's compromise, but there's still bad compromise. … Understanding, to me, is important. To just understand. I think it's part of what we probably owe each other as humans, to try to understand each other. It doesn't mean I have to sacrifice my principals completely to come to some compromise. I think compromise is, you know, **<T: ten min>** like—yeah, there are bad compromises. There are compromises that, I think, don't move us far enough towards a better world, on environmental issues or on any issue. And then there are compromises that do. And we should be supportive, even if they don't get us as far.

I think here in Pennsylvania, that finding where that is, is really hard. And it's hard also because you have folks, who I totally agree with their beliefs, but who just want to hold a hard line. And I don't think that's going to get us very far. So I think the politics get, for all those reasons, a little more complicated than a state that's one side or the other.

EARDLEY-PRYOR: Do you find yourself—being at the front lines of negotiating where that line gets drawn in terms of compromise, but also having a constituency that is very strong in their beliefs and what they want. Do you find yourself in between, not only the front lines of finding the compromise that works for the long term interest, but also then having to communicate why that compromise is necessary to your more rabid, or more—[laughter] rabid is not the right word, more—

GARBER: I would never call them rabid. [laughter]

EARDLEY-PRYOR: No. But to your more outspoken and heartfelt supporters?

GARBER: I think, yeah. I think you have to communicate it well. I'd also probably argue that most of the public—or a huge chunk of it, like 40 percent—agree with the compromise most of the time. There's people on either ends. But then—and you have to communicate. A lot of times, they're our best supporters. So we have to bring them along or articulate why we had to make these decisions. But I think, actually, most of the public's usually pretty happy. It's the loudest voices on either side that get upset, for whatever reason. So I think most people are with us on that compromise, because most people aren't that radical—or even if they are, they sort of get it.

But yes. To your question, yeah, I think part of our job is to articulate why we had to make agreements we had to make, why we had to make the decision. And that we're not happy, that we're not done. The vision is still being made. But visions aren't made in one fell—I always think of it as—aren't made in one fell swoop. It's these steps along the path.

I think also, in a place like Pennsylvania—and probably if I worked even more in a place that was even more politically anti-environment—I probably think part of our job is just to—they always say, "Speak truth to power." Part of our job is just to stand up for the people whose lives are being ruined. So sometimes, your job is just to be the thorn in the side and say, "No, no." On fracking, I think we're in a really—I just don't think it's going to stop. It's hard to see how we get better environmental protections. People's lives are getting ruined. And I just tell people—yeah, part of it is, I'd rather just stand with people and say, "That's where I stood," thirty years from now, even if we lose every day. There's also places where I think you just have to stand for what you believe in, but different roles you play.

EARDLEY-PRYOR: You mentioned visions aren't things that are made in one fell swoop. They're steps along the way. So I think that might be a nice transition point for us to talk about future visions for Philadelphia.

To move into that kind of visioning period, I'll ask you a couple abstract questions. What are some of the things that you value most, that you love?

GARBER: I think community's particularly important to me. I think, whether it's what I love about the city—that there's this sense of community and togetherness, and we're in it together. I think that's really important. Or just some of the things we were talking about earlier, about growing up in Atlanta. So I think some sense of, we're in this together, I think, is quite important.

I think this ideal that—you know, it's like the golden rule. I just think this ideal of, we all breathe—part of the reason of why I think "we all breathe the same air, and we all drink the same water" is so important is, this is the place where what you do affects me. Your choices affect my life, and my choices affect your life. And it's sort of tied back to community, but it's sort of different. Therefore, we owe it to each other to look out for each other, right? And what I want to have happen to me and my family, I want to have happen to you and your family.

And that doesn't mean that we all have to have a perfect idyllic life. And it doesn't mean we all have to be millionaires and billionaires or whatever, everything we want. But there's some basic standards that we owe to each other—about how we experience life and how we impact each other lives—that we have to meet and that I think our society should just build around. **<T: 15 min>** In some ways it's all about community, I guess. So clearly, I just care about community. I did write my senior thesis in college about community, as the case may be. So yeah, those are the things that, probably, I think the most about.

And then, you know, from the vision of the future, or whatever, I think about the environmental impacts. I think because of the experiences we talked about earlier, around air quality and things like that. For me, it boils heavily down to environmental impacts. But I also think of it, like other pieces. Someone parked in the No Parking spot, blocking the playground across the street from my house yesterday. And I was annoyed, but I didn't go say anything

about it. And so that frustrates me a lot. I didn't go say anything about it. I should have probably. So those sort of things. I don't know if that helps.

EARDLEY-PRYOR: In a sense, justice. Doing right. Or is that about following rules? Is that about other people who need that?

GARBER: Justice is like—it's not really about—I mean it is. Justice, to me, becomes this thing of, like "what I think doing right is, and what you think doing right is, is different." And I know I think my version of doing right—maybe it's not in our case—but I know I think my version of justice is absolute. I think the reason Community works better for me—that we're all in it together—is because it's very easy for me to say, "Here's what I want my experience to be like, my family's experience, my friend's experience to be in our city. And if I want that for my friends and my community, then you should have it for your friends and your community." I think it avoids some of the problems with—I think it leads to justice. It leads to a just world. But I think when people talk about justice, it comes down in absolute way that people can't communicate and connect on in a way that they can understand each other. Because it's just easier to believe, "This is the right thing." And that probably comes from growing up in a household that's religious, and in the Christian south. It's just hard to communicate. But it's very easy for me to understand what I want my family's experience to be like, and what I want for yours.

And I think, what we find is that when there's—what was I listening to the other day? There was some story the other day—Oh! About former Vice President Dick Cheney. There's this hypocrisy there, because he was very—or for a long time, at times, he supported a lot of anti-LGBTQ policies. But when his daughter came out as lesbian, or when Rob Portman's son came out as gay, it totally changed the picture. How is that? So to me, that was a communal decision. "I just had—my son, my daughter's going to have this experience now. So I have to change my position." And I wish people would just get to that place sooner.

EARDLEY-PRYOR: Tell me about some of the things that you fear, things that scare you in life.

GARBER: Things that scare me in life. I think that actually, more and more, living in a city, the thing that scares me the most is that I don't feel like I—and I think other people—feel like they can say something when they see a problem around them. So I think this all the time on the subway, and this—I don't know if you remember the story. But a year ago—I think it was a year ago?—someone was shot on SEPTA because they—do you remember this? They said something to two guys—I think they were like college age or maybe younger—on a subway car who were harassing someone else. And then they got shot.

I think there's this problem where, I think for a city especially, the concept that I can't just—or that I get nervous about saying something. I tell my wife—she gets a little road rage, and she always flicks off people—and I'm like don't do that. And she's usually in the right—handling it, maybe, the wrong way. But I just don't know what that other person's going to do. And so I get—more and more, I'm sad, and I'm probably a little scared by the concept that we can't articulate. I think, in a city, it's dangerous sometimes to articulate when you think someone in your community is doing something wrong because you're worried about what the reaction will lead to—whether that's literally getting shot, or some financial thing, or some whatever, right? That scares me a lot.

And then I think the other thing that scares me a lot is that we've sort of, on some of this stuff, try to stay hopeful. But every once in a while, I think, we as humanity are never—we're just too selfish. We're just never going to be able to see the long-term vision. So it's good to talk about the fifty-year vision, it's good to talk of a hundred-year vision. But are we going to be able to understand that we have to make those decisions for the long term about what's happening here and now? And we've evolved, of course, to just focus on the here and now. And that, of course, makes sense—if you have immediate hunger, if you have immediate whatever. But those two things, I don't know, scare me a lot. **<T: 20 min>**

EARDLEY-PRYOR: One of the fears you mentioned about not being able to articulate something you see that you think is wrong. Do you see that—*how* do you see that relating to the work that you do?

GARBER: Well, I think it's easy to—when you see something wrong, and you're in a position of advocating for change—it's a little easier. Because it's in a—to steal a phrase—a "safe space," right? You know what the rules of the game are. You know who you're interacting with. And, if you're smart about it, you mostly can control all that. It's more like a hospitality or courtesy thing, to say it on a daily basis—to be able to say, "Hey, you really shouldn't throw that cigarette on the ground."

We were talking about this with my—so we live across the street from a park and a basketball court. And I went to the community meeting the other week. They just put up No Dog signs, and there's been a little bit of a kerfuffle over it. And we're talking about it. And at some point, the guy who works at the rec center said, "But that's my job. I don't want you guys to ever say something to someone, because I don't want to be responsible for what happens." And I said, "Yeah, but at the same time, it's our rec center. It's our park. We all live in this neighborhood. And we should be able to just say, 'hey, you've got to pick up your dog shit,' or 'hey, there's a No Smoking sign right there. Don't smoke because there's kids around.'" And until we can—but the problem is, that is in a much more uncontrolled atmosphere. I think it's a mixture of—it's an uncontrolled atmosphere. And we aren't that good at knowing when to call things out, I think, as people, and to do it in a polite, unemotional way, myself included. It raises the stakes in a different way.

EARDLEY-PRYOR: One last abstract question, when you think about energy, what comes to mind?

GARBER: Well, mostly, I think about power plants. [laughter] So I probably think heavily about smoke stacks and solar panels. I think they're my two visions. I think about it as all the pollution coming out of the smoke stacks, and I think about all the consequences, because I know a lot about that. And I think a lot about the solar panels that I see. I was driving back from New Jersey yesterday, and there's solar panels on a farm in Bucks County—Snipes Farm—and you can see them from the highway. Like, "Oh, that's nice." I think those are probably my two images.

EARDLEY-PRYOR: All right. Let's move into the visioning piece here. We'll talk about—the first one is Philadelphia in the year 2067, so fifty years into the future. And again, this is your future vision. You can have an arc for your vision that's a story of growth, or of collapse, or some sort of transformation. It could be status quo. It could be utopian. It could be dystopian. It's your vision.

What do you see in Philadelphia in fifty years, the year 2067? What is life like? How is energy being used?

GARBER: Yeah, that's a hard question. Since I like to be hopeful, despite my depression at times, I think my image would be that communities, as a whole, are generating electricity for themselves. So whether that's solar or wind or geothermal or whatever, that there's a sense that we, as a neighborhood—maybe a block or something, I don't even know—have come together to figure out, how do we produce enough electricity—energy—to survive and to be happy. I think there's a lot of opportunity to bring communities together around that. So, like putting solar panels on the children's hospital in my neighborhood, or the parking lot. And I think there's a lot of opportunity to do that as a community and think about energy as a locally grown resource, rather than this thing that comes from afar.

I think there's also a lot of opportunity to think about energy—I think energy we don't really understand because it's just this thing that shows up, right? I flip the light switch, and it just comes on. I mean, except for the small set of people, probably in the city that have had their electricity turned off, which is terrible, I just think people don't think about the consequences of how they use it. So I like to think people would have a better sense of that. I don't know exactly how, or what that would look like.

EARDLEY-PRYOR: But in fifty years you hope the people will have that better sense?

GARBER: Yeah, and I guess, then the city would look like—I was just in Germany, and there's solar panels on almost every roof. It's like solar panels are the norm, not the exception. And probably for the city, that's the best way to go. So they're the norm there, what everyone's using. **<T: 25 min>** It's like, you expect it on a house. If you don't have it for whatever reason, there's community solar that you can tap into to power your home, or community wind, or maybe some wind from mountains somewhere else. But I mean, that is the vision I'd like to see.

We think about it in terms of electricity for our homes. But in terms of the rest, I think it's a city that has a totally different transit system. I take transit every day, and I walk a lot of places. And in some ways our transit system's great. You can get a set places. But once you get out of a certain, basically along the two routes and some of the bus routes, it takes forever to get anywhere. And I think the transportation system has to be a place where I think anywhere in the city—from city hall, let's say—basically, I should be able to get to anywhere on public transit in half an hour. And there's no real reason—in the city. And I should be able to get anywhere in the suburbs within probably less time than half an hour, but within forty-five minutes or something, or at least to major hubs in the suburbs. It takes longer than that. And I think if you got to the place where, from city hall—maybe not from my home, because I get that I can't always get what I want by my home—I can get anywhere in the city in half an hour. And everyone could get to city hall in fifty minutes, could basically get anywhere in a reasonable amount of time.

EARDLEY-PRYOR: How are people doing that in fifty years?

GARBER: In fifty years, I do think it is still public transit. I do think it is an expanded subway. I think it's a mixture of public transit, subway system, probably rapid bus transit, to be honest. And then express trains to the suburbs. And I think the Center City area is car free. So there's no cars there—maybe some limited car use for people that live in the city, there's ways to do that. But mostly it's all walking everywhere.

EARDLEY-PRYOR: How are cars powered at that time or these buses, these rapid transit buses?

GARBER: I think they're all powered by electric. I think ultimately, the place we're going to have to go is that everything is electric powered. It means we'll have to make some sacrifices, right? You can't—maybe we'll get charging technology and figure it out one day, magically. But I think, ultimately, it means you'll have to stop every once in a while, and take twenty or thirty minutes somewhere to recharge your car or your bus. And then that comes from solar—or wind, or what have you. I think that is where we are headed. And I think for most people, on a day-to-day basis, you could do that. It requires some pretty big shifts in how we operate.

And then I think ultimately, it's a place where most people don't have a car. I think it's a place where—that's the other thing—if you had a transit system that let us get everywhere in thirty to forty-five minutes within a five-county region, maybe an hour, you wouldn't need a car on a daily basis. And maybe you borrow a car, or use car share. Maybe there's something else, maybe there's communal cars. I don't know. But if we got rid of half the cars in the city, it would make everything go better in some ways. And I think a set of people today in the city already live that, right? A lot of people in the city probably don't—I know we don't use our car on a weekly—definitely on a daily basis. We don't probably use it on a weekly basis. We have a car for when we travel further away, a lot for my work, and sometimes for ease of use to get to Whole Foods or whatever. But my guess is most people in the city don't drive every day. I don't know.

EARDLEY-PRYOR: What about food? So food is a kind of energy. What's the food story of Philadelphia? Are people just going to Whole Foods? Or is there some sort of change that happens in fifty years?

GARBER: Well, I think if our population ultimately doesn't totally rebound, the vision would be—

EARDLEY-PRYOR: Wait, has the population dropped in your fifty-year future?

GARBER: Oh, that's a good question.

EARDLEY-PRYOR: What do you mean by rebound?

GARBER: Well, Philly's population, drop, drop, drop, and then just re-broke the million mark a few years ago. And I think it's not reached its peak again. I don't think we've exceeded the size of the city at its peak. So that's why we have all these vacant lots, in part. I mean, a lot of people come in from the suburbs, but whatever.

It probably depends on how you think, because in my vision, more people live in the city. So maybe Philly does get a bigger population, but that's because there's a bigger push to move into cities and then, like, small cities. I think the more we move into big cities and then smaller mid-size city hubs, and less of the suburbia—I don't think we'll be there in fifty years, I have to say. I think the cities will probably keep growing, but I think the suburban stuff and the other parts won't. It's just too soon. We, I think, will be better off. And I think it's already happening. We're just seeing more people move into the city. **<T: 30 min>**

EARDLEY-PRYOR: So those trends will continue?

GARBER: I think so. I think they will, because I think, at least for our generation, it's what people want. And I think there's a lot of benefits now. And I think more and more it's where the jobs are going to be. Maybe they'll be in the suburbs, but they'll also be in the cities. And then I think—

EARDLEY-PRYOR: For food?

GARBER: For food, my guess is we'll still rely on places like Amazon, apparently, and Whole Foods and grocery stores. I don't know if we'll ever get to the place where cities are capable of producing enough food to feed themselves. And I don't know if we'll get to a place where, in fifty years, where there will be enough community gardens. I'd like to think that there will be more community gardens. And I'd love to see—I don't know, I think we have enough space, so I'd like to see it. I don't know if enough people like gardening anymore to see enough community gardens. [laughter]

EARDLEY-PRYOR: What does Philly look like in terms of its buildings? Is it more vertical, or is it spread out? Are there still old brick buildings around? What do things look like in fifty years?

GARBER: I think it'll look pretty similar, actually. I think you'll see more verticalness in the downtown area, and maybe spreading out into west Philly, and maybe parts of north Philly. I think the rest, what you would see is potential reclamation of abandoned sections. So you have to remember, a large chunk of the city is still abandoned. If you go into Point Breeze, and if you go up into northeast Philly, there are tons of abandoned homes. And I think it's more likely that we reclaim those, and they eventually get refurbished—

EARDLEY-PRYOR: Into new buildings?

GARBER: Or just like fixed up as homes, not like rebuilt completely—than that we go completely vertical in neighborhoods outside of West Philly and outside of University City—the ever-expanding University City—and Old City and Center City. But then I just don't think the skyline will expand that much further out. And then I think in Center City, you might see more tall buildings and more verticalness as a bunch of the homes get torn down. And that makes sense. But I think it will be contained within that region of the city.

EARDLEY-PRYOR: Let's take a step forward into about one hundred twenty-three years into the future. It's the year 2140. So in about one hundred twenty-five years, how has Philly changed? Has it grown? Is it shrunk? At this point, there's some expectations for climate impacts beginning to really be even more of a daily impediment or challenge to life than it is now.

GARBER: Yeah, I think you'll see the Delaware move in some. So then you'll see abandonment somewhere by one hundred twenty-five years. I think, knowing humanity, we will fight the good fight against the rising sea levels.

EARDLEY-PRYOR: Do you think there will be sea walls that help the tidal rivers?

GARBER: I think there will be, and I think they'll probably eventually fail, unless we figure out really quickly how to—much quicker than we are—how to deal with climate change. I think we'll fight the good fight for many years. And we'll sort of come to a realization—probably by one hundred twenty-five years—that that's a losing battle, that we can't meet our needs as a society while doing it. So then I think, in Philly, you'll see some encroachment in the southeastern part of the city, in Old City. I think there'll be some efforts to save the old part of the city, because it's just too iconic. I don't know what that looks like. But I think you'll see the waterways sort of encroach on those areas. There's not a—some of it's not that huge of a population, so you're sort of okay. But I think then, beyond that, you'll see then the city sort of expand into the western sides of the city and the northern sides more and more.

I think by one hundred twenty-five years out, you'll see—I tend to think the population keeps . . . well, I don't know. At some point in there, the population's going to peak. But I still sort of believe cities are the future, and so I sort of think it will keep growing. What we'll probably see is some hubs in the suburbs—and then hopefully some other cities around the state sort of pop up. So you'll see some other Rust Belt cities. And that will impact us. **<T: 35 min>** If that happens and they become viable alternatives, there's a little less need of growth in Philly. So it matters to us. I think the city will keep growing for quite a while. I don't know what it peaks at. And then I think it sort of expands into the suburbs and has additional, ideally, little—especially if my transit vision all works out. [laughter]

EARDLEY-PRYOR: I like it. So will Philly experience any of the refugees that are fleeing from the coastal areas?

GARBER: I think so. I think we will see a lot of growth from that. I think by one hundred—I think it will happen sooner. So I think, probably, somewhere between that fifty year and one hundred twenty-five year mark. Somewhere between that fifty and one hundred twenty-five year mark, we'll have some tensions among refugees coming. Because I think most of the projections

show the end at the twenty-first century—right? 2090, 2100, right? And so I think a lot of that will happen. There'll be a ton of tension and push. And then by 2145—is where we are—it will sort of have settled out. I think it will add to the city's population growth quite significantly. Some people move to the suburbs and other places. But I think some people will just move into the city, and it will sort of settle out.

EARDLEY-PRYOR: With the increased heat indexes expected in Philadelphia, and with the greater precipitation expected, how is Philly different? Does it look different? Are the buildings different? Are the way people move around different?

GARBER: Yeah, I mean, I just don't know if we have the wherewithal to really build an underground system of cold caves to keep us cool between like—[laughter]. I think you'll see some of it. I could see—

EARDLEY-PRYOR: Wait, wait. What is this vision? There would be underground caves to keep people cool?

GARBER: Like if you're ever in Chicago, my sister went to Northwestern, and there were underground caves for the wintertime—like tunnels between the buildings. I don't think we'll get there. I could see it where the buildings become more interconnected, so you can get in and stay in your nice AC in cooler areas. I think we'll see more green roofs, on the whole, to try and deal with the island heat effect in the city.

And I think the real question is, do people still play outside and want to go places as much? I think what will happen is, that will still happen. But it will happen in a shorter season. In July, no one really wants to walk anywhere. It's too hot now. And then, it will be like maybe in June and even late May, to early September. There will be a longer period where the heat is so unbearable, you'll see less people outside unless they have to be.

EARDLEY-PRYOR: Does that impact the way that Philadelphia's parks systems work? Are there less parks in Philly? Is Fairmount still a big space? Are the Squares still a part of the community sense in Philadelphia?

GARBER: Yeah, I think it does impact things. I think what you'll—let's see. I think the parks will mostly stay. I think they'll get a little bit different use. I think we'll realize they have other benefits besides places to play. So I think they're still around.

EARDLEY-PRYOR: What kind of uses are you picturing?

GARBER: Well, things like the fact that they're heat sinks for the city. So like, if you're trying to keep the heat out, you want those parks in places, and you want green spaces. If you want good healthy air, then you want that stuff. I think you might also see some of them build in community garden opportunities or farm parks that people could use. I sort of remember when I was a child always having fun at summer camp farming. I went to summer camp, and it was farm. I don't know. They got us to do labor for fun. So I think you could see that happen. I think what you'll see though is less play in the summer outside during those hottest days.

EARDLEY-PRYOR: How about dealing with the precipitation? Do the buildings or just the way people move around—I mean, you mentioned interconnected buildings as a way to continue walking. So walking is still a big part of life in 2140?

GARBER: I think it will be. I think it just won't be as often, but I think it will be. And I think if we can—yeah, I just think people in cities will walk.

EARDLEY-PRYOR: Do cars still play a role in 2140?

GARBER: I think mostly not. I think, at that point, people don't own cars. So you either have the public transit system, or I don't know, some community car share thing maybe—like there are some cars, because people need to get to places, but most people won't own their own car. They'll have a car share, or they'll rent a car. They'll take an Uber, Lyft, whatever's future, or maybe cars just become—it's hard to know.

It's totally possible with self-[driving] vehicles that we see, like—everyone gets in their own car, but they're just part of the transit system. I think you'll see stuff like that happen. I think people—except for the diehards who love their cars, versus those who won't own cars, especially in a city, the traffic will become so unbearable that I think people just won't want to.

EARDLEY-PRYOR: With the energy scene, how is Philly powered in 2140? Do fossil fuels play any role? **<T: 40>**

GARBER: If they do, I think we're totally screwed! [laughter] I think they won't. I think the question isn't, "Do fossil fuels end?" I think the question is, "What's the timeline, and how much damage has been done?" The writing's on—not only because they're just running out, because they can't exist forever. I think the economic writing's on that wall, and it's just a question of how quickly it goes. So by 2145, I think they're all gone. There may be nukes still. God forbid, but there may be nukes. There may be something like fusion, if they ever figure it

out, which I doubt they will. But you know, I think there'll be more solar and wind and big energy-efficiency efforts.

One of the benefits of a city is it is just more efficient. And I think, if we're not going to have the same cheap abundance of energy, people will sort of realize the value of it, I think. Part of the problem is we don't realize the value it provides us. And so as people realize that, they'll want to become more efficient.

EARDLEY-PRYOR: Let's move forward to the third visioning piece, which is 2312. So almost three hundred years into the future. As a reference point, three hundred years from today in the past is in the 1720s. So North America is mostly Native American at that point, the (indigenous) Nations are still very strong. There's a few inroads of colonialism from the Europeans on the coast. Wood by far is the dominant energy source. Coal isn't even on the scene.

So let's leap three hundred years into the future almost and talk about your 2312. What is life in Philadelphia like?

GARBER: I think the first question becomes, "What's our government look like?" I don't even know if we have the U.S. anymore. I think at some point . . . I tend to think, by three hundred years, something's going to happen. Either we're going to break down into individual state governments or regional governments. There could be world government. I don't really think that will happen, but who knows? Or something—

EARDLEY-PRYOR: Wait. So at the same time that there's more regional influence in government, there may also be a global structure?

GARBER: No, I think it's either or. I can't tell which way it's all going to go. I tend to think the One-World government thing never happens because people want local control, and we're all so different. So I think that will never happen. So then, I think you have more regional things. And then I think, you know, so maybe Philly and New Jersey become a nice little region together. [laughter]

EARDLEY-PRYOR: But Philly exists? Philly as a city is still there?

GARBER: I think so. I think it—there are these things, right? We do know for thousands of years of history—I mean, it sort of matters how much the sea levels rise. Let's be very clear. So maybe it moves in a good bit. But we do know this thing of—like, there are certain places on the globe that have inherent value that make them thrive.

So one of them has always been being on water sources, which Philly still does. Another is, I think, unless there's major population shifts in the US in a really weird way—like the population is shifting out west, but it's also shifting south. I think it's still a centrally located place. And you sort of have to think, actually over time, in three hundred years with climate change, it will get so hot in the south that it will push people back north some. And so I sort of think all those things mean Philly still exists in some function. It's hard to know. Like you said, it's sort of hard to know. It's hard to know if we find aliens finally. [laughter] So it's a little hard to know what the thing looks like, but I think it's sort of like Rome. Rome's been around for thousands of years. Philly came later, but my guess is there's a set of things about its location that means it will exist in some form or function.

EARDLEY-PRYOR: Is it bigger or smaller?

GARBER: Well, I think in three hundred years the population of Earth is smaller. So I think what we'll see happen—what we have seen happen, admittedly—is as populations become more educated and more knowledgeable and more advanced as economies, the population sort of evens out and eventually decreases, because you're not having eight children any more.

EARDLEY-PRYOR: Right, yeah. Demographic transition.

GARBER: And I think that's going to happen everywhere. So I think, one, the population of the Earth will be smaller. But I think, ultimately, some of it is, the population of the United States region will be larger. And I'm not sure about Philly. I say that because we just have such big space compared to our population. **<T: 45 min>** So when you ultimately think about where refugees from Africa, from the Pacific-Asian Islands are coming from, just the best option sometimes is going to be the United States. And if we could just get over our hatred of immigrants, I think it just makes a ton of sense from a population-density perspective. So I think, in three hundred years, that will have happened.

So I don't know what Philly's population will be like. I mean, it's worth noting, the city footprint may move. It's sort of interesting. I don't know if there's any good historical studies of cities creeping in location over time. But my guess is there are some cities that have crept in location over time, as they expand and then they shrink in areas. In the next three hundred years with climate change, we'll see that. We'll see cities move a little bit, like a mile or two, which will be enough to deal with a lot of problems.

EARDLEY-PRYOR: What's the energy scene like? Three hundred years.

GARBER: No fossil fuels still. That's for sure. I don't know! It's hard to know. Three hundred years. So do we even know what the energy source is we're going to use? Are we still—and maybe we are still solar and wind, because that's always here, right? But have we discovered fusion or some way to have some totally—bacteria that creates [energy], there's that whole investigation. I think it's really hard to know what energy looks like. I think what it will look like will be relatively clean compared to what we're doing today. That is, that we will have at least learned our climate lesson—the hard way probably. [laughter] And so that lesson will force us into something clean. But we've probably not invented it yet. I just can't imagine we've invented what we're going to be using in three hundred years.

EARDLEY-PRYOR: What about what Philly looks like as far as buildings and trees and that sort of thing? What do you see?

GARBER: I bet we will have, in three hundred years, I bet it will look different. I bet it will look more—I think there'll be less just building, building, building, and more of an interplay between—I think at some point the climate stuff is going to force us to rethink how we build our cities. I think three hundred years will be enough time to reshape parts of the cities and reclaim parks as parks and open spaces and things like that. But it's going to take that much time for us to, sort of, be beaten down by destruction. You know, it's sort of this thing where I can't imagine learning the lesson the first five times. But I think three hundred years will have sort of restructured the city, so it will be more like almost a living thing, where there's more green space. There's more fluidity between it. Maybe there's little pockets of—instead of just having Center City and West Philly, maybe there's more like pockets of like, I don't know, little miniature cities almost within it or something. I don't know.

EARDLEY-PRYOR: So the neighborhoods sense of Philly has grown. They're almost their own little cities.

GARBER: Yeah, I think so.

EARDLEY-PRYOR: Community is a very important thing in your world. What is the social life like in three hundred years in Philadelphia? Are people living with families all in one building, or is it still individual single-family residences?

GARBER: I think we'll move—well, in Philly it's hard because I still—in three hundred years… I guess, maybe, we won't have the same homes anymore. You'd have to tear down a huge chunk of the city to get there, but I guess I do think, yeah, we'll move into these buildings that have a bunch of people in them, and a bunch of communal needs in them. And I think that will be good and bad, probably. I think they somewhat segregate communities more. You can't

just—you don't walk out on your street as much. You just like—my little sister sort of lives in one of these in Atlanta. And she just like—she goes in and out of her building, and half of what she needs is there. So I think that will happen at some point. And whether it's the whole city or just a good chunk of it, I think we'll see more of those. They sort of make more sense. But…

EARDLEY-PRYOR: Three hundred years in the future, how are people moving around transit-wise?

GARBER: Well, I think we'll see people move out of their—I think in three hundred years, if you think about mostly what you transport yourself for, I think if the city changes enough, mostly what you'll end up needing to transport yourself for is your job. And I think if you take the tele-working thing to the extreme, you start to see people not needing to go anywhere for their job. Now you need to go sometimes to meet in person, but I think it will become holograms or whatever. There will just be—or virtual interfaces. I mean, if you just see what's happened. We'll get to this point that, at least for a lot of jobs, we won't need to do it.

I think we'll be heavily roboticized. I think even in one hundred twenty-five years, we'll be heavily robotocized. So the jobs where you have to actually physically build something will be taken care of heavily by robots that are managed by other people. So then, I think, you have to travel less. And then it works well if you have stuff in your community that you don't have to go anywhere. I think the question for the city becomes, "Do those communities actually have some heterogeneity to them, that they then represent the whole community?" I think you'll see, therefore, less transportation, **<T: 50 min>** and probably more public transit. Or like the car thing, where no one owns a car, or whatever. Maybe personal flying cars, I don't know.

But I think that—if I just think about it, those two features will shift, over the next three hundred years, the need to travel on a daily basis. I think most of us, we travel to work. And every once in a while, once a week, to go grocery shopping. And even then it's just like—less transportation you need.

EARDLEY-PRYOR: Is there anything else about either your visions of the future or your sense of Philadelphia that you want to share?

GARBER: I don't think so.

EARDLEY-PRYOR: Thank you so much for taking time today.

GARBER: Of course, this was awesome.

[END OF AUDIO, FILE 1.2]

[END OF INTERVIEW]