

Interactive Architectural Action In Tokyo: The Highlights

15 Oct 2007 Category: [Architecture](#), [Features](#), [Japan](#), [Technology](#)



Which of these approximately 1 698 light sources would first catch your attention? If it moves, we'd go for this pretty interactive piece on the UNIQLO façade, done by KleinDythem architecture. Photo by KDa.

No doubt, Tokyo is full of bits and pieces of playful architecture and lots of temporary installations that make clever use of the city's crammed spaces. Time to gather our favourites that have *amassed* over the past year, for a little roundup on recent *interactive architecture* of several kinds! Amazing pieces we always wanted to show you...

Written by Verena



Fashion mogul Hussein Chalayan loves to give his creations a little bit of an interactive extra: an LED lit dress that looks like a walking [Blinkenlights](#) installation. “Illuminating Water Dress” from his recent Swarovski show in Tokyo. © [Swarovski](#)

For a start, if we break down the term *interactive architecture* to its modules, then the most basic would be something like... an automatic sliding door! It might take some time counting all of the automatic doors in this mega urban sprawl. However, if *interaction* is addressed, we can show something like self-adjusting surfaces: [vertical garden walls](#) (soon [to be revealed](#) in Omotesando). Other techie developments, such as elegant [responsive shading](#), are still in the making...

Interactive in architecture could be a lot more than it is now. But where to begin? How about with the least common denominator... a simple LED! Apart from this sweet nostalgic feeling we get from watching flickering LEDs as remnants of the 80s, these catchy elements are easy to use and give temporary visual pleasure as programmed. LED looks chic, so chic you'd simply *have* to put it on dresses as well - as [Hussein Chalayan's](#) recent Tokyo show for [Swarovski](#) demonstrated. And we all know the [intricate relationship between architecture and fashion](#) in terms of structures and forms that response dynamically to their inhabitants. Not only as your private LED amusement telling you the time with a flashy [wrist watch](#)...



Responsive apparel that adjusts to its wearer... © [Swarovski](#)



...oops! Also, from the Hussein Chalayan Tokyo show for Swarovski. © [Swarovski](#)

LED Light Show

Needless to say, LED elements also go quite nicely on a building's façades... So, what's the status quo of interaction in the (mostly commercialised) public spaces in Tokyo? [Semitransparent Design](#), [GT INC.](#) or the ubiquitous [Klein Dytham architecture \(KDa\)](#) enlighten the Tokyo night skies in some sophisticated ways: For example, the latter showed once more with fashion brand [UNIQLO's](#) building surface in Ginza how an animated illumination can cheer us up. Okay, we've seen this before and we totally loved the Berlin [Blinkenlights](#) installation - but in Tokyo you have to make a serious effort to be even noticed amidst all this neon spectacle.



I just saw a mega Tetris in Ginza, yay! Behind the steel grid flicker 1 000 bright LED elements, displaying cute little animations... Photo by KDa.



...at the UNIQLO building in Ginza by KleinDyham architecure. Photo by KDa.

Temporary Playgrounds

So, a light show can also be a temporary merriment craving for consumers' attention: Last year, [Semitransparent Design](#) spiced up the established Christmas decor along Omotesando Street in Aoyama – the annually illuminated columns that were a nice but not too exciting sight.

[Semitransparent Design](#) added a little bit of interactive play to these sixty objects, each of them being six meters high: For the *Akarium* project, everybody could *call* the columns either by mobile or over the internet and her or his voice would dynamically control the pulsation of the lights.

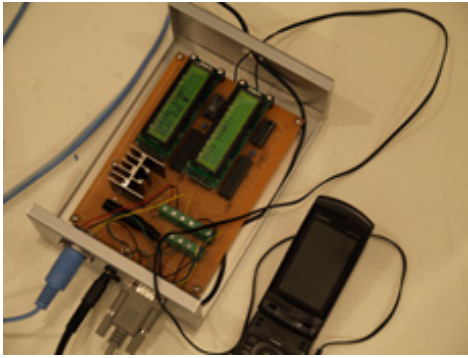
Semitransparent’s Ryoji Tanaka explains: “*Akarium* as an illumination project has been going on for eight years. When we joined the project, the light design had already been fixed and the lights were going on and off just through time-based programming. We enhanced the project with interaction, and by placing an interactive devices in a public space, we wanted to observe the changes in people’s communication.” Which they did sort of, and a [Cannes Lion](#) was a belated [Christmas gift](#)...

The Akarium: Xmas light show! By Semitransparent Design.

For the transfer of the voice to a visual, Semitransparent integrated their proprietary hardware within the existing light controlling system by these stylish light people from [Color Kinetics](#). The ingredients of the hardware would convert the voice’s volume to a numeric value and transmit it to the controlling device in real time; all programmed in C.



What is that PSP doing there?? Semitransparent’s magic box... Photo by Semitransparent.



...a propriety hardware for converting a voice from a mobile [phone call](#) to a numeric value to control the columns' pulsation. Clever. Photo by Semitransparent.

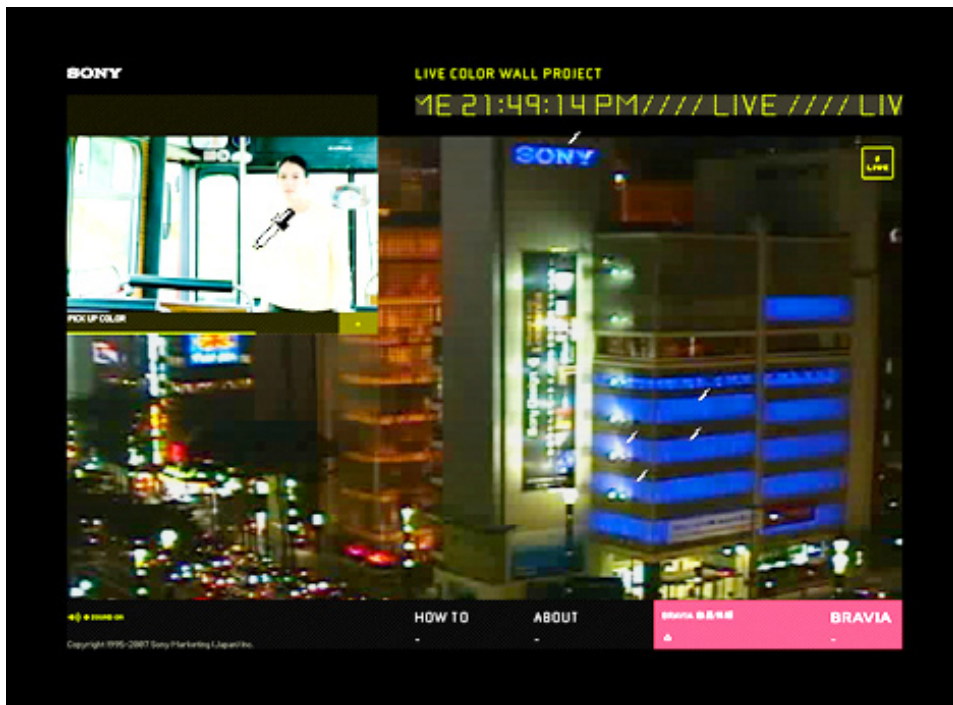
Once again, Tokyo with all of its glitzy displays, screens and high buildings that populate the cityscape like trees in a forest, is surely an ideal playground for installations like the *Akarium*. Or is it? “Actually, we aren’t sure whether Tokyo is the perfect place for interactive works. In fact, we try to think more in terms of a global audience since we want to reflect the actual network action on the spot. Regarding our installation, we had the shyness of the Japanese people and their independence thanks to cellphones in mind,” says Ryoji.

However: “Though using lights and architecture as installations serves as contact point, we are more interested in an environment and a lifestyle that has been altered by network technology as well as by a desocialised culture stemming from [open source](#) and *P2P*,” says he.

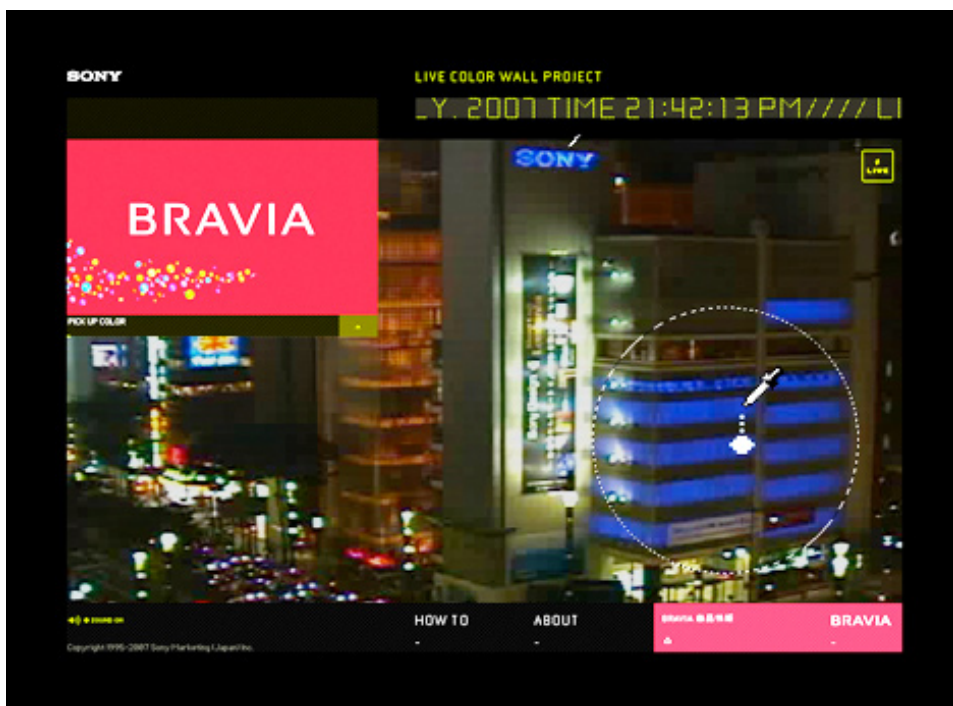
Temporary Drawing Playgrounds

The next step would be not only letting people alter installations with their voice - but also letting them *draw* on the city’s surfaces... Done! Semitransparent’s latest *interactive architecture* for SONY Bravia involved a whole façade of one of the company’s buildings in Ginza: As part of the ongoing [Live Color Wall Project](#) this summer, online interaction should put a little bit of makeup on the *real* world: Online surfers could see the building’s surface via webcam and change its illumination by *colouring* it with a Photoshop-like *tool* on the website’s live feed. All done in real time, of course!

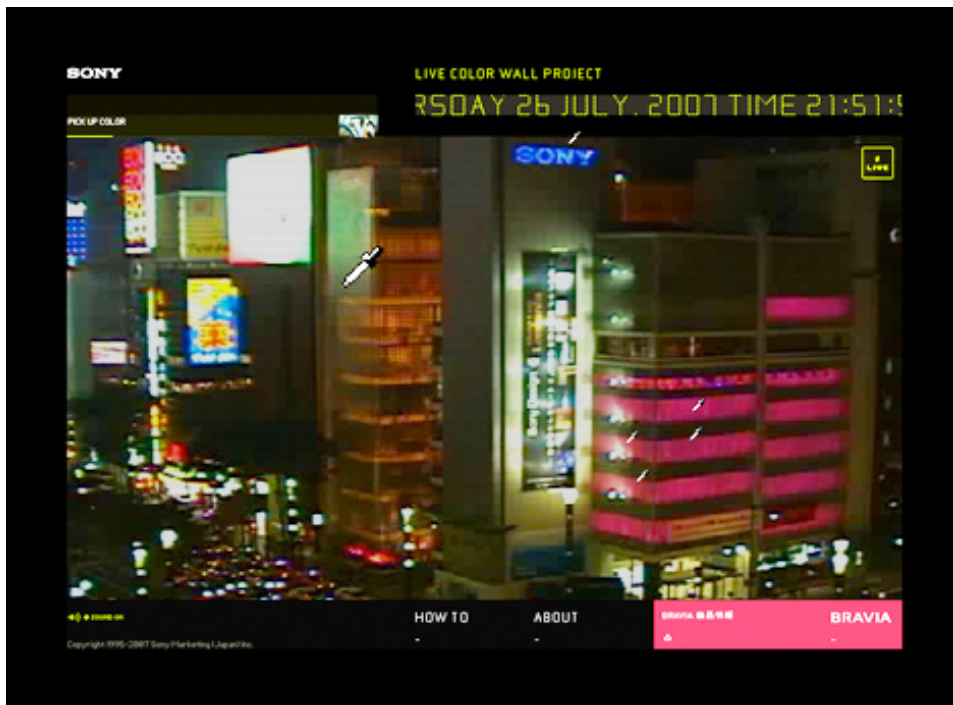
Ryoji Tanaka explains: “When a users accesses the website, his mouse cursor turns into a *colour picker tool*. When he picks up a colour either from the video image of the Bravia spot or from the Ginza district webcam feed, he can drop the colour onto any part of the SONY building’s image, and its illumination changes immediately.” Sounds nice, and looks nice too! See below:



Interactive architecture that adjusts to your colour prefs while sitting on the sofa by simply pressing a keyboard button. Awesome! Surfers can change the SONY building's façade in Ginza in real time with the [Live Color Wall Project](#). This is the webcam...



Pick a colour from the SONY website and do it Photoshop style on the image from the webcam... [Live Color Wall Project](#).



Et voilà! See the result via live video feed. All done by simple drag&drop. From the [Live Color Wall Project](#).

Shadow Plays

What else can be done with an untouched empty wall that needs beautification? How about something with a bit more character! If you haven't seen it on YouTube yet, here we go: As part of the campaign for Microsoft's Blue Dragon, [GT INC.](#), our beloved friends from [IMG SRC](#) and [NON-GRID inc.](#) set up a clever as well as effective projection last winter: a gigantic shadow play all over a huge Shibuya wall next to a parking lot called [Big Shadow](#).



Once more some fine interactive works: Big Shadow, a gigantic interactive projection on a Shibuya wall, by GT INC,...



...that immediately reacts to the actions of passers-by.

When pedestrians moved past, their silhouettes were enhanced and deformed, and eventually the

game’s mischevious little creatures would enlarge on the wall and play tricks on the crowd. For even more fun, users could add their creatures through a [website](#) and watch the results via live feed. Though GT INC.’s Koshi Uchiyama has mixed feelings: “To be honest, Tokyo is not a perfect place for interactive installation: equipment is very expensive and there are so many regulations. But with Big Shadow, we could create a pretty cool cityscape by combining the dragon’s animation-looking silhouette with the neon signs of Shibuya’s bawdy night. Tokyo’s, or perhaps I should say Shibuya’s *power* gave us exactly what we needed.”

Huh? What’s that done with? GT INC. used C++ and Java for reaction rate and expandability. For more entertainment, roam a bit around some further [footage](#) of this one.

Oh, how cute! A little dragon just came out of me! Big Shadow, interactive projection on Shibuya walls by [GT INC.](#) with [IMG SRC](#) and [NON-GRID](#).

Speaking of cityscapes, can projects like these have a last effect on the urban sprawl? “I think it can add a temporary excitement. But at the same time, people lose interest quickly. Most of these are actually just like reviewing the image of the very cityscapes which Katsuhiro Otomo created with [Akira](#) and Ridley Scott presented in [Blade Runner](#). If there is a possibility to constantly change the cityscape, a drastic method is necessary: When all the current electric advertising billboards will be switched to monitor displays...,” says Koshi Uchiyama. Ha! That would be at the other extreme of Sao Paulo’s concept of a [billboard-free city](#)...

That was pretty much it, sorry! Let us know if you spotted something brand new for our next collection...

76 Comments

1. The Shibuya Shadow wall is too much fun, mesmerizing. Sorry we missed it!

Got hooked on a similar interactive display at last year’s Design Tide...

Posted by: [TOKYOMADE](#) on October 15th, 2007 at 8:15 pm

2. Interactive architecture makes a place more live and active
And its a good starting!

Posted by: [Paavani](#) on October 15th, 2007 at 8:29 pm

3. wah so nice

Posted by: shikou on October 15th, 2007 at 10:13 pm

4. Sony Bravia thing is boring. They shouls stick to ripping off Kozyndan.

Posted by: Jolly on October 15th, 2007 at 10:22 pm

5. Cool! The shadows are so cool!

Posted by: [Akai](#) on October 15th, 2007 at 11:17 pm

6. Voice reactive lighting via mobile phone. An excellent solution!
The Bravia idea seems forgettable.

Posted by: [Nick](#) on October 16th, 2007 at 10:20 am

7. All these architectural wonders are amazing really. I'd have so much fun walking along the streets. However Big Shadow really caught my attention! The next time I'm in Japan, I'll definitely go check it out!

Posted by: razori on October 16th, 2007 at 12:23 pm

8. Last winter there was a really great interactive installation in Union Square in New York City.
Check it out:

<http://www.youtube.com/watch?v=-M0FtVvPbvQ>

Posted by: dpm on October 16th, 2007 at 6:22 pm

9. That shadow play is viral advertising for Blue Dragon. Because that creature only can be summoned by using the shadow of their master / host. So that shadow play is very good presentation for advertise this game ^^

Blue Dragon is a game created by Akira Toriyama for X360.

Very nice and creative! Love Pingmag! Always!^^

Posted by: TOTORO on October 16th, 2007 at 6:47 pm

10. Nice sity =)

Posted by: asd on October 17th, 2007 at 3:17 am

11. [...] PingMag - The Tokyo-based magazine about “Design and Making Things” » Archive » Interactive Ar... No doubt, Tokyo is full of bits and pieces of playful architecture and lots of temporary installations that make clever use of the city's crammed spaces. (tags: architecture japan interactive art interactiondesign design kvadrat) [...]

Posted by: [links for 2007-10-20](#) on October 20th, 2007 at 9:23 pm

12. I is pleasantly amazed! Thank!!!