

The Flow of Urban Life – a podcast by KONE – Transcript

Episode 5: How will our future cities change architecture?

Fernando Romero [00:00:03]

In essence, the cities will remain the same. However, the technology involved in the cities is going to be dramatically evolving, faster and faster as the time evolves. And this will make life completely different. But in essence, the cities are going to be the same things, but we will have much more present technology, much more robots solving our daily problems.

Denise Wall [00:00:32]

Wherever you are in the world, there's a good chance that you're one of the 4.4 billion people living in a city.

Sam Kingsley [00:00:38]

And even that number is set to grow massively by the middle of this century.

Denise Wall [00:00:43]

Join us on a journey to understand the changing way we live, work, learn and even play in cities.

Sam Kingsley [00:00:50]

We're going to explore how we can make sure that our urban environments serve all kinds of people at all stages of life, today and in the future.

Female announcer [00:01:01]

The next stop is the flow of urban life.

Sam Kingsley [00:01:08]

I'm Sam Kingsley.

Denise Wall [00:01:09]

And I'm Denise Wall.

Sam Kingsley [00:01:10]

Denise, if you had to choose, would you rather live in a really historic city like Rome or somewhere ultra-modern like The Line in Saudi Arabia, this new city they're building in the desert?

Denise Wall [00:01:22]

Oh, my goodness, there's no middle ground there, Sam. So, I guess I'd have to go for the Rome sort of scenario. But when we do talk about where we'd like to live in the city, we're not just talking about building new futuristic environments, are we?

Sam Kingsley [00:01:37]

No, no, we're absolutely not. And a lot of what we're doing when we're talking about building and creating this into the future is actually remodelling and repurposing and upgrading the buildings that we already have. Now, our guest today is Fernando Romero. He

joins us from Mexico, and he is one of the most exciting, in my opinion, architects around today. He's known for his futuristic designs even when he's working with historic sites. Fernando, hello and thank you for joining us.

Fernando Romero [00:02:04]

Thank you for welcoming me. It's a pleasure to be with you today.

Sam Kingsley [00:02:07]

Now, Fernando, you are the perfect person to have this discussion with us about imagining cities of the future because among the very many high-profile projects that you've worked on, there are airports, major museums, office towers – but you're also working on Mexico's Hyperloop project, and even a whole city on the side of a volcano in El Salvador that runs on Bitcoin. So it's fair to say that you probably spend quite a lot of time thinking about what the future looks like and how we're going to live. Do you have a project that you're working on, or that you've worked on, that for you, feels the most future-orientated?

Fernando Romero [00:02:54]

Let me share with you the experience of working on Bitcoin City for President Nayib Bukele from El Salvador. Let's take some of the principles of Bitcoin as part of the inspiration of how we develop the city. On the other hand, of course, you have beautiful inspirations of medieval cities where it's interesting to have a border, or limit, on the city, so we went back to the idea of beautiful cities like Rome in Italy that has beautiful walls that protect the city, and then we went to the idea of why don't we do a circular city? That already defines a perimeter, so we have a limited amount of land, and the limited amount of land, of course, has this metaphor with Bitcoin in terms of a limited amount of supply. You only have 20 million coins, and here we only have 20 million square kilometres, and basically, with that, we find the surface of the city next to a volcano.

And then we went to talk with other consultants: OK, what's the most efficient way to draw the city, to have the infrastructure laid out, to build the roads, what are the scales of the roads, what type of roads we want to build, which are the blocks you want to develop, where do you create densities, where do you reduce densities. And that's the concept that I find in these cities, basically. It's a 15-minute walkable city, where whoever arrives in different areas of the city will have at a walking distance enjoyable spaces, public spaces, and all the services you need to have an amazing life. We are also doing the airport for them. It has been an amazing experience.

Denise Wall [00:04:29]

Well, Fernando, thank you so much for walking us through that amazing-sounding project. And I think it would be great for us to think about what our ideas of a future city are like. And when you're not working for clients, what would your ideal city of the future look like?

Fernando Romero [00:04:47]

Well, it's a great question. I think in the depth of the soul of architecture that is the essence to build cities remains a solution to solve problems for humans. In essence, the cities will remain the same. However, the technology involved in the cities is going to be dramatically evolving faster and faster. And this will make life completely different. We will have much

more present technology, much more robots solving our daily problems. So, we are going to live surrounded by robots, basically, it's the cafes and the basic jobs are going to be taken by robots. I really do believe that's a reality that is coming really, really soon. Of course, AI is both an amazing tool, but it's also an amazing risk. So, I think we are in a moment in time that is super exciting, but at the same time, probably one of the most risky moments in civilization.

Sam Kingsley [00:05:45]

I think that's such an important point because you're talking about the Bitcoin City as well that, you know, you can have all of these ingredients that a city needs, but how do you create that sense of life and community and that spirit that is also so important to making a city a decent place to live.

Fernando Romero [00:06:05]

In this case, President Bukele really knows that's a fundamental question. And it's the same question that was asked by the Brazilian president when they have done Brasilia. So, you need to have the density, and you need to have a purpose. And when you have a working city where you have governmental employees, when you have already at the beginning a density, that's the beginning of how you can start a society.

But one of the biggest challenges for new cities is: how can you actually create something that people would like to live in, right? I think the advantages of a Bitcoin City is that the place is extraordinarily beautiful, full of green trees, and it will be a low-density city. Moving the ministries there will be the beginning of creating a beautiful environment to work. But, of course, that's just the beginning, right?

Denise Wall [00:06:56]

I think you raise a great point, Fernando, which is that sometimes, when we design cities, whether it be for the present day or for the future, we are essentially taking a gamble on an idea that we have, and it may not always work out. And what I'd like to ask you is, if you think about your earliest work, presumably perhaps designing buildings that still stand today, of course, and in light of how the world has changed since then, what would you say that you've got right in your designs and are there any areas where you think you might have missed the mark?

Fernando Romero [00:07:31]

I love this sentence of one of the most important photographers of modernity, Henri Cartier-Bresson, who was working in the war with Magnum. He said photography has changed very little since the beginning, it has only changed in the technical aspects. And I think this perfectly applies to architecture. It has changed very little because it's still produced for humans, it has only changed the technical aspects, meaning in the technology that you can use. But it's still crazy to believe that we're still building with concrete and casting concrete as Perret was doing in Paris in 1913. So, 110 years later, we're still casting concrete in the same way.

So, technology has evolved but very slowly, architecture is from all the design, the ones that evolve slower because of the resources involved and the complexity involved and the

permits involved and because it's permanent. In regards of your question, I think I got wrong the idea that some of the essential aspects of architecture remain so present. Like, great architecture has a capacity to touch you and touch your soul. When you visit The Pantheon in Rome, it has something, it has this metaphysical dimension that touches you and captures your attention and touches your soul. And I think great architecture has that capacity. So, if I have achieved that in any building, I really think that will be a success.

Sam Kingsley [00:09:07]

When you're looking towards the future, are there certain sort of fundamental things for you that you feel every building or every space must have in order to make it something that's going to last into the future?

Fernando Romero [00:09:23]

No, I think part of my life has been thinking that you should not try to define something in advance. You should try to see that architecture is translated in a specific context, and each context is so different. So, I don't have a pre-conceptualized idea of projects. I always come to a project completely open, and that's why our projects don't look alike. And that's good, and a challenge also. Most of the very commercial architects, they have their DNA very established, and all the projects look the same, like for example Calatrava, it's a clear DNA through all his projects.

In our case, that is not the way we work. We work thinking that each context has its own history, its own climate, its own information, each program is different. We treat each project as something unique, and that's the reason why all our projects are so different.

Sam Kingsley [00:10:20]

Do you design that with adaptability in mind, thinking that as people's needs might change then the building can be sort of adapted to fit that change?

Fernando Romero [00:10:31]

Yes, I think that's a beautiful question. In the case of Mexico City Airport precisely that was part of the reason why we won the competition against another eight teams. We thought that the technology on aviation will change a lot in the coming decades. Coming to that, we thought that it's interesting to do a structure that is singular, extraordinary enough with big spans to enable you to have minimum presence on the structure in the floor plan.

So, when you have 180 meters free of columns, then you can easily change and adapt the layout of all the retail area. Why? Because it would change a lot – because the way in which we are shopping is changing, because the way in which we are spending time is going to change, the way in which the restaurants are operating is changing, so the more flexibility you can give to the project, the better, right? And the client loves that, so I think that was highly one of the biggest assets of the design we presented in Mexico City airport.

Denise Wall [00:11:30]

Now, I'd like to sort of change pace a little bit to talk about some of the challenges that we're facing today that likely might hang over into our immediate future at least. We are dealing in many parts of the world with climate change, and the impact that that's having on

our cities, but outside of that we're also looking at problems like inequality and poverty, and what I'm wondering is how far can design and the way we build urban environments help ease some of these problems. Is there any way in which we can possibly, let's say, design our way out of some of these problems?

Fernando Romero [00:12:12]

I can respond from a romantic, idealistic way that through design we need to solve all the problems that we are facing in civilization, that we need to find more sustainable solutions. But on the other hand, the reality is that the problems that we are facing are bigger than the solutions we are presenting, right? In terms of immigration, when you see people still dying between Africa and Spain in the boats, when you see people dying in the deserts of Mexico and the United States trying to cross the border to have a better quality of life, then you realize that we are failing as humans, we are failing to solve some of the most basic problems like human rights, health and security.

We are failing on that, so I believe that we need to be as efficient as possible and try to solve some of the problems that we have. That we need to find the best solutions in the most efficient way, try to put them into practice and try to help as much people as possible in the shortest amount of time.

Denise Wall [00:13:19]

On a related note, sometimes major projects can be quite controversial in a community, depending on who has got the power to make decisions. And this speaks to the question of inequality, for example. So, you may have projects that are being backed by vested interests, by big corporations, by big developers, and you may have small voices in the community who may be opposed to a project for one reason or the other. Do you have any ideas as to how to get more voices on board so that there's broad-based support for big projects, especially in cases where there are communities that will be directly impacted by major projects?

Fernando Romero [00:14:09]

A fundamental DNA of architecture is that it's permanent, and the fact that it's permanent has imposed on architecture that you have a lot of approvals, different approval processes. So, one through the community they went through, for example, environmental, through security, through fire departments, etc. So, all those approvals are basically the filters to guarantee that we are building something that will work and last and should be built. In some places, those approvals are so complicated and so restricted that what you can build is only the same as what has been built for centuries.

So, it's very restricted and sometimes very limited to use new technologies and not necessarily a good thing. It can be a very negative thing. In other environments, more open societies that are more developed, for example the Nordic countries, they are more open to have a lot of approvals, but also open to bringing new technologies, new technologies and they open groups and they discuss the projects and that's why they're building the best architecture in the world today. So, I believe in that kind of good balance between open to approval and communities and about a process that indeed reassures and confirms that

architecture is permanent. And that's the importance because it's precisely permanent. It needs to be discussed whether it's the best for a place.

I really believe that architecture can be a tool to develop a place. So for example, a place like Havana, Cuba, in the Caribbean that has been under a dictatorship for decades, that has completely stopped the economy, right? If you are able to bring investment, if you are able to build an amazing new project that boosts tourism, that tourism will help the people because it will create employment and development. I think that's one of the parts that I am more interested in architecture is how you can actually bring people out of poverty by using architecture for developing an environment.

Sam Kingsley [00:16:27]

We've been talking about building iconic new buildings, but I want to ask you about how much value you place on repurposing existing buildings and modernizing buildings that already exist. They may be heritage buildings, but they may not be.

Fernando Romero [00:16:43]

I firmly believe that there are some structures that you don't need to demolish. You can transform or reuse, or in the case that they are an extraordinary piece of architecture, to keep them as part of our history of architecture. You can actually see the history of civilization through slides of the buildings, because each building tells you something about where we were as a civilization.

When you see the Eiffel Tower, OK, that's the moment where steel was being developed in new ways, they were starting to understand how to make taller structures for industry purposes, but then this brilliant man came to do a symbol that supposedly was going to be temporary and became now the symbol of the country and boosted the tourism forever for that country, right? And it's one of the most beautiful structures on the planet ever raised. And it just represents the development of humans in that precise time.

Sam Kingsley [00:17:40]

And do you also think about this from a sort of sustainability point of view about whether, you know, if you have an old building, whether it's more sort of environmentally friendly instead of knocking it down and starting again to repurpose as an existing building?

Fernando Romero [00:17:59]

Yes, yes, for example, Hotel Boca Chica was a hotel from the 30s, 40s in Acapulco, and we just restored it. And it's the same structure, we have just simply done a couple of things to make the operation of the hotel more efficient. But I do believe that there are some places in the planet where you don't want to destroy. If it's a poor place and the structure is already there, you need to think how to use that structure and make the most of it. So, I truly believe that also from the sustainable point of view, sometimes the most efficient, resources-wise and sustainable-wise, is to reuse the existing structure.

Denise Wall [00:18:40]

Is there a way to find a balance between that sort of human-centered charm that you're talking about in sort of the older cities in Europe, but also making use of the technological

breakthroughs that we see every day? So, we talked earlier about a role for AI and different kinds of cutting-edge technologies. Is there a way to balance that, and do you see great examples of that around us today?

Fernando Romero [00:19:05]

Yeah, it's not about money. I think it's about creativity, right? So, when you see, for example, the Middle East trying to do those experiments with a lot of money, that's not necessarily successful. But when you see how Europe's best places, especially in Nordic countries, they are slowly adapting the technology to have a more efficient future. I think that's probably the best laboratory in the planet, probably the Nordic countries or even Japan, places where societies are using technology without sacrificing humanity.

Sam Kingsley [00:19:40]

And yeah, I mean just to go from that to sort of talk to the other extreme, you are working on Mexico's Hyperloop, which is this futuristic transport system that could propel people at 700 miles an hour through these tubes to make a distance of, like, a six-hour trip, cut down to 45 minutes. That kind of extremely forward-looking science fiction-sounding thing is actually being looked at in quite a few cities and countries around the world.

Fernando Romero [00:20:16]

The idea of Hyperloop basically is a company that launched a competition to see where in the planet were the best places to use this technology. And I applied. And among 2,000 teams they selected, I think, something like 16 corridors, we're one of them. And basically, it's suggested the idea that because between Mexico City, León, Guadalajara, Querétaro, we have four big cities connected with what we call the Bajío. That was one of the best places in the planet to use this technology.

The technology is already existing in the Maglev because it's basically how you move mass with magnetic fields and it already exists in the trend of connection to the city. However, Hyperloop wanted to bring it one step further, that was to reduce friction with the wind to put it inside a tube. It makes sense for the environment, it gives more flexibility, but the project is still in development and the technology is still in development, so it's more likely that it will be successful first for cargo than for humans, due to all the security that you need to go through thousands of approvals just for putting humans inside.

Denise Wall [00:21:35]

Do you see when we talk about the fact that we can have, like, a Hyperloop design for mass transit connection, for intercity transportation, for example, while people use other forms of transportation, sustainable forms of transportation like micro-mobility solutions like your e-bikes and your scooters and so on for getting those 15-minute distances close to your home. Do you see urban designers as having a role to play in sort of driving sustainable solutions to the way we live?

Fernando Romero [00:22:09]

Yeah, one of the things in which technology will have a faster impact will be in the way we move. And as you just mentioned, scooters, for example. And also, electric mono-transportation will be more developed, more efficient, more present, and urban planners

will need to think in the best way to develop infrastructure to use this technology in the most efficient way within cities, right?

Sam Kingsley [00:22:36]

And just before we finish, Fernando, is there a kind of project or something that you would want to work on?

Fernando Romero [00:22:45]

Well, they asked me that question like 10 years ago, and I said, well, an airport: to design an airport would be a dream. Like a miracle, some years later, I got the airport. I still think that a cathedral would be quite beautiful and not necessarily for one religion or another, but an ecumenical spiritual space where people can have nothing more than light and space will be something amazing to design, and I still hope to do that one day. Every single project has its own challenges, and I am already very blessed to be working in the projects that I'm working now. I'm still happy to wake up every day and keep working, so I feel very blessed.

Sam Kingsley [00:23:35]

That's fantastic, and very exciting for us. We will be looking out for your cathedral at some point in the future.

Fernando Romero [00:23:42]

I hope one day I can invite you and show it to you.

Denise Wall [00:23:46]

The Flow of Urban Life is a podcast that looks at how we live and move in urban landscapes.

Sam Kingsley [00:23:52]

We sit down with people at the forefront of making the world's cities better and more sustainable places to live.

Denise Wall [00:23:58]

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Sam Kingsley [00:24:06]

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