

Oral History Interview Transcript

Course Title: Energy in World Civilizations

Institution: University of Chicago

Student Name: Domingo A. Cortinez

Interview Date: March 1, 2023

Prompt: what conclusions emerge from the interview about the place(s) and time period you discussed. How do these findings illuminate—or challenge—one or more key themes of the course?

Transcript:

Domingo A: Hi, this is Domingo A. Cortinez, and I'll be interviewing my father Domingo E. Cortinez for my class energy in world civilizations to better understand the energy dynamics and possible energy changes between my father's upbringing in Argentina to his current energy use in Miami, Florida. Before we start, is it okay if I record this?

Domingo E: Yes.

Domingo A: Perfect. So my first question is, what differences are there from how I or your other children use energy versus how you used energy growing up in Argentina?

Domingo E: In Argentina, if I compare the energy when I grew up, to where my mother grew up, it is completely different to how we use electricity. We would heat up the house using wood on the fireplace. And then to heat up the water, we use wood to heat our water to take a shower. We had electricity then but it was not enough to put hot water in the shower or not enough to put a lot of light into the house. If I compare with my mom, my mom, she did have some electricity. But then she studied and went to school with a candle. They used a candle to read, a candle to write or to do homework during the night time.

Domingo A: Yeah. That actually touched on one of my other questions, which was how was energy use different from your generation that you had growing up in Argentina versus that of your parents? And then I also wanted to ask about the earthquake of 1944, which particularly affected my grandparent's generation and how that might have changed energy use in Argentina.

Domingo E: The earthquake in 1944 was not a good time. But it completely transformed electricity in San Juan. At that point everything was mostly without electricity. After the earthquake, after that damage, in every single house they start putting electricity into the houses. All the construction was completely different. They came from a very construction fashion, using what they call adobe. This is like a brick, but it's not cooked. After the earthquake, the construction was more anti-seismic and they moved away from adobe. Before the earthquake, they used charcoal to cook and to heat up water to clean the clothes. I grew up heating up water to shower until the age of 13, using wood from the trees in my backyard, the damasco tree. Also when they [my grandparents] went to the school, they used little heaters, el "braserito," so everybody went with heaters with the charcoal to heat up their legs at school. After 1944, they started using more electrical equipment like an electric stove and refrigerators. That was electric but before that all the refrigerators used kerosene. After the earthquake is when they start working and looking for different sources to generate electricity. All the electricity that came to San Juan before the earthquake was generated down south in Neuquen, where there are several diques or dams. All the electricity was going through a wire from high tension all the way from the south came into one point, into Mendoza, and after that some point they started making some dams in San Juan to generate electricity. Then they were able to have more access to the electrical energy.

Domingo A: Yeah, thank you. I also wanted to ask about how energy is different from your energy use in Miami versus in Argentina. And then do you think that your energy use has actually increased after moving to the United States as in do you think you're using energy more often now?

Domingo E: When I came to this state [Florida], the United States had a lot of electricity. They also wasted a lot of electricity on the houses, they have different lights that they don't need. They have all kinds of equipment that are electrical, even though they have a lot of outside lighting or park lighting. Many different areas that they eliminated. But during the time that there has been a lot of construction, and energy efficiency is more required by the government now, where they require that in the houses they require what they call the energy efficiency analysis where they analyze what is the percentage of energy savings behind the construction of the house. If you compare that with the construction in Argentina up to today, they don't do those kinds of analysis but here in this state [Florida] it's very important because if you do that you use less energy to generate AC for example. Here in Florida, where the problem that we have is to save the heat inside, they push us to use very insulating material even on the glasses on the door. When we put the glass, we use what they call a low UV light glass that prevents heating by light coming through the house. That means the heat stays outside and is not coming into the house.

Domingo A: Yeah, you touched on a question I was going to ask. But just for some context to the above answer, my dad is a contractor in the United States so he's worked in the construction field for some time. I wanted to ask if there have been any changing regulations or laws that have impacted how you're building specifically to improve energy efficiency in the household? And then how would that differ from construction in Argentina? You talked about this a little bit but could you speak about it more?

Domingo E: Recently, for example, on the lights before we used to have one wire going to each of the lights around the house. But right now, due to new technology, what we do is we run a low voltage wire, like a 12 voltage one, instead of a high-voltage one that means we save not only electricity, but we also save money on the materials because it's less expensive to run a wire that is a low voltage versus run a wire that is high voltage. On top of that, more or all of the municipalities are requiring energy analysis to the maximum and they're increasing the levels of the wall insulation. Instead of using drywall to be half an inch, now they require a drywall three quarters of an inch. And if you put together all those calculations, the degree that you get for an energy saving is crazy, it's unbelievable. An air conditioning unit I would put in today is also twice as efficient, meaning it saves twice as much energy as the AC units I used to put in.

Domingo A: That's amazing to hear. More on the household level. I'd love to ask how energy changed in Argentina particularly at the household level. So for example, how has energy changes in Argentina changed the amount or quality of household work that you had to do? For example, did Pepi [my grandmother] have to do more work or less work as electricity became more mainstream and what does this mean for household work in general?

Domingo E: If you compare the household work of my mom, myself, or even you guys [referring to his kids] when you go to Argentina now, the amount of work we do thanks to energy is much less work for the household. If I had to guess, my mom used to work double that I was supposed to be working and you

guys [his kids] probably work 1/3 or even less than that. That's the reality of today's work in Argentina and the US.

Domingo A: That's really interesting to hear. Now switching more into the contextual background for Argentina. Argentina went through a military dictatorship during the years 1976 to 1982, which were times when my dad was growing up. I wanted to ask how the experiences of that dictatorship or just political regimes in general in Argentina have changed energy in the country or how it individually changed your energy use?

Domingo E: When the military took control of the country, what they tried to do was give more security to the Argentinian population. This meant that they spent more money to generate better energy. But the purpose of the military when they took over was more towards security and to remove "montoneros" that were doing wrong things.

Domingo A: Argentina, both during and after the military dictatorship, faced rampant inflation during the 70s, 80s, and 90s. So I was wondering how that changed energy in Argentina?

Domingo E: Those were very difficult times because the government, they tried to do things but Argentina just didn't have the means to do it. Due to bad governments, they weren't putting money towards energy. They tried to do more political campaigns where they spent the money on that and not on the improvement of infrastructure. They did some but not enough.

Domingo A: Interesting. So the province of San Juan, the province where my dad grew up in Argentina, gets a large part of their energy from the "dique" or dam of Ullum which was built in the 70s while you were there. How has the construction of the "dique" changed energy use in San Juan and can you speak about the changes it's facing today?

Domingo E: The "dique" is a great source of energy because it's clean in one aspect. On the other hand, the "dique" was also created in a period to have a good time. The "dique" created a lake in the dry province of San Juan where lots of people go now, including tourists to spend the warmer months there. In the long run, the "dique" has created some kind of changes on the weather due to more evaporation and creates more rain into the area.

Domingo A: Yeah, like you mentioned that "dique" is now a tourist attraction with a new community of vacation homes being built around it. What do you think about the stability of large energy developments like dams and their potential to not only change the energy usage but also change the economy as a whole in that it has generated tourism.

Domingo E: Okay, right now they are constructing two more dams in the same river. One is under construction already. One of those is almost ready and finished, they're trying to fill it up with water. They believe that this year, there will be enough rainfall and snowfall to fill the dam. At some point, San Juan will be not a net consumer of energy but a producer of clean energy in the future. Also those dams will generate more tourist areas and will bring more money to the province. But sometimes, corrupt governments move the money towards other purposes, they do *malversion de fondos*.

Domingo A: So Argentina currently receives around 61% of its energy from natural gas and coal 21% from hydropower 9% from renewables and 7% from nuclear energy. What would you like the energy to look like in the future?

Domingo E: In the future, the cleaner the better. San Juan is working on solar electricity. They have created several big areas where there is generally sun's energy and there is an effort to withdraw more from sources that are clean. There was a plan to put a nuclear reactor but the population rejected it.

Domingo A: So those were all the questions I had that did want to give you an opportunity to speak about anything that I haven't had the opportunity to ask you about that you think might be useful for an energy project.

Domingo E: I'm sorry, can you repeat that?

Domingo A: If there's anything else that you might want to speak about about energy that might be helpful for my research?

Domingo E: So right now we are working on the reconstruction of my family house down in Argentina that had three generations at one point living under one roof. It burned down after thieves got in and lit it on fire. But we're reconstructing it now. I requested the architect to do an energy study that is done here in the states to try to save money by reducing the cost of cooling the house as well as heating the house because here in the state [Florida] the only problem that we have is the cooling of the house, but down there we do the cooling as well as the heating. If more construction was done doing this energy analysis, not necessarily more technology or money, you could improve energy efficiency a lot in Argentina.