

The performance of light rhythms at Q's Eye

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Katja Bülow is an architect, educated at the School of Architecture at the Royal Danish Academy of Fine Arts in Copenhagen, Denmark. Currently, she is enrolled as a PhD student and is working on her dissertation, 'Light Rhythms in Architecture'. The dissertation is an investigation of the relationship between light and architecture. The scope is to define the performance of luminous rhythms in spatial structures. Here, architecture is regarded as a physical frame surrounding so-called 'light rhythms' – i.e. an intervention into the flux of visual information, which, by its presence, becomes partly responsible for committing the body to experience the structure of space.

She is also a member of the 'Lighting Detectives', an international study group of lighting designers dedicated to the study of local lighting cultures around the world.

Introduction

As a child, I loved to create 'casual architecture' with a crumpled blanket. I would toss the blanket on the floor and watch a multiple amount of coincidental spaces appear. In these accidental spatial formations, I found the most charming places in which the smallest dolls and teddy bears could pass the time. Playing this game, I was using a human ability to point out stimulating spaces within the layout of a landscape. What I loved about the blanket was that I could toss it again and again and find new exiting possibilities with to work from. The grown-up 'real' environment is complex and not nearly as simple and flexible as the blanket, but a useful quality of the child's game is the joyful reading of every new landscape formation and the desire to create stimulating spaces within it.

Abstract

Creating an architectural place into the formation of a landscape has always been a great challenge to architecture. On the one hand, architects want to create remarkable places in the landscape and on the other hand they want to merge with the structure, which is already there. The main objective of this paper is to investigate the visibility of architecture between these two parameters and to test the notion 'casual architecture' as a way to navigate between them. The investigation is based on one single case, 'Q's Eye'¹, which is a media screen integrated into the façade of the QFront Building situated by the famous Shibuya Crossing in Tokyo. In this case, 'casual architecture' derives from the spatial connections to the

luminous rhythmic performance of the media screen, also called light rhythms, which provides the space around Q's Eye a sense of place.

Q's Eye

Q's Eye is one big performance based on a huge number of LEDs². This kind of light source distinguishes itself by being very small and bright, at the same time and that it is able to work for a long time. Also it can be activated independently and work in connection to the digital programming of a computer. These qualities make LED an ideal light source for projection screens. Q's Eye is integrated into the façade of the QFront Building in a remarkable way; small groups of RGB coloured LEDs are placed on a vertical structure between the glass layers of the façade. The integration of the linkage between the LEDs and the structure of the façade itself makes it possible to display a very large show. When the construction of the QFront Building was complete, Q's Eye became the largest outdoor projection screen in Japan, the position of the LEDs between the glass layers of the façade creating the illusion that the projection of the show has been captured alive on the façade of the QFront Building.

Inside

The construction of the media screen turned Q's Eye into a transparent 'creature' in motion. The projection covers the area between the 4th and the 7th floors of the QFront Building. On the 6th floor, there is a small café next to the reverse side of Q's Eye, and until 2003, the design of the café opened up to the performance of the LEDs, so that it was possible to experience the media screen from the inside. The unobstructed connection to the light rhythms of the LEDs created a sense of 'casual architecture', a place where one could take a break, which differed from the majority of peaceful places in Tokyo. The 6th floor café is part of the services offered by the QFront Building, which houses CD/DVD rentals and shops, a cinema, bookshops, cafés and a restaurant. A special feature is the huge 'Starbucks Coffee' on the 1st and 2nd floors from which there are a magnificent view over the busy Shibuya Crossing. Being too impatient to wait for a seat in this popular place, the visitor may continue further up into the building to the 6th floor café, which offered a view to the gleaming lights from the buildings surrounding QFront Building through the rhythmic pulse of Q's Eye.

The visibility of architecture

The small choice of obstructing the façade of the café next to Q's Eye makes a striking difference to the sense of this particular place and it touches a paradox regarding the visibility of architecture in the urban landscape of Tokyo. In an essay on 'Superflat Architecture and Japanese Subculture', Taro Igarashi describes contemporary Japanese architecture as being 'superflat'. This term is associated

with the features of the indispensable convenience store and the flourishing *manga* culture of Japan. In his description of the qualities of superflat architecture, the QFront Building is used as an example of the denial of traditional spatial design in favour of an almost nonexistent architecture, an expression that apparently goes with the 'information architecture', that grew more and more prevalent in Japan during the 1990s. According to Taro Igarashi, 'Superflat Architecture' (a characteristic feature of the 'information architecture') diminishes the experience of physical depth, architectural hierarchy and order are blurred, and a clear relationship between programme and space is abandoned.³ It seems that architecture is present – it is just not visible...

Outside

Looking at the QFront building, one must agree with Taro Igarashi, that the building lacks traditional architectural expression. It looks like a mega-sized television of purely informational functionality, and participation in a possible urban hierarchy is somewhat lost among the adjacent buildings, which are plastered with luminous billboards and media screens of different sizes. Q's eye catches some attention, being the largest of them all, but most eye-catching is the show that is co-ordinated with the media screens 'Super Lisa' and 'Forum Vision'.⁴ The edge around Shibuya Crossing is one mega-structure of information. Nevertheless, people take in this landscape – characterised if not by any architectural 'code' or order, then by a huge performing 'blanket' of visual and audible output.

The landscape

The dominant structure of this landscape is the clear separation between outside and inside. People vanish into the inner worlds of the buildings and into the underground, which contains shops, cafés and restaurants. Outside, the buildings are bearers of luminous billboards and media screens. Inside, they contain a wide range of sceneries, which would remain in darkness if they were not made visible by a continuous flood of artificial lighting. The observer of this landscape is highly affected by this visual world of commerce, in which inside sceneries and outside communication compete for attention. Attention towards the assortment of articles being sold and the information given is created by a wide range of visual 'tricks': colourful patterns and impressive luminous rhythms that are turned on and off, all kinds of signs and billboards programmed to flash and change colours in certain ways, and the media screens displaying different kinds of sceneries in order to catch attention.

A place to rest

The cafés and restaurants of Tokyo provide a break from the 'roaring' landscape. The designs often characterise the brand of the place, as known from food chains in the western part of the world, or they

show tasteful sceneries of eastern or western style. So, contrary to contemporary Japanese architecture as interpreted by Taro Igarashi, the interior designs of the cafés and restaurants offer a multitude of visible architectural designs – in the form of 'associative wrapping'. As parts of the performing 'blanket', the eating and resting places are generally secluded from the outside creating even more inner worlds of the inner worlds of the buildings. They become visible by artificial lighting only, unless daylight is allowed into the place by a particularly good view. Until 2003, the café next to Q's Eye worked quite differently in accordance with the prevalent way of creating a place to rest, since no scenery or seclusion was created. In the first place the non-covered walls and ceiling made the space appear as what it was – a storey between floors and ceiling, and secondly, the unobstructed view to the media screen created an absolutely intimate contact with the outdoor environment. A white painted bar was situated at the back of the room, so that visitors could sit along the rhythmic pulse of Q's Eye. They would sit at simple square tables on Verner Panton's 'Panton Plastic Chair', made out of one piece of plastic.

The rhythmic performance of Q's Eye

The white walls, ceiling, bar and chairs of the café created an opposite compact mass to the vibrating translucent transformation of the media screen. Right next to the working rhythm of Q's Eye, the LEDs were experienced as different formations of colour and brightness, created by the changing patterns of the show outside. Being so close to the media screen, it was simply not possible to observe the full show from the café, not only because of the limited field of vision, but also because of the obstructing edges of the 6th floor ceiling and floor. Nevertheless, the luminous rhythm of the flux itself stimulated the eye and affected the appearance of the place. The luminous rhythm of the reverse side of Q's Eye was characterised by the composition of sequences put together by cuts of varying lengths, each of a specific colour and lighting level. The character of this type of rhythm is difficult to grasp while watching the show on the external side of Q's Eye, as if in front of any urban media screen or a family television set. However, if the luminous rhythm of the screen is observed from another room or through a window from the outside, everyone will recognise the rhythm of a television at work.

Rhythmic composition

Looking at the luminous rhythm of the screen from a distance, it is hard to understand how anybody could stand to be in the café next to the media screen, but it would appear that the strength with which Q's Eye established this place was more important than the functional quality of the light. Being in this place was like being close to a natural phenomenon, tamed in honour of the visitors to the café. The luminous rhythm of the media screen was tamed in a sense, but

it was also emphasised by the correlation between the rest of the light sources. The general lighting of the place kept the brightness of the media screen at a bearable level and still made the luminous rhythm from the media façade appear as the dominant light source. Additional low lights, e.g. the warm light from light bulbs, created a cave-like atmosphere accentuated by small bowls of candles on the tables, which contrasted the rhythm of the media screen with the continuous flicker of the flames. On top of the 'orchestration' of the artificial light sources of the café, the translucence of the media façade allowed the slow rhythm of daylight to become a fundamental partner. Each visit to this place would reveal a new variation of the media screen as the repeating theme of the composition.

Light rhythms

The term 'light rhythms' conceptualises the architectural composition of luminous rhythms. The term is taken from the study of rhythms developed by the French philosopher and sociologist Henri Lefebvre. His 'Rhythmanalysis' is based on the experience of rhythms in the environment, and can be used as a method to "measure" time and space⁵. Using this way of analyzing luminous rhythms, the experience of time is defined by different types of sequences, like the cyclic change of daylight and the programming of various types of artificial lighting, and the experience of space is influenced by the penetration of light rhythms into space and by the luminous reflection from space itself. The rhythmic way of measuring seems appropriate in the urban flux of Tokyo, since the rhythmic approach offers a way in which to discover stimulating repetitions in space and use these as a point of reference. In this sense, the light rhythms of Q's Eye work with the media screen as their point of reference. The architectural act of an unobstructed relationship to the media screen gives direction to the light rhythms and the architectural lighting emphasises the poetic theme of this act.

Rhythms of and in the urban landscape

*"It is the intonation of a large work, the chords, which in an andante maestoso makes the basis and the introduction to complicated experiences."*⁶ The Danish architect and town planner Steen Eiler Rasmussen wrote a chapter on how rhythm is linked to architecture in his book 'Experiencing Architecture'. He uses the example of the large Quirinal Palace in Rome, Rue de Rivoli in Paris and The Rockefeller Center in New York City to explain how large structures of rhythm work as a measure, something to which a complicated structure can be related in an urban environment, thereby influencing the overall impression of a city. The architectural examples of Steen Eiler Rasmussen work by a rhythmic structure incorporated into the physical landscape but he also emphasises the distinctive quality of rhythm, as an experience working between the rhythm of the moving body and the rhythm of physical structure. In addition to Steen Eiler

Rasmussen's rhythmic experience of architecture, Henri Lefebvre describes rhythm as something that takes place in the physical structure of environment. Taking this idea to the urban landscape of the Shibuya crossing, the buildings constitute a setting around events taking place, and architecture might just be as simple as changing the setting in order to influence the rhythmic direction. Thus, architecture does not become visible as architecture, but as something that directs rhythms that take place.

Andante Maestoso

Following the line of Steen Eiler Rasmussen, the urban landscape around the Shibuya Crossing works as an *andante maestoso* of Tokyo, in which the rhythm of the adjacent buildings create a significant theme. Like the heaviness of the large architectural masterpiece in the complex structure of the city, the buildings around the Shibuya Crossing become a condensate of working rhythms through the constant flux of luminous advertisements. In opposition to the isolated rhythmic theme of the façade composition in traditional architecture ('the masterpiece era'), the rhythm of the media screens are recognised throughout the urban landscape of Tokyo. The recognition of a place is thus influenced by the character of the luminous rhythms rather than by the expression of the buildings per se. Obstructing or not obstructing the connection to the media façade of the QFront Building affects the human ability to examine this *andante maestoso* from different angles. Being able to observe the same element in different ways might be the way to measure chief points in non-hierarchic structures.

The passage

Contrary to the cafés and restaurants of the inner worlds of the underground and the shielded buildings, the café next to the unobstructed version of the media screen was situated at the edge of the outside urban landscape. This particular position was experienced in various ways from inside and outside the media screen. In the café the surroundings were just visible through the media screen, which acted as an intervening layer between outside and inside, and from outside the intervening layer became part of the immense unapproachable media wall outside. The different experiences of Q's Eye, made possible by the transition between outside and inside, turned the café next to the media screen into a place that was different than the isolated café designs of the secluded inner worlds of the buildings. The luminous rhythms of these places are only experienced from inside and they are entirely programmed to make the indoor environment visible in a certain way, and if not connected with daylight they make their own closed composition of light rhythms. At first, the light rhythms at Q's Eye was experienced as a mixture of programmed and natural light

rhythms. In addition to these distinguished characters the inside experience of the rhythm took on a casual character. because the programming of the rhythm is intended for the observer outside. The rhythm of Q's Eye was experienced as 'casual' from the inside, like the rhythm of the television that somebody else has turned on in another room. This rhythm was not meant to be focused on, but it made the place appear, nonetheless.

Control

The difference between the observations on the front and reverse sides of Q's Eye was influenced by the differences in scale relating to the human body. The different views transmitted a remarkable difference of control in work. The exterior side of Q's Eye is characterised by an extremely high degree of control; the show of the media screens changes between the digital programming of commercials, real-time shooting of the crossing, film sequences and graphic formations, which catch the attention of the eye through incessant streams of variation. The experience behind the media screen did not get the control of the outside show at all – but only noticed the different formations of colour and brightness created by the LEDs, changing in the recognisable rhythm from the outside. Q's Eye truly created a performance, which was one and the same – end yet totally different. The question is what the casualness of the reverse side of Q's Eye meant to the café, which was connected so intimate to it? One suggestion is that the 'casual' side of Q's Eye made another created a place in which to take a rest in that was different to the place that resorts to seclusion.

'Casual architecture'

In this place, on the reverse side of Q's Eye, the visitor is offered a break, which distinguishes itself by being taken close to the urban landscape from which the break is taken. The appearance of this place created proximity and distance at one and the same time. Considering the visibility of architecture in this place, you might say that it reassembles an act of 'how *not* to make' architecture appear. In this case, architecture was not visible as a representative design, but it pointed out repetitions in the urban landscape through the performance of light rhythms instead. Therefore, creating a place in a chaotic urban landscape is an act of 'how *to* make' place visible by means of architecture. The example of the café on the reverse side of the media screen showed that it can be done in a way that lets the place 'take place' and creates a stimulating nest in the pulsing blanket of Tokyo.

www.QFront.co.jp , "QFRONT" (QFRONT CO,. LTD. 2004)

Short cite: www.QFront.co.jp

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LED, light-emitting diode.

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Taro Igarashi, 'Superflat Architecture and Japanese Subculture' in Moriko Kira and Mariko Terada ed., Japan. Towards Totalscape.

Contemporary Japanese Architecture, Urban Planning and Landscape (Nai Publishers, Rotterdam, 2000), pp 96-101.

Short cite: 'Superflat Architecture and Japanese Subculture', p 100.

4

www.QFront.co.jp , "QFRONT" (QFRONT CO,. LTD. 2004)

Short cite: www.QFront.co.jp

5

Henri Lefebvre, 'Rhythmanalysis. Space, Time and Everyday Life' (Continuum 2004), p 8

Short cite: Lefebvre, Rhythmanalysis, p 8.

6

Steen Eiler Rasmussen, 'Om at opleve arkitektur' (Gads Forlag 1957 (1966)), p 132.

Steen Eiler Rasmussen, 'Experiencing Architecture' (New York: Technology Press 1959 (1964))

Short cite: Steen Eiler Rasmussen, p 132.