

Global Studio and Global Sustainability

Interview with

VIVIANA MUSCETTOLA

from ZAHA HADID Architects

Is there a real good answer to global demands for more sustainable future or should we become more focused on the local problems of sustainability? What was the etymology of the word "sustainability" and what does it mean today? These are just some of the questions, which could appear in every conversation, especially professional. The answers are different, often presented through the prism of some project. The interpretation of its meaning gives the unique seal to each and every creation. The signature that is well known might become the subject of the discussion more often than we think.

By considering star architects around the globe it comes out that only few women managed to reserve their place among the greats. One of them is a unique figure that established her practice back in the 90s. The one, that became the busiest global figure and female star architects of the modern era. The Zaha Hadid Architects (ZHA) studio is an interesting place full of individuals all gathered to produce and research for the best architecture. It is a sort of cluster studio where ideas are born in collective manner and with a high sense of their own philosophy. However, the focus in this article will be on one particular lady who works with ZHA more than a decade.

This is a short story about discussion on many topics and try to peak behind the scene of the ZHA studio. Here is how one global studio is managing the global sustainability.



Source: Zaha Hadid Architects

Viviana Muscettola, architect, Senior Associate at ZAHA HADID Architect (ZHA) joined the studio as a designer in 2004, having previously working as an architect in Rotterdam and Beijing. Currently, the Project Architect for the ZHA's Cairo Expo City project, she holds Italian and American nationality and is registered architect in Italy and the UK.

Viviana has an architecture degree from the Università degli Studi di Napoli (2001) and Master of Architecture degree from the Architectural Association in London (2004).

You joined ZHA (Zaha Hadid Architects) 11 years ago. That is quite a lot of time. How it looked like working in such a large studio on your first day and how it looks like now?

Muscettola: When I started 11 years ago the practice had around 45 employees. In one year time we already had over 100 employees and since then the office has grown almost exponentially. Today we have over 400 architects working mostly in our London office. We are based in a former school, and went from one studio space, which was Zaha's office and her library. Slowly the office has been able to expand and today we occupied the entire former school and we established a gallery space in an adjacent building. The office is working in smaller groups, called clusters. These clusters are project based teams working in collaboration. ZHA is international practice, an high number of employees are from all around the world, making the practise truly global. Zaha Hadid and Patrik Schumacher are extremely engaged with the world of Academia and Universities across the world, they have been teaching for many years in the US, Austria and Britain. Therefore many of the employees, including myself, come from the line of students of one of those universities. The result is a very vibrant and young practice. At the beginning of every project Patrik and Zaha give their design direction, there is then an open brainstorming session for all the team members working on the project: an in-house competition where people have their chance to do put forward their own proposals. Zaha and Patrik will then revise the selected options and eventually choose the one that fits the best the brief or the location, the so called "winning design".

So, you are giving the chance to young architects to show their works and ideas to grow and to contribute to the whole idea on design of the project.

Muscettola: Yes, exactly. The engagement of the team is a critical part in parallel with the conversation we have with our engineers. The built environment is made by the intelligence of many people and the contribution that we can receive from construction engineers, or landscape architects and lighting consultant makes the project what it is. The design proposals from the office are enriched by and pushed forward by this collaboration. A successful project needs also a good communication with the Client. The more we tune in with his aspirations, bringing their idea into our agenda and vice versa, the more a project will be successful.

You mentioned communication, integrative design and team work as key factors of the office. Since your personal position in every project is different (depending on the construction phase, design phase or

competition), how does it feels switching from one role to another?

Muscettola: I have been lucky enough to be able to work on small scale projects (like a sofa) to very large scale ones such as huge master planning. This allowed me to not just to experiment one typology but being able to move from smaller to bigger project, it's really widening up your own perspective. The creativity needs the change of scale, needs to experiment on smaller object like vases and then work on a skyscraper which is much more of a collaborative process but will benefit from the clarity of vision given by a simple concept.

What do you prefer?

Muscettola: This is a difficult question. The good thing about doing some product design is that you design it today and hopefully in a year time it will be on the market. In the construction industry it takes a very long time to see the results of your experimentations. I worked on 7 residential towers in Singapore for almost seven years. The development is built now and I'm really happy with the final results, thought in 7 years you are already in the next phase of your personal journey.



Citco Zaha Hadid Collection, Milan
Source: ZHA; Copyright: Jacopo Spilimbergo



d'Leedon, Singapore
Source: ZHA; Copyright: Aaron Pocock

When it comes to product design of smaller objects it is nice to conclude the journey and to respond to the specific agenda in a relatively short amount of time. So, for me I would not give up being able to design buildings versus doing furniture. I've been trained as an architect and this is what I would like to continue to pursue.

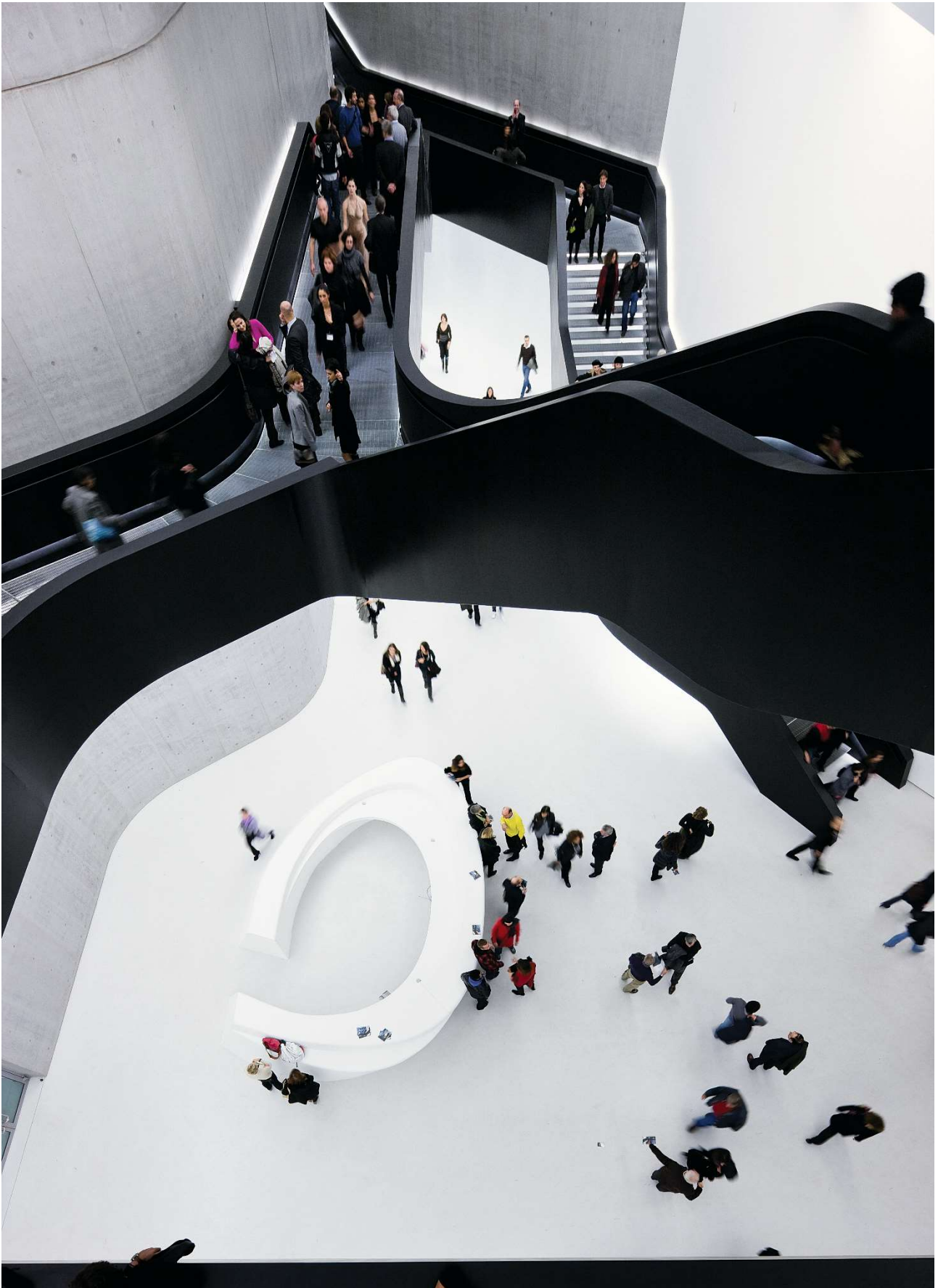
But I believe that working on smaller scale reflects your work at larger one?

Muscettola: Yes, that is correct. The office just recently presented in Milan Design Week the series of vases that are part of an ongoing experiment on towers. We've been doing many physical models in a search of a kind of geometry setting out and we went through a lot of alternations. We then realized that some of them can be turned into a flower pot or candle. You can see the same resemblance with those objects and with some of the

projects that we are doing now in Australia. The office does a lot of this step-by-step design development, adjusting itself, fine tuning a concept or an idea.

When we are talking about the ZHA and architecture and urbanism that your studio is producing they are made by principles of parametric design. However, when it comes to smaller scale you do not have that required kind of context needed for parametricism to take its place. So, how does your studio transform its philosophy into those small scale objects?

Muscettola: When you work with objects and not buildings you do not have particular context to work with. We have done certain number of projects, pieces that were produced by Alessi as series of pods, which can be reconfigured as you wish. They are separate pieces that you can put together in a different way.



MAXXI, Rome
Source: ZHA; Copyright: Iwan Baan

There is the idea of the field but Parametricism is not only about component of an object in one field. It is also about finding out the ways to implement it through sets of information data, which makes specific design. For example: it is noteworthy when it comes to tower design how to define the shape of the building that will better respond to the predominant winds or to the thermal conditions especially if is set in a very harsh environment and extreme climates. How to orient the building? How to capture the predominant wind? How to treat the façade in a way that most of the year you can run the building on very low energy consumption. We do actually design of buildings in a way that the shape and orientation of gives the highest contribution to the overall reduction of building consumptions, it's a passive method which gives the greatest results because we impact on the amount of energy the building needs, before even considering recycling or sources which are more common methods. Of course choosing the right material for the right location is very important component but if the shape of the building is not reacting to the environment for which it is designed then effectively you can achieve so little with just material selection. The design can try to recycle the water, capture the sun and produce some energy but it is a little percentage when it comes to the consumption and most likely will not reach the required level of sustainability.

The sustainability is a complex matter. It is a set of many rules, recommendations and even so much versions of different standards for certification of buildings. But then again, the sustainability is very tightly incorporated into your projects. You mentioned

specific context but how do you work with the historic contexts, heritage and cultural environment? How do you cope with it and make the right dialogue between the existing and new buildings without jeopardizing each of them?

Muscettola: The answer to this is not just one. The office has been designing buildings that in some instances are trying to cooperate with the surroundings in a way to moderate their own appearance to the existing environment. In other cases the way is to completely break the bond between the old and the new so that there is no more dialogue in a way of shapes and in a way of materials that we use. We are working on future buildings and we must work with something that is truly contemporary.

An example can be the project we've done in MAXXI museum in Rome. The location was not in the centre of the city but still the Rome is "the eternal city". The site was quite tight, including an existing building on one side. The design works with aligning the main facades to the surrounding buildings, the main volumes of the building align with the surroundings creating a sense of belonging. The façades are then built in concrete and glass to mark the difference with the existing. We created new place for people coming to visit. Another project worth mentioning is the Galaxy Soho buildings located in a quite dense and historical part of Beijing. In that case we worked with the concept of the courtyard and court house, typical for the traditional Chinese architecture, and especially residential buildings and then transformed it in terms of scale and also in terms of materials. And again, it was a new icon of city.



MAXXI, Rome
Source: ZHA; Copyright: Roland Halbe

When we are talking about contemporary architecture and pushing the boundaries forward and reaching out to the next chapter or goal we realized it is not an easy task. The public is not always welcoming the iconic architecture. How do you go from a studio that struggle to build anything 20 years ago to the studio that cannot stop building today?

Muscettola: We do not build all the time but yes we do have more buildings sites now than 20 years ago. Our office is really putting a quite amount of time in the earliest phase of the design whether it is a competition or the first concept stage, because this is the point where all of the most important decisions about the future of the building will be made. When you look through our website or the publication about the office, you think that every building is one-off, instead I can tell you that all of those came from ideas that have been circulated for a while in the office and discussed with Zaha Hadid and Patrik Schumacher. Only the ideas that have been developed enough through time will eventually get built.

Melting forms and different shapes are extremely dependable from parametric design. Climate, topography, location characteristics and context are the dominate data inputs. What about the users? Are they also a parametric figure or something else?

Muscettola: Where the society comes to the picture? Zaha Hadid Architects is designing with the ultimate users in mind. For example for the office building typology we are working with the concept of a new floor plan with no physical barriers and highly connected. The idea is to create physical connection that will promote communication between departments, engage people to exchange their ideas. In this case the agenda is also to encourage the client to drop the typical office planning and try to embrace new ways of connecting people in the office. Creativity is not only for us architects, or artists: every employee will improve its productivity working in creative environment and we truly believe that communication plays a very strong role. When ZHA designed the headquarters of BMW some years ago the brief called for spaces for the production of the cars and offices for the different department (blue and white collars). Before our project car manufacturing and office spaces were completely separated: in our building the actual cars assembly lines runs through the office space. People doing IT, engineers or even marketing and people assembling the car are now together. Our projects emphasise visual and physical connections to provide multiple experiences, looking through the space from different corners at the same time. Our brain is never doing a task at the time: if you look at the painting you are simultaneously thinking of something else and making connections, and this feature sometimes

requires pushing the visitor, empowering him to experience multiple connections at the same time.

So, in a way you are creating that space that engaged the visitors and contributing to the overall experience of the space. Have you ever spoken with some of the visitors of the space and got their reactions to the created space?

Muscettola: I've been working on the project of residential buildings and the client was a developer who was looking at the square centimetre of sellable area, rightly so. Last year during the opening ceremony we met some of the people who bought the apartments and more than one told us: "We really appreciate that there is over 1700 apartments and I can still explain others where do I live because it has its individuality". It is difficult when you go to such big scale to give people sense of uniqueness and at the same time feel part of something bigger. It is true that not everyone can have a small country house with the garden and that can say: I live in that house with the red door. Many people are living in massive blocks where is more difficult for them to get the feeling of their own nest, the place of their family and private life, recognition of their status. Therefore, we are very happy when we managed to convince the client that seven towers will not do anything bad to the residents. We are proud when we have an opportunity to work with the clients to achieve the best for the final users. At the end it is the communication between the client and us that makes the project valuable.

You mentioned diverse clients and places on earth where the ZHA designs and builds. Where is easier and where is harder? Where is more welcoming environment and where is problematic?

Muscettola: All countries are different and unique. Most of our design is done in London and we then communicate with Clients, consultants and contractors via conference call or site visit. Only real issue could be the time zone difference, but you get used to it.

So, how the public reacts on your proposals and designs in each of the continents? Where is the hardest for your studio to work?

Muscettola: Generally the public responds really well to our designs. Curiosity and willingness to embrace the new is what triggers those reactions.

If the architecture is a new religion and we (the architects) are the new priests of this religion do we



Sleuk Rith Institute, Cambodia
Source: ZHA

need to be more lauder or more aggressive in order to get the society and our practice to that sustainable goal that we set ourselves? Are we really on the front line or are we giving ourselves the bigger task than we should have?

Muscettola: For sure we are on the front line, but are we alone? I do not think so. I do not think that we should be left alone to scream for better. Unfortunately a lot of responsibility comes from planners and therefore from politics. I have travelled through the wonderful landscapes of Montenegro and all of these green mountains and blue sea and these beautiful stones. Unfortunately there have been many big scale developments not really responding to this beautiful landscape and historical setting. I think that this is the opportunity where planners and city councils should really force themselves to be stricter. Like it happened in Costa Brava, or all the way to the south of France and Italy, I have to say. In the 60s Italy has been heavily destroyed by developments that were just looking on the profit and not even looking at the sustainability. Wherever there was a boom of economy there was devastation of the place and bad response by the architects. I think we have better tools now, better ways to do it right and it is about forcing the investors to make better decisions.

Do we pose the knowledge and the strength to lead the world into the better sustainable future? By your opinion, where are we going to be in 20 or 50 years?

Muscettola: We are on the front role as we always have been. Architects are the ones that are engaged with the social and the environment most of all. Our responsibility is really high. Although steps are being made in the right directions we are still moving a little bit too slow. With our inventions, with our progress we can get a better future. We need to push the industry to new generation of materials. Up to now, we've been using the materials that are hiring forever but again you have today materials that are more recyclable, greener and more available than ever before. They implicate less raw materials into the production process and consequently a reduction on carbon footprint. The industry needs to help the architects and engineers to come up with better solutions whether we are talking about the recycled materials or to find materials that perform better. In the Netherlands, the social housing is demolished after 25-30 years because they upgrade them to incorporate new standards, materials that insulate better etcetera. It is more sustainable to demolish the existing building and rebuilt with the higher standards. In addition, the industry needs to react more by giving us better materials than before and more environmentally friendly ones to work with.

Communication and collaboration between the politics, developers and designers is crucial. Everyone needs to push the other one in order to make it work. The society, the construction companies, the engineers, the industry or of course the designers, all have to push ourselves to better future of the built environment. I do not think it is going to be in a twenty years of time but we have to stay on that green path. It is a long process and we should be careful that by doing this we are not exploiting other economies, the countries in transition. Most of the building materials and components used in the construction industry are coming from the Far East and developing Countries because they are cheaper. How do they produce them? By being zero green. But still building in Europe with these materials you can get green certificates. Developing countries are the ones that need to be more careful and go directly with the solutions that are better than those we used in the past. Why they have to do it exactly as we did and to loose time and resources? To make same mistake all over again until collapse and thinking going green. Especially for us it is important since we have been working all around the world and trying always to push a little bit of our clients, contractors and developers to take sustainable solutions on board.

By your opinion, what is the future of architecture and what is the architecture of the future?

Muscettola: I hope that there isn't just one answer to this question. I am lucky enough to work in an office that is creative practice. I wouldn't want to see the world that is populated only by ZHA buildings because I am all for difference of each place. The most beautiful cities in the world are the ones that are mixture of everything, contemporary and historic side by side.

What is after-parametric design?

Muscettola: This you have to ask our Director Patrik Schumacher. I think Parametricism is still an in fieri process and it still needs to be fully established. Parametricism is a quiet wide umbrella. It is about the tools we use for work but also it is related to the way we think about architecture and our environment and how do we work together as a community. ZHA spends a lot of its time to work with students around the world to develop the discipline.

How is it working with Zaha and Patrik?

Muscettola: I think they both have the sparkle of geniuses in their mind. They have a way of been connected to the world and to truly do architecture that



Sleuk Rith Institute, Cambodia
Source: ZHA

is quite unique. They are involved in architecture 24/7 as it is their passion and life: they are a source of inspiration for us all. I love working with them because they are as passionate as they were when architectural students. I've been there for eleven years and I'm still learning a lot from Zaha and Patrik as well as from my colleagues. We all talk together and make decision from the first week of the project, the first sketch until the last brick. I like the feeling of exchanging ideas and information even when in disagreement on a specific subject. We are really pushing all the architects who we work with at the office, not only ourselves. This collective way of doing architecture and getting to the final building is amazing. It is experiment, dynamic, creative, innovative, and with very nice vibe on the overall.

In some way the architecture is still considered as a "men's profession". You are working for the iconic studio and with person that is pushing so much in terms of profession, boundaries, design etc., that even the press is questioning sometimes the Pritzker award winner. How do you relate to that part of Zaha struggle and mission of women's perspective in architecture?

Muscettola: Unfortunately, this topic is more disappointing than the one on sustainability. There are greater steps in that directions than making some sort of equal status for female and male employees whether you are working in London or some other places in the world. If you look at the number of female architects in

architectural schools, that number is very high, even higher than the number of men. Then if you look at the working environment, especially all of the top executives in companies they are usually male. In the reality there are women leaving their jobs because it is challenging to be able to keep up with your work and parenting but has a lot to do with disparity in salaries. In a family is usually the mother to give up the job because she earns less. My recommendation is to keep working despite the heavy burden of balancing work and family. Your children will grow and for you being able to contribute to this society with your profession is important. Parenthood is a matter of choice and each individual should have the right to have a children is they wish so. It is the biggest mistake that our society to ask women to choose between one or the other. It is not "sustainable" for our society to have to compromise it with the work. There are many things that can be done from flexible office hours, better and less expensive child care, home working. I was the first woman in ZHA to have kids and stay with the Company and I have to say both Zaha and Patrik as well as my colleagues have been very supportive.

What is your message to younger, the emerging generations of architects? What is your advice to them how to get from schools to work environment, establish themselves as creative minds of the future?

Muscettola: I always talk about this topic because I did the same mistake as most of the people did – I thought

that when I finished university I was going to be an architect! I've done five years of this and even more, I'm done with learning and now I'm ready to do my job! No. Seriously, that is not the reality. I am still learning and that is the part of our way to progress. So, please do as much as you can. As soon as you finish your studies or even throughout your studies do grab whatever there is, competitions, part-time jobs, etc. Your primary goal is not to make money. Architecture in general is not about making money but being able to get knowledgeable of this very complex profession. It is different from what you have done at the university and you must do as much as possible. Always look for a job that engage you in creative way, do as much as you can and get the experience in first few years. Jump from one thing to another or stick with the same office and explore all, it doesn't matter. Just find something that makes you part of the discourse so that you can work with other people, learn from other people. The more you are exposing yourself at the beginning the more you learn and develop. Take internships, this is what you need to start understanding working in an office or gaining the

knowledge of the profession and be completely open-minded when it comes to this. Choose what you want to do somehow, direction or particular field or maybe if you do not know try even something even if you do not like it because at the beginning you have to be experimental. You have to put 100% plus and be hungry for knowledge and practice. When I've decided to do architecture none of my parents were in the profession and there are no architects in my family. I did not know much of this practice in the beginning. I've been really lucky because I liked studying architecture and afterwards I enjoyed the profession. I still want to grow and develop myself. We (the Architects) are lucky because we are doing a profession that is really engaging. You might have weeks that are less interesting but mostly we are a lucky category of workers: Architects love what they do and do it with passion. How many professionals can say that? I think only a few. I wish to never sit in the office that makes me unhappy or not motivated. Fight for your goals otherwise it will not matter ... otherwise you better choose a job that makes your life easier.

Interview: Mirjana Uzelac Filipendin M. Arch.