Increasing Mobility

Architecture and Urban Design in the Global Age

An Interview with Bernard Tschumi

Sasha Cisar
Jørg Himmelreich

Sasha Cisar: The upcoming second volume of trans*it will focus on transportation and traffic. It would be interesting to explore your views on the impact of mobility in architecture and urban design.*

Bernard Tschumi: I gladly welcome your interest and your questions.

Jørg Himmelreich: We would first like to address mobility in a general sense – get your thoughts on it and discuss how these are reflected in your architectural work.

We would then like to turn the discussion to the Elliptic City, *your design proposal exploring urban strategies for a new city in the Caribbean. In particular, we are curious about how your design addresses issues of mobility.*

From there, we would like to draw a comparison between Elliptic City *and one of your earlier and most celebrated works – Parc de la Villette in Paris. We would be interested to know whether your approach to mobility has evolved over the span of time between these two projects, and if so, in what ways?*

In conclusion, we would enjoy taking a look at architectural theory from the varying stand points of Switzerland and the U.S. Having studied architecture at the ETH in Zurich, Switzerland, and currently teaching at Columbia University in New York City, where you served as dean from 1988 to 2003, you could certainly offer insight into the similarities and differences between the two schools.

Mobility

SC: The issue of mobility has been a hot topic in architectural circles in recent years. Has this influenced your work in any way?

BT: Well, I would divide the issue into those aspects which are social, economic and political, and those which are architectural and urban. I intentionally make this distinction because the first are inescapable in a sense. For example, today's work forces and currency exchanges operate on a global playing field. So, the fact that architects presently work all over the world is merely the inevitable outgrowth of a general cultural and societal development. You could really say that society has been doing nothing else but move toward increased mobility for the past 2000 years and that what we are presently experiencing is a general phenomenon.

Now let's address the issue as it relates to architecture and urban design. It is often said that in architecture and urban design, you can do one of three things: reflect the status quo, accelerate the trend, or resist and slow things down. Which do you choose? Indeed, I have no single answer here. There was a time when I would have argued that you have to accelerate in every case, but today I would say that it depends on the circumstances. In some cultures, I would definitely aim at acceleration. Perhaps this is what's happening with the *Elliptic City* project in Santo Domingo.[1] However, I would probably do things a bit differently given another situation.

For example, take the project *Factory 798* we did a couple of years ago in Beijing.[2] Our intent was to try to save and preserve an existing neighborhood that was about to be torn down and replaced. In an attempt at establishing a simultaneity of two 'times', we proposed to build a mega structure that would float above the existing buildings. I choose the word 'time' here over the word 'mobility' in order to stress the coexistence of the 'old time' and the 'new time'. So, I would say that it depends on the situation really, because in many ways it is not an issue of mobility in the direct sense of trains, cars, or airplanes – these extensively explored aspects of mobility have already become common knowledge.

SC: Do any of your other projects or studies deal with mobility in a particular way?

BT: I typically encounter issues of mobility in my large-scale projects. It is these that also most interest me – projects such as the *Cultural Complex* in Dubai[3] and, to a certain extent, *Parc de la Villette*[4] as well. Let's keep the focus of the talk on these large-scale projects for the moment, because in the small-scale projects such as the National Studio in *Le Fresnoy*[5] or the *Alfred Lerner Hall Student Centre* in New York,[6] I do something different, I

Bernard Tschumi, 2006, photo.

'stage' – "je mets en scène". My function becomes one of a stage designer or a film director who stages the movement of the visitors through these spaces. I approach most of my building projects in this manner. In other words, to me it is about creating public spaces around the places through which people move from one activity to another. It is those spaces of movement that become the public areas. But this is already a well-known aspect of my work, so it would be more interesting to explore instead the urban ramifications of mobility.

Elliptic City

SC: Exhibited at the 2006 Architectural Biannual in Venice, Elliptic City *is a design for a new city in the Dominican Republic; a proposed financial hub for North and South America.*

BT: The decision to show this project at a Biannual certainly tells you something about my view on globalization. The exhibitions in the Swiss Pavilion[7] are typically very introverted and self-focused. In other words, when Luigi Snozzi shows a village in Ticino,[8] the work is strong but rather inward looking. I wanted to open the gates, cross boundaries and expand into this era of globalism. So I intentionally chose a project that is as far from Switzerland and its concerns as possible. I was happy to have a project on an island in the Caribbean about the size of Switzerland. On top of that, *Elliptic City* was right in line with the theme of the Biennale, which just happened to be 'Cities.' An interesting aspect of this project is the fact that 52% of the island is a protected natural reserve; in most countries, it comprises a mere 10% of the land. So, when we were asked to do a small city – actually, we've planned for a population of about 30'000, so you could really call it a town – my first move was to say that it is like designing a landscape. And yet a landscape that has evolved over time while still managing to protect major portions of the existing natural environment and able to express a great deal of flexibility. This led to the concept of a series of islands located within that natural environment, each functioning as a clearing. This certainly might bring to mind an archipelago, but in many ways the notion here proceeds from a more abstract intent. These elliptical islands can accommodate a whole series of functions or programs, and therefore express great flexibility in their evolvement over time. Now why is this important? Well, I have always been more interested in concept and strategy than in composition – after all, that's what designing a city is all about. Take New York City, for example: The street grid and rules for triggering density, introduced 200 years ago, are still alive and well today. Or take Paris: Georges-Eugène Haussmann[9] cut boulevards through the city 150 years ago, laying down a set of rules that people are still playing by to this day. I also want to develop a game for the *Elliptic City* in Santo Domingo that will still be played 50 years or more from now, when I am already long gone.

JH: If we understand correctly, your project conceives the city as an attractive location for financial companies; a business hub that would certainly generate major traffic issues. Some kind of transportation system would be required to deal with this series of spatially separated 'islands'. How does your concept approach these issues of mobility? Is this reflected in the design in any specific way?

BT: Yes. In this particular case we are looking to establish a sort of hub platform for South America and North America. What's interesting is that there is a global as well as a local issue going on here. As I've already mentioned, I want to protect the natural environment, which metaphorically speaking, means I want to protect the local culture. So, the idea is to have 'islands of globality'. Rather than seek a 'Disneyfication' that calls for islands devoted to history in a world of globalism, I'm attempting to reverse things by having islands devoted to globality in a world of local culture. This enables these islands to develop in the most contemporary way possible, without trying to be contextual. We are working within the boundary of each ellipse while still preserving the character of the local culture that surrounds it.

Bernard Tschumi, *Le Fresnoy National School of Contemporary Arts*, Tourcoing, 1991–1997, photo.

JH: You mention the practice of Disneyfication. Your project brings to mind the idea of the circular Garden Cities[11] *proposed by Ebenezer Howard as self-sufficient satellites to existing cities. Another strong association can be made to the* EPCOT,[12] *a design for an elliptic city to be built on a large area of natural swampland that was proposed by Walt Disney in the 1960s for the Disney World Resort in Florida. It was designed as a mixed-use complex of residences, shops, hotels, and entertainment. Disney also planned additional elliptic islands, each devoted to a single function such as production or exhibitions. They were to be interconnected by a system of streets as well as a dense network of public transportation. Did either of these two projects play a role in developing your concept?*

BT: Neither Ebenezer Howard nor *EPCOT* served as a reference in the development of the *Elliptic City*. However, I do find your comparisons very interesting and amusing. If you give me a bit of time, I can do some research and get back to you.

SC: On the home page of the Bundesamt für Kultur [Swiss Federal Office of Culture], you refer to the 'green archipelago' *proposed for the city of Berlin in the 1977 article* "Cities within the City" *by Oswald Mathias Ungers, Rem Koolhaas, Hans Kollhoff and other architects, and recently revisited by Pier Vittorio Aureli in a series of studies.[13] Were you inspired by the original notion of this series of 'urban islands' or by Aureli's re-examination of it? Or would you even say that your project attempts to do the exact opposite?*

BT: No. I do have enormous respect for the studies of Pier Vittorio Aureli,[14] but my project for the *Elliptic City* in the Dominican Republic is completely different. Don't forget, it is located on a tabula-rasa site – there is absolutely nothing there. The conditions I am dealing with in the *Elliptic City* are also very different from those addressed in the article by Ungers, Koolhaas, Kollhoff and others. Aureli refers to their concept for Berlin as one based on a shrinking scenario. The interest of the architects here was to identify discernible traces of the

city's history and then insert a group of 'green islands' into this existing urban fabric of 'imprints'. In contrast, I am working with an undisturbed, untouched site with absolutely nothing on it; it has the potential of serving as a springboard to initiating a global dialogue with various parts of the world. I am conversing with places like San Miguel or Brasilia, cities whose designs were approached as an artistic composition that did not take the element of time into account. The elliptic islands can change in shape and density – here, it's more about a strategic game rather than the site itself.

JH: Let's get back to the issue of mobility. How will movement on and between the 'islands' be managed? Will there be some sort of public transportation system?

BT: This is simple. Some of the islands would follow the common practice of getting around by car while other islands will provide a system of small electric buses that serve the various buildings. It depends on the function served by each island. For example, the financial district will require tight security, enabling few cars access and requiring most to park outside of buildings and transfer to electric buses. There will also be a network of electric buses for all other areas simply because they provide a quick way to go from point A to point B. But you could also take your car and park it somewhere. I don't claim any particular invention here; it has much more to do with the nature of the activities. In other words, the system of transportation would need to be fitted to the individual needs and conditions of each island.

JH: The monofunctional role of the ellipses is quite a contrast from the mixed-use approach often deemed a desirable concern in today's discourse on cities. Your design recalls the strict separation of functions visualized by Tony Garnier for the Cité Industrielle[15] *that has now become commonplace around the world in the form of city zoning laws.*

BT: Indeed, the *Elliptic City* is always about the separation of functions; there is an island for business, another for shopping, another for hotels, etc. – with a single
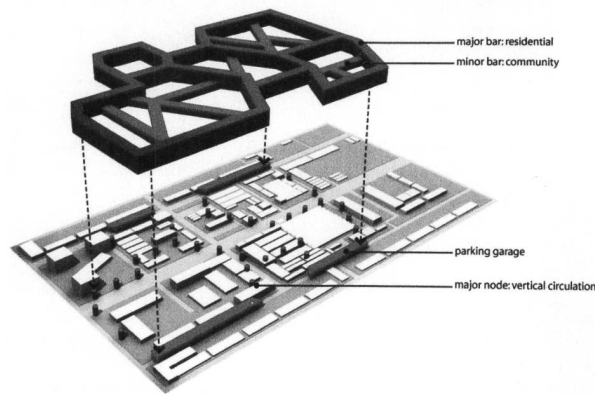
Bernard Tschumi, *Factory 798*, Beijing, 2004, axonometric drawing.
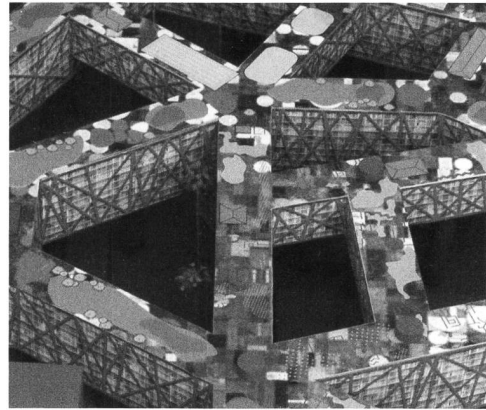
Bernard Tschumi, *Factory 798*, Beijing, 2004, model.

important exception – one island combines every kind of function and program you can possibly imagine. In a sense, this particular island is exactly what planners have wanted for decades. I call it the 'MixCity'.

However, I am interested in the notion of specialized functions because they serve an important function on the larger scale. For instance, the business center, hotels and convention hall are all highly-specialized and require each their own respective characteristics, including in one case special security measures. We have not yet totally worked out the residential aspects – who will live here, what income level it will target, etc. Each ellipse should also serve as an empty slate, in a sense, upon which all kinds of programs and typologies can be applied, enabling maximum evolution of the space.

SC: Let's turn to the comparison we draw between your design for the Parc de la Villette *and the* Elliptic City. *Your approach with* Parc de la Villette *was to create movement and action between the 'Follies' and the other elements that are diagrammatic in character. In this project, the space in between seems as important as the architectural elements themselves. The architecture here appears to stimulate rather than define the variety of actions – the events – that are possible.*

JH: It seems that in Elliptic City *action is intended to be more condensed and localized than in* Parc de la Villette, *and therefore much more predetermined.*

BT: There are two important differences that need to be pointed out when comparing these two projects. First, *Parc de la Villette* is 0.6 km², while the site for the *Elliptic City* in Santo Domingo is 15 km², making it substantially bigger. Another major difference is that *Parc de La Villette* is located in the city center and characterized by its 19th century cast-iron building and the bordering *Cité des Sciences et de l'Industrie*. As well, these two projects present extremely different programmatic and contextual issues. *Parc de la Villette* is a culture park that offers a mix of activities. The *Elliptic City* in Santo Domingo is an urban development depicted by a series of specialized islands.
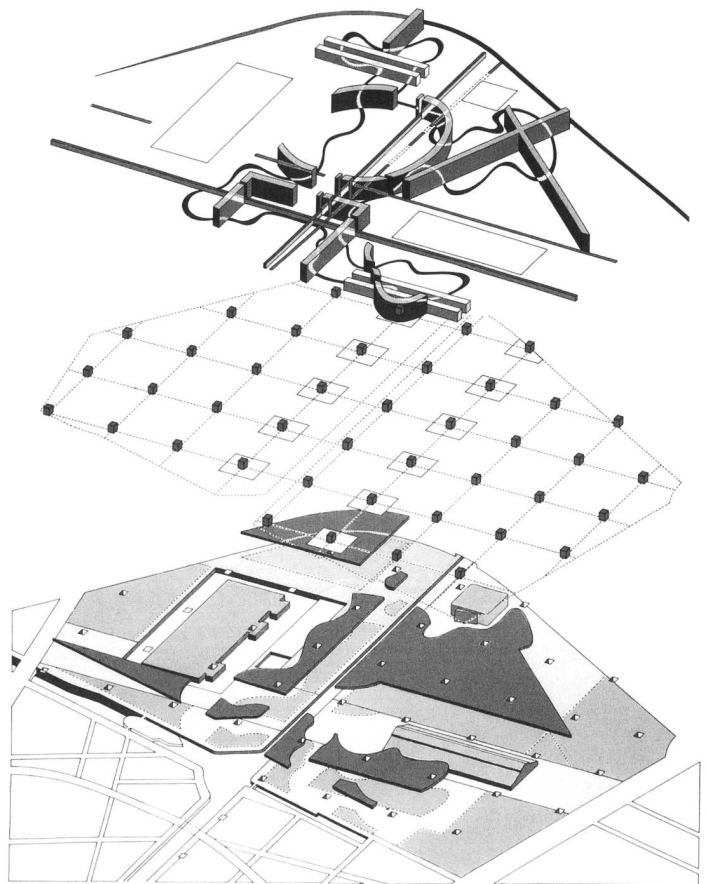
Bernard Tschumi, *Parc de La Villette*, Paris, designed 1982, completed 1997, axonometric drawing.
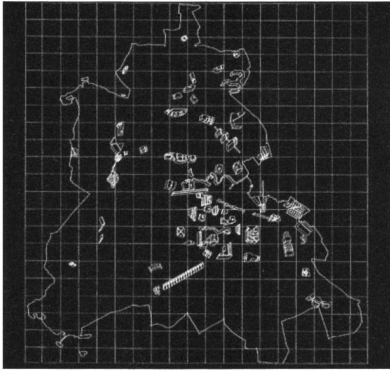
Oswald Ungers / Rem Koolhaas / Hans Kollhoff,
Berlin as a green archipelago, 1977.
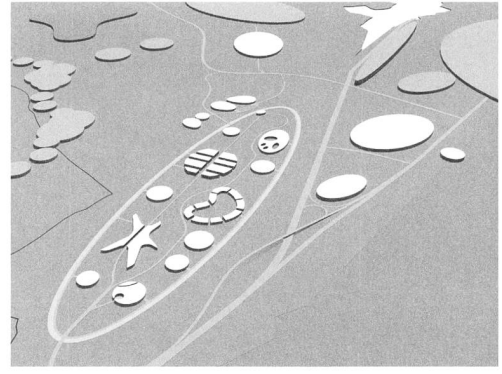
Bernard Tschumi, *Elliptic City. Independent Financial Centre of the Americas*, plan.

Now, what they do have in common are 'fields of intensity': conveyed in the grid system of 'Follies' in *Parc de la Villette* and embodied by the ellipses themselves in the *Elliptic City*. The only difference is that these points are rigidly laid out at intervals of 120 m at *Parc de la Villette*, while the elliptic fields are very fluid; they can be located anywhere and can vary in size and physical appearance. The uniform architectural vocabulary of the 'Follies' is a contrast to the wide range of vocabulary possible with the ellipses. My intent was to do something quite different with the *Elliptic City* than I had done in *Parc de la Villette*, and yet, at the same time, certain themes and strategies do reappear here – the fields of intensity being a perfect example.

JH: You view space and the events which take place in it as integrally bound to one another: you argue for setting the stage for events to occur rather than predefining what happens. However, Elliptic City *seems to prescribe a set program of very specific functions for each of the islands – this appears to be quite a departure from the approach taken in your early work.*

BT: Let me explain what I think is the difference between a program and an event: A 'program' assigns specific functions to the spaces, making what occurs here predictable. An 'event', on the other hand, cannot be predicted in advance. It occurs when you bring things together that do not necessarily fit. In other words, it arises out of vectors of movement that intersect or activities that are juxtaposed in an unexpected way. However, I haven't gotten this far yet in the project for the *Elliptic City*. As soon as I shift from the urban scale down to the scale of the object, these event-related factors might then come into play.

JH: What particular challenges are involved in such a large-scale project?

BT: I have only now gone back to working on large-scale city projects, after having not worked on them for some time. The problem large-scale city projects pose is the long time-frame involved – I, on the other hand, like to build immediately.

We started out by presenting this project at the Venice Biennale. It was great to have the chance to develop the project, but it was difficult to impart the strength of our architectural concept at the urban scale, as we lacked the compelling depictions that architectural renderings of buildings can provide.

Academics and Discourse

SC: Recently, we talked with Wiel Arets[17] from the Netherlands. He asserts that there haven't been any real debates going on in architecture over the past ten or twenty years, especially in universities. Would you agree?

BT: No, I don't think that's true. What has changed, though, is the nature of debates. Throughout most of the 1920s and up into the 1980s, architectural debates where very simple, bordering on simplistic at times. Everything was argued from opposing binary positions. During the time of Le Corbusier, for example, the debate centered on 'Modern' versus 'Les Beaux Arts'. Then it became 'Post-Modern' versus 'Modern'. Later it was 'Deconstruction' versus 'Post-Modern', and so on. There was also the 'Historicist' versus the 'Modernist'. In the last 15 years, the line between these two extremes has become more and more diffuse. There are a lot of debates going on these days – they're just no longer black versus white or plus versus minus.

JH: Perhaps debates have not appeared to be taking place much in recent years because the unyielding, heated stances of earlier years have dissipated.

BT: Yes. But in many ways that might also be quite intelligent because these earlier hard-line views were ideological – often even quite religious in tone. So, what you

Bernard Tschumi, *Elliptic City*, shown at the Swiss pavilion at the 10th International Architecture Exhibition Venice Biennalle, 2006, photo.
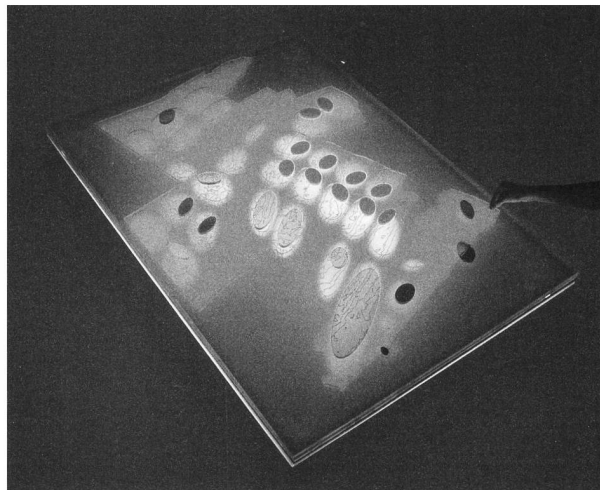
Bernard Tschumi, *Elliptic City. Independent Financial Centre of the Americas*, 2006, photo by: Schweizer Bundesamt für Kultur.

got was the religion of the modern versus the religion of the classic – not a very intelligent way to think about a serious matter.

SC: On your home page you make a distinction between theoretical projects and non-theoretical projects. Is this a conscious decision of yours when you work on a project?

BT: I am not sure I make this distinction; I don't think I do. There are simply projects that start out as a theory or a concept that eventually become a built work of architecture, and there are those that start out as very pragmatic issues that then lead in practice to a theoretical statement. It doesn't matter if you start with theory or with practice. Both are correct starting points. But eventually there will always be some sort of a theoretical point of view because that's the way to get an overview or understanding of what one is doing.

SC: Let's turn our discussion to the world of academia. You studied at the ETH and you've built projects in Geneva and Lausanne. Have you stayed in contact with your alma mater?

BT: I haven't stayed in contact with them and they haven't stayed in contact with me. So, it goes both ways. Nevertheless, I think the ETH was a very good school with a very specific agenda; it also had both incredible strengths and limitations.

SC: You say that 'it was' this way – are you saying that this is no longer the case?

BT: I am referring to a time over 35 years ago, and the ETH has certainly evolved since then. It has changed tremendously because the nature of practice has changed. I think practice and design in Switzerland are still integral components of the whole building process. This is quite different from the development taking place in the rest of the world. And this is accordingly reflected in the country's education system to a certain extent. Some of

the challenges facing architects worldwide are not necessarily the same as those currently being dealt with in Swiss architectural practice. I personally have to say that I enjoy being able to function both ways: realizing a building in Geneva and realizing a building in New York City under two completely different sets of conditions.

JH: Could you explain what these conditions are and how they differ?

BT: I would say the main difference has to do with the nature of the construction industry. In Europe there is a certain degree of flexibility, while the American construction industry is inflexible. If I design a building in the United States, I have to be able to work with a strong understanding of those industry standards. In other words, in terms of construction, I think there is generally less invention going in America than in Switzerland or in France. I can develop a lot of things on the building site when I build in Europe. I can work with the contractor and develop specific solutions. In the U.S., I do not meet the contractor at all. There is a clear barrier between the architect and the contractor. I produce drawings which then become legal documents I hand over that are not allowed to be changed during construction. It would take a lot of time to elaborate on the whole topic – you could devote an entire special issue to it in your journal.
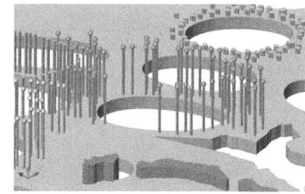
SC: Some at the ETH are of the opinion that construction in the U.S. is not as integrated into the design process as it is here in Switzerland. Do Swiss universities take a more holistic approach than those in the U.S.?

BT: Yes, I think you are right. It's an oversimplification, but it's correct. Schools of architecture did not exist in the U.S. 120 years ago. If someone wanted to obtain architectural training at this time, a trip to Rome's monuments was the way to go about it. During this period, the American construction industry developed a series of building techniques – and did not include the architect

Does vegetation that looks 'natural' protect better than geometrically organized vegetation?
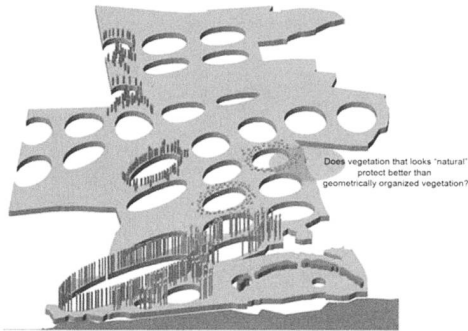
Question: *Do artificial "islands" call for artificial vegetation?*

arrival from the land   arrival from the sea

What are the advantages of using a different green boundary for each "island"? What kind of landscape would it create?

in this process at all. Returning from Rome, an architect would then design a facade and interiors, marking an area on his plans in pink called the 'poché'. He would then hand the plans over to the contractors who would then decide what went in the poché. American education is really based on a Beaux-Arts education system. Europe, on the other hand, has been influenced by the Arts and Crafts and Bauhaus movements which sought to establish a closer relationship between production forces and design forces. A strong dialogue emerged as designers incorporated an understanding of production processes and manufacturers incorporated an understanding of design processes into their work. Someone like Jean Prouvé,[18] the French engineer, architect and inventor could have never existed in the United States.

SC: The ETH used to have an exchange program with both Columbia and Harvard. For reasons unknown to us only the Harvard University program is still active today. Don't you think that this is the wrong direction to be taking even if these two countries have such different approaches to design?

BT: I agree with you – these exchanges should take place. However, when I was dean at Columbia it became apparent that there were a lot of ETH students interested in coming to the U.S., but far fewer students from Columbia University interested in attending the ETH. That is because 50–80% of the students at Columbia are arriving from different parts of the U.S. or the world with the specific interest to study at Columbia and be in New York City. They are not interested in participating in exchange programs that take them away from their very brief three-year study. I think it is not only a question of differing cultures or approaches to education, but also a question of motivation.

SC: So would you say that an exchange program directed at the bachelor level, which runs between four and five years, would make more sense?

BT: Here in the U.S. there are two types of programs available to those interested in becoming an architect: a three-year graduate program or a five-year bachelor of architecture program. However, the bachelor level is currently undergoing major revisions. The five-year bachelor of architecture program is being phased out and replaced by a three-year master's program. Students will now have to complete an undergraduate degree before entering the graduate school. They will not be able to start the five-year program directly out of high school.

Research

SC: At the ETH over the past three years, there has been a lot of controversy surrounding the definition of research in architecture. Is it actually possible to do research in architecture? And if so, is it akin to the research done in scientific fields or is it completely different?

BT: You first need to ask yourself whether architecture is an art or a science? If it is an art, then do artists and art schools do research? What kind of research would an artist pursue? Would they investigate a new kind of paint or a new kind of sculpting material. Or would it be historical research? It is much easier to answer this question in science. Architecture encompasses a whole spectrum of aspects that span from the artistic to the very scientific. The difference between doing research on a concept and doing research on ecological materials is great. The word 'research' in architecture can only be defined through the specific research projects undertaken. There are no common denominators in architecture as there are in biology, for example. Research in science is based on hard facts; in architecture, on the other hand, the line is not always so clear. So, I tend to be cautious regarding the trend that research is experiencing in schools today.

SC: Many research programs have been introduced at the AA or SCI-ARCH, for example. I've been under the impression that in research studios at the master's

Bernard Tschumi, *Elliptic City. Independent Financial Centre of the Americas*, rendering.

level or in some PhD programs everything is regarded as research. Do you think this has become common place? Do you yourself agree?

BT: The question is: What is research? Is it something highly specialized like research on waterproofing or is it about something else? What is an architect? Is the architect a generalist or a specialist? Common understanding says that an architect is a generalist. He has the overview. He's the one who sees the big picture and calls in the specialists and experts to work on the different areas of the project. For this reason, I am hesitant to refer to the architect as a specialist. I observe people who are able to do all kinds of things with new modeling techniques, and yet they are completely incapable of maintaining the big picture when it comes to organizing a building project or a complex urban situation.

SC: According to you, then, the architect is a consultant when it comes to urban development?

BT: No, the architect is not a consultant; the architect should have consultants. I think that it is really important to look at what we are capable of doing as architects; to realize the ways in which we can harness our power. I refer to the architect as a generalist because I believe that the ability to see the big picture makes the architect very powerful. All the others involved in the project are just specialists in their field – the politician or the traffic engineer can't know everything, so they turn to consultants in other fields. The architect, however, is able to juggle it all, functioning as the mediator and moderator throughout the entire building process, while maintaining the big picture at all times.

To me, architecture is about the ideas, the concepts, and the key role of the mediating architect – not the forms.

JH: Thank you very much for the interview.

1 The *Independent Financial Centre of the Americas* (IFCA) will be a privately operated and independently regulated international financial centre based in the Dominican Republic, the geopolitical crossroads of the Americas.
2 *Factory 798* (2004) in Beijing is a horizontal mega-structure superimposed over existing facilities, connecting them and holding up to 5'600 units of housing / commercial units / studios and lofts for the artistic community.
3 The *Cultural Complex* in Dubai was planned to contain an opera, a theatre, and a museum. To respond to the climate and the fact that is was meant to be build on an artificial island, it was developed as a series of three-dimensional ribbons.
4 *Parc de la Villette* is a 55 ha urban redevelopment project in Paris, designed 1982 and completed 1997.
5 *Le Fresnoy National Studio for the Contemporary Arts*, France, 1991–1997.
6 *The Alfred Lerner Hall*, Student Center of Columbia University / New York was finished in 1999.
7 The *Swiss Pavillion* at the Giardini was designed by Bruno Giacometti in 1951.
8 Luigi Snozzi showed his projects for Monte Carasso at the 6th Architecture Biennale in Venice in 1996.
9 Georges-Eugène Haussmann (* 1809; † 1891) was civic planner for Paris under Napoleon I.
10 Neologism, derived from the name of the Walt Disney Company to describe what some see as the spread of the principles of Disney theme parks throughout society.
11 An approach to urban planning founded in 1898 by Ebenezer Howard in the United Kingdom, planned as self-contained communities surrounded by greenbelts, and containing balanced areas of residences, industry, and agriculture.
12 *Experimental Prototype Community of Tomorrow* (*EPCOT*) "community of the future." A concept developed by Walt Disney to elaborate visions and plans and the purchase of property near Orlando / Florida, which was not realized. It was tansformed into a theme parc and opened 1982 as *Epcot* theme park as part of the Walt Disney World Resort in Florida.
13 Oswald Ungers, Rem Koolhaas, Hans Kollhoff published their idea of Berlin as a green archipelago in the article "Cities within the city," *Lotus* (1977).
14 See for example: Pier Vittorio Aureli, "Toward the Archipelago. Defining the Political and the Formal in Architecture", in: *Log* (2008) Winter, pp. 91–119.
15 Tony Garnier published his ideas about a city with separated zones for recreation, industry, work, and transport in a book called *Une cité industrielle*, 1917.
16 Bernard Tschumi, *Event-cities*, Cambridge / Massachusetts: MIT Press 1994.
17 Cf. the interview with Wiel Arets (* 1955 Heerlen), p. 28.
18 Jean Prouvé (* 1901 Paris; † 1984 Nancy).