

## Future city: resilient by data, adoptive by design

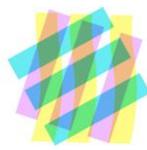
Erez Ella

Hi everyone. My name is Erez Ella. I'm speaking today, tonight from Tel Aviv, Israel. I was born in Jerusalem 50 years ago, since then, studied in Tel Aviv University and most of my junior years I did in AMO in Rotterdam, then in New York. In New York I also helped in establishing Rex Architecture together with Joshua Prince Ramus. In 2008, I moved back to Tel Aviv and established HQ Architects, and since then I'm also teaching in the Bezalel Academy of Art in the city of Jerusalem. So, in a way I did a full circle from Jerusalem all the way back, more or less around the globe, at least the western sphere of the world.

Here at HQ, we are lucky to do complex projects from various types and typologies, scales and typologies. We are working with municipalities, the private sector, doing from very small to very big, from housing all the way to infrastructure and masterplans. We also feel very lucky that we have the chance to work during these times, when revolution is happening in our mind, technology is changing everything. It is also changing the city. The backbone of traditional city keeps changing in front of our eyes. The economy, mobility, the way we live, the way we move in the city, the social aspects of the city are completely changing because of technology. This is for us, a really interesting time. It gives us the opportunity to seek how architects can continually influence in the era of information. And for that we kind of have a saying here, and that is something that leads us quite a lot is, we put our faith in data. We believe that we should collect, seek, look after, analyze and find data. And this is maybe today, the best tool architects can have in order to suggest new things.

Now before I'm gonna talk about the pandemic, COVID, health and the city, I want to mention one thing, or two things about data, that we kind of, tend to forget. Data can be used in two main ways, if I may say. One is to look for data to understand the current situation, for observation, for research, to see what's happening today and sometimes it can be used for different things, which is to design and create solutions. I think that most of the time, people look at data for the latter, for how it can create solutions. This is of course very interesting, and we will talk a lot about it later but I think we're looking also to study and understand the current situation or the existing urban situation by analyzing existing data. This kind of allows us to get a deeper look into what's actually happening. We can collect data from different places, not only the physical ones. We can understand social conditions, we can understand economic conditions, trends, mobility and other things and aspects of the city that sometimes can be overlooked.

Going back to our main subject tonight—post-pandemic city—I want to mention one thing that perhaps you already know. Tel Aviv and Israel, in general, is, I think, one of the first countries that came out of the pandemic crisis. Actually here, we don't feel it at all except for the fact that maybe we cannot fly around the world as we would like to, and hopefully it will remain like that. I'll just give a little bit of perspective about if and how the city changes. So the first thing I'd like to mention is that in my perspective, COVID did not change the course of history or change the way we would live. It just accelerated some processes. It's accelerated the way commerce works in the city. In my mind, small shops or stores were doomed before the pandemic, and we see it now happening all around us. It's accelerated the work and employment models. It changed...



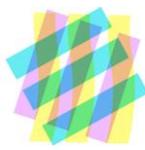
we see now people walking from home. It's something that already happened before. Our employees are demanding models for hiring and working for us before the pandemic and after the pandemic, we see that a bit stronger. It also accelerated some kind of need for communal, community, social resiliency, if you like, that needs to happen in order to maintain the fabric of the society of how we live together.

So, a lot of things changed, but in perspective, I believe that they did not change in a way that we were supposed to be surprised out of it. Having said that, it doesn't mean that the pandemic did not change the architecture or urban planning. We can see that our clients for buildings start to ask themselves different questions that before, they did not ask. They ask us how social spaces can help the work environment, if it's an office building. They ask us how they can create outdoor spaces for either apartment or office spaces. We see that even in health care and in places we designed like the Shiba Hospital. We have to envision its masterplan for the next 20 or 30 years, they started to ask how we can create places that, on the one hand, can be private for the patients, but at the same time, with outdoor qualities of greenery, with places of fresh air, not necessarily air conditioned, and so on and so forth.

For us architects, it's actually great because this is the moment that we can start to envision and suggest things that a maybe couple of years ago, were overlooked because of economy. So now we feel there is an opportunity, a moment that we can put our foot in the door, if you like. On the one hand we have the developer —kind of developer, or private market or capital— asking us what we can do, what are the next steps that we should look at. At the same time, we as architects already understand that we need to abound this term of masterplan, this big thing that we know what will be the first step in designing and what will be the last step in designing. We understand that we cannot know everything, we cannot anticipate everything, and with this kind of moment, we need to look and see how we act.

We can see also two things that happened here that I want to point out. One is our realization that speed is an essence. It's a big issue for all of us. Maybe 40 or 50 years ago we could have started a design and then we finish it and then we build the building or the neighborhood. The society pretty much remained the same. Today, it's not like that. We are designing when we start the project until we finish the programming or concept design, reality around us changes. And again, COVID and pandemic suggest that as well. This is one thing, and we need to, in a way, try to suggest ways to deal with that. At the same time, we also understand that no matter what we will need to do, we have to suggest resiliency. Resiliency, in many aspects of the word, is ecological, of course. We see the way they are changing in front of our eyes: every year it becomes hotter; the phenomena that are happening... But also resiliency of the community, of our life, of how we see our families, of how we consume our cultural events, how we consume our food, how we grow food... So there are many ways that we need to look at that and try to deal with it.

So i would like to give maybe two examples of projects that show you how we can handle this kind of complex situation that we are living in. The first one would be the Shiba Hospital project. It's a project for one of the top ten, I think it's ranked 9th in the world in terms of quality of hospital. And the hospital is turning quite old. It used to be outside of the city around agricultural fields, non-urban at all. And since the city, the metropolis grew out, at the moment, it's centered in the middle of a new neighborhood. The hospital, as an entity, decided to change its mode of operatus. Instead of being in an enclosed environment for fixing people, or fixing health of people, they try to become a city of health —some kind of urban fabric where people can get their well-being, if you like. With that, they came to us and asked us to help them envision the



three-dimensionality of the hospital, triple its size for 1.5 M square meters. Of course, it's almost impossible to imagine the size of the square meters that we will need to build on—they will build in the next forty years. We need also to add to that the pandemic lessons that they learned. Maybe the main one is that they don't know what they would need to design in the next ten years. They don't know if there will be COVID number 2, COVID-19 number 2, or it will be something else that they need to deal with. We also need to add to that the unique conditions in Israel, sadly, I must say, sometimes we are facing conflicts and security issues that the hospital itself needs to react to give service to, in terms of wars and other armed conflicts. Or in the day to day, be a little more secure than other infrastructure buildings in the city.

So once we started to look at this problem, we realized that the hospital itself is monitored quite a lot. They have a lot of information that they usually use for being a little bit more efficient in terms of operation—how many staff they need, how they can move around, food or meals or laundry and so on. And we took that data and we started to look at it in different ways and what we realized is that we can divide the whole movement of people and —let's call it goods— medicine, laundry, food and so on to four different system of movements. So the conclusion out of the data collection was that what we need to design is not the building, but actually the infrastructure of all movement within the hospital and this suggests four different layers of movement for different types of circulation. One of it is completely urban, connected to the new residence around the hospital, walkable, flat, pedestrian-oriented, shadowed and so on. So the data and the information we collect is used to understand this situation and have a—hopefully I would say—smart observation about the conditions. So its just a completely unique strategy of how to develop the hospital in the future.

The second example I would like to give is about a masterplan we are doing for the south of Tel Aviv. It's the last industrial area within Tel Aviv. Economy pushed back, pushed out, most of the heavy and small industry out of the city. The industry moved out. A lot of the creative class of the city also cannot afford being there, staying in the city. We could see it even with our employees, how they have to move out of the city because they cannot afford the rent that is raising up. Over there we suggested... again, we analyzed, we collected quite a lot of data actually from the city, public data. And we realized that there is a very interesting ecosystem of commercial connections between the different industries and the small workshops that exist over there. So there is a guitar —electric guitar— manufacturer that buys its wood for the guitars from a supplier a couple of blocks from it, and probably the designer that designed those guitars are a couple of blocks the other way around. And we also realized that once we take out one of those entities, and if they will need to move out of the neighborhood, the whole three or four businesses and industries that relies on one of those existing entities will have to move with it. So it will kill a whole branch of businesses that can be in the city.

On another hand, we also realized that we cannot force our carpenter —he's maybe 70 years old, still does and hopefully can work for several more years— but at one moment he will have to stop work and not force another carpenter to move in. So we suggest that, instead of a masterplan, a digital ecosystem that will show the municipality that gives permits and new urban plans to be built in the neighborhood, a system that will show who relies on whom. Therefore, when there is a new building coming in, we suggest places that either builders can move to, or how to keep that building or this business while the whole block is being renovated. We suggested places that needs to be preserved as a space, not from an architecture point of view, or aesthetic point of view, but from a performance point of view. Either high ceilings for different industries, either large loading docks and so on and so forth. And what we're trying to do over



there and what's actually happening is that we are not trying to show how the whole area will look like but what we're trying to show is how the area will perform in the future and we found that extremely interesting as a place of resiliency or a place that would like to be resilient.

I would like to finish this short talk by summarizing the issue of data and architecture. I think that we all see how the tech companies are using data in a way that maybe sometimes even scares us. They took control of music, cinema, dating, images, photographs... all the industries that currently are online, we see they actually can anticipate what we would like to see, creating or controlling the way we are consuming culture information and obviously when we look at companies like Facebook or twitter, also form the way we think and our opinions on things. But architecture has a unique condition. Since we are a fragmentized industry, design and urban planning are not centralized in one place yet (I hope it will never be). We can, in a way, create or continue to create this infrastructure for ideas and infrastructure for society to meet, create and think independently and I think this is kind of the way we need to use data and information. And i will finish by referring to an Israeli singer, Nota Erez. She sings in one of her songs, "Bring back the noise", referring to the fact that she's asking everybody to continue to make noise in this silence algorithm that started to control our life.

Thank you very much for listening and goodbye.