Rediscover JUNKAN

Monthly JP pavilion

Issue

12

Feature

Ever-Turning Seasons

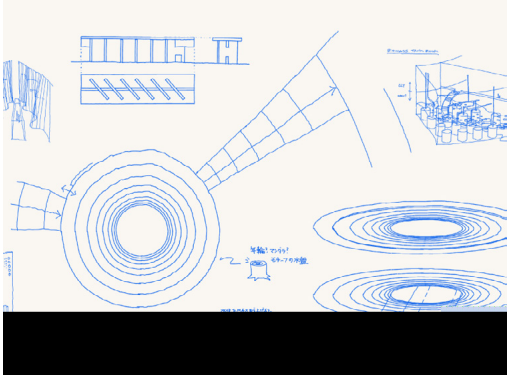
The Great Cycle of Nature So Fragile, So Precious, So Beautiful.

Feature

Tracing the Meaning of Ever-Circulating Words: Exploring Japanese Aesthetics Through the Lens of "JUNKAN"

Has "JUNKAN" been shaped by literature? Dictionary editor Satoru Kaminaga explores three words tied to Japanese aesthetics.

P.04



Reflecting on Japanese Aesthetics Through the Lens of "JUNKAN"

The Japanese aesthetics that run through the architecture and exhibits of the Japan Pavilion. Sato Oki shares the creative ideas and innovations behind it.

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We have explored various forms of "JUNKAN" that surround our daily lives — from ecosystems and the role of microorganisms to recycling.

However, one significant question remains: When and how did the word "JUNKAN" come into being, and how did it come to hold its current meaning?

In this final issue, we spoke with dictionary editor Satoru Kaminaga about the origins and evolution of three Japanese words that embody distinct cultural values. These are "SHIKI" (the four seasons), which reflects the ever-changing nature of the environment and climate; "MUJŌ" (impermanence), which expresses the fleeting and transitory nature of human life; and "JUNKAN" (circulation), which conveys the idea that changing things and events will eventually repeat themselves.

Turning, looping, and returning — why has this concept become so deeply rooted in our values? Let's embark on a journey through time, tracing the path of words.

"SHIKI": Capturing the Beauty of Nature Through Words

— The concept of the four seasons is deeply intertwined with Japanese culture and values. How did the word "SHIKI" (four seasons) take root in Japan?

Kaminaga The term "SHIKI" literally refers to the four seasons — spring, summer, autumn, and winter. The idea of dividing the year into seasonal periods can be found in China and other East Asian regions as well. However, how the Japanese have perceived and expressed these four seasons reveals a unique sense of beauty that is distinctly Japanese.

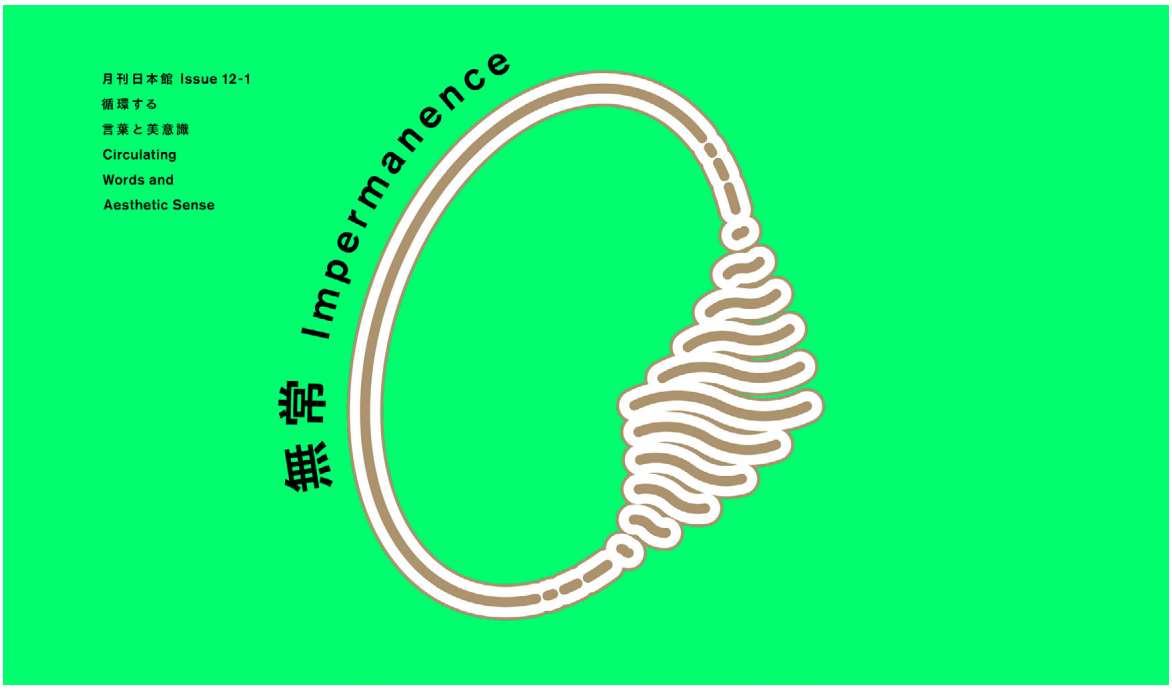
The Japanese sensitivity to the four seasons has been refined through literary

works. A quintessential example is the opening passage of The Pillow Book by Sei Shōnagon, written during the Heian period:
"In spring, it is the dawn that is most beautiful. As the light gradually brightens and the mountain ridges become faintly white, thin, purplish clouds stretch delicately across the sky."
This passage reflects how the Japanese have long observed the subtle transitions of the seasons and expressed them in words with remarkable precision.

— So, you're saying that language has played a key role in nurturing this sensitivity to the seasons?

Kaminaga Exactly. The Japanese language offers an incredibly diverse range of expressions for describing the seasons. Take cherry blossoms, for example. When fallen petals float downstream, they are called hana-ikada (flower raft). When the blossoms have fallen, leaving only the green leaves, it's called hazakura (leaf cherry). There are also expressions like hatsu-zakura (early blossoms), hana-akari (blossoms that seem to glow at night), hana-gasumi (blossoms that appear hazy like mist), and nagori no hana (the final lingering blossoms). These rich and nuanced expressions capture the subtle transitions over time. Such words do more than simply describe phenomena — they reflect the Japanese perspective and sensitivity toward the changing seasons.
In addition, concepts like the nijūshi sekki (the 24 solar terms that describe seasonal shifts) and the go-sekku (the Five Seasonal Festivals — January 7's Jinjitsu, March 3's Jōshi, May 5's Tango, July 7's Tanabata, and September 9's Chōyō) have further enriched the Japanese sense of seasonality.
This sensitivity to capturing fleeting seasonal changes through language is at the heart of Japanese aesthetics.

"MUJŌ": Fleeting Yet Beautiful



— The term "MUJŌ" is known as a concept that embodies Japanese aesthetics. What was its original meaning?

Kaminaga The term "MUJŌ" refers to the idea that everything in this world is constantly changing and never remains in the same state. In Japan, the use of "MUJŌ" dates back a long way — it already appears in the Man'yōshū, a poetry anthology from the Nara period. In Volume 16, there are two poems titled "Verses on the Impermanence of the World," which use the concept of "MUJŌ" to express the fleeting nature of human life and the uncertainty of when death may come.

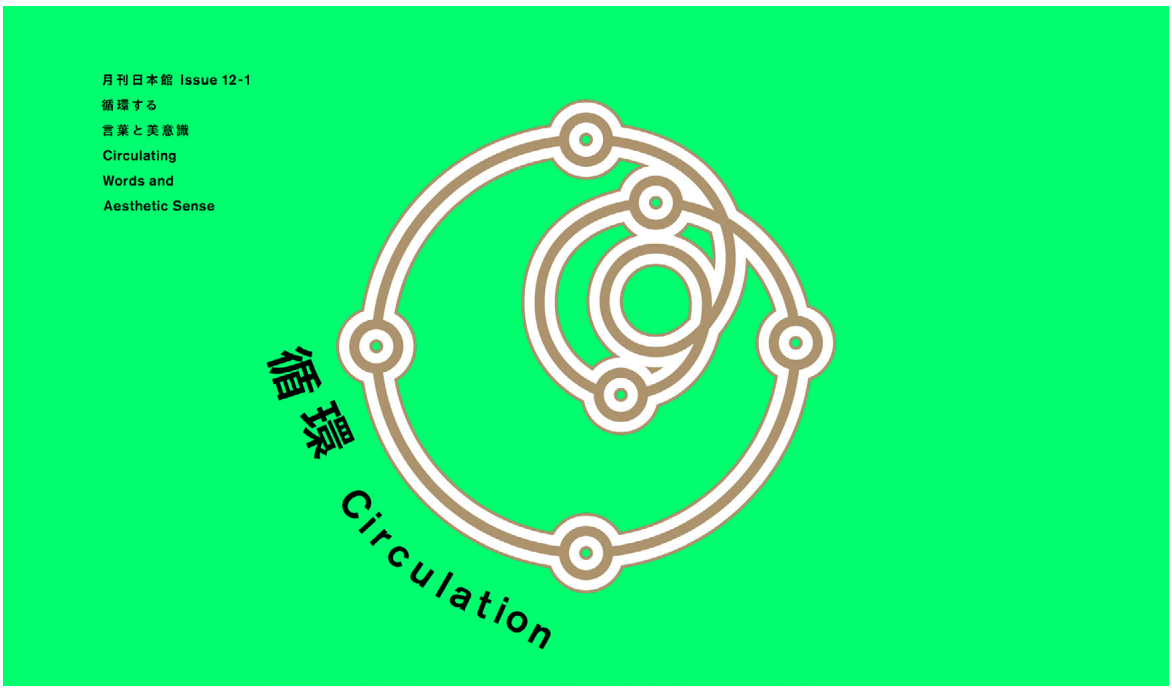
— How has the concept of "MUJŌ" evolved throughout the history of Japanese literature?

Kaminaga During the late Heian to early Kamakura period, Japan saw a shift from an aristocratic society to a warrior-led one, accompanied by growing unrest and heightened anxiety among the people. Amid the spread of mappō thought — the belief that the world was in a state of moral and spiritual decline — the concept of "MUJŌ" became a central theme in literature. The interpretation of "MUJŌ" was further refined through the works of reclusive monks such as Kamo no Chōmei and Yoshida Kenkō. As they observed the impermanence of the world and recorded their thoughts in essays, they elevated "MUJŌ" into an aesthetic consciousness — the idea that things are beautiful precisely because they are fleeting. A striking example can be found in the famous opening passage of Hōjōki:
"The flow of the river never ceases, and yet the water is never the same. The bubbles floating on the surface disappear and form again, never lingering for long. So it is with people and the dwellings they call home."
Doesn't this passage vividly capture the atmosphere of that era?

— So, rather than finding "sorrow" in transience, they discovered "beauty" instead?

Kaminaga The concept of mujōkan (the awareness of impermanence) greatly influenced not only the Japanese aesthetic of wabi-sabi but also Japanese culture as a whole. Wabi refers to the beauty found in simplicity and austerity, while sabi describes the beauty in the aged, weathered, and withered. Underlying these concepts is the mujōkan-inspired belief that true beauty lies not in brilliance or perfection, but in the incomplete, the fleeting, and the transient.
This aesthetic evolved further under the influence of tea ceremony and Zen Buddhism. It can be seen in the minimalist spaces of tea rooms, the dry landscapes of karesansui gardens, and the appreciation of irregularities or imperfections in pottery — all of which embody the wabi-sabi spirit.
There's also a Japanese term, teinen, which reflects this worldview. Unlike the common understanding of "giving up" as resignation, teinen refers to achieving a state of acceptance — a deeper recognition of reality. This sensitivity to the transient nature of life, along with the quiet sorrow for what has passed, remains a powerful and recurring theme in Japanese literature even today.

“JUNKAN”: The Ever-Returning Value That Underlies All Thought



— With that in mind, I’d like to ask about the term “junkan” (circulation). What are the origins of this word?

Kaminaga The term “JUNKAN” (circulation) is used in various contexts today — from blood flow and ecosystems to recycling — but its original meaning is “to go round and return to the starting point.”

The character jun (循) means “to follow” or “to go along with,” while kan (環) refers to a circular loop or ring. Together, they describe something that continuously revolves like a jade bead rolling in a circle — never breaking and eventually returning to its origin.

The term “JUNKAN” originates from Chinese literature. It appears in Bai Shi Wen Ji (The Collected Works of Bai Juyi), a Tang dynasty poet. In his farewell poem “Zeng Bie Yang Yingshi, Lu Kezhou, Yin Yaofan” (Farewell to Yang Yingshi, Lu Kezhou, and Yin Yaofan), Bai Juyi used the term “JUNKAN” to express the unending waves of sorrow that follow a parting.

離憂繞心曲　宛転如循環
(Riyū shinkyoku o meguri, enten toshite junkan no gotoshi)
The grief of parting coils around my heart, revolving ceaselessly like circulation itself.

In Japan, the earliest recorded use of “JUNKAN” appears in Kanke Bunsō, a collection of Chinese-style poems by Sugawara no Michizane from the Heian period. In the poem titled “Ode on Fallen Leaves and Empty Branches in the Garden,” “JUNKAN” is also used to describe an emotional state:

分任循環運、年如転轂衝
(Bunin junkan shite meguru, toshi wa kokushō o marobasu ga gotoshi)
Duties are cyclical, turning and returning like the spinning axle of a wheel.

In both cases, "JUNKAN" conveys a sense of continuous movement — emotions, roles, or time itself endlessly revolving and ultimately returning to where they began.

— So originally, the term didn't describe physical movement, but rather the flow of emotions or abstract concepts?

Kaminaga For instance, there's a dictionary called the Nippo Jisho, published in the early Edo period. This was a Japanese-Portuguese dictionary created by Christian missionaries to help them learn Japanese. In this dictionary, "JUNKAN" (written as jun'kwan at the time) is explained in Portuguese as meaning "the rotation of the heavens" or "the free movement of blood through the body's vessels." While the exact process of how "JUNKAN" came to describe physical movement is unclear, it's certain that by the Edo period, this usage had become established.

— The words "SHIKI" (the four seasons) and "MUJŌ" (impermanence) also seem to share the themes of "change" and "repetition." Although "JUNKAN" is originally a Chinese term, would you say it has influenced Japanese culture and values as well?

Kaminaga Absolutely. "JUNKAN" plays an important role in Japanese culture as well. For example, Japanese gardens are often designed to create a sense of "JUNKAN" — with flowing water or guiding visitors' gaze along a circular path. Strolling gardens (kaiyū-shiki teien) are a prime example, where visitors follow a winding path that reveals different scenic views along the way.

In the tea ceremony, there's also significance in the "JUNKAN" of the tea bowl between the host and guests. Sharing tea from the same bowl is seen as fostering a sense of connection and unity. Although the interpretation of "JUNKAN" has evolved over time, it remains a concept that resonates deeply with Japanese values and aesthetics.

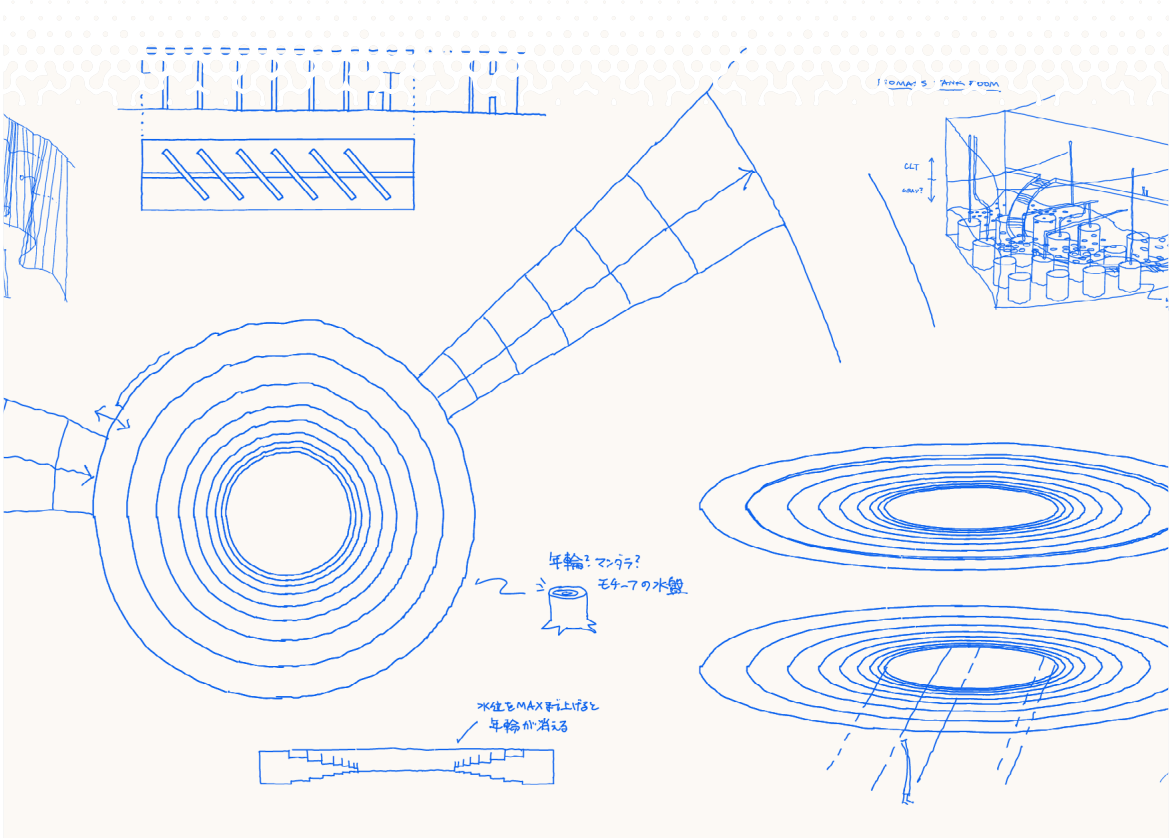
— Thank you very much for your time.

Kaminaga From the rich perspective on the four seasons, born from life deeply intertwined with Japan's natural rhythms, to the aesthetic of "MUJŌ" — finding beauty in the fleeting and transient — these cultural foundations seem to have nurtured the value of "JUNKAN", the belief that what moves will eventually return to its starting point. Today, the concept of a "circular society" is being embraced not only in Japan but across the world. The term "circular" is increasingly seen as a guiding principle, evolving to take on new meanings and significance. Perhaps the word "JUNKAN" itself is being called upon to adapt and expand as it journeys forward in time.

Satoru Kaminaga

Born in Chiba Prefecture in 1956. After joining Shogakukan's affiliate Shogaku Tosho in 1980, he transferred to Shogakukan in 1993, spending nearly 37 years dedicated to dictionary editing. He contributed to works such as The Great Japanese Dictionary (Second Edition), The Contemporary Japanese Dictionary, and The Dictionary of Beautiful Japanese. Even after retiring from Shogakukan in 2017, he continued working on The Great Japanese Dictionary (Third Edition). His publications include The Troublesome Japanese Dictionary, The Even More Troublesome Japanese Dictionary, and 101 Beautiful Japanese Words Chosen by a Dictionary Editor.

Reflecting on Japanese Aesthetics Through the Lens of “JUNKAN”



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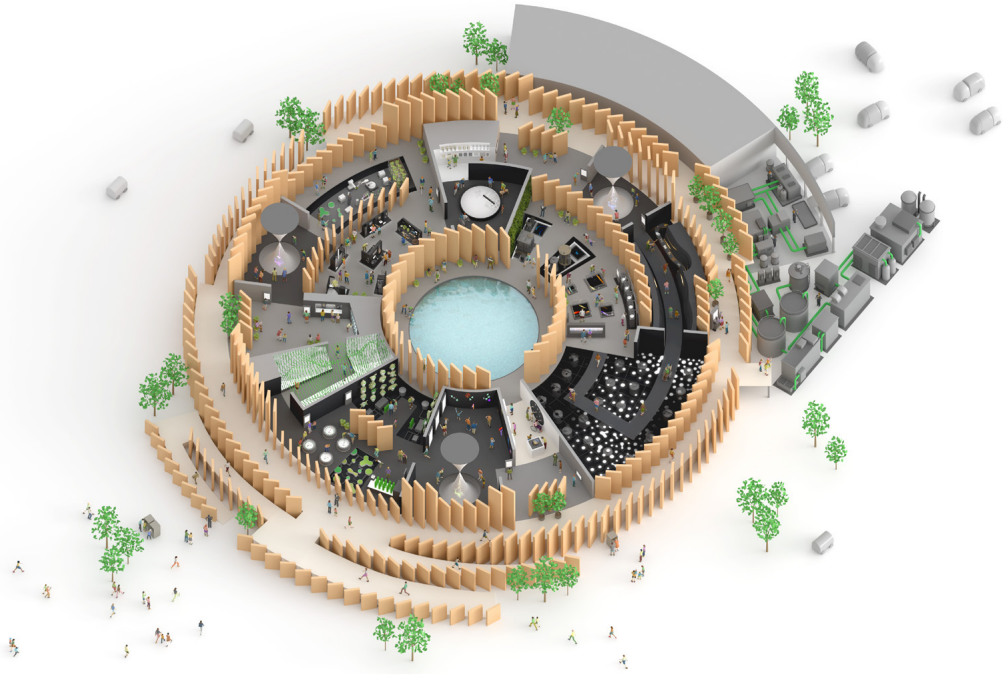
The Osaka-Kansai Expo, set to begin in April 2025, will feature the Japan Pavilion, designed around the central theme of "JUNKAN", a harmonious loop of change and return. This concept is embodied in both its architecture and exhibits. The pavilion's circular structure — with no clear beginning or end — features three entrances. Its striking exterior is constructed from wood designed for reuse, reinforcing the theme of sustainability. Inside, the exhibits range from food waste treatment systems and algae to Martian rocks — seemingly unrelated elements that are, in fact, all interconnected. As Oki Sato, the Japan Pavilion's chief producer and designer, explains, this interconnectedness lies at the heart of the pavilion's concept. In previous issues, we have explored "JUNKAN" from various perspectives. In this article, we examine the concept through the lens of Japanese aesthetics. From the architectural design to the exhibits themselves, we delve into the ideas and innovations that reflect this distinctly Japanese sensibility — as shared by Oki Sato.



For detailed information on the Japan Pavilion exhibits, check out

Architectural design, architectural planning, and exhibition interior design (basic and detailed design): Nikken Sekkei
Exhibition design (basic and detailed design), construction: Japan Pavilion Exhibition Consortium Joint Venture (Tanseisha / Nomura Co., Ltd.)

Theme and Exhibits: Interconnected and Circulating

The theme of the Japan Pavilion, "Between Lives", was born from the concept of "JUNKAN." This theme embraces a wide range of elements, including philosophy, science, history, and environmental issues. How was this theme chosen, and how did it shape the content of the exhibits within the pavilion? To understand this, we first explore the underlying concept of "JUNKAN."

— How was the keyword "JUNKAN" chosen?

Sato The role of the Japan Pavilion varies significantly depending on whether the Expo is held overseas or in Japan. For an Expo held abroad, the Japan Pavilion is expected to encapsulate "contemporary Japan," offering visitors an experience that feels as if they've traveled to Japan.

However, in the case of the Osaka-Kansai Expo, people can experience "contemporary Japan" firsthand through various encounters within the country. This led me to believe that the role of the Japan Pavilion should go beyond showcasing specific objects or events — it should delve into deeper ideas and ways of thinking.

As we explored what concept should be at the core, we realized that Japan's unique relationship with nature stood out as a defining characteristic. The idea of "JUNKAN" — born from this connection with the natural environment — emerged as a key theme.

"JUNKAN" not only reflects Japanese thought and history but also ties into new technologies that are shaping society. We believe this concept could offer valuable insights for navigating the future.

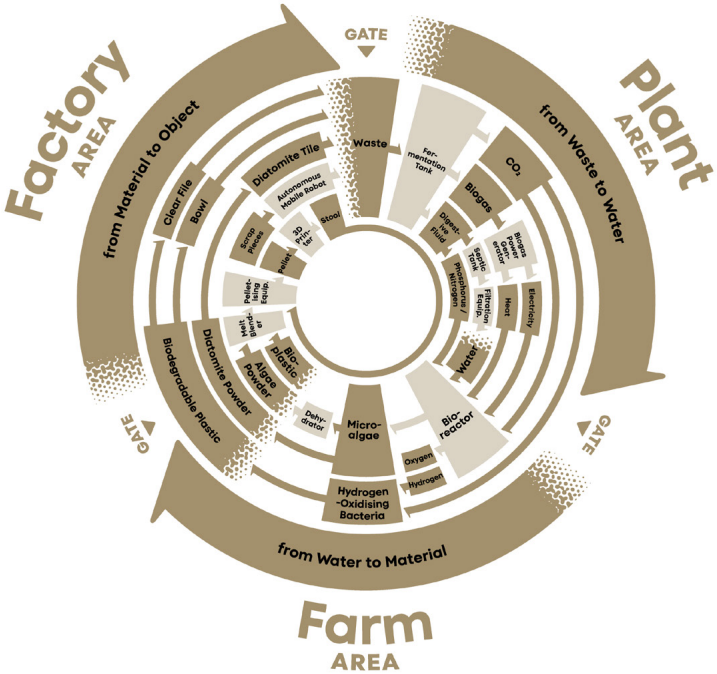
— So, that idea ultimately led to the Japan Pavilion's theme, "Between Lives", didn't it?

Sato The concept of "JUNKAN" is broad and can be challenging for people to relate to on a personal level. That's why we felt it was important to focus on smaller, more familiar elements. The theme, "Between Lives," reflects this idea — not just highlighting life itself, but also carefully illustrating the subtle connections that exist between lives. This approach led to exhibit designs that visualize invisible, delicate forms of life and express the fleeting yet beautiful nature of life's constant transformation.

— How did you approach the design of the exhibits to express the concept of "circulation"?

Sato When we started the project in 2021, our first step was to identify the elements that would circulate throughout the Japan Pavilion — things like waste, water, various forms of energy, algae, materials, and products. Each of these elements has its own life cycle: they are created, fulfill their purpose, and eventually fade away. Our living environment is filled with countless small cycles like these. To better visualize these connections, our team created a conceptual diagram that we referred to as a "mandala." As we mapped out these smaller cycles, we realized that their intricate interconnections ultimately form a much larger cycle as a whole. This realization became our starting point. From there, we developed the content, followed by the exhibition spaces, and finally the architectural design itself. I believe this unique process — starting with the concept of circulation and allowing it to shape every layer of the project — was crucial in bringing the vision of the Japan Pavilion to life.

— So, visitors can experience the interconnectedness of these elements within the cycle at the Japan Pavilion?



This is the conceptual diagram known as the "Mandala," which illustrates the interconnected elements featured in the Japan Pavilion. (Not all circulations depicted in this diagram are fully realized within the Japan Pavilion itself.)

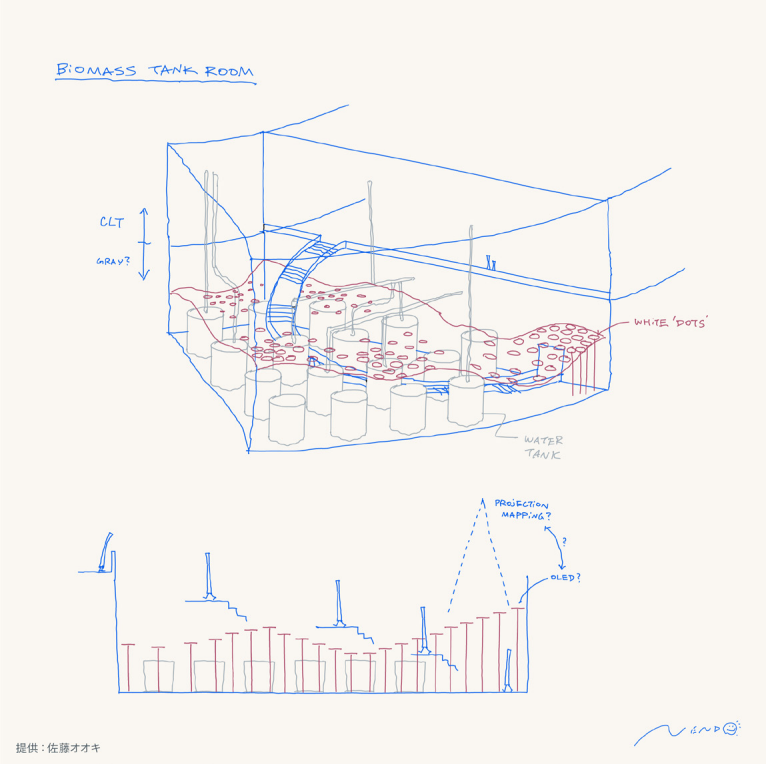
Sato We carefully designed the exhibits to ensure they wouldn't feel like isolated events, but rather convey a sense of invisible interconnectedness. For example, algae appear in various forms — as part of furniture, food, or even incorporated into artworks using diatomaceous earth. Additionally, recurring design motifs are woven throughout the space. By scattering these small "connections" across the exhibits, we aimed to help visitors sense the presence of a greater, overarching cycle that ties everything together.

— The phrases "The Pavilion That Eats Waste" and "The Living Pavilion" have also been mentioned. What ideas and intentions lie behind these concepts?

Sato In everyday life, waste is often seen as something dirty, smelly, and undesirable. But is that really all there is to it? By shifting our perspective, we may find that even discarded materials have their own vitality — and by recognizing this, we can connect them to a larger cycle of renewal. Our aim is to challenge conventional thinking by allowing visitors to witness waste being transformed into something new and meaningful. To achieve this, we deliberately designed the Japan Pavilion to function as a food waste treatment facility.

The pavilion is integrated with a biogas plant — a system that breaks down food waste to generate electricity and water. The plan is to collect approximately one ton of food waste generated daily at the Expo site using EV trucks and process it within the pavilion itself. A food waste facility is typically seen as the "final resting place" for discarded materials. By combining this with regeneration technology, creative design, and engaging content, we wanted to create an immersive experience — not just a showcase of exhibits, but something visitors can see in action. Our goal was to create a truly "living" Japan Pavilion — a space that embodies circulation and renewal in a tangible, impactful way.

At the biogas plant, food waste collected from the Expo site is broken down into water and biogas. The biogas is then used to generate electricity, serving as the energy source that powers the Japan Pavilion.



提供：佐藤オオキ

An early sketch of an installation inspired by a fermentation tank, showcasing various microorganisms actively breaking down food waste — one of the exhibits in the Plant Area.

What Defines Japanese Aesthetics?

At first glance, the Japan Pavilion captivates visitors with its striking arrangement of wooden panels that stand neatly in a circular formation. These panels are intentionally spaced, creating a sense of openness that blurs the boundary between the pavilion's exterior and interior — subtly evoking the theme of "Between Lives". This design naturally leads to a deeper conversation about the underlying concept of Japanese aesthetics.

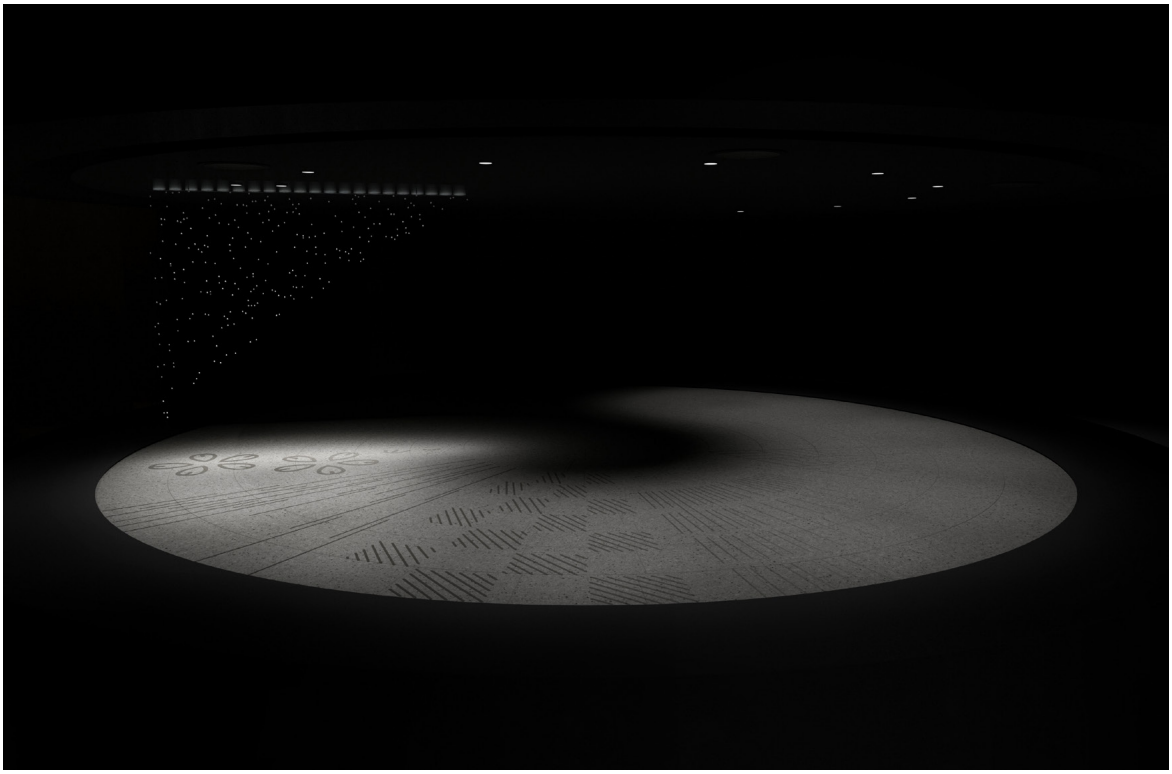
— Could you tell us about the concept of Japanese aesthetics reflected in the Japan Pavilion? How has this been incorporated into the exhibits?

Sato As I mentioned earlier, the concept of circulation is deeply rooted in our relationship with nature. While Western perspectives often emphasize "confronting" nature, Japanese aesthetics are characterized by a stance of "coexisting" with it. I believe that a key aspect of Japanese aesthetics lies in the awareness that we are part of a larger cycle — an understanding that our existence is intricately woven into this broader flow of life and time. This mindset is particularly evident in the way Japanese culture embraces small things and fleeting moments. There's a unique sensitivity to the beauty found in what is delicate, impermanent, and quietly unassuming — qualities that reflect this deeper connection to the cycles of nature.

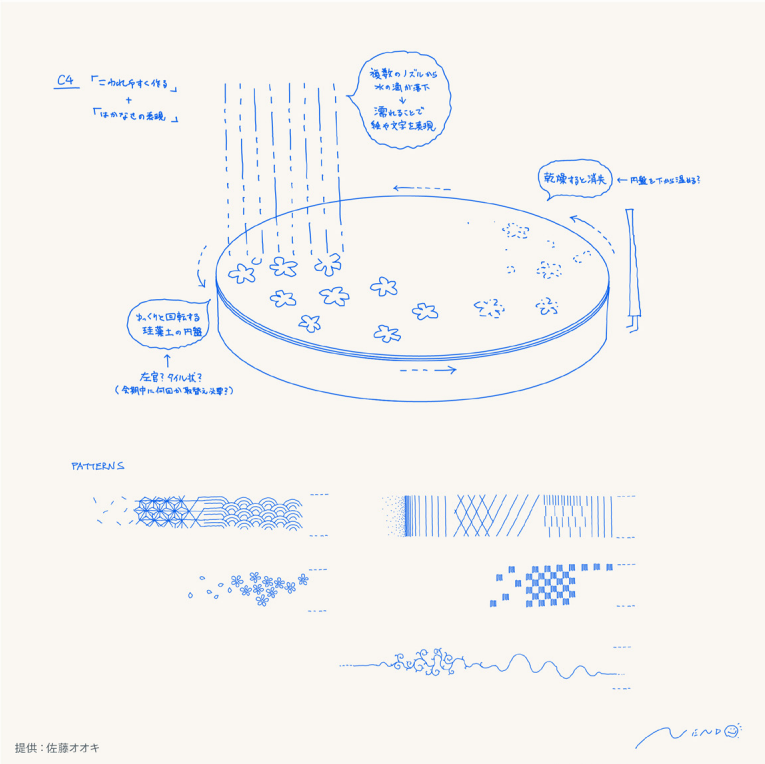
— What exactly do you mean by "small things" and "fleeting moments"? Could you provide some examples?

Sato The Japanese have long found beauty in the changing seasons and nature's fleeting moments. There's a deep appreciation for the ephemeral — the transient beauty that exists only for a brief time. For example, the falling petals of cherry blossoms, fireworks that briefly illuminate the night sky, or the quiet flicker of a sparkler fading into darkness — these fleeting moments are cherished precisely because they are short-lived. This sense of treasuring the moment, finding beauty in what is delicate and impermanent, is a distinctive aspect of Japanese aesthetics.

Another characteristic of Japanese sensibility is the awareness of invisible yet essential presences. At the Japan Pavilion, we highlight microorganisms — tiny, unseen beings that have quietly supported human life throughout history. These include bacteria that break down food waste to generate fuel, kōji mold essential for making miso and soy sauce, and microalgae, which are gaining attention as a promising resource for the future. Through exhibits that showcase the activities of these "small things", we hope visitors will recognize and appreciate the overlooked yet vital contributions these unseen forces make to our lives.



The "Water Art" that appears and disappears on the large diatomaceous earth canvas in the Factory Area embodies the Japanese aesthetic of cherishing ephemeral beauty — finding elegance in fleeting moments.



提供：佐藤オオキ

A rough sketch exploring the mechanism and patterns of water-drawn art. What kind of designs will emerge on the large circular diatomaceous earth tiles, spanning over 6 meters in diameter? Be sure to see it for yourself at the venue.

— When expressing the sense of "JUNKAN", which is said to be central to Japanese aesthetics, what particular elements did you focus on in designing the Japan Pavilion's spatial experience?

Sato The circular structure itself — with no clear beginning or end — is a direct expression of nature's cyclical flow. Upon entering any of the three entrances, visitors will encounter an exhibition space inspired by an hourglass, designed with identical elements in each. This repetitive yet subtly evolving experience creates a sense of looping — as if things are continuously transforming and being reborn. This design acts as a key mechanism for evoking the concept of "JUNKAN." Another unique feature is that the sequence of exhibits changes depending on which entrance visitors choose. This slight shift in perspective allows each visitor to experience a different narrative or viewpoint. We also hope that these varied personal experiences will spark conversations among visitors, enriching their understanding of the interconnectedness that lies at the heart of "JUNKAN."

A Space Designed to Be Felt, Not Just Understood

How will visitors experience the meticulously designed exhibits at the Japan Pavilion? As the host country's pavilion, this project presents a bold challenge — blending architecture and exhibition in an unprecedented way. To conclude, we asked about the unexpected beauty that emerged through this process, as well as tips for enjoying the Japan Pavilion.

— The Japan Pavilion's architecture is undoubtedly on a scale unlike anything you've worked on before. Why did you choose to adopt the challenging approach of "designing the interior while simultaneously defining the outer structure"?

Sato I was committed to keeping the "exhibition experience" at the heart of the design process. My goal was to start from the question: "What will visitors feel, and how?" From there, I envisioned a space where exhibits, language, sound, interior design, and architectural elements would seamlessly blend together and expand as one cohesive experience. In pursuing this deep integration of hardware and software — as well as analog and digital elements — it became essential to develop all aspects simultaneously. Ultimately, the aim was not to create a space where visitors simply understand information, but rather one where they can feel the information — an immersive experience that resonates on an emotional level.

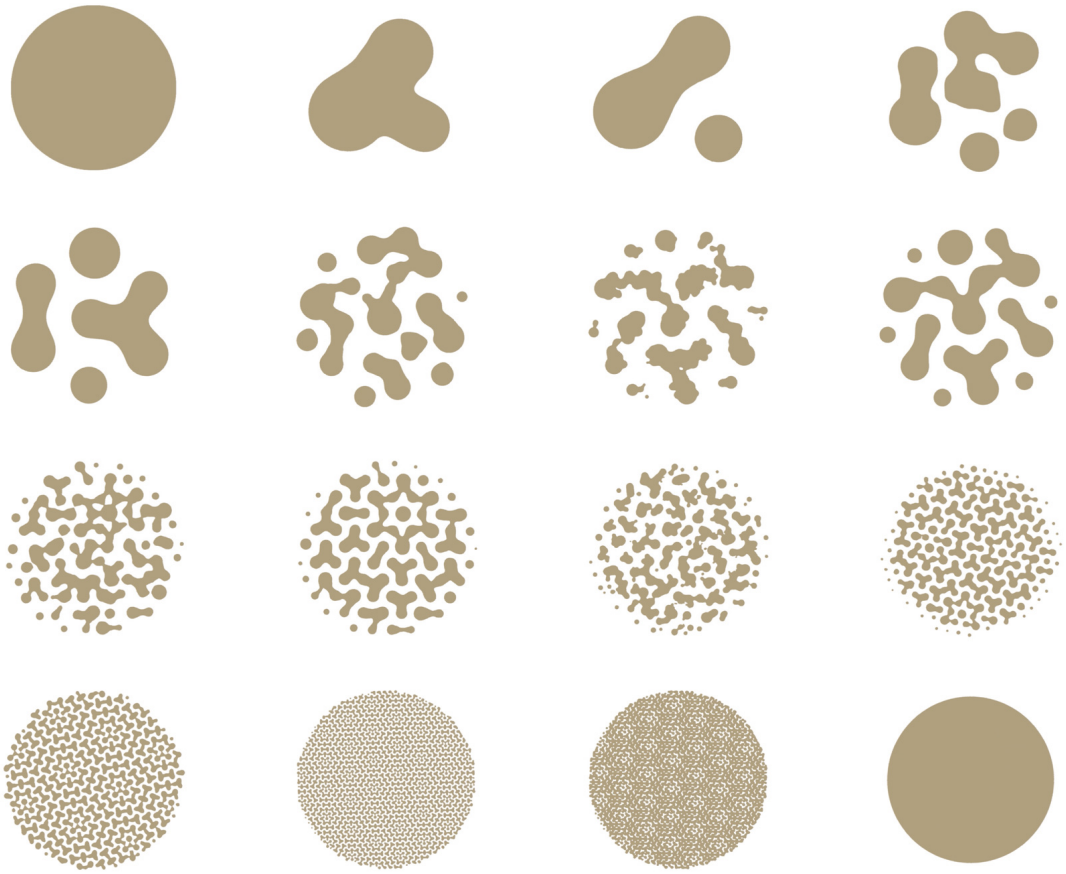
— Could you tell us about the specific design elements or techniques you incorporated to help visitors feel the information rather than just understand it?

Sato Instead of speaking loudly to grab attention, the Japan Pavilion intentionally adopts a more subtle, "whispering" approach — carefully layering delicate expressions throughout the space. I would be delighted if visitors take a moment to really listen and engage with these quiet details. At first glance, it may lack the flashy impact often associated with Expo pavilions. However, like dried squid that reveals deeper flavors the more you chew, the Japan Pavilion

is designed to reveal new insights and discoveries the longer you explore it. This sense of depth and layered complexity is what we aimed to create — a space that continues to offer fresh perspectives with each visit.

— Could you share the thoughts and intentions behind the visual system designed for the Japan Pavilion as a whole?

Sato The visual system, too, was designed to be something that feels organic and ever-changing, rather than bold or iconic. Yoshiaki Irobe from the Nippon Design Center created a system that resembles a living organism — constantly shifting and transforming. By allowing these graphic elements to appear throughout the pavilion in fluid, evolving forms, I believe they effectively enhance and emphasize the Japan Pavilion's central theme.

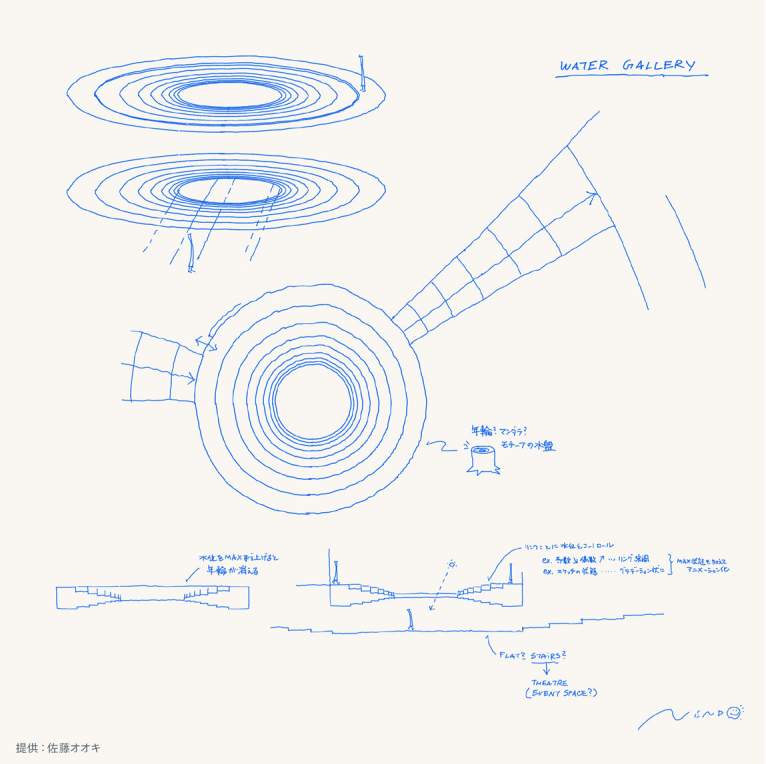


— Through your work on the Japan Pavilion project, have you discovered any new insights about the concept of "beauty"?

Sato One of the most surprising and memorable moments for me was the way the water basin at the center of the Japan Pavilion took on an unexpected presence — something I hadn't fully anticipated. This space was intentionally left empty, rather than featuring a specific object or display. This decision stemmed from the idea that the center should not hold a defined meaning, but instead allow the circular flow of "JUNKAN" to take precedence. When the space was finally completed, I was struck by an unexpected sense of beauty — a quiet yet profound feeling that seemed to encompass the entire

Japan Pavilion. Despite being “empty,” it felt as though everything was there. The stillness of the space invited a range of emotions to emerge, revealing a unique and mysterious kind of beauty that continues to resonate with me.

The circular courtyard, open to the sky, features a large water basin. The crystal-clear water, purified to near-perfect clarity by microorganisms in the Plant Area, beautifully reflects the surrounding light.



提供：佐藤オオキ

This sketch served as the foundation for the large water basin at the center of the Japan Pavilion. Early design concepts explored various possibilities, including stepped, concentric ring, and two-tiered structures.

— Finally, could you share some tips for fully enjoying the Japan Pavilion?

Sato The Japan Pavilion is designed with numerous small, layered elements that create subtle connections throughout the space. You may encounter the same elements reappearing in different forms or spaces, or notice repeated motifs. Even the background music contains elements of "connection" and "JUNKAN." While the theme of the Japan Pavilion may initially seem grand, I encourage visitors to focus on the small details. By paying attention to these quiet whispers and subtle cues, I believe they'll uncover new insights and discoveries that make the experience even more meaningful.

Osaka-Kansai Expo Japan Pavilion Chief Producer / Chief Designer

Oki Sato

Born in 1977. In 2002, he founded the design office nendo. He has won numerous design awards both domestically and internationally, and his major works are housed in museums around the world. His clients span various industries both in Japan and abroad. Currently, he is working on the design of the new high-speed TGV trains in France.

HP: https://www.nendo.jp/
Photo credit: Allan Abani