Mechanical Systems Deliver Societies

Andrés Jaque interviewed by Benedict Clouette

For Andrés Jaque, architecture is first and foremost a technology for provoking social effects. Jaque's approach to mechanical systems recognizes them as inherently political, but also capable of being reprogrammed through the process of design. Jaque discusses his projects ESCARAVOX, a pavilion in the Matadero in Madrid, and the House in Never Never Land, a vacation home in Ibiza.

Benedict Clouette You go to great lengths as an architect to consider the technological apparatus of buildings as part of their social performance. How does your interest in the social aspect of technology affect your approach to mechanical systems in your buildings, for example in the ESCARAVOX project?

Andrés Jaque There are two things that are very important: one is to recognize that all technology – including building systems – is produced socially and also creates social hierarchies. Most canonical buildings of modern architecture have been produced by big powers, whether public or corporate. Not only have the buildings been paid for by big powers but also the agendas through which their mechanical systems have been developed have been produced by powerful environments. That's

When you look at the way cultural production is situated in cities, it tends to be gathered in the same places where power is made most visible. This is certainly true in Madrid,

very important to ESCARAVOX.

where the Museo del Prado, Reina Sofia, and the Caixa Forum produce an axis that coincides with where the city's power is produced and performed. This happens within the spaces of the city, but it also happens in the distribution of technology. When you consider the way structural-, air-conditioning-, lighting- and sound-systems are produced, they're following the agendas produced by powerful sectors of society. With ESCARAVOX, we were trying to be a little bit queer, by employing a strategy to reuse and rename existing things that were initially produced to marginalize or to keep certain social realities from emerging as visible. We were very much aware that the program we wanted could never be strong and powerful enough to undertake the whole process of developing and producing its own custom designed systems. So, we used existing devices and mass-produced, generic products to create a situation in which these products could be used to transform the entire environment. We explored a series of architectural strategies to re-assemble generic components - massively produced to fulfill the agendas of the powerful - to create a subversive opportunity for other realities to emerge.

Many of the technologies we used for ESCARAVOX drew on agricultural systems. The development of agriculture from the 1960s was an amazing modern project, more

influential even than that of cities. The development of technologies, structures, irrigating systems, and ways of organizing labor and property was a monumental project of transforming the space of the earth. Those technologies are still in use. Irrigation systems shape the surface of the earth to a degree that most architectural inventions have never been close to achieving. They not only shape the earth, but our bodies too, by the way we eat.

What we did in ESCARAVOX is to make use of these technologies - not as final products, but by trying to break their agendas, by re-combining and re-programming the ways in which these technologies could be used. We took inexpensive mass-produced irrigation systems - the Big Macs of architectural systems - and we re-programmed them to water plants to grow food in the structure, and we used the greenhouse textiles from agriculture to create shade. We remixed them with the Big Macs of sound systems, the Big Macs of video production, the Big Macs of furniture, And we re-combined these Big Macs into a new, strange infrastructure. in which the technologies which had been designed to marginalize realities were re-arranged to make other possibilities emerge. So, by re-combining these elements we wanted to produce a space that could be used by any-

> body or any group to go there and play music, put on events and public debates, and to do this themselves, without being invited to be part of those cultural places.

> It's an idea of how to use technologies in architecture that, in my opinion, is related to Banham. He discussed how technologies were producing and delivering societies – hierarchized societies – in Los Angeles and of how infrastructures were producing segregation among different sectors of the city. Behind the gardens and the watering systems there was a society that was actually producing fear and violence, and was working to exclude a part of what was going on.

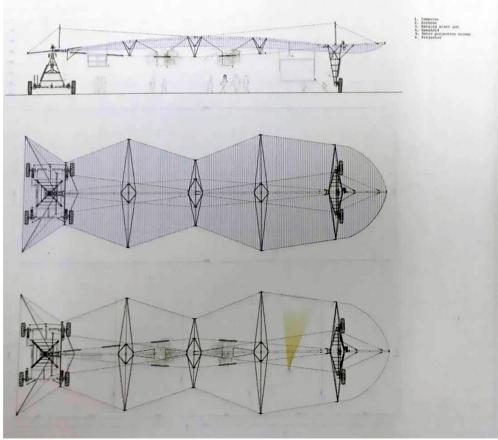
BC There is a largely unquestioned assumption about mechanical systems – that they exist as services to an interior environment, and so reinforce the distinction between inside and outside through the regulation of environmental differences. And this hierarchy is typically related to property and ownership. That's what is so unexpected about ESCARAVOX, that it provides the services that would usually be part of the interior environment to a public square.

AJ Yes. One of the things we've seen in the last few years is that mechanical systems have produced the never-ending interior. The interior has a certain way of performing informality, which has traditionally been formalized as an enclosed space. With the development of interior technologies – air conditioning, electric lighting, cooking appliances, and bathrooms – came a new way in which the interior was depicted. At some point these mechanical systems were bought by users and they were sold as technologies to serve the desires of users. What ESCARAVOX recognizes is that the qualities of the interior are no longer synonymous with enclosure.

ESCARAVOX furnishes the square with a number of systems. The first system is that it has an engine that is controlled by a joystick, or with an app on your iPhone, so



ESCARAVOX at the Matadero in Madrid.



Drawings for ESCARAVOX.

you can move it, unlike a building. The movement makes the whole structure transformable without compromising the use of the public space of the square.

The second system is audio-visual technologies: ESCARAVOX has amplifiers, a turntable, and a music board. It's equipped with lights all around, and it has a video projector. It also has a climatic system that sprays a mist of water to cool the surrounding environment, and it has a watering system for the plants that hang from the structure. Also – very important! – it has basic technology like chairs and furniture that can be moved around. So, in a way, ESCARAVOX is creating this environment that will grow in time, as a movable landscape. In fact, it's already growing, with hummingbirds and insects and bees!

We're working on another version of ESCARAVOX now for Abu Dhabi. We found that in Abu Dhabi the very same components could be acquired for use in the project – the same irrigating technology, the same sound systems, the same lights, the same furniture.

BC Did you make any attempt to adapt it to this new region and context? I'm curious, because you could take the approach that the technology should be shaped by its context, or on the other hand, it could be more like a beach ball thrown into a crowd: it's the same beach ball anywhere, but

AJ I think that to an extent, ESCARAVOX in Abu Dhabi is a beach ball sent to a new crowd, but I would suggest that architecture is so complex that the beach ball is not only materially described or defined. That is, we can throw not the ball but the strategy. And in that new place, the strategy re-combines in a different way, or produces a situation that has different material effects. Abu Dhabi produces a number of particularly unique demands, for instance, in re-

once it's tossed, people play with it however they want.

lation to the climate, and maybe also some idea of properness. In Abu Dhabi, 'properness' might mean clean energy production as part of the building, which was part of the idea from the beginning in ESCARAVOX. Secondly: they have more money. So, we can go much further into the technology and assembly. But, we still don't have enough to produce our own technology. We still have to re-program technology that has been produced for other means, and other agendas.

I think technological assemblages already have an agenda of their own, so that a project like ESCARAVOX that has been produced in Europe and is informed by a whole tradition of social democracy, could be delivered to Abu Dhabi and have a totally different political effect in that context. This idea is very important. Modernity – especially when it comes to architecture – is always a bit strange because it packs, at least at some level, a kind of subversion. For me, this has been forgotten when accounting for the social and political effects of modernity.

In the 1970s people were trying to make design processes democratic by voting and participation, but that denies the political dimensions of a technology such as architecture. I'm not interested in voting on what architecture should be; or rather, I think there is another way of dealing with politics. We need new ways to determine

the politics of architectural devices, and, on the other hand, to recognize that these devices are materially producing a politics. This has nothing to do with democratizing decision-making, but rather it means appreciating that technologies already have an agenda.

BC In researching mechanical systems for this issue, we have defined a few paradigmatic figures -Mies van der Rohe, Kiyonori Kikutake, Louis Kahn as emblematic of different approaches. But maybe Cedric Price is more relevant for your work. In the Fun Palace, the mechanical systems are a standin for the dynamic production of social life in the building. Everything is represented through technology, because as an architect that is how he indicates the social exchanges that take place in the building. Unfortunately, it never goes beyond suggesting this attitude through drawings, because it is never built. In contrast, your work seems deeply concerned with the means by which it is realized. It seems with ESCARAVOX - and likewise with your 'IKEA Disobedients' project - that the motive to source cheap, mass-produced materials came from an idea of accessibility, and not just in terms of economics. How does that guide the way you think

about technology in these projects?

AJ For me the idea that mechanical systems deliver societies is very important. Mechanical systems cannot be accounted for in themselves, but in the way that they engage, and the way in which they become associated with many other social forces. Cedric Price was assuming this in a very radical way. The Fun Palace was about how to deal with mechanical systems as a means of creating new mediations between things, to bring people into the conversation about architecture, technologies, and environments.

For instance, he extended the heights of elements like the ventilation stacks just so that it would be a landmark in the city and so that people would discuss them. He used very basic technology to produce a dialogue. In a way, Cedric Price produced technologies that were re-organizing so-

cial forces – material ones and human ones.

From that perspective, the ESCARAVOX projects are trying to evoke the idea that we don't care about detailing or beauty, we don't care about Zumthor and his approach to architecture. Basically we think that that a new idea of aesthetics could be created from merely accounting for other cultural and technical environments, and that the architecture can be a confrontation to provoke a general discussion.

BC In your project in Ibiza, the House in Never Never Land, one of the elements that really struck me was this duct that comes up from the floor and then makes a 90-degree turn in the middle of the room, like a periscope. That's clearly a moment that makes the non-preciousness of the construction very visible.

AJ Yes, the House in Never Never Land is about balancing recognition with design. The design had to make certain elements compatible that could never be compatible without this set of very particular qualities of architecture, technology and mechanical systems.



The House in Never Never Land, Ibiza, Spain.

A section of the House in Never Never Land.



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Lloyd's of London, by Richard Rogers.

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