# Architecture and Education I Interview 3
# Christoph Gantenbein I January 2012

**Samuel Penn**: You practice in Basel with Emanuel Christ and run a unit at the ETH as assistant Professors. The programme is called 'Typology Transfer', which examines the creation of new architecture based on established types. I wonder whether you could explain what the motivation was behind creating a programme like this?

**Christoph Gantenbein**: The "Typology Transfer" is a design method, based on our understanding of architecture. And of course these two aspects cannot be separated. Let me first talk about architecture, and then how we teach design. Architecture means to us primarily: urban typologies. So far we have studied them in four cities – Hong Kong, modern Rome, New York and Buenos Aires. We focused on building types, not by simply portraying them but by analysing the buildings that are relevant in terms of specificity and mass – the building types out of which these cities are built. We try to understand the city through its architecture. We absolutely believe, and this comes from our practice, that architecture and urbanism cannot be separated. In our office when we look back over the last thirteen years of our practice, we can clearly see that we are starting every design even of a small house or building by the relationship it creates with its context. We always try to make urban architecture. This is our belief, it's not very new because Aldo Rossi was talking about similar things – that architecture is deeply linked into the city and that architecture itself is an expression of the urban. This may be surprising, because you come from Scotland and perhaps expect a typically Swiss position. There is of course another culture that isn't so close to us – the Alpine understanding of the nearly classicist object in the landscape. This is a different culture that we don't consider ourselves to be part of. We focus on the city, and we think there is a huge crisis in the city. This might sound strange, as there's an immense amount of research on the actual development of cities being done by several architects, from Rem Koolhaas to Herzog & de Meuron at their ETH Studio Basel. We think this analysis is very worthwhile, as it is necessary to be able to understand the city. But when it comes to the level of creating the city through buildings, then we notice that architects are completely lost. Based on this view of things, we developed a design method in our unit at the ETH where we teach the students that a design of a building, that whatever you do as a creative individual, is linked to an existing culture. We are convinced that the modernist idea of the architect as a genius is a lie. This understanding of the architect claims the development of a design out of nothing but his own imagination, and any outcome cannot really be understood by anyone – except by himself. This idea is a cliché that has become attached to the architectural profession and we think that this is a dangerous tendency – we see that in this very misunderstood freedom lies a strong limitation to creativity. Creating out of nothing doesn't lead to more freedom. I would say the opposite is true. Complete freedom makes your inventions meaningless. But if you can deal with existing knowledge, an existing culture of architecture, you can go much further. It was interesting in Hong Kong, you see these buildings that are much more radical than the expressionist fantasies by Hermann Finsterlin or by Hans Scharoun. The architecture is so fantastic in terms of how it sits in the landscape, its sheer dimensions and also in its aesthetic. It doesn't mean to be radical and is in reality a very pragmatic expression of conditions. That's what we want to teach our students. Have a look at what exists. Try to analyse it, to understand it, and try to understand the rules of its architecture, how it's developed and try to generate your own expressive project out of these rational rules.

**SP**: I'd like to pick up on the the study of urbanism, which as you say broadly means the study of context – not just the physical but also the cultural context. There seem to be two ways to deal with that approach. The pragmatic collection of data, and proposing that by collecting data we can somehow derive what form should come from it. This is broadly an objective exercise. Then there's the other way that Jacques Herzog, Pierre de Meuron, Marcel Meili and Roger Diener are pursuing at Studio Basel that is an overall study of urban form in Switzerland and now other countries. The conversations I've had so far with both students and teachers at the institute in Basel pivot exactly on the interesting point you made about the architect being lost. They can study urbanism, they can study the context and all the data, they can compile it, bring it together, but then they're lost when it comes to the actual architecture. That's a very interesting proposition and insight that you made. I guess that your programme is somehow trying to bridge that gap, fill that void – to mediate between the realisation that architecture still depends on human judgement, and that there is therefore creation, but that there is also a lost transmission, nothing we can instantly recognise as a tradition, and so instead architects have to return to the cold, cool objects of the discipline or art, to somehow find a language to develop their own voice within. Do you think that's a fair assessment or do you think it might be a bit of a dystopian view of how we relate to history – or how you and your practice might relate to architecture?

**CG**: That's exactly the point: The effect of conditions, described through facts and data on the one hand and the architecture with its own autonomous rules on the other. This is the challenging character of architecture, and we want to study it through examples that we generally find in anonymous urban architecture. How architecture reacts to the climate, how it occupies the territory, how it reacts to traffic or political development, all these conditions are recognisable in a building. On the other hand, architecture has its own eternal rules. With this question in mind we created our personal collection of facts and plans of these four cities. We studied the architecture of these modern cities that are a result of urbanisation during and after industrialisation. We felt that historic cities like Venice for instance wouldn't give us the answers to contemporary questions. It was both a logical and intuitive decision to focus on modern cities – intuitive inasmuch as we like the four cities and have an immediate emotional connection to their architecture. For instance in Hong Kong we felt the buildings were fantastic and in our guts that we wanted to understand how they came into being, to figure out how the whole system worked. What we do with the typological research is very scientific but also artistic at the same time. I don't think it's possible to make architecture without an emotional understanding of it, or without a comprehension of its culture. Our appreciation at this level comes partly from our teachers. Hans Kollhoff opened our eyes to the wonders of the historic city and we have transferred that enthusiasm to our analysis of modern cities. Cultivating an architectonic sensibility is probably the most important aspect for an architect to develop in their working life and it's equally important that a teaching architect is able to pass on their grasp of architecture at that level to their students. I think that might answer the first part of your question. The second part of your question is about history.

**SP**: Yes, but rather than it being a scenographic approach to history, whereby motifs are sampled and reused, I sense in your work that the relationship with history and the built form is deeper?

**CG**: Emanuel and I are atypically interested in history. After our diploma we both won a fellowship to Italy to study Renaissance, Baroque and Rationalist architecture. I am also interested in the history of politics that helps me personally to understand the relationship between architecture in a historico-political context. It's almost impossible to understand architecture without gaining insights into the social, economical and technological systems it was created in. Once you grasp these factors it is easier to understand the other side of historic architecture which is what I eluded to before – the emotional. When you have studied Renaissance architecture and have seen it personally then you start to get to know it, then you begin to feel the individual approaches of the figures that designed them. When you visit the buildings of Michelangelo and Brunelleschi at San Lorenzo in Florence for instance, you start to appreciate the different sensibilities of the architects and also the individual forces and ideas that shape their work. I get an incredible sense of connection – five hundred years ago an individual was compelled to create a special work, of course they were in a particular context, you have to know the context to be able to feel the individual part – then you can get close to these designers, they had the same love for material, for form, for proportion. One could say that we are interested in this non-historic part of historic architecture.

**SP**: What's interesting about your approach is that it is kind of anti 'art history'?

**CG**: Yes. What makes us positively nervous is the notion of pure architecture. To be able understand it in a pure way you have to abstract it from it's historic and social context.

**SP**: The context in which these individuals worked and were taught was very different. They would have been working in a specific milieu and I wonder whether they would have had the same preoccupations with history as we do? Would they have been as intent on gathering or analysing information as we are, or would they have strived toward a 'pure' architecture and adjusted it to fit the flow and ebb of the context they were working in. I'm interested in this misconception that somehow through gathering a lot of information, the building starts to shape itself, rather than using individual genius or invention, a series of objective parameters determines the architecture. Do you think that any of that information actually has an impact on what ends up being designed, or do you think that there is a 'discipline' of architecture, a canon of work so to speak, with particular lessons that give us our understanding of what is appropriate to design. I think we should be honest about what we do and instead of hiding behind veils of information.

**CG**: Of course: The knowledge of facts cannot automatically be translated into an architectonic or urbanistic form. Architecture is not an automatic process of feeding facts and harvesting a form! That's why we think that the digital data and digital production opens a lot of possibilities but it is not an interesting design method. It can create wonderful objects but for us this isn't relevant. So to be able to design an object where I can bring in my abilities as a designer and my individual passions I need to work with something that I find relevant. Working in the abstract makes us nervous and

Michelangelo was clear about this. In St. Peter's and in the Palazzo Farnese he invented architecture to re-establish the architectonic power of Rome that had become an unimportant city. He was in the position to coin the future of that city. Where do we see this potential today? We feel at the moment that there is a huge crisis in the city, that urbanity is a very undefined word, and that we have to establish an idea of what urbanity can mean in this age. From our point of view it was so clear what it meant in 19th century France, the bourgeois society, the avenue, these very formal spaces. Urbanity has meant different things in different times and we just experience the complete absence of positive ideas about the city today. It's a common idea that the modernist city is a model that is out of date and is problematic, but nevertheless we hear a lot of criticism but no suggestion of a positive answer to the real problems of the city. So when we collect the information we do in the cities we visit, which is by the way not just the collection of statistics or data but real buildings. We then test these buildings by using them in our own designs with the question of what they could contribute in the development of a contemporary city. In this research there is somehow a simple idea that density is not just an economical or ecological value but that it is mandatory in the creation of urbanity. We think that this closeness of the activity of people is a conditio sine qua non for urbanity – and that urbanity has to do with real physical space and with people – and that it is not affected by all the virtual social networks of today – that contemporary urbanity will happen in the public space of the city, but what we regard to be public space is something that has to be developed and to be clarified. We believe that it could be closer to the 19th century city. Hong Kong which was mainly built in the 60's and 70's has physical and spatial qualities which have similarities to those of 19th century traditional European cities. So, we need a clear idea of what we are looking for to be able to deploy our creative energy effectively.

**SP**: It's obvious that you are interested in 19th century urbanity because you tend to study cities that display those tendencies politically. Hong Kong is an especially good example. The typical 19th century city is a place of huge industrial expansion. It was at this point that architecture and planning became professional disciplines – it was also the point at which the profession had to start dealing with risk and moved away from the previous position as artistic individuals to one of being public servants – and the sense of the medieval plot, or how a plot was developed changed radically. The city expansion and the more medieval plot driven model are both quite easy to get to grips with. When you go to Hong Kong there seems to be a bit of both. A tendency to get the most out of a plot and the huge city extension plans. It's an incredible mix of vibrant planning ideologies. My question, as always, is what the architect's role is in all of this? Our role has shifted. In the 19th century architects and engineers were still planning cities, in our contemporary context planning has become a separate discipline, a defined body of knowledge (in the UK). It's difficult to place where our responsibility now lies. It would seem that in reality the architect has a small part to play in the creation of the city and that commercial forces determine the shape of the urban context. The architect then works in a very confined space to get the most out of their plot. The expression of that kind of city is just a selection of architectural exercises determined by the boundaries of a specific plot and the regulations that impede upon it. I suspect that the 'planning' of Hong Kong is not being undertaken by architects. They are not thinking of what building would be best to reference on this site or thinking what Michelangelo would do in this situation, and yet this situation creates what you describe to be an incredibly dynamic urban form. Should we let go of the traditional notion of the architect and become like 'ants unconsciously building ant-hills', or do we somehow still determine within a discipline how we should live – or do you think that this is no longer relevant?

**CG**: It is important that we as architects make proposals for the vision of our cities. I speak now as an architect working in Switzerland where we have a very weak tradition of urban culture and the design of cities. That's why we look toward cities like Hong Kong, New York and Buenos Aires – cities where there was a huge economical pressure, established rules and a highly developed urban culture. These are cities where the architect is almost unnecessary. In Buenos Aires you feel that the rules are so clear that the buildings are authorless, without the hand of an architect. And it's often those designed without an architect that are the best. To compare those architects, or even constructers, to ants, misses the point: They were professionals like us, working intelligently and hard and with a lot of skills and traditions. But they were not designers in our individualistic and arty understanding of the profession. The rules are very clear, the geometry of the streets and building plots mixed with the huge pressure to build at that time results in a reduced freedom for the architecture. Having to deal with these clear sets of rules leads to amazing buildings even if there is a bad architect behind them. It's clear that good architects make better looking buildings, but because the urban rules are so clear even the bad architects can create remarkable buildings in those cities. What we realised was that this constraint is valuable in the creation of the city. A city needs these rules, and Hong Kong has these rules, as do all the cities we have studied. What we miss here in Switzerland are these precise rules. Building laws here are very defensive. They try to reduce the building height and create the maximum distance between the buildings and in doing this they somehow avoid urbanity. This comes from an intention to avoid the creation of what we would call a city. Zurich has some interesting block

neighbourhoods from the 19th century. There was a regulation in 1893 that proposed these block formations following the example of Berlin, and then in 1914 they replaced those rules with the ones aligned to the 'garden city'. You can see the results in the city today. It is a very un-urban city in terms of its form. It was an intentional change led by the architects of that time. So we shouldn't underestimate the position and influence of the architect in these processes – it's not the investors who want to make a profit and don't care too much about the form – it's the architect that gives form to these forces.

**SP**: So, on the one hand the architect is irrelevant because the rules are so well established and on the other the architect is central to the culture of the rule making process. In the first we can assume that the profession is no longer required, that a house builder could create the city to a set of rules defined by architects/planners but conversely the good buildings still need to be designed by architects. It could be that we are somehow arguing ourselves out of a job. In fact we are in a peculiar period architecturally. In the past cities were mostly built from pattern books and a more concerted authorship was invested in the most significant public buildings – nodal points of social importance that held the city together. In fact artists and sculptors not architects built significant buildings during the Renaissance. Commonplace buildings were not given the same exposure and if they were it would perhaps only be the façade that was beautified. We are now in something of a strange position as architects – one in which we have tried to grasp too much and on the other hand one in which we have given away some of the responsibilities we probably shouldn't have. My question is whether we should have to do everything?

**CG**: No we don't have to do everything. I think we need a clear idea of what the city is today, which in itself is a big task. This is perhaps the opposite of designing. We are dealing with some of the remnant ideas of modernism which considers the architect as a genius, supported by the way Le Corbusier presented himself as an inventor of a new world – from painting, to building, to the city – everything. If every architect was to consider themselves to be the inventor of a new world we would find ourselves with a problem. Even today in master plans for cities we see that architects and planners are enthralled by this way of working which is a huge problem. You can't go about constantly inventing the city because it is something that is common, something common to society, and in order to make it work its rules have to be accepted by the people who use it. If an architect is given the task to design a piece of a city over a few thousand square meters then it has follow the rules established by how people actually use the city. We need less invention and a better understanding of our common culture.

**SP**: We have to be careful when we use the word invention because of course invention is also very positive. If we take away invention and ingenuity, even in small-scale things like a window detail then we would be poorer for it. Perhaps it's better to say that we should be careful of self-interested expression that overrides common expression.

**CG**: When I use the word invention in a negative sense I mean the naïve self-over-estimation where individuals propose their own private ideas in society.

**SP**: The idea of 'private will' is worth thinking about. Can we as architects still aspire to serve the purposes of a common society?

**CG**: It's a fundamental human question about how we integrate ourselves as unique human beings, with unique histories, together to form society. This connection is fundamentally a cultural one – how we create things together. I haven't thought about it much but probably each generation has to redefine this relationship. The individuals of the modern age of heroism, of architects and artists, who had the courage to invent a new world would find themselves with a totally different set of problems today. Our age is one of a complex globalised society, very different from the world of the 19th century. We have to acknowledge that not everyone will be as singularly important a figure as Le Corbusier, but that the role of the architect is one in which we can still propose visions for the problems of today through each specific project. The only way to find out about the reality of our common society is to work on the ground with real projects, and to study real functioning cities. We do this at the ETH. We teach our students that rules are important and that we can learn from rules from other cities – that our creativity has to engage with objective rules, and that objective rules are not a problem or a restriction for creativity but that they can be create a fertile ground for creation. Likewise we look at our work in the same way, we ask questions about individual expression and the author and how they meet with the rules of society and architecture.

**SP**: Going back to the question of urbanity, you speak about the need for uniformity, not in a bad sense but more in the sense of a costume, in defining the roles that define our common urban realm.

Then of course there are a whole set of other rules, architectural rules commonly called ‘principles’ which you study through the observation of type – rules like spatial organisation, structure and maybe even proportion and composition. Do you deal with those principles in the same way as the larger planning or urban rules? Does the method of studying the city transpose to the study of the singular object in the city or do you then revert to a more common approach to learning about architecture at that level?

**CG**: What we try to do with the student is to approach the design in a very coherent and logical way. For instance we check the potential of an urban building type to create public space: What kind of space, what functional potential, what scenario is linked to this type? And on the other hand: What kind of architecture does this type produce? How is his structure expressed through a façade? That means, we somehow try to build up a coherent system of space, type and expression. So far it’s very rational. At the same time, I know that in reality, in our office, there are some disturbing elements that can be absolutely contradictory – that bring a completely different angle to the design. Talking of being honest, of course to be so rational is in some sense a pretence. We follow the logic of a design up to a point, but there comes a certain stage in which a design can be enriched by contradictory elements that are completely individually motivated – ‘because I want it’ – which is legitimate. We don’t tend to reinvent architecture. Architecture is always about the same issues.

**SP**: Up until now we have been talking about the rules in quite an abstract way. When I recently met Peter Märkli we spoke about the grammar of architecture. He explained that the grammar of a building is something akin to a language, like the alphabet, that can be understood and therefore learned. Apart from the most rudimentary principles afforded to it by climate and site conditions, could you see anything in architecture that relates, like he does, to a common language? At the beginning of this interview you said something very interesting, about how at a certain point, when it came to designing a building, the architects/students were suddenly lost. It makes me think that the we just need to study architecture, study buildings, like you did when you immersed yourself in the buildings of Northern Italy.

**CG**: When we study building types from these cities they tend to be anonymous buildings. They are often pragmatic and in that way tell the student a lot about the rules of architecture, because they follow a technological, economical and functional logic. They are not singular buildings but merely representative of a huge group that has evolved over generations or even centuries. The knowledge of how they dealt with the constraints is condensed in very intelligent solutions. So, studying these examples with the students is very worthwhile because the objects explain a lot about the rules of form – how a body ties to a façade with openings and how all the components come together. A lot of these buildings are the opposite of a manifesto, they are not there to prove something, but are the result of an intelligent considerations, they also happen to be architectonically beautiful in my opinion. They have clear rules, and I think these clear rules lead to a clear tectonic expression. In those examples we can learn a lot about the grammar of architecture and of bringing the tectonic elements together.

**SP**: Many of the motifs that are adopted by common stock buildings, the pediment, an architrave or a particular window head detail have generally been derived from ‘model’ architecture created at the apex of a culture. In a way the grammar of architecture has come from there. However, our link with this archaic language is broken. Do you think we can build a new grammar and where do you think we should start?

**CG**: Because we live in a very complex society where there aren’t such clearly defined rules of perception anymore, the way I perceive a building is very basic, direct and physical. I see the house as a body and in the body I see elements like openings that are a disturbance of this body – and maybe I wouldn’t call it a grammar rather than physical rules that determine how these openings are. They can be harmonious or disturbing or boring, that’s how architecture works through our optical physical perception and that is why it has rules – rules governed primarily by the culture of our own human body.