

The Data Center is the most definitive and yet invisible typology of our contemporary world. It is the densest spot in our digital universe, a physically invisible *space* virtually visited by many. In a time when the collective spirit of the net itself is more and more in peril, these privately owned devices represent, in many ways, the pinnacle of our shared infrastructure. Therefore, Data Centers are intrinsically collective infrastructures.

Unfortunately the buildings themselves remain largely invisible. Subject to technical and environmental requirements, they tend to hide in the fringes of our world; fringes that are increasingly scarce. The Cloud, inhabitant of the data center, struggles with its own invisibility as the place where our valuable content is stored. Both dynamics are problematic but offer an opportunity. As in our cities, what was formerly considered collective is increasingly privatized (one thinks of schools and communal offices). It might be argued that Data Centers are amongst the few leftover opportunities that, because of their intrinsic content, have the potential to acquire collective meaning.

This is not the first time we have investigated this potential. Two years ago, in the first studio at Columbia called *Architecture without Content* we tried to portray the absolute potential of these big boxes because of the evident impact of their sheer mass when projected in the even covered field.

In this studio *Architecture without Content 4* we return to the center of the city and investigate the potential of these enormous buildings if they would be located on Roosevelt Island; formerly the outskirts of Manhattan, today the very center of New York.

Roosevelt Island is strategically positioned and highly wired. It has a latent potential for symbolic representation, as was recently exemplified by the posthumous execution of Kahn's Roosevelt memorial and the numerous paper projects that preceded that monument. In parallel, it is undergoing a process of reinvention as a new center of excellence, as exemplified by the recently announced plans of Cornell University to open a new hightech campus on the island. Within all this activity, an overall project is lacking.

Architecture without Content 4 reconnects to Venturi's concept of a Difficult Whole. The Difficult Whole is not a group form, nor a mere

collection of elements, but a formal strategy that seeks for a cohesive composition of parts through *inflection*. Each of the parts influences each other, while the parts retain their individuality. Each of the Data Centers on Roosevelt Island aspire to do the same. Their content is an alibi for architectural form whereas their position is integrally part of the overall project for the island. The immutable forms of these big boxes are able to capitalize on their invisible content to create a disposable sanctuary for our contemporary Information Age. The project for Roosevelt Island announces its very decay the day of its completion—an empty civic center.

Kersten Geers &
Andrea Zanderigo

I	<i>Fire Station #4</i> 1966, Columbus, Indiana, Venturi and Rauch Fernando Ceña Martínez & Qi Shan	<i>Data Centers</i> 2013, Roosevelt Island, New York City
II	<i>National College Football Hall of Fame</i> 1967, New Brunswick, NJ, Venturi and Rauch Rodrigo Valenzuela Jerez & Pablo Van Lierde	1 Qi Shan 2 Fernando Ceña Martínez
III	<i>Lewis Thomas Laboratory</i> 1986, Princeton University, New Jersey, USA, Venturi, Scott Brown and Associates Jeongin Kim & Jung Hwa Lim	3 Pablo Van Lierde 4 Rodrigo Valenzuela Jerez
IV	<i>Lieb House</i> 1969, Glen Cove, N.Y. (Barnegat Light, N.J.) Venturi and Rauch Esteban de Backer & Ludi Dai	5 Jeongin Kim 6 Jung Hwa Lim
V	<i>Headquarters Building, North Penn Visiting Nurse Association</i> 1960, Ambler, Pennsylvania, Venturi and Short Pedro Câmara Campos & Nickolay Martynov	7 Ludi Dai 8 Esteban de Backer
VI	<i>Varga Brigio Medical Office Building</i> 1965, Bridgeton, New Jersey, Venturi and Rauch Thomas Heltzel & Sean Myung Shin Kim	9 Nickolay Martynov 10 Pedro Câmara Campos Figueiredo
		11 Thomas Heltzel 12 Sean Myung Shin Kim

This book shows the fourth incarnation of *Architecture without Content*.

Architecture without Content started two years ago at Columbia University.

Back then it was understood as a research into Big Boxes, big corporate volumes of architecture that populate our contemporary universe and that are able to house many different things. We scrutinized different "programs" and came up with a set of possible portraits of such architectures. During the course of the studio we realized the buildings we designed not only didn't house any people, but that, in many ways, they had no relation to the very machines they protected, as their content was far off limits of our scope as architects. Hence, we named our studio *Architecture without Content*.

While working on different incarnations of the same theme over the next two years, our focus gradually widened. In studios in Mendrisio and Graz, we first tested the actual impact of these enormous buildings in the *evenly covered field* to finally stretch the theme to a much broader approach towards an architecture of the perimeter. *Architecture without Content* became broader and perhaps a tad more ideological as well. The return to Columbia presented an opportunity to reassess some themes implicit in the initial idea that was never quite acknowledged on the one hand and, on the other, by engaging with the midst of New York City, to reposition the debate on architecture of the city implicit in the project from the start. For this reason, *Architecture without Content 4* is more Spartan, but also more ambitious.

Architecture without Content 4 started in Philadelphia. Looking for traces of early Venturi, we finally fully embraced him as an important reference. We ended up celebrating (and reevaluating) Louis Kahn's unbuilt project for Philadelphia's Civic Center: his infrastructure-vectors-turned-into-immutable-mass became our main reference for an ambitious take on both the big box and New York. Could we introduce Venturi into New York and use Kahn as a back door? If so, we certainly didn't mind.

The studio's regained Spartanism is translated into a reduced "program;" all projects presented here are Data Centers, perhaps the most urgent and contemporary of all big boxes. This sudden reduction

of scope allowed for more precision, for a simpler argument and created space for a new challenge. *Architecture without Content 4* puts to the test the possibility of these big boxes engaging in the collective presence of the city, not as an individual anomaly, but as a group form, a Difficult Whole. Here, each of them is both machine and tombstone. In each incarnation, the big boxes try to represent their potential as well as their inevitable demise—as a contemporary "architecture for museums" (taking the liberty to paraphrase Rossi in the wrong way) or as the physical incarnation of the machines that make our society run; *a necessary architecture*.

The data centers presented here did not arrive in Roosevelt Island by accident. The big boxes reconnect Roosevelt Island to a tradition it has always nourished: that of housing the "border programs" of the infrastructure of the city. A relatively small island on the east side of Manhattan, it represented somehow the outskirts of the city faraway yet so close—a piece of wilderness at its immediate border. For this reason, it transformed relatively quickly from an island of countryside into the perfect location to park buildings and artifacts that were doubtlessly needed, but preferably not an integral part of the city. An era of hospitals, prisons and the like ensued.

As the City of New York developed, Roosevelt Island also fell subject to redevelopment, or a 'reurbanization'. This attempt to fill the island with housing (high on the agenda in the nineteen seventies) faltered despite ambitious plans. In retrospect, one may claim that this happened because in all these plans Roosevelt Island was understood as a mini Manhattan, a weirder, greener, more idealized version of the city district that is already the most idealized in the world.

All these projections have been rendered obsolete. Today, the points of gravity have shifted and the borough of Manhattan is but one important district in an ever-sprawling town; a big urban agglomeration that, particularly in terms of density of people, suddenly finds Roosevelt Island in its center.

Roosevelt Island became the center of New York by chance and accident. If it is indeed the city's gravitational center, can it also be its immutable center? In a curious way, the recent completion of Kahn's

(pathetic) Roosevelt Memorial is a case in point and so is (for very different reasons) the announced development of Cornell University's new faculty of sciences on the island. We decided to take both recent developments as an omen for a possible future, albeit one with a slightly different form. The catalyst for our project is the exceptional position/location of the whole island in the network of tubes and wires, in relation to a relatively high availability of land on the island. Both factors can transform Roosevelt Island into the physical (and visible) hub of our ever-expanding (digital) cloud.

The project for Roosevelt Island turns the island into the immutable core of 21st-century New York, a mystical infrastructural hub-cum-research *heterotopia* in the center of the city. The 12 buildings contemplate the representation and closeness of our intangible digital infrastructure. Each project deals with the impossibility to design such a container, with its pragmatism, but also its obsolescence. In light of the ever-expanding/developing digital storage capacities, any design is oldfashioned the moment it is finished. But perhaps this slowness is the only remaining asset of our profession. Since we are incapable of translating what really happens inside, we have to take other challenges, develop other urgencies. In an era where everything turns virtual at an enormous speed, these slow buildings might be the threshold between the ever-changing information inside and the desire to find collective moments in the city outside. For this reason, each of the buildings presented here contemplates a position on the edge—the edge of the island and the edge between the known and unknown. The buildings literally form the perimeter of the island in relation to the city proper; they mediate their *Necessary Architecture*, as one that is shared by many and visited by none. These immutable forms are veritable monuments of our 21st century, as they will be obsolete the very moment they will be built.

Colophon

Architecture without Content 4
Necessary Architecture

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Necessary Architecture

Architecture
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