

# In media res

**Prof. Susanne Brenninkmeijer talked to Rolf Humborg-Hülsbeck and Birgit Bierbaum about their experience of working in the Middle East.**

*In the Middle East you can virtually sit and watch high-rise towers sprouting out of the ground. Features such as height, speed and avant-garde daring are outdoing each other at a daily rate – you only have to hear the name Zaha Hadid to know what I mean. She originally comes from Iraq – even if she studied mathematics in Beirut and architecture in London – and is probably the only architect of world renown with cultural roots in the Middle East. Apart from Ms. Hadid, there are numerous personages from the architectural world vying for attention in the region, introducing western influences and creating any amount of sustainable architecture, although not always to the advantage of the general outcome. The lighting design in the region is also primarily based on imported philosophies and local design practices are few and far between. Not every seed that is sown in the desert sands turns into a full-grown tree, so to speak. At any rate, investors clearly want something for their money that surpasses anything ever developed in the western world, and place their trust predominantly in western know-how to achieve that.*

Delta Lighting Solutions, founded in the year 2000 by Ziad Fattouh, is one of the few local lighting design practices that have become established. In fact, the number of locally based lighting designers is hardly enough to cover the creative work that needs to be done on hotels, facility buildings, schools, shopping malls and office buildings. Today Delta Lighting Solutions comprises a team of twelve from Germany, Brazil, the United States, and the United Arab Emirates. Seven of them are qualified architects, industrial designers or lighting designers. Three are dedicated exclusively to computer-aided design and presentation. And the office is looking to expand in the near future. The mix of local understanding and western design know-how appears to be bearing fruit.

We spoke to two German lighting designers from Delta Lighting Solutions, Birgit Bierbaum and Rolf Hülsbeck, to learn more about what experiences they have made in the Middle East and to find out where the differences lie when it comes to design and project planning.

**It has been two or three years now since you decided to move to Dubai in the United Arab Emirates. What were the factors that led you to take this step?**

**Rolf:** Money, sun and a life of luxury, of course! We're still working on it...! When I joined Delta Lighting Solutions the design practice had already been in existence for a few years. They had completed a number of projects in the region and were about to complete more – mostly facade lighting on towers, but also a few shopping centres, malls and car showrooms. And they had more new, interesting and ambitious projects in preparation. I was really struck by the variety of potential projects developing in one place.

Then there was also the personal challenge of living and working in a different culture. As a lighting designer I had worked in Germany and France, and in Dubai I saw the opportunity to apply the experience I had gathered in Europe in a country with a mass of highly ambitious projects in the making.



**Birgit:** I came to Dubai together with my partner. He is also an architect and we decided to take this step together. We saw the move as a chance to develop from a career point of view. And we were looking for a change in general, experience abroad, and a dash of adventure.

**Have your hopes and expectations been fulfilled?**

**Birgit:** Very much so, in the sense that I am working on some extremely demanding projects, and have learnt to appreciate the experience I gained before I came here. It's also great to be able to work with international design teams.

**Rolf:** I was very keen to see how my professional and private life would develop here. From the start I was taken with the mix of western influen-

ces and Arabian culture that takes a very special form in Dubai – with all the pros and cons. I enjoyed the dynamic approach to many of the projects I was working on. After working on projects in Europe where many projects took a number of years to complete, or were sometimes stopped suddenly, or the budget was cut radically, the determined, future-oriented, and sometimes even visionary approach I have come to know in the Emirates and other countries is the region I see as basically extremely positive and motivating – in spite of all the difficulties entailed.

**What difficulties do you mean?**

**Rolf:** One aspect is the topic of climate protection: many of the projects owned by private investors may not be designed to cope adequately with the possible effects on the environment, even if the government is acclaiming the year 2008 as the "Green Building Year". This means that 2008 marks the beginning of a

campaign whereby all new projects are subject to fulfilling specific energy efficiency and environment friendly stipulations. A large number of the projects already realised, or in the process of being built, ignore the modern-day challenges inherent to climate protection worldwide. Property developers are only slowly beginning to design and build in a more energy-conscious way. In the lighting sector they are also starting to place more weight on energy efficient light sources and lighting systems, which in turn is reflected in updated official guidelines and recommendations. The speed at which many of the projects here are realised can also be problematic. There often doesn't seem to be enough time to coordinate everything that needs to be done within a project, which can make it difficult for us to control and supervise the design and execution of a project.

**Did you have any concerns or thoughts about the risks involved in moving to Dubai?**

**Birgit:** I was unsure about a lot of things – mainly of a personal nature, though: would I be able to cope with the climate? How would I manage being far away from family and friends? My former job was extremely interesting and I had learnt a lot, so I was afraid of being disappointed or feeling I had made a mistake in choosing this path. The work here is so varied, diverse and intensive, however, that I can't say I regret deciding to come here.

**Rolf:** I must admit I didn't have much idea of what life and work in the Emirates was like before I came here. No more than what we see and hear in the media, which is either highly critical of the developments going on here or doesn't go further than describing it as a tourist's playground. Now I would say that it was an advantage not knowing too much beforehand, because it meant I was able to approach my new situation in a relatively open way without any preconceived notions.

**Designers taking this step into the new New World are well advised to dispense with any prejudices, then?**

**Rolf:** There are many prejudices people can have against Dubai and the entire region come to that, mostly to do with wealth. Financial aspects certainly play a significant role for people debating whether to settle here. But then I have to say that salaries in many fields are not necessarily substantially higher than western standards and working hours are often longer. Six-day weeks are nothing out of the ordinary. Another prejudice might be that especially here in Dubai a lot of the glamorous image of the city comes from the glittering facades. Effective lighting adds to that at night, especially for the parts of town that focus on attracting tourists, and sometimes there is not much substance behind what looks brilliant. At the same time, serious efforts are being made to bring Arabian lifestyle and the Arabian culture into context with other parts of the world, be that in architecture or in the artistic sphere. And I have to say that "wealth" has always been a part of this culture, so for many natives the way they are handling the current boom seems completely natural.

**What took most getting used to: the way of working or the cultural background?**

**Rolf:** Moving to an unknown country to work always brings with it huge challenges: the language(s), different mentalities. In many regards you need to completely re-orientate yourself, and there is very little time at the beginning because you are immediately involved in the job you have taken on. I moved to Dubai on my own at first. My family joined me a



few weeks later so I was able to concentrate on my work and get used to my new life at a relatively easy pace.

## INTERVIEW

In relation to the work we do here, writing specs (specification of luminaires for a project) is something I can say we all suffer from, though not only in this part of the world, of course. The way they treat the specs provided by lighting designers working on the projects is a drama compared to how



this is handled in the western world. When we were working in Europe there was a certain degree of transparency and respect when it came to observing specifications. Clients in the western world tend to value and rely on our expertise, whereas here even those who are used to local mentalities and approaches are faced with nasty surprises every day. It is probably part of the pioneer work that is required: firstly to make the luminaire market more transparent, but also to convince the clients that given the extreme climate in the region it is not worth opting for lower quality products when selecting luminaires in order to save money.

**Birgit:** If you ask me what makes life difficult when you first move here, I would say car traffic and finding somewhere to live. Once we have the Metro in 2009, the situation with the traffic can only get better! Rented accommodation is very expensive here and it is not easy to find something suitable. And Rolf is right about defending specs. We find we are continually fighting to defend the quality of a spec and to avoid ending up with cheap alternative products being installed.

Projects go up here at breathtaking speed and it sometimes takes a lot of explaining and talking to acquire

Lighting designers in the Middle East

samples and get lighting trials done in spite of the time pressure. We need time to make it clear that these processes do not hamper the realisation process but rather promote achieving a quality result.

**Are the clients open for your suggestions and arguments?**

**Rolf:** In our experience we find that Arabian clients are more open to our arguments. Of course, the money involved plays a significant role, but many clients are aware that poor quality products or poor supervision of the realisation will not do

their ambitious projects any good in the long run. It's important to give the client an idea of what the lighting design is going to cost as early as possible so he has the chance to gauge the feasibility of the project. This puts him in a better position to judge the offers from lighting suppliers. The design phase is sometimes so short, however, that it is not always easy to obtain all the information about prices in time. That is especially true in the case of custom luminaires, where the manufacturers first have to calculate the expense incurred for them and then the delivery costs are added to the final price. But I do have the feeling that many clients are becoming more aware of the importance of the topic of lighting – maybe because of what they have learnt from projects in the past.

**There are lots of foreign lighting designers working in the Middle East, but not many who have practices here. Why is that?**

**Birgit:** I think a lot of practices first try to do a project from their home base and prefer to travel to Dubai without setting up office here right away. Dubai is pretty centrally located, which makes travel back and forth easy. The projects in Dubai are sometimes not that easy to get a grasp of when you come from outside, though. You need local knowledge and contacts to be able to set up a practice here. Apart from the fact

that there are often others involved in the design team who also have a practice in another country. That means the lighting designers working closely with the architects in the respective country, work as a team, and only travel to the actual site to give presentations.

**Rolf:** There are many reasons why designers don't settle here: for a start it's relatively expensive to set up a fully staffed office in Dubai. Rents for office and living space are incredibly high and continue to rise, which means that even large international firms think very carefully about to what extent they can and want to be present here in Dubai. Geographically speaking Dubai is an international hub: you can get a direct flight here from all the big business centres around the world, and that's a big argument for not moving here full-time. Another reason is that it is always easier to work in familiar surroundings. Thanks to good communications and travel opportunities, you

can practically choose where you want to have your base, even if you are handling projects in many different countries around the globe.

Over the last few years we have been witnessing an exemplary boom in this part of the world and many things are beginning to concentrate on the Middle East. But it is not always a good idea for practices to become dependent on just one place, even if it appears to be very tempting. Even if the majority of the projects we are working on at the moment tend to be in the Middle East, we still maintain contact with projects and project developers in other countries to ensure the design practice has a broader basis. Our advantage is that we are an international team with lighting designers from different backgrounds and disciplines.

**Is it an advantage then to have a practice here in Dubai?**

Projects such as "Cooling Plant 2" in Dubai present lighting designers with new and exciting challenges. The architectural design alone is foreign to the western world, but to design this kind of building to house a functional plant is equally unusual. The facility behind the facade, which from the outside could well be a hotel or another kind of building designed for cultural or other uses, is actually the cooling plant that serves the entire Burj Dubai area, the largest building development in Dubai. The lighting designers developed a concept for the building that aligns very closely to its outward appearance, picking out the main elements of the facade and illuminating them to accentuate specific features.



**Rolf:** I enjoy being here and close to my clients and the projects, learning more and more about the different mentalities every day. Time plays a different role in this part of the world. Many jobs only become real after

years of maintaining business contacts with potential clients and building up trust. On the other hand, projects may suddenly come into being and need to be finished within unbelievably tight timeframes.

It's an advantage for clients and other project designers to have us nearby, of course. It's a whole lot easier to coordinate appointments and meetings – even at short notice. And we are able to respond more flexibly to changing situations.

**Birgit:** And we have the advantage that we can supervise our projects here first hand and answer clients' or contractors' questions directly. The lighting distributors' network is structured and organised differently from in Europe. It helps to know local distributors because that means it's

easier to organise samples for testing. And if you live here, you understand the extreme climatic conditions and can take that into consideration when selecting and specifying products.

**Were there any great differences in the way you worked in Europe or were you able to transfer your know-how and modus operandi 1:1?**

**Rolf:** You have to get used to different timeframes. Even if the majority of architects and project managers primarily come from Europe, America or Asia and are experienced in international design work, large-scale million-dollar projects often cannot be realised as fast as the property developers would like. In Europe, for example, some projects take years to complete, whereas here it's all over and done with within a few weeks! And that also applies to changes that are required to be made at short notice and realised when the project is well

The lighting solutions developed for the respective parts of the facade are as varied as the facade structure itself. Would-be windows and tiny niches are backlit as if to indicate life within the building's walls; the structure and design of the windows and the vertical outer columns are accentuated from below, projected sections of the wall are illuminated softly horizontally, prominent tower or corner elements are floodlit. Other, more expansive wall surfaces have received wall-mounted fixtures and the structure of the wall is intentionally divided by beams of light. Many exterior lighting elements that have been allowed here are questionable, and yet it cannot be denied that the building radiates a fascinating, albeit ambivalent, charisma.

on its way to completion and the design phase has actually already been concluded and approved. It's definitely a different way of going about things.

**Birgit:** In my opinion, the greatest difference lies in the wide variety of different nationalities working here. This means you are continually dealing with a wide range of levels of knowledge, experience, motivation and languages. The lighting design profession is better known in Europe. Here you often have to explain to the other people in the design team what our job is on any given project. We are frequently mistaken to be the distributors, because they were simply not familiar with the idea of working with an independent lighting designer. In general, I would say there is less general knowledge of what lighting design is. There is basically still an awful lot of explaining to do.

**Are there any differences with regard to relations with bosses, clients, colleagues, and professional competitors?**

**Birgit:** Apart from the fact that we are dealing with lots of different nationalities here with different cultural backgrounds, I don't see any real difference.

**Rolf:** We are basically very western-



zed in the way we work. Many of our partners on projects are European, have similar backgrounds to us and share the same professional skills. It is relatively uncomplicated to communicate with one another. Women have a harder time career-wise when it comes to earning respect from Arabian partners or clients. Birgit can probably tell you a story or two... If you want some fast facts, I can tell you that Dubai today has around 1.4 million inhabitants, of whom about 250,000 to 300,000 are Emiratis. They say that the number of people emigrating to UAE every year is around 360,000. That naturally gives rise to problems with regard to integrating all these people, and also with regard to the infrastructure of the city. With so many different temperaments coming together, it is amazing how relatively peaceful and tolerant the people are. In our team at Delta we have seven different nationalities. Together all these colleagues bring their various personal and specialist experience with them. I see this as enormously enriching.

**Would you say you design differently in an environment of this kind?**

**Rolf:** There are probably as many different design approaches as there

are projects in the Middle East, and the number is vast. In the case of the majority of buildings, we are talking about modern, western architecture, but in the hospitality sector, for example, you do see strong Arabian and Asian influences.

The lighting design aligns itself to the architecture or interior design, of course. In palaces, for instance, you find a mixture of styles. Everything from highly decorative chandeliers to downlights for accent lighting or cold cathode for indirect ceiling lighting. This mix of styles is perhaps more extreme than we are used to in Europe, but there is basically no difference in the way lighting designers actually design.

**Birgit:** You can't generalize when it comes to special design features. I am currently working on a palace project, which is naturally different from the point of view of overall design than a German government building in Berlin. We have projects such as hotels or hotel resorts that are designed according to a specific theme, which may be traditionally Arabian, Polynesian or metropolitan. Then there are also futuristic designs and styles, depending on the client's wishes or the architect's intention. Diversity is the name of the game here and you have to try and find the best solution for every

project, the same as you do in Europe.

**Is there a lighting culture in this part of the world that has to be taken into consideration when designing different projects?**

**Birgit:** There are ample references to the Arabian countries in the region and to Islamic art, architecture and lighting, yes. You often see elaborate decorative lighting as a form of festive lighting on houses. For example, on a bride's house when she gets married. On special occasions, coloured light is used to create a festive atmosphere in the city. On the National Holiday, the facades on buildings such as the Emirates Towers are lit with coloured light and lasers and so on ... but I wouldn't say there is a specific Emirates lighting culture with an historic background; the city has grown so fast from a fishing village to a metropolis.

**Rolf:** Maybe it's more a question of a culture of shadows. We live under truly direct sunlight. That is to say, sunlight falls from directly above us. This kind of vertical light gives rise to harsh shadows that do not necessarily penetrate the buildings, unless there are large openings in the ceilings. And we mustn't forget we are living in a culture of Mashrabiya screens, which originally took the form of bay win-

dows in upper storeys of buildings clad with decorative wooden, or sometimes metallic, latticework that looked like windows. These screens not only filtered the daylight, but also provided a view outside while shielding the inmates from view. The screened windows or facade elements we call Mashrabiyas make for a substantial stylistic feature of Arabian architecture. They are often purposefully used in many interior and exterior lighting projects, usually backlit, but you also see them illuminated front on. Graze lighting picks out the texture of the surfaces very nicely. Another striking feature of Arabian architecture are small niches built into the facades. These catch the intensive vertical rays of sunlight during the day and cast stark shadows. At night, tiny luminaires can be concealed in these niches and create beautiful effects that accentuate the façade design.

#### How does the climate affect your work or designs?

**Rolf:** In Dubai it is extremely warm and humid over the summer months, and that is already a challenge for all design work outdoors. For a start, we have to pay particular attention to the quality of the luminaires applied. When you live here you can see first hand how materials respond to the climatic conditions. That having been said, there are projects that are especially exciting because of the desert climate.

**Birgit:** There are some products, such as specific LED systems, that don't work in the heat. You always have to take the intensive daylight into account so the contrast from indoors to outdoors is not so extreme. The same applies to buildings with extensive glazing, and there are enough of them in spite of the climate! Daylight is not given the attention it deserves, unfortunately, but as a consequence of the Green Building Initiative, which was passed by law in December 2007 in Dubai, we are seeing the first projects developing that are committed to ecology friendly building.

**Does daylight play a greater role here than in other countries, apart from the effect it has on the climate?**

**Rolf:** I lived in the south of France for a while, in Marseille to be exact, where they have an average of over 300 days of sunshine a year with intensive blue Mediterranean skies. This obviously affects your attitude towards natural light, and also your design approach. That is to say, Dubai is not particularly unique in this regard. Although I must say I was surprised at first as to how early it gets dark here. Even in the summer the sun starts to go down at around 7.30 pm and dusk is relatively short. That means that evenings and night life take place in hours of darkness, i.e. under electric light, which is not a disadvantage for our line of business, of course. Indeed, a large part of the design work we do is creating atmospheres outdoors, or around towers or in hotel grounds after dark. In other words, spaces that are more or less accessible to everyone.

**Birgit:** Returning to daylight just for a moment: traditionally daylight played a significant role in Islamic architecture, as you know, and we all hope that will continue to be the case. There are a number of exemplary projects, such as the Masdar Initiative (a city based on a sustainable, zero carbon, zero waste ecology: Sir Norman Foster) or the design for the Louvre (Jean Nouvel), which demonstrate how brilliantly daylight and solar energy can be used, and Arabian tradition combined with modern architecture.

#### LED technology is gaining ground worldwide. Why is this technology so problematic in the Middle East?

**Birgit:** The extreme heat. Temperatures can rise to well over 40°C even at night here, and the electronics can't stand that, especially when the LEDs have no heat sink. LED equipment can even be damaged during the daytime when the luminaires are not even switched on. Again, because of the heat. The luminaire housings are built into facades, for example, these become increasingly hotter as the day progresses and the lighting equipment heats up along with the facade.

**Rolf:** We have a lot of manufacturers' reps contacting us who want to present their latest products, especially LED luminaires. One of the first questions we almost always ask is: "How

do your LEDs perform under the extreme climatic conditions in the region? What technical solutions do you offer for your LEDs and what experience do you have with projects in the Middle East?"

Of course, technical solutions can be found if you want to use LEDs outdoors here, but we are always extremely cautious about applying LED products. Even if clients find it hard to understand why LEDs are being used all over the world in large-scale projects and are celebrated as a revolution in lighting engineering, it is our duty to make it clear what risks they are running, financial risks amounting to millions in some cases, if LED installations are applied on tower facades under Middle East summer temperatures. We expect lighting manufacturers to listen to our serious comments and proposals and not to make any frivolous guarantees to clients or local suppliers, and encourage them to use this location as place for experimenting with their products.

#### Dubai has arisen out of the desert and is seen by most people as the perfect holiday destination. Are the projects perfect projects to work on?

**Rolf:** There are projects currently being developed here that would hardly be possible to realise at all anywhere else, because they are backed by incredible sums of money and it is the goal of the region to create these unique projects as a magnet to attract tourists. However difficult it is sometimes to cope with the new and increasingly gigantic projects that are coming off the drawing boards daily, bringing with them a multitude of infrastructure issues for our everyday work, there are indeed projects that are fascinating in themselves because we all work together to realise ideas in a completely new dimension. Some buildings are literally created out of nothing; whole new sections of town arise out of the desert or even the sea. Developing the lighting master plan for a project such as Dubai Maritime City is a huge and probably unique opportunity, but it is also a huge responsibility. You never know what subsequent project developers may decide to do with the land left unoccupied.

In the beginning, we mainly did lighting projects that involved illuminating towers. Nowadays, and especially in the last two years, our design work has become much more diverse. We have just finished designing two palaces belonging to the Sheikh and Ruler of Dubai, plus one administrative building and a private complex on an off-shore island. We are also designing the lighting for an exclusive hotel resort in the desert of the Emirate of Abu Dhabi. The unique location presents a special challenge for the lighting design, because the lighting levels in the outer parts of the complex have to be kept as low as possible to protect the nighttime environment. We are looking at whether we can use solar energy to power the lamps, which would lower the energy consumption from the mains and avoid laying unnecessary cables through the desert. Unfortunately, there are not many high-quality luminaires on the market that can be run off photovoltaic systems and most of them are based on LED technology, which, as we have already said, has its limitations outdoors at this moment in time.

One of the very special projects we are working on at the moment is a twin-tower project in what will be a central location in a large project development in the Dubai desert. We are responsible for the exterior lighting – that is to say, the facade lighting with LEDs integrated into the interior facade – as well as the landscape lighting plus large parts of the interior lighting. This will prove to be another landmark tower in Dubai along with the Burj Al Arab Hotel or the Burj Dubai, which is currently rated as the highest tower ever built – now underway, as you know. Then we have projects currently being realised, such as Motor City, designed by the American architects firm Burt Hill. Motor City is a complex comprising an automall, office and hotel tower as well as the grandstands at the Dubai Autodrome. Other projects are the facade lighting for the Harvard Medical School and the Binary Tower.

**Birgit:** Yes, we certainly have some very fascinating projects, but I guess everyone has a different idea of what makes a perfect project! We have absolutely massive projects here that you would never find anywhere else,



and there are many projects that are very sophisticated from a design point of view. At Delta we deal with both these types of projects, and in combination with a committed client and a team of motivated designers from different disciplines, you could say some of the projects are "perfect" to work on.

#### How long do you plan to stay here? Would you describe yourselves as immigrants or foreign workers brought into a part of the world with a definite holiday ambience for an indefinite period of time?

**Rolf:** It is difficult to predict how Dubai will develop over the coming years. When you see how mammoth new projects are launched on prac-

tically a weekly basis here in Dubai, you do sometimes wonder what the city will look like in ten years' time. But that doesn't mean to say that the quality of life will be lost on the way. On the contrary, they are investing as much in parks and landscaped areas that are for the good of everyone who lives here. The city is also becoming more committed to developing cultural activities to add to its attractions. Serious efforts are being made to build high-quality museums, galleries, theatres and concert halls. There is land along Dubai Creek that has been specifically pinpointed as the location for a cultural centre. At the moment I feel very positive about the future and can imagine basing my home here for a very long time. I'll have to wait and see if my family feels the same way.

#### Do you think you will ever move back to Europe?

**Birgit:** Interesting job prospects are always worth considering! I do miss my family, my friends, forests and meadows, long summer evenings in a "biergarten", being able to ride my bike anywhere, European cities like Cologne...

**Rolf:** We expressly decided to settle here, whereas others come here to work for their companies for a period of time and then return home. Strangely enough, I have never had the feeling that I am missing something. I prefer to look at life from the angle of what I gain in life experience here. I have always managed to maintain personal and professional contact to Europe and modern telecommunications make it easy for me to keep

The question that arises is whether it is justifiable to negate the function of an industrial plant in this way at all, and then to use lighting design to further support the illusion. The design rule of thumb Form Follows Function has been completely ignored in this case. Then again, nobody seems to have raised the issue of what is allowed or not allowed when it comes to building projects in Dubai, and denying the existence of any kind of cultural associations in the built environment seems to be part of the game. What the lighting designers have done in the case of "Cooling Plant 2" is respond to the architectural design of the building, which definitely smacks of traditional references, and have chosen not to address the function of the facility at all.

up-to-date with what is going on. I actually enjoy the challenge of helping to establish a design practice. Delta has developed amazingly fast over the last three years and it is exciting to be part of that. Of course, I can imagine becoming involved in a project in Germany or somewhere else in the world. But it would have to be special. And I would find it fascinating to work on something that is linked with our profession. But I think that one way or another I will always maintain a link to Dubai and the region.

**Thank you, both of you, for talking to us.**