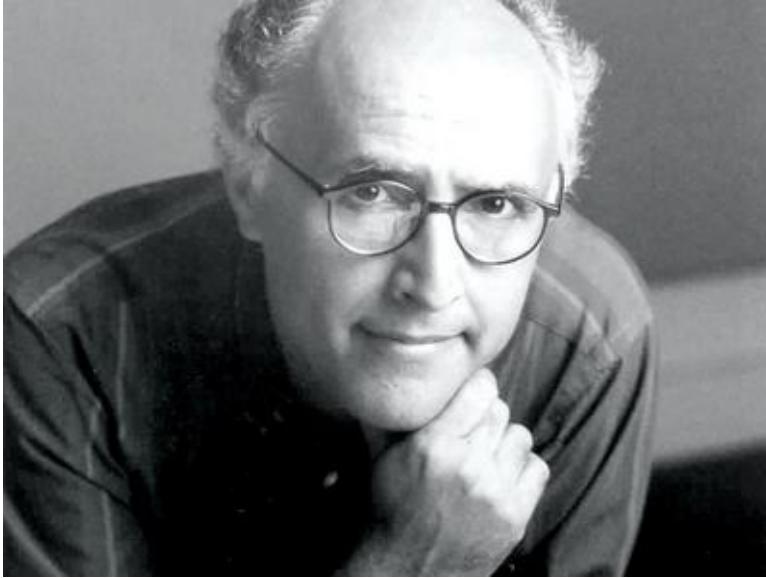# RT#6 "Affordable housing – high impacts"

Roundtable discussion (collaborative project of BERLOGOS and CAS) on affordable housing, its problems, impacts and difference of approaches all over the World.

Participants:

Avi Friedman, architect, co-founder the Affordable Homes Program, professor of architecture at McGill University (Montreal, Quebec, Canada), the recipient of several research awards (Progressive Architecture Research Award, the J.-Armand-Bombardier Prize for Technological Innovation, and the Manning Innovation Award of Distinction), author of many books and articles, a member of the Order of Architects of Quebec and the principal of Avi Friedman Consultants.

Diego Ramirez-Lovering, professor of architecture at Monash University in Melbourne, Deputy Dean, Monash Art Design and Architecture, Australia, co-founder of the Monash Urban Lab, award winning architectural practitioner and researcher.

Paulo Carneiro, architect, post Master Degree in sustainable development and earth architecture by CRAterre Institute, co-founder of CAS studio (Lisbon, Portugal).

Tatiana Afonina, art historian, orientalist, independent researcher, interviewer, the author of publications, a participant of International and All-Russian science conferences, editor-in-chief at BERLOGOS magazine, jury member of A'Design Award& Competition 2016-2017.

Tatiana Afonina: Today the theme of our discussion sounds like «Affordable housing – high impacts». And the first question is: Is there still an important relation between affordable housing and architecture practice as it was in a postwar time, in the XX century? How can they converge into a common point nowadays?

Avi Friedman: It seems to me that the recent winner of the Pritzker prize, Alejandro Aravena, is the best illustration of what you are asking about. Seems to me that work of Aravena in Chile demonstrates that you can do affordable housing but you can also do very innovative architecture, and you can win the most prestigious award for this work. So, I think that they're not mutually exclusive, meaning that you don't necessarily need to build affordable housing as a charity, it can be a beautiful architectural practice, and it can be very innovative.

Diego Ramirez-Lovering: I would have to agree. I suppose in some way there are many examples of housing that have been delivered that are affordable, and I'm going to show what that means at some point, but that is still beautiful, that maintains some sort of architectural integrity. And I suppose it's interesting that architects often seem to default to thinking about achieving affordability through making construction cheaper, and I think certainly that is one way, but certainly as I develop my career more, I increasingly see housing and therefore housing affordability as a kind of social or economic construct. Seems to me that architects would be very well served by starting to think of the context in which housing is delivered not just architectural context, but social and economic contexts, which ultimately really have an impact on affordability. I think, you know. I'm a big fan, Avi, of your work. I may say it (*smiling*).

Avi Friedman: Thank you!

Diego Ramirez-Lovering: I think that one of the reasons why Avi's works have been so innovative in this regard, a little bit like Aravena, is that it is not just engaging with issues of construction and affordable construction and materials, which, of course, we should absolutely go for, but also engaging with issues of financial structures and innovative ways of thinking about the home in wider social and economic frameworks.

Also, that was a start. I mean, I was just in fact looking at some of the works of Aravena, for example, his incremental housing, or housing that grows over time. Avi, what you've done is another example of the way in which affordability can be dealt beyond traditional thinking of very cheap construction such as the premise of mass housing. So, I guess that there are many different ways of thinking about affordability, and construction is not the only way.

Paulo Carneiro: First of all, thank you all for being here, it's a pleasure to be among Diego and Avi, two great thinkers on this subject. I think what Avi said it's really true, and we can also see that the subject of Venice Biennale of the last year was "social architecture". Even though I don't like very much the word "trend", but at least it's a good trend! It's important to talk about this and to

pass this information from us, architects, to people in general who usually are not very aware of this kind of subjects. I also agree with what Diego said. Not only physical context is important, but social and cultural too. It's fundamental to connect affordability with people that are going to use houses. If not, it will be only one more project/concept of architects and disconnected from people and society. So, I absolutely agree with both of you.

Tatiana Afonina: So, if we have a trend, if a social architecture is tending to be more common, let's say, why the design of "affordable housing" is still separated from other types of housing or construction? What are the limitations that turn affordable housing to identifiable?

Avi Friedman: Affordable housing by term or definition does not do service to the occupants. We stigmatize people based on their income. For the purpose of our discussion today, we can change it from affordable housing to innovative housing. Once you replace the terminology, and take out the economic aspect and introduce innovation, it is becoming a part of a different paradigm. No different, for example, form the need to create sustainable communities or considering solar energy. At present, we see affordable housing as an economic challenge. But, say, in the past few years we have many single people in different societies who do not want a large home or people who start their businesses for home. They all need other aspects in addition to have their costs of housing reduced. I think that if architects take it as an innovative challenge, they will be better off.

Diego Ramirez-Lovering: I think I try to start with stigma, a term. In some way, it's really a term that's used, primarily, impulsively. I suppose, since you go to the market place and to the real world, the term "low-cost" or "affordable" will have certain connotations which are not helpful, really. Because in some way an architect's job, I would argue, is always to make things affordable (*smiling*) for any client. I guess just the amount of money that they can spend on house is the difference, but in that sense, I would argue that housing affordability is a policy framework, it's not an architectural one. And it's dangerous to connect to it, in this sense, because it's always seen as somehow an inferior problem. It's something like word of a compromise, which I certainly don't believe in. So, yes, I agree.

Paulo Carneiro: What you said is very interesting. In my grandparents' time to have a small house was a sign of being poor, but talking to friends or other people of my generation now there is a growing movement of the tiny house and working self-construction, probably due to a precarious global economy. And I also think that what you have said, Diego, is very important, because we, architects, have to enter in this site along with this movement, and we must design towards affordably, but with good quality. So, of course, being affordable is one of the concepts that we don't talk about, but we usually think of, as one of the main concepts in designing. I think, almost all architects think of that. So, yes, I agree with both of you, of course, and what Avi said is also very inspiring. We should see this process with different positive possibilities and not as again a stigma in a design process.

Tatiana Afonina: Can you give an example, please, of affordable housing in your countries: Canada, Australia, and Portugal? Are housings more affordable in economical or architectural meaning, and how it's reflected on its quality?

Avi Friedman: In Scandinavian countries, the government is more interventionist. I recently have been to Finland and visited a small town name of Porvoo. They needed to build entry-level housing, and it was introduced as a national competition. In other words, many countries recognized that if they are to produce something bad, the clientele will remain in a horrible vicious cycle, and will be continuously stigmatized, believing psychologically that they're cast among the poor. These nations decided to break this vicious cycle by introducing housing that at times, and they are even more beautiful than regular market homes, letting people gain their own self-confidence, and use the home as a stepping stone to buying another one. This type of notion needs to be the cardinal rule. That transition is often difficult, because as was mentioned before by Diego, it is a cultural change. And it's change in habit, but I believe that Scandinavian countries regard housing as a mean to put low income people on the same footing as the rest of the population.

Affordable housing in Porvoo, Finland. Photo: Avi Friedman

Diego Ramirez-Lovering: Yeah, it's a very interesting question, I suppose. On the one hand, yes, of course, I think there are these definitions. Affordable housing here, in Australia, for example, is really defined by being able to afford based on income: someone spending up to 30% of their income, in the part of the lower income quartile of population, it's very much a kind of economic definition. The housing that is increasingly delivered, like maybe in United States and Canada, is not public housing, but it's much more about subsidizing the private market to delivering affordable housing, and it's very much a financial game, in which there is little control and its quality is often very poor. So, in Australia, that cheapest housing is on the city fringe, in dormitory suburbs where there are other difficult problems such as a lack of services. This housing is typically built on small parcels of land, detached housing in areas that do not offer many services or employment options, I've been doing some work in Southeast Asia, particularly, in Indonesia, the last years which brings this into perspective, may I say (*laughing*). On the one hand, we talk about a certain level of quality in Scandinavia, I have heard so many from Avi's examples and others, and of course they're wonderful, they're certainly worth it, but they are also very small countries, first world countries. And in Indonesia, India and China if you think about rise of the middle class, and these masses of people that are coming through, wanting larger homes, they want to be able to have the same that people have in first world countries. So, I suppose, it's a very interesting question about how we're thinking about these issues in a global sense rather thinking in often a very local sense of our cities. And I would say in Australia really affordability is a challenge, but it's not nearly than that of Indonesia or some of our southern neighbors or even Latin America. And particularly when you start to engage in these contexts you start to think about the way which architects respond to these questions. I would argue that in some sense when doing work in slums, for example, creative solutions are required, which are not only an architectural or formal or even about construction, it's much more an economic question, much more a social question. And, of course, we can engage through architectural questions, but it's a mistake to think that architecture can solve problems of affordability. I think that Avi' work has shown that thinking about buildings or houses in social and economic frameworks will definitely improve the delivery. But I underline, buildings on their own can't solve these problems of affordability.

Avi Friedman: Something that you said is very true. It is hard to lump the entire world in the same loop; affordable housing will be needed to house poor population in the Philippines. As always, it's not the same as buying a house in Copenhagen at all.

Paulo Carneiro: Absolutely. After all there are levels of intervention. I think that, for example, here in Europe (with the cultural differences and adaptations) the Scandinavian model is followed. Here in Portugal in the 1970's and 1980's, after the social revolution, there was a massive program (with different implementations) of affordable housing for the disadvantaged people and people coming from the overseas (colonies) and nobody wanted to live in that type of housing because of the stigma. But there were also very well-designed houses through the SAAL process (Nuno Portas) and implemented, for example, by Álvaro Siza or Souto Moura, but even in that time people didn't want to live in those houses. But today, after 40 years, there is the typical gentrification process

and some of these houses are being lived by architects or used as design studios. It's very interesting because I think it's another step. As Diego and Avi said, this is not as in South Africa's countries informal settlements, but it's another and completely different problem that we, as architects, can't solve it completely because it's a political and economic problems so it's much more complex. I think it's not only about design.

Avi Friedman: If I may inject one little sentence: a couple of years ago I was in Melbourne, Australia, and I was very impressed by what the state of Victoria is doing in housing the poor. I toured several projects by group called MGS. I was extremely impressed by the type of social housing that the State is providing to its low income population. These are beautiful designs, and you can find some of them in my book Designing Sustainable Communities. But I was very impressed by that initiative.

Diego Ramirez-Lovering: Thank you! If you do come again, please, drop me a line *(smiling)*. Rob McGauran is an adjunct professor of our university, and he has led a very significant program of affordable housing. He was on the board of a housing association, one of the largest housing associations in Australia, housing choices. And the interesting thing about their work is that they are very much understanding the way in which you can develop cities or economic frameworks for these kinds of projects without letting go of quality. I suppose, he has been very good in arguing for affordable housing and producing some empirical evidence that supports his arguments, and also, it's just very clever. Many of their projects have been delivered in associations with local councils. So, local government owned car parks which are all over metropolitan area allow for these buildings to be delivered on the air rights of the car parks, so living in carparks is a public domain, and effectively finding sites, I mean here, in Australia, land acquisition and land prices are incredibly prohibitive – very-very expensive land. So, just thinking about, you know, this problem creatively and be able to produce land, in fact that was not there is a sense through air rights, and I guess just thinking again about this delivery of affordable housing in a way that's supported by understanding of economic frameworks, and simply just clever opportunistic kinds of approaches. But very important is also always arguing for their quality, this social housing we're talking about is not just affordable housing, it's often people's disabilities, or social issues more probably, spending the majority of their time in these houses, which makes home environment significant. So, yes, I think that is a really good example and there are others, I mean, Victoria, and Australia in general has been very proactive, very clever, transitioning from a very standard English-based model of public housing and housing associations, to more partnerships with the private sector and so on. So, the government is thinking in interesting ways. I often refer to an example, but I'm thinking about your country, Avi, about the Canada Mortgage and Housing Corporation. They have strategies that you have been supporting or you've been promoting which is the idea of having the secondary dwelling that you can rent or subdivide and sell in your own house, and then connecting this additional income possibility to mortgage structures. Is that right, is that the case?

Avi Friedman: What's currently happening in Canada is very interesting. In the 1990s the Government decided to shift away from the "business" of building social housing. They transitioned into giving money to provinces and asked them to solve this issue on their own. Governments in general recognized that giving money to either individuals or to municipalities is easier than building homes. This became the state of affairs, until now. And unfortunately, the situation has become so serious that I think we have to revisit this old model. Governments in my opinion need to be more interventionist.

In many nations, we are seeing how young people, and primarily the millennium generation, was completely cut out of homeownership, there is no chance that a young person on a current salary can afford a home in any of the urban centers around the world. In addition, if you take the world's largest cooperation by stock value, like Google, Facebook or Apple computers, they all have been initiated by young people starting a company from home. Providing homes to young people need to be regarded not only as housing the less advantaged, but as an instrument of creating wealth.

Tatiana Afonina: In our progressive technological world is it still important to apply solutions with a creative low tech? What are the examples in your work of these solutions and what's their impact on communities?

Avi Friedman: Architects tend to associate high tech with more expensive homes.

This is the general convention: if you bring somethings sophisticated, it will cost you much more. But I believe that there is sophistication in low tech as well. It is a higher intellectual design challenge to do something with ingenious simplicity.

Something that happened in the past decades, closes the gap between affordability and sustainability. When you design with less material, you also consume fewer natural resources. If you orient the home in the right direction to have a passive solar gain, and save energy as well. So, the elements that we need to consider is to how we can design contemporary innovative housing and consider range of other issues that bring sustainability in addition to lower cost, consuming fewer resources, making a home self-sustainable, allowing for flexibility so people will not have to move often. I don't regard low tech as impediment, as something that pulls you back.

Diego Ramirez-Lovering: It's interesting. In my view, ultimately the term high-tech is a strange one because often it's difficult to pin point where the technology is high-order. What I mean by that, one could argue that the technology of high-order is provided by those solutions that are going to be the most optimal for solving the problem. And in affordable housing I would argue, hi-tech in the traditional sense, traditional understanding of the term, in many ways, is rather irrelevant. And I'm living in a very-very intense environment at the moment, again working in the slums in Indonesia, where it's really about providing very commonsensical solutions that can be built by the communities themselves. And by the simplest level of skill that you can find lots of the common denominator and provide solutions that can still be very-very clever and very good and very useful for the community. So, in that sense I think it's a sort of a confusing term because you can't solve housing affordability, and its problems with technology. Building and housing possibly has the

slowest uptake of technology in comparison to other manufacturing sectors…and there is something with that, there is something to that, it's not a question of technology, it's a much broader question.

Avi Friedman: I would like to add one more thing to the low and high-tech question.
Seems to me that what made my work successful was the fact that it was replicated.
In my opinion, the sophistication or the technology needs to make housing build in large numbers without replicating the similar unit. This is the direction on which I'm working now. What I tried to do is to use computer technology to improve communication between a builder and a consumer, meaning that the consumer will not move to a standardized unit with the same façade.

Grow Homes, Avi Friedman

Next Homes, Avi Friedman

Paulo Carneiro: "Low technology" is only for us in the so called developed countries, for the guys in Indonesia is just "right technology", no high or low. As you said it's the most efficient way of buildings.

I just want to add a small thing that occurred to me right now after what Avi said in the other subject. In Portugal (but I suppose probably it is not only here), 40 years ago people started to leave the historical center, because the houses were very small, no garage, made with wood, lime and stone, and people preferred to go living outside the city center and this led to poor maintained or empty, but interesting buildings that fell into ruins. At this moment people are investing in renovating these historical houses and neighborhoods because of Airbnb, it's like a phenomenon here. So, the city center is becoming a touristic center for foreign people who come here just for one-two weeks. So, today is a national holiday and I'm here, in our studio, working, but the streets are empty of Portuguese people *(smiling)*, there are only foreigners. Like a theatre scenario: people just walking around and everything is closed: cafes, restaurants. This is an example how patterns change during the time and how architecture can evolve, keep the place with the old patterns as well, or can also influence on these patterns and social behavior.

Diego Ramirez-Lovering: Yes, I think that brings a kind of interesting question about architecture's relationship with high tech, or what we traditionally understand as high-tech. It's often

been related to a technological solution to do with materials, construction, systems that are somehow facilitated by new technology as you see now: houses printed in China in one day and so on. But ultimately it seems to me what is more interesting and ties to what Avi and Paulo are saying: it is about the technology that allows us to, in some way, relate to housing in different ways or access in different ways. And this notion of Airbnb example, I think, is a really good one, where at any given time in American cities there might be 10% of houses that are completely empty, and it's just about managing the software that sequences occupancy in a different way, it's only really about allowing this new relationship between the technology of a software and the housing stock of the city. I think it brings up very-very interesting possibilities for the future, and also, I guess, new ways of thinking about the way in which we relate to a housing and as Avi well said, and I'm sorry if I'm misquoting you, but in the past, you talked very much about the need for adaptable housing, and I in fact talked about this as well, a flexible house that can shift as the householders' needs change. But if you think of the city in that way, for example, where are all sorts of stock available throughout cities at any one time it's just about how we more effectively connect householders with stock. I'm just thinking a little bit outside the square here, thinking about how we may conceptualize the future of affordability beyond just cheaper construction, or more efficient optimized delivery.

Paulo Carneiro: Diego, would you develop a little bit more this last part? It's really very interesting what you said about going beyond affordability, I didn't fully understand that part and I would like to know more.

Diego Ramirez-Lovering: We've been developing this project here in Melbourne for a little while; it's a little project in our school, which is about creating an online platform connecting vacant buildings to people needing to be housed. Melbourne has the very odd kind of circumstance of having a very large number of investors, of housing units by investors who do not live maybe even in Australia; they're often from Singapore, China. And they rent often Airbnb or they rent of now for short-term rental, and the city and the large part of the inner suburbs has the very high rate of vacancy. And at any time you have 20% of the houses empty throughout our city, so we've been speculating on this, I guess an online platform that can connect people that are needing housing – maybe it's short-term maybe it's longer-term – depending on the vacant stock, in this case the inner city, as a way of managing affordability, because in many ways of course when these homes are vacant there is no return, and there is a huge demand for property. On the other hand, it's very difficult for these people to access these vacant properties. So, just thinking about the platforms like Airbnb may be in some way conceivable.

So, affordability is not really about construction, it's not really about an efficient high-tech or low-tech construction type; it's really just about more effectively connecting, supply and demand.

Avi Friedman: Something that was mentioned before about housing as an ongoing dynamic entity is extremely important part of how people view their life and how happy they will be with their living

arrangement. Creating environment, creating homes does enable people to continuously modify their living condition according to change in their family status, is, in my opinion, part of holistic approach to how to design good environment. Cities also need to be regarded as living organisms, as places that let people change their places of living according to all ongoing circumstances. In my opinion, the best cities in the world are those who are able to continuously be evolved, change and alternate their function according to new realities.

Diego Ramirez-Lovering: I guess this notion of a flexibility or adaptability which seems to be key here, but thinking of flexibility or adaptability beyond the unit of the house or of the city.

Tatiana Afonina: How can communities' cultural values through handicraft enrich architecture? And in the opposite way, what can architecture offer and improve in these communities?

Avi Friedman: Earlier, Diego mentioned Southeast Asia that definitely can't be compared with Scandinavia. These are two different cultures, one is northern country, and other one is warm nation, where outdoor living is a part of life and habits. The success of housing is measured by how individual units turn into a community. How people will live in them and relate to each other, and in order to make it happen we need to do is to bring other features into our community's design which include outdoor kids play, paths for elderly people walk, places for growing food and then – meeting and social places to gather.

Diego Ramirez-Lovering: I think that's absolutely right. I guess, maybe the question is about handicraft. I'm not sure, whether you mean that is somehow related to cultures' ability to somehow be involved in the production of housing, is that what you mean, Tatiana?

Tatiana Afonina: Yes, that's also.

Diego Ramirez-Lovering: OK. So, again in material and technique, or technologies it's an interesting question. I mean, Avi, Aravena who I'm sure you know, and the images the architecture media have popularized of how you can think of housing as a kind of infrastructure for the household to develop over time in different ways and to somehow personalize, change as required, so in the way letting go of some of the kind of traditional notions of authorship, when everything is being designed. Design for change and, in that sense, I think it is being involved particularly again in the most low-cost housing as I've ever been involved in Southeast Asia, the most affordable, if you will, it's very much about developing frameworks and empowering the community to be able to develop things over time, also provide the most basic of infrastructure, that can then connect world as opportunities or risers means to do so. That, I think, is a really interesting shift, maybe it's a cycling, sort of a circling back to 60s-70s, which I think is also interesting; notion of empowering communities, empowering cultures to really be active participants in their built environment, not just passive consumers.

Paulo Carneiro: It's interesting what you're saying and I can give an example about some communities: I worked in Africa, in Mozambique, some people like modern models, and most of them are ashamed of their cultural values, which for me, for example, are very rich and very fascinating, but some people are very, as Avi said before, stigmatized and they reject a house built in bamboo because it represent being poor and they aspire to "have a modern house or a modern model" and this goes beyond comfort and safety. The intersection of these senses and axis is curious. I think this is the most interesting time now because of all this information that is flowing in different countries.

Diego Ramirez-Lovering: I completely agree, I would say. When I was in these communities in slums of Makassar, Indonesia and Suva, Fiji what they want is a four-story mansion, of course, with a flat screen TV, and a double car garage, I think I brought up this notion of the rise of a middle class is really big challenge for global urban situations in China, India, Indonesia – these very large countries. Ultimately the reality is that it's a very impoverish situation where saying in this case the donor agencies are only able to supply very small amounts of funding for infrastructure. And in fact, often moving away from the individual household toward public infrastructure, the large lending banks and parts of government, such as the World Bank or the Asia Development Bank, feel very nervous about providing individual household with any kind of benefits; they're much more comfortable supplying community infrastructure per se. So, the notion, I guess, of thinking (I'm drawing a long string here) about the house is somehow connected to a larger part of the community, and in some way valuing the broader community rather once on individual dwelling, maybe coming back to what Avi was saying about the open spaces, public domain is so very important rather than always thinking of housing as an asset. But still I think it's certainly interesting to consider an architecture that moves away from the individual benefit to community benefit, in a very broad sense.

Paulo Carneiro: But how can we connect? Because we are talking about very different realities, for example, Indonesia or Denmark – are very different countries, cultures and even with globalization there are several different aspects to work with. So, how can we connect these things: local aspects and idiosyncrasies and global issues? Being flexible, as you and Avi said before? I think lots of organizational aspects are way beyond of the scope of architecture.

Avi Friedman: Many planners and architects are bringing to the process of a community's design other features that long time ago were part of the community, but were forgotten. Communities are taking advantage of the shared economy. I recently visited 45 places around the world, and wrote about them in my book "**Designing sustainable communities**". Many of the communities recognized that they need to create places for active living, with places for kids to play. In many of the communities the neighborhood buys electric cars that people can ride around. Many of the communities introduce all kinds of common houses, where people get together to cook and be with each other.