



# World's First Digital Museum

David M. Kahn

## teamLab Borderless

Permanent series  
of exhibitions that  
opened June 2018

In early 2019, I first noticed references to something called teamLab Borderless, the “World’s First Digital Museum,” located in Japan ([www.borderless.teamlab.art](http://www.borderless.teamlab.art)). While museum professionals might debate whether Borderless is a museum, consider this. A Google® search for “Museums, Tokyo,” places Borderless right alongside the Tokyo National Museum. Listings for art museums in Tokyo on TripAdvisor® include Borderless along with a nearby gigantic sister venue, teamLab Planets. Whatever you choose to call it, Borderless is fun and the public loves it. An astounding 2.3 million visitors came through the doors in the year following its June 2018 opening to see its massive digital exhibitions. TeamLab is also heading our way. They will have a presence in the new American Academy of Motion Pictures Museum in Los Angeles, California, scheduled to open in 2021.

Who or what is teamLab? In Borderless’ entry area, a sign states:

teamLab (founded 2001) is an art collective, interdisciplinary group of ultratechnologists whose collaborative practice seeks to navigate the confluence of art, science, technology, design and the natural world. Various specialists such as artists, programmers, engineers, CG animators, mathematicians and architects form teamLab.

In addition to Borderless and Planets in Tokyo, there is version of Borderless in Shanghai, China. The group has mounted an exhibition at one of Tokyo’s premier institutions dedicated to contemporary art, the Mori Art Museum, as well as site-specific installations on the grounds of Japanese temples and castles. teamLab also has groupies. I met four at MoonFlower Sagaya Ginza, a teamLab dining experience in Tokyo. They told me they make it a point to visit every teamLab installation wherever it might be.

A critique is a writer’s professional and personal assessment of an exhibition, formed without consulting its creators, and shaped by their expertise and experience. Its audience is the profession. Each issue of the journal features a critique of a current or recent exhibition.





Fig. 1. One of the most frequently photographed features of *Borderless Universe of Water Particles on a Rock Where People Gather*, which is set in an atrium-like space.





For my first Borderless visit in September 2019, I allotted too little time, only one and one-half hours, for its 100,000 square feet of space. And frankly, I was not expecting it to be as spellbinding as it was. Otherworldly music by a teamLab member together with the unbelievably original, often elegant, visual imagery and lighting effects transport the visitor into a truly unique aesthetic universe of teamLab's invention. I had seen outdoor sound-and-light shows before, but nothing even vaguely comparable to this in terms of scale and imagination. My second visit, in November 2019, lasted four hours that zipped by. Other digital experiences that I have seen since have paled in comparison. They include ARTECHOUSE's *Machine Hallucination* in New York City, a single room of pulsating imagery that reminded me of a disco, and Annabelle Mauger's and Julien Baron's *Imagine Van Gogh*, which was presented at the Arsenal Art Contemporain in Montreal, Canada, and felt like a giant slide show. Both were on loops lasting 20 to 30 minutes.

Borderless' exhibits range from single digital artworks the size of traditional paintings to walk-through environments that are part sculpture – a term favored by teamLab – and part sound-and-light show. Throughout, blacked-out walls and ceilings provide a backdrop for mesmerizing digital imagery. Exhibits are accompanied by interpretive panels in English, Japanese, Chinese, and Korean that mostly provided impressionistic descriptions of the installations. Virtually no one pays attention to the copy. Everyone is far too busy looking every which way and attempting to capture everything happening around them on their iPhones®.

Visitors repeatedly encounter the same characters and motifs, such as giant rabbits, throughout Borderless' corridors and galleries. According to one text panel,

TeamLab Borderless is a group of artworks that form one borderless world. Artworks move out of the rooms freely, form connections and relationships with people, communicate with other works, influence and sometimes intermingle with each other, and have the same concept of time as the human body.

Where, when, and in what contexts the imagery appears occurs randomly. As another text panel puts it, "The work is rendered in real time by a computer program. It is neither a prerecorded animation nor imagery on a loop. The work as a whole is in constant change; previous states will never be repeated and can never be seen again."

There are no printed visitor guides or floorplans. There is an app you can download which inconsistently provides alerts that you are approaching

a particular exhibit. Otherwise, you are on your own. This, along with the dark, fun-house-like environment, adds a bit of mystery and excitement to the journey. Explorers have no idea where they are going or what they are going to find down this corridor or behind that black curtain. One disadvantage to this is that you will never know what you may have missed and may only find out by studying the website. Universal design is not a priority.

Timed tickets cost about \$30 U.S. (¥3,200). Visitors queue up in a large vestibule and are admitted in groups of about 50 at a time. Just inside the entrance are high-ceiled spaces with walls and floors covered by digital oceans of undulating flowers and flower petals. Turn right into the Butterfly House, so identified on a panel, stand still, and virtual butterflies appear sprinkled about on your clothing before flying off. The floral motif on the surrounding surfaces is also dominant in a vast atrium not too far way (fig. 1, p. 113). There visitors climb a small hill, perfect for taking selfies, and get a close look at a virtual waterfall that flows down the walls, spills over the hill, and runs every which way across the floor.

Traditional Japanese culture informs many exhibits. The most compelling, even hypnotic, among them is *Walk, Walk: Search, Deviate, Reunite* (fig. 2).

**Fig. 2.** Figures in Heian period (794 to 1185) dress march in procession while playing historical instruments or waving their arms in dance-like motions.

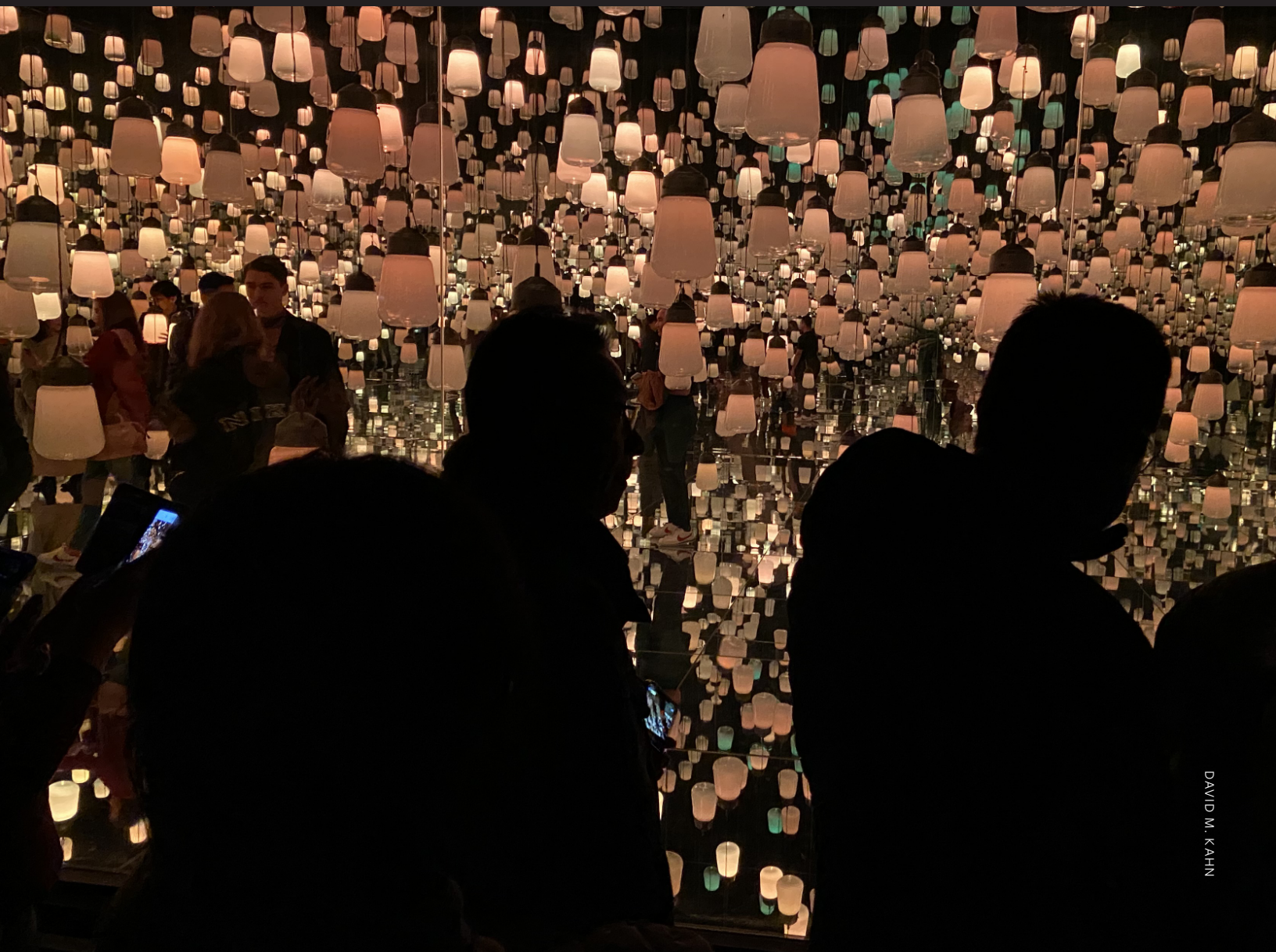




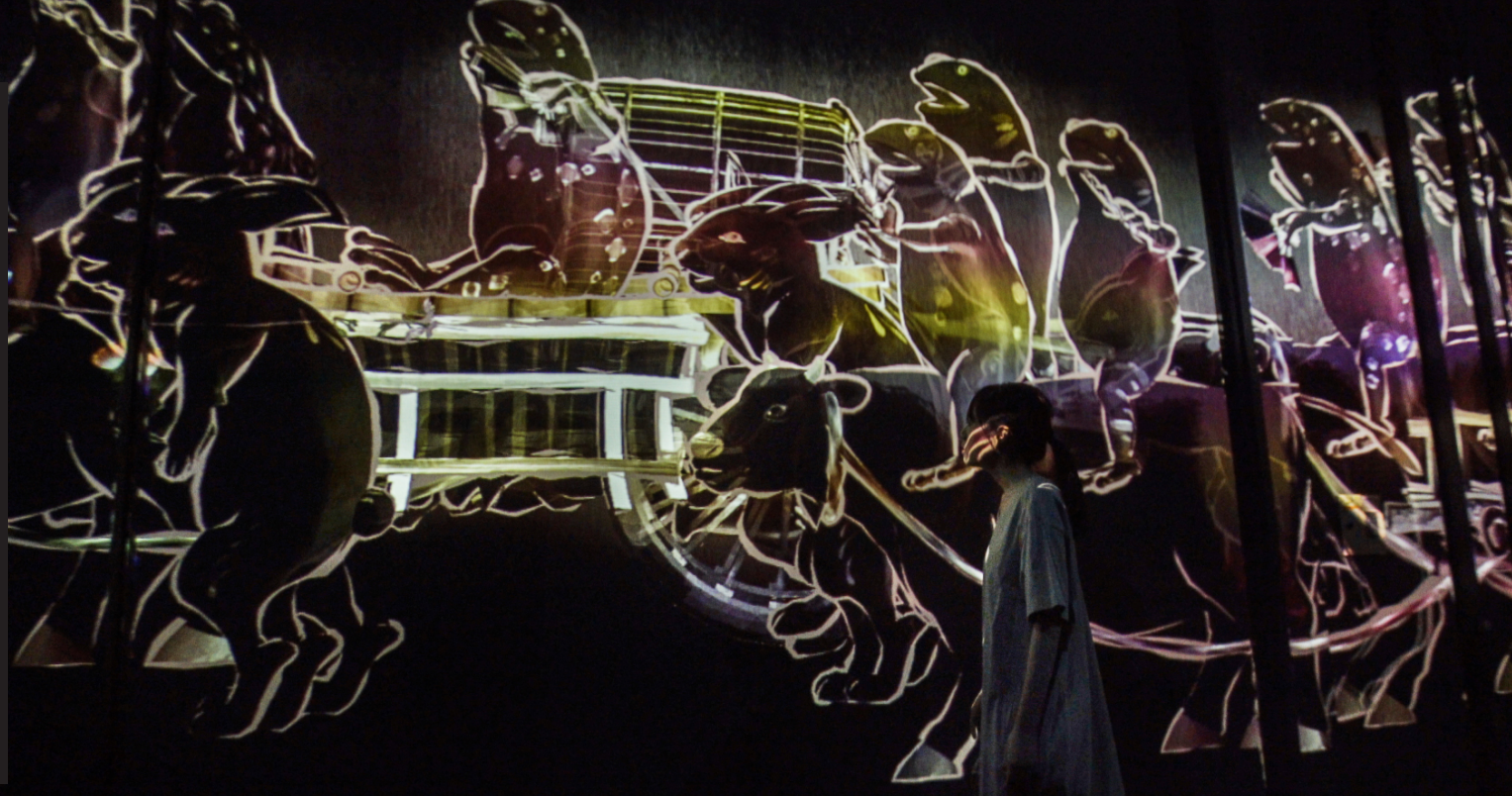


**Fig. 3.** Visitors wait in line for up to an hour outside the *Forest of Resonating Lamps-One Stroke, Autumn Mountain* for their chance to spend about three minutes inside the striking installation.

Stretching along one wall of an endless corridor, an amazing procession of larger than life-sized figures, in white, ghostly outline, gracefully step down from nowhere and parade into infinity. Dressed in costumes and armor worn by nobles and soldiers during Japan's Heian period (794 to 1185), some play instruments. Accompanying them are commoners waving their arms in the air as if in a trance. Across from the procession is an installation called *Cave Universe*, where digital images cover all surfaces. If you are lucky, a live guard dressed in black who is squatting in the darkness might jump up, scaring you half to death, to ask you to step back and not enter the cave. On occasion the same figures in *Walk Walk: Search, Deviate, Reunite* do just that. They reunite here spinning in outer space.







These characters in Heian dress pop up in countless other settings along with unusual companions—including giant hopping kangaroos and jet-like crows that leave streaks of light in their wake.

Many exhibits reflect Japan's fascination with the seasonal imagery that informs everything from traditional painting to poetry. Visitors to *Memory of Topography* enter a large mirrored room and pass through a field of lotus pads on stems that tower overhead before decreasing in height to hip level. Projected on the surface of the pads, and on pathways through them, are digital images of maple leaves, a traditional symbol of fall, floating on fast moving streams of water swirling through space. The projections change with the seasons as is the case in *Forest of Resonating Lamps— One Stroke, Autumn Mountain* (fig. 3). That room is filled with hundreds of pulsating hanging lamps that constantly change color. According to label copy, the colors represent eight seasonal shades used to dye silk in the premodern era. Since no one seems to look at the label copy, this is probably lost on visitors. Although the text also appears on the app, people did not seem to be looking at that, either.

As spectacular an experience as *Borderless* is, it has some shortcomings. Only occasionally when traditional imagery is deployed is it explained. For example, there is a long tradition in Japanese iconography of animals assuming human roles. In *Borderless*, a convoy of ox carts laden with rice bales is led by anthropomorphic frogs and rabbits (fig. 4). Reference to the painting tradition that inspired it might have enriched viewers' appreciation. A bigger issue is that much is made of interactivity. There is a large rectangular space, *Infinite Transparency*, filled with rows of transparent screens on which changing images are reflected into infinity by mirrored walls. Label copy urges: "Move closer to the artwork and

**Fig. 4.** Much of *Borderless'* imagery is rooted in traditional Japanese iconography, which is not referenced in explanatory texts. Processions of anthropomorphic creatures, for example, are a staple of scroll painting.





it reacts.” I could have touched my nose to the screens, but nothing happened. Similarly, there is a breathtaking sound and light show, *Flutter of Butterflies Beyond Borders, Intersections Create Life 1 where 64 Light Rays Cross* (fig. 5). It is animated by beams resembling *Star Wars* light sabers. They flash across the space in coordination with each other and music. Visitors are supposed to be able to deflect the beams with their hands, but nothing happened when they attempted to do so. That said, experiencing *Flutter of Butterflies* and other installations in *Borderless* evoke something like a spiritual as well as aesthetic response. And everyone wants to capture that, whatever it is, on an iPhone®, which is an impossibility.

**Fig. 5.** The sound and light show in *Flutter of Butterflies, Beyond Borders, Intersections Create Life 1 Where 63 Light Rays Cross*, like all the other exhibits in *Borderless*, never repeats itself.



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Borderless' second floor, *Athletics Forest*, is essentially a children's museum. The digital wizardry is still evident, but as a whole it is less spectacular than the ground floor. Text panels elucidate such topics as "Lifecycle of a Star" or "The Three Laws of Mechanics." How these relate to the exhibits is unclear. Visitors can jump on a giant trampoline enlivened with digital imagery. Children draw in one room. Undulating floors are covered with digital giant fish and polliwogs swimming this way and that along with crawling, crocodile-sized salamanders. A high point of a visit to the second floor is the En Tea Room, a gigantic, darkened space where flowers float atop wide counters. Once a glass bowl of green tea is placed before you at precisely the right spot, blossoming flowers appear to float on the tea's surface before flowing away.

In the final analysis, I have no doubt that the people behind teamLab are artists and what they have created qualifies as art. I will even go so far as to concede that the building that houses Borderless qualifies as a museum. It has all the trappings except for a gift shop, which is a curious omission. Visitors are certainly having inspiring aesthetic experiences there. I personally was astounded by the sheer numbers of young people under 25 I encountered there in September 2019 (fig. 6). In November, the crowd was more mixed, with lots of families and older adults, suggesting that Borderless appeals to a wide variety of audiences.

Pace Galleries, one of the world's leading purveyors of contemporary art, announced in August 2020 that it will open a chain of "EACs," Experimental Art Centers, starting in December 2020 with a 50,000-square foot version in Miami. The work of teamLab and other artists will be featured and admission will be a hefty \$40. Pace's EACs, teamLab's museums, and similar attractions that undoubtedly are to come will likely impact public perceptions of what museums are or should be and what their exhibitions should include. Museum professionals everywhere might want to consider how we can stay competitive by injecting similarly sophisticated pizzazz into our galleries. Following my own Borderless visits, I shared a PowerPoint presentation about teamLab with my board. The members did not evidence irrepressible enthusiasm for bringing teamLab to the Adirondack mountains. I am going to keep pushing, though, lest some other cultural organization beats us to the punch.

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**Fig. 6.** Of its 2.3 million first-year visitors, half were foreigners and half of those said they came to Tokyo to see Borderless. The majority of visitors are young adults.