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Davos Special

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Clockwise from left: The congress center in Davos, where the World Economic Forum annual meeting is taking place. Davos is in the middle of Swiss Alps and a city popular for holidays, sports and congresses; Prime Minister Shinzo Abe makes a speech on Jan. 22, 2014, at the opening plenary session of the WEF 2014 annual meeting in Davos; The WEF 2016 annual meeting will take place in Davos from Jan. 20 to 23. WORLD ECONOMIC FORUM, CABINET PUBLIC RELATIONS OFFICE

Japan takes on global role under 'Vision for Tomorrow'

Minoru Matsutani
STAFF WRITER

Vision for Tomorrow is a regional partner community project of the World Economic Forum in collaboration with consulting firm Accenture Japan Ltd. In short, the project aims to contribute to the world by Japan's experience together with today's advanced technology.

The concept matches the ideal of the annual meeting of the World Economic Forum (WEF), dubbed Davos after the Swiss resort at which it is held, where global leaders in politics, business, academia and other fields discuss various global agendas and examine how to make the world a better place. This year's conference will be held from Jan. 20 to 23.

The Vision for Tomorrow project came about following a speech delivered by Prime Minister Shinzo Abe in Davos in January 2014, in which he said Japan should take a more active role in solving various global problems.

"Japan is among the most advanced countries in a number of areas such as social security, urbanization and infrastructure and many others. The mission of the project is how Japan can contribute to other countries to avoid or mitigate socio-economic problems that Japan has experienced in its own development through lessons learned," said Tadashi Waki, managing director at Accenture.

For example, many experts predict that the Japanese pension system will fall short in the near future due to the increasing financial burden on younger generations as the elderly population grows.

"Japan should have shifted its policy to encourage Japanese people to be responsible for their own futures a long time ago," Waki said. "Many other countries will probably go down the same path. We should study when a country should undertake policy choices and help them overcome difficulties we've already faced."

The challenge facing their mission is that developing countries typically want to prosper and join developed countries as soon as possible, rather than spending time and money to make their futures — dozens of years from now — better.

"Ultimately, our job is to help regular people (not politicians or other leaders) have long-term views," he said.

In one of the activities in line with Vision for Tomorrow, the Japan International Cooperation Agency (JICA) is helping the Thai government with the country's health care system. Thailand has implemented universal health care coverage, a social support system that Japan has enjoyed for many years, and JICA is currently giving the country advice on securing the financial resources to support the system.

In another example of JICA's activities in line with Vision for Tomorrow, it helped about 20 countries issue a total of 8 million volumes of maternal and child health handbooks, which originated in Japan. The handbooks contain a variety of information, including when babies need be vaccinated for various diseases such as measles and polio.

The books help mothers understand what is necessary to protect their children's lives. Some 6.3 million children die before reaching the age of five and 290,000 pregnant women die every year in the world. Of the children, 6.15 million would have survived if they lived under the same medical and social conditions available in Japan, said Takao Toda, director general of the Human Development Department at JICA.

"We need to learn and work together to solve various global problems. Sharing knowledge is important for that," Toda said.

A Japan International Cooperation Agency volunteer shows a health handbook created for pregnant women and children to a woman in Palestine. JICA

He also pointed out that Japan was able to achieve universal health care coverage half a century ago, not because Japan was a rich country, but because it was poor and everybody, especially politicians, was unified to build a strong country and agreed that solid health care was essential.

Indeed, health care is just one area in which developing countries can learn from Japan's experience.

Establishing a public health care system is essential to maintaining a healthy workforce. Japan has invested in universal health care, which has become a model for the world as almost everybody has access to affordable health care. However, the system has become more and more difficult to finance as life expectancies have increased and medical expenses have surged.

If Japan had shifted its focus to preventive care and healthy longevity, a reduction of the financial burden on younger generations may have been possible. For example, eating healthy foods and exercising can prevent lifestyle diseases such as diabetes and hypertension stemming from high cholesterol. Encouraging people to adjust their lifestyles may be something government authorities can do.

Another case study shows that developing countries can learn urban planning from Japanese experience.

Many people moved into cities when Japan was experiencing economic growth, creating surging demand for housing, public services and infrastructure such as electricity and water supply in urban centers. As people moved to avoid the crowding of major cities, demand for housing rose in new satellite cities.

Japan's government adopted a laissez-faire approach and let the private sector build infrastructure to meet short-term demand. However, as the economy slows and people living in major cities move away and those living in satellite cities move back to centers, they leave underutilized infrastructure in the satellite cities that local governments have to maintain.

Building long-lasting infrastructure is also something developing countries can learn from Japan, which focused on quantity and speed of infrastructure, rather than safety and longevity, things that later proved important.

Infrastructure in Japan that was built during the high growth period in 1960s and '70s was not built under assumption that it should last several decades. Later, public authorities were forced into "patchwork" maintenance every time

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2020 Olympics host to hold world forum on sport, culture

Hiroshi Hase, minister of education, culture, sports, science and technology, speaks during an interview with The Japan Times in his office at the ministry in Tokyo on Jan. 5. YOSHIAKI MIURA

Shusuke Murai
STAFF WRITER

With a little over four years to go before the 2020 Tokyo Olympics, discussions in Japan are gearing up about what positive legacies will come from the international sports extravaganza, sports minister Hiroshi Hase said in an exclusive interview with The Japan Times in January.

As the next country to host the summer Olympic Games after Rio de Janeiro in August, Japan will hold the first "World Forum on Sport and Culture" in October as a kick-off event to energize the Olympic and Paralympic Games movement.

The international conference is scheduled over multiple days: from Oct. 19 to 20 in the cultural heart of Japan, Kyoto, and from Oct. 20 to 22 in Tokyo, the host city of the games.

In cooperation with the World Economic Forum, the Ministry of Education, Culture, Sports, Science and Technology will invite leaders from both public and private sectors — including businesspeople, athletes, members of the International Olympic Committee and leading artists — to exchange opinions about how sports and cultural assets in Japan can be used to bring about new opportunities to create legacies for 2020 and beyond.

Starting from 2018, northeast Asia will be the center of international sports competitions over five years; from the Winter Olympics in Pyeongchang, South Korea, in 2018 to the Rugby World Cup in Japan in 2019, the Tokyo Olympics in 2020, the World Masters Games in Kansai in 2021, and the Beijing Winter Olympics in 2022, Hase said.

"Peaceful relationships are a fundamental condition of holding such events," he said. "Of course, there are diplomatic and security challenges to overcome. But I believe promoting harmony in this region will be one of the main roles of the World Forum on Sports and Culture."

Hase also said the international conference would be a great opportunity for young business leaders and innovators to enjoy cross-sectoral collaboration by discussing the possibilities of creating new economic and cultural ecosystems surrounding the "soft power" of Japanese culture such as fashion, tourism and healthcare.

A former high school teacher and well-known professional wrestler, Hase said Japan could become a role model for other countries with its unique sporting spirit, which he said represents Japanese people's sense of virtue.

For example, Hase said the notion of kata, or forms, practiced in Japanese budo martial arts such as judo, kendo and karate represent the spirit of harmony, courtesy, integrity and humbleness inherent in Japanese culture.

"Kata is to perform patterns of movements with both offense and defense working together," Hase said. "This is not to merely trace a fixed pattern of movement; without each side understanding its core meaning, kata cannot be accomplished."

In addition, Hase pointed out three notable attractions that Japan has can attract overseas guests to the 2020 Olympics; new innovations, *washoku*, traditional Japanese cuisine, and high public safety.

"For the 1964 Tokyo Olympics, Japan contributed to the proliferation of colored TV internationally, something I believe was a prime example of Japanese innovation," Hase said.

He said that for 2020, he hopes the world can see new innovations in areas such as information and communications technology, materials for manufacturing and technologies to make the lives of disabled people better.

"I would like to introduce not only Olympic athletes, but also spectators from around the world to healthy washoku cuisine, which was registered as a UNESCO Intangible Cultural Heritage. I also want them to experience the safety consciousness of people in Japan," he said.

Meanwhile, Hase said he hopes the 2020 Olympics will serve as a symbol of restoration from the devastation of the 2011 Great East Japan Earthquake, demonstrating to the world how the country worked together for recovery, so as to encourage those who suffer not only from natural disasters, but also from other struggles of life.

"Facing an enormous struggle, we can cooperate together in harmony to overcome a challenge, rather than making a difficult situation worse — this is the fundamental virtue by which Japanese people live," Hase said.

Davos Special

Turning challenges of cybersecurity into new opportunities for growth

William H. Saito
SPECIAL TO THE JAPAN TIMES

As information and communication technology (ICT) has extended into all areas of society, we have become ever more reliant upon it. The subtle ways in which it is changing the world, though both exciting and frightening, are not widely recognized or understood. This year, Japan will host the G-7 summit in the Ise-Shima region, and in four years the 2020 Tokyo Olympic and Paralympic Games. As these large-scale, global events have now become completely dependent on ICT, the threat landscape has also evolved. There is greater concern about a hybrid threat that would use computers as cyberweapons to carry out attacks on physical infrastructure. Data breaches worldwide are now so common that we hardly pay attention to the news. Even the recent theft of personal information records from the Japan Pension Service had little lasting impact. Yet the frequency and severity of such attacks is certain to increase. The ease and borderless nature of this threat ensures that no one is immune from such attacks, yet individuals and corporations are complacent about both the threats and the risks.

At the same time, Japan is investing heavily in the "Internet of things" (IoT) technologies, as the ability to automate and innovate various services will bring significant benefits to Japan's aging society. Because many nations will face the same issues in years to come, Japan is ideally positioned to take a leadership role in this area. However, being truly successful in the IoT will require an ability to deliver those products and services reliably and securely over time — something that Japan cannot currently guarantee. To date, the race to add new features and functionality has only resulted in flawed security implementations that achieve little more than "keeping honest people honest."

The rapid pace of technological change presents enormous challenges for governments around the world, as they face tight budget constraints and competing priorities. Political realities mean that by the time cyber-related legislation is passed it is usually out of date, and sometimes new regulations actually make things worse. Another concern is the ease with which businesses can relocate to a different country to avoid any increase in financial or operational burden.

Three key themes

I believe that a new mindset is vital if any economy (but particularly Japan's) is to survive and thrive in the coming decade. Governments must recognize that ICT and cybersecurity are no longer separate issues, and must take innovative approaches to address both concurrently. Unfortunately, the technical aspects of cybersecurity make it complex and difficult even for professionals, much less policymakers, to grasp. However, the most critical elements needed to bolster cybersecurity are not technical, but strategic. I see at least three key strategic issues — changes in approach or perspective — that are essential to promote true cybersecurity.

First, we need to recognize the relative importance of preserving data integrity versus data confidentiality. While it is essential to confirm that users are who or what they claim to be, and try to prevent information leakage, assuring and maintaining the integrity of information is an even higher priority, much more so than most people appreciate. In many cases, not being able to rely on the accuracy of information (e.g., medical data) could be much more serious than having it revealed to others. Yet most security systems, policy and research overwhelmingly focus on preserving confidentiality rather than integrity. An apology may be enough if your blood type is disclosed, but no apology will suffice if your blood type data is changed just before you go into surgery. Breaching confidentiality is embarrassing; losing integrity can be deadly.

Second, there is the key concept of resilience. Security experts accept the premise that there is no such thing as perfect, 100 percent security. The most practical defense is to find the right balance between security protocols, total cost of implementation and ease of use, with a focus on ensuring system resilience, that is, minimizing losses rather than trying to anticipate and prevent every possible type of attack. Billions of years of evolutionary biology show that the fittest not only survive, but also prosper. Thus, cybersecurity should not be seen only as a means of self-defense, but also as an opportunity to build up one's corporate, national or even individual resilience, to become stronger in an increasingly uncertain and challenging world. By getting this approach right, cybersecurity actually becomes a key differentiator and a competitive advantage rather than a cost center that often feels like a "tax."

'... the most critical elements needed to bolster cybersecurity are not technical, but strategic.'
WILLIAM SAITO

Most importantly, building resilience in one area often leads to unforeseen benefits in others. I have experienced many government-driven programs that have enhanced resilience in one area while proving even more valuable in dealing with completely different, unrelated exigencies for which they were never intended. Specifically, resilience is versatile: Once people develop resilient thinking, they realize it requires a comprehensive review of the area that supports and surrounds a system. The unintended consequence is that it results in the entire system becoming stronger. Similarly, I am confident that developing resilience in cybersecurity will be the catalyst to naturally strengthen other parts of Japan's infrastructure and mindset, leading to improved outcomes from natural disasters, epidemics and other "freak" events, which seem to be increasingly common these days.

Third, now that ICT is inseparable from economic activity, we need to shift from a 20th-century mindset where cybersecurity is an afterthought to one where security is both fundamental and indispensable. Security must be designed as an integral part of all systems, with resulting benefits in terms of ease of use, functionality, resilience, productivity, efficiency, competitiveness, reduced total cost of ownership and positive return on investment. Both Japanese businesses and governments should seize this opportunity to become global leaders by addressing the challenges that lie ahead.

Global community, security

Because it transcends borders and old concepts of sovereignty, cybersecurity is by definition a multistakeholder issue, and addressing it requires global cooperation. In November, the Japanese government helped move the discussion forward by hosting an international cybersecurity event, the Cyber3 Conference Okinawa 2015, which was supported by the World Economic Forum (WEF). Over 400 global experts came together to propose solutions to cybersecurity issues involving businesses, governments and law enforcement agencies. The participants in this multistakeholder discussion agreed that the problems are far too complex to be addressed by any single organization or government. The only viable response, they concluded, is to create a global cooperative mechanism that facilitates meaningful communication and information exchange among stakeholders.

As one participant put it, the Internet is now a global commons where we must share information in order to protect ourselves and protect each other. This information should not be considered proprietary to any one organization, as similar threats are borne by all and a shared global resource is necessary for mutual defense. We need to work together, as a global community and work through our differences, in cybersecurity as in other areas, and understand these issues from multiple perspectives within an international context.

The Cyber3 conference laid the foundations for a fruitful exchange of ideas and proposals at the WEF annual meeting in Davos, Switzerland this week. The theme of Davos 2016 is "Mastering the Fourth Industrial Revolution" and will examine the changes being brought about by rapid systems innovation, ubiquitous mobile Internet access and the proliferation of sensors (IoT). Global leaders gathering in Davos will discuss these topics and seek ways to achieve meaningful progress, and the outcome of their meetings will help to shape policy discussions around the world.

In Japan, strong government leadership is necessary to develop a coordinated ICT and cybersecurity strategy without shackling the economy with overregulation. Japan has certainly lagged behind in this area, but it can no longer afford to do so. Instead of playing whack-a-mole with security problems, today's challenges should be seen as an opportunity to innovate and turn cyber resilience into a competitive differentiator for the nation, a new arrow for the economy and a foundation for the revitalization of Japanese industry and the economy as a whole.

William H. Saito is an entrepreneur, venture capitalist, public policy consultant and educator, who has contributed to global information security policy over the past two decades. He currently serves as special advisor to the cabinet office for the government of Japan in charge of science and technology and information technology policy and is on the board of the World Economic Forum.

International experts discuss cybersecurity at the Cyber3 Conference Okinawa 2015, which was hosted by the Japanese government and supported by the World Economic Forum in November. CYBER3 CONFERENCE

Collaborating on solutions to global challenges

CONTINUED FROM PAGE 1

repairs were needed.

"Urbanization issues, environment and disaster risk reduction would be where Japan can help developing countries. The important thing is that Japan should provide know-how of how to operate the system," said Hiroyuki Ishige, the chairman and CEO of the Japan External Trade Organization.

One of JETRO's missions is to connect Japanese companies with foreign companies and Japanese companies with foreign governments to aid Japanese businesses. But business opportunities can be found in providing solutions for various issues faced by developing countries. Japan has experienced many of these and has the know-how to address them.

For example, the organization held a number of events to match people involved in the elderly care business of China and Japan.

The organization also gives advice for foreign governments to lure Japanese investment.

For example, JETRO provided Laos with a proposal to enhance the business environment in the country in July last year. The proposal included a reduction of transportation costs with neighboring countries and simplification of administrative procedures for cross-border transportation.

While governmental organizations such as JICA and JETRO pave the way for international cooperation, corporations enhance people's lives by way of technologies, services and know-how.

Fujitsu Ltd., a Japanese information technology company, has found business opportunities in activities in line with the spirit of Vision for Tomorrow.

In one such business, Fujitsu is working on operating a validity study of a participatory disaster prevention system for Hue Province in Vietnam, with support from JICA's Vietnam office. In the system, residents check river water levels and report them on their smartphones. Disaster risk reduction authorities compile the data and release information to residents.

Needless to say, using residents' smartphones instead of installing large machines to constantly monitor water levels saves a great deal of money.

"Fujitsu's information and communication technology can contribute in disaster risk reduction, agriculture, environment and traffic systems," said Takeshi Nakajima, corporate executive officer, head of the Government & Public Utilities Business Unit, Fujitsu.

He stressed that ICT-based social infrastructure should be designed with the outcome in mind, and that it be easy to use and versatile so that the actual operators could recognize its value at an early stage and continuously improve their operations.

Topics in line with Vision for Tomorrow will definitely be discussed at the Davos meeting. Some of the issues that will be addressed at the conference include agriculture and food security; economic growth and social inclusion; employment, skills and human capital; environment and natural resource security; as well as the future of the global financial system. Additional topics to be discussed include the future of health; the future of the Internet; gender parity; international trade and investment; and long-term investment, infrastructure and development.

The theme of the meeting is "Mastering the Fourth Industrial Revolution." The fourth industrial revolution refers to the period of digital transformation that will have profound effects on economies, societies and human behavior.

According to the WEF's press release, central questions that will be asked of the fourth industrial revolution include: How will it transform industry sectors, including health, mobility, financial services and education? How can technology be deployed in ways that contribute to inclusive growth rather than exacerbate unemployment and income inequality? How can breakthroughs in science and technology help in solving globally common problems ranging from climate change to public health?

Participation in the meeting is by invitation only for more than 2,500 people from more than 100 countries, including chief executives and chairs of the WEF's 1,000 partner and member companies, political leaders from the G20 and other countries, heads of international organizations, experts representing the WEF's Global Agenda Council and civil society communities (or NGOs), media leaders, spiritual and cultural leaders and people designated by the WEF as Young Global Leaders, Social Entrepreneurs and Global Shapers (under the age of 30.)

The annual meeting has six co-chairs. This time, they are Credit Suisse AG CEO Tidjane Thiam, Hitachi Ltd. Chairman and CEO Hiroaki Nakanishi, International Trade Union Confederation General Secretary Sharan Burrow, Al Bawsala Founder and Chair Amira Yahyaoui, Microsoft Corp. CEO Satya Nadella and General Motors Co. CEO Mary Barra.

Klaus Schwab, a German-born business professor at the University of Geneva in Switzerland, founded the WEF in 1971.

A resident checks river water levels with his smartphone in Hue, Vietnam. FUJITSU LTD.

Davos Special

'Mastering the Fourth Industrial Revolution'

The world is changing at an unprecedented pace with profound implications. In global governance, the balance of power between nation states and the international framework that managed it in the last century are frayed. The worst refugee crisis in living memory is just one reminder of how geostrategic competition, renewed regionalism and new antagonists are eroding global solidarity.

On the economic front, this century began with a global growth rate of roughly 5 percent whereby GDP doubled every 15 years and enabled billions of people to escape poverty in just one generation. In the aftermath of the global financial crisis, "normal growth" is expected to hover at around 3 percent, with considerable consequences for job creation and social inclusion as global GDP, in this new scenario, doubles only every 24 years.

Adding to a shared sense of uncertainty is the emergence of a fourth Industrial Revolution that is distinct in its transformation of entire systems of production, distribution and consumption as opposed to a product or an industry. Concern is growing about the effects of digital disintermediation, advanced robotics and the sharing economy on productivity growth, job creation and purchasing power. It is clear that the millennial generation will experience greater technological change over the next decade than the past 50 years, leaving no aspect of global society undisturbed. Scientific and technological breakthroughs — from artificial intelligence to precision medicine — are poised to transform our human identity. Therefore, leaders from all walks of life must prepare for a future of exponentially disruptive change.

Mastering the Fourth Industrial Revolution is now a global imperative. This theme drives the design of the sessions, task forces and private meetings at the Annual Meeting 2016. The World Economic Forum Annual Meeting provides an unparalleled platform for co-design, co-creation and collaboration for global leaders from across business, government, international organizations, academia and civil society to advance multiple agendas including:

The global agenda
To improve global governance through public-private cooperation by working in close collaboration with key international organizations and providing substantial, yet informal, input into major multilateral processes

Klaus Schwab, founder and executive chairman of the World Economic Forum, speaks during a plenary session at the congress center during the WEF annual meeting in Davos on Jan. 21, 2015. WEF

The geosecurity agenda
To convene public and private sector leaders together with defense and intelligence experts in preparation for a rapidly changing security landscape

The economic agenda
To support multistakeholder efforts to deliver sustainable and inclusive economic growth in the face of slowing growth rates, increasing market volatility and looming global risks

The regional and national agenda
To examine in depth the social and economic transformations occurring in all regions of the world through informal interaction with over 250 political leaders on trade and investment-related issues in various national and regional contexts

The industry and business agenda
To shape the evolution of industry ecosystems and business models, particularly in the context of scientific, technological and policy innovations, by engaging industry leaders with their peers from government

The future agenda
To share ideas, innovations and discoveries that will reshape the world by engaging those at the vanguard of change from such fields as the arts, media, medicine, science and technology, as well as the next generation of future leaders

The World Economic Forum was recognized in 2015 as the International Organization for Public-Private Cooperation by the Federal Council of Switzerland. Deeply conscious of the responsibility that comes with such recognition, the Annual Meeting 2016 will bring together leaders who have the power to make change, achieve mutual understanding and, where appropriate, push action forward. The aim is to create a new type of international organization that acts as a trusted bridge builder between the public sector, business and civil society and serves as a strategic platform to shape and develop global, regional and industry agendas at the beginning of the year.

Text excerpted from the WEF website.

Participants attend a session at the WEF 2015 annual meeting in Davos on Jan. 21, 2015. WEF

Globis initiates Japanese innovation

STAFF REPORT

The World Economic Forum is hosting its annual conference in Davos, Switzerland, from Jan. 20 to 23, once again set to remind leaders from around the world they have roles to play in improving the state of the world — the nonprofit organization's stated goal.

For many years, the meetings of key individuals from various fields, including business, politics and academia have inspired participants to start their own initiatives back home by creating opportunities for them to debate today's relevant global issues — this year's theme for the meeting is "Mastering the Fourth Industrial Revolution" — and mingle with key opinion leaders.

One participant from Japan is Yoshito Hori, president of Globis University Graduate School of Management, and managing partner of venture capital firm Globis Capital Partners, who has participated in Davos since 2004.

"I think Hori has mainly two outlets for the inspiration he takes from Davos," said Tomoya Nakamura, dean, Graduate School of Management at Globis University. "One is represented by G1, which is a Japanese version of the Davos meeting involving political, business and cultural leaders. The other, I think, is that, if you look at the general direction the Globis group, the areas Globis Capital Partners invests in and the classes created in the MBA program strongly reflect his views on the current times and the world (that are inspired by his Davos experience.)"

The idea for a "Japanese Davos" took shape not long after Hori asked Claus Schwab, the founder of the WEF, why he didn't bring a WEF meeting to Japan. His answer, according to Hori, was something along the lines of, "Why don't you organize a meeting of your own in Japan?"

Hori held the first G1 Summit meeting in 2009 with the hope of gathering the leaders of the next generation to paint a vision for the nation's revival, by giving them an opportunity to learn and debate issues facing the nation.

At the seventh annual meeting held over four days last March, panelists, including Japan Chamber of Commerce and Industry Chairman Akio Mimura, Shinya Yamanaka, winner of the 2012 Nobel Prize in physiology or medicine for creating iPS cells, led discussions on such topics as Japan's shrinking population and an ideal energy policy after the 2011 nuclear crisis at the Fukushima No. 1 Nuclear Power Plant led to prolonged suspension of all of the nation's nuclear power plants and regenerative medicine.

G1 is a Japanese version of the Davos meeting involving political, business and cultural leaders. GLOBIS

"The biggest difference between Schwab and myself is that he doesn't express his opinion very often ... he doesn't take a political position, but at the G1 Summit, I do," Hori has said. "That's because it's necessary to make Japan a better place."

In terms of Davos' influence on the programs at Globis University, Nakamura pointed to a "Tohoku Social Venture" course, which was launched soon after the earthquake and tsunami disaster hit Japan's Tohoku region in March 2011.

In the course, Hori sought to take advantage of the popularity of Japan's largest and highest-ranked MBA to support reconstruction of the Tohoku region, where nearly 16,000 people died and large tracts of land were swept away.

"This is a class that was created in the hope of providing ideas for reviving the disaster-hit areas," Nakamura said. "The instructor of this class was an MBA holder and venture capitalist, and he discussed successful cases of businesses in the region after the disaster."

As a Davos regular, Hori keenly follows the latest technological advances, a topic that features prominently as leaders discuss where the world is headed. He believes knowledge of cutting-edge technologies is becoming an essential element for successful business leaders to possess.

This led Globis to start an online Pre-MBA program in English in 2016, which uses an online live conferencing system and chat function that adds an additional, interactive channel of communication in class that is not possible in a physical classroom.

In its 10th academic year starting in April, the school plans to renovate its MBA program into a brand new one that aims to produce a new generation of leaders who can understand the latest technologies and initiate innovation.

The year will see special courses on "branding design and management," "artificial intelligence and management," "algorithms and architectures," "technology and business models" and "big data marketing" under the new program, dubbed "Technovate MBA."

The school plans to make the program, after finalizing courses in the coming years, a basic building block of its overall MBA program by the 2018 academic year, according to Hiroyasu Mizuno, Globis' global communications manager.

"This program is not intended to produce technicians," Mizuno said. "The key element is to help students better understand technology ... we'll equip them with skills to gain a competitive edge by using technology, implementing it in business models and initiating new businesses."

Davos Special

Showcasing the best of Japanese cuisine, culture

Clockwise from above: Sushi is the perennial favorite at every Japan Night; Kimono-clad women pour sake into *masu* (square wooden cup) with *hishaku* (bamboo ladle); There are a variety of Japanese dishes on the buffet; Guests mingle while enjoying Japanese food. JAPAN NIGHT ORGANIZATION COMMITTEE

Chiho Iuchi
STAFF WRITER

Japan Night, one of the most popular events during the World Economic Forum meeting, will return to Davos, Switzerland on Jan. 21.

Annually held on the sidelines of the WEF meeting in Davos, Japan Night has entertained meeting participants with Japanese food and culture, aiming at deepening international political and business exchanges between Japan and the world.

In previous years, the Japanese government and the private sector jointly hosted the event, providing an opportunity for the leaders from each country and various fields to mingle while enjoying delicious Japanese foods and beverages.

This year, the Japan Night Organization Committee is made up of representatives of 23 of the leading private sector companies in Japan. This new initiative may showcase the unity and collaboration of Japan's private sector.

Every year, the Japan Night reception at the Central Sporthotel Davos is filled to capacity with more than 500 guests, including government leaders, business executives and academic experts from around the world. Around 80 percent among them are non-Japanese, including WEF founder and Executive Chairman Klaus Schwab, and many other VIPs. With such ability to draw many guests, Japan Night is recognized as one of the most beneficial events outside of the official sessions.

Among the evening's highlights are the opportunities for participants to sample Japanese cuisine.

It is still fresh in our minds that a team of chefs from Tohoku, who have been supporting the disaster-stricken area in the aftermath of the 2011 Great East Japan Earthquake and tsunami, beautifully demonstrated the richness of Japanese culinary arts, as well as Japan's resilience at Japan Night 2012.

Since "*washoku*, traditional dietary cultures of the Japanese, notably for the celebration of the New Year" was added to UNESCO's Intangible Cultural Heritage list in 2013, Japanese cuisine has been garnering wider attention.

The buffet at the upcoming Japan Night will be catered by Hotel Restaurant Ryokan Hasenberg/Usagiyama in Widen, located 20 km from Zurich, Switzerland.

***Kagami-biraki* (sake barrel opening ceremony) is performed by the representatives of the organizers, as well as Klaus Schwab (sixth from right) and his wife (second from right).** JAPAN NIGHT ORGANIZATION COMMITTEE

"We are the only Japanese restaurant in Switzerland to receive a Michelin star and one of only five in Europe," said Masafumi Kurahayashi, general manager of Usagiyama. "Our team comprised of the chef at Usagiyama and our winter-season branch restaurant Nito at Kulm Hotel St. Moritz will prepare all the food for the reception," he said.

Far from Japan, it is not easy to get the seasonal ingredients necessary for Japanese dishes.

"In terms of a sense of the season, there is a difference between Switzerland and Japan. So we combine seasonal ingredients from both and note it on our menu card. Since opening 13 years ago, we have changed our menu every month, rarely offering the same dishes," Kurahayashi explained.

As always, sushi will be the most popular delicacy at Japan Night.

"At such a large-scale reception, it's nice to serve in *dorabachi* (large-size flat bowl) or in *funamori* boats to show *omotenashi* (Japanese traditional hospitality). But as people rush to the sushi counter every year, the dishes empty in a matter of seconds," Kurahayashi said. "So people only have a chance at the beginning of the party to appreciate our sushi presentations," he said.

In addition to standard sushi plates, the buffet will include various authentic Japanese dishes, such as tempura, *chawanmushi* (pot-steamed egg custard), *kenchin* vegetable soup with *udon* noodles and Japanese-style stewed chicken with vegetables. Many of the dishes will have vegetarian versions as well.

There will also be more casual staples such as Japanese-style curry and rice, as well as *gyoza* dumplings.

This year, Kobe beef from Hyogo Prefecture and *kamaboko* (steamed fish cakes) from Odawara, Kanagawa Prefecture, transported directly from Japan and prepared by Usagiyama chefs, will add some glitz and glamor to the buffet.

"With what we have (*moteru*), we do our best (*nasu*). That's our way of omotenashi," Kurahayashi said.

As for beverages, there will be 10 brands of sake from Fukushima Prefecture, as well as Japanese whisky in addition to the hotel's lineup.

Another attraction of Japan Night is a presentation of traditional Japanese culture.

Kagami-biraki (sake barrel opening ceremony) is a traditional Japanese custom performed at celebratory events in which the lid of the sake barrel is broken open using wooden mallets. The term kagami refers to the lid of the barrel and carries a symbolic meaning, as the lid's round shape symbolizes harmony. Thus, the ceremony in which the lid is broken open represents opening up to harmony and good fortune.

Although this attraction was previously conducted in the middle of the party, this year, it will be performed at the beginning to open the reception. Representatives of the organizing companies will take mallets in hand and together break the barrel dressed in *happi* (traditional Japanese straight-sleeved coat). After sake has been served to all attendees, there will be a toast to kick off the evening.

Additionally, there will be a live performance of calligraphy by Okinawan artist Maaya Wakasugi. Now based in Europe, the artist has been exploring his unique style of "ancient letters." He has contributed to various art projects, including a logo for the Louvre Museum in Paris.

Facilitating people-to-people contact by offering a venue to exchange views in a friendly manner over the country's unique dishes, while presenting traditional culture, Japan Night 2016 will surely reaffirm the country's global contributions.

Saitama City

(Publicity)

City supports and encourages high-tech innovation

Saitama City, a major bedroom community of Tokyo, is proud of many things, including the fact that it is home to 1 percent of the country's population, a percentage that is likely to rise as the population is still increasing.

It is also home to Saitama Stadium, a 2002 FIFA World Cup stadium, and Saitama Super Arena, the venue slated to host basketball during the 2020 Tokyo Olympics and Paralympics.

The city, 19 minutes from Ueno Station, 22 minutes from Tokyo Station and 29 minutes from Shinjuku Station, is a pleasant place to live, with convenient access to retail stores, transportation, rich nature, sports facilities and residential areas. Land prices are reasonable compared with Tokyo and other bedroom communities of Tokyo. Saitama's average residential land price was ¥176,000 per square meter, substantially lower than the ¥214,000 in Yokohama, ¥250,000 in Kawasaki and ¥505,000 in Tokyo's 23 wards, according to the Land, Infrastructure and Transportation Ministry's 2014 official figures.

Also, the city takes various measures via the Saitama City Foundation for Business Creation to support companies, such as providing consulting and financing services and dispatching experts to them.

The city also supports business expansion through cooperation with businesses, governments and universities and other measures.

With such incentives, 126 new company facilities had relocated to Saitama City in the 10 years to 2014.

Leading-edge certification

On top of those, Saitama also boasts many companies in the high-tech sector, especially in optical equipment. Saitama commands 13 percent of market share in shipments of optical equipment and lenses in Japan.

To help such high-tech companies thrive, the city is offering support to enhance their competitiveness.

The city began the "Saitama City Leading-edge Companies Certification and Support Program" in April 2008. To date, it has certified 34 companies as leading-edge companies.

Supporting these certified companies will stimulate industry in the city, further enhancing the city's appeal. The program aims to allow the city to rise as an international competitive power and create innovation. Certified companies will hopefully be the driving force of not only Saitama City, but also the entire Japanese economy.

The certified companies are allowed to announce their certification as a leading-edge company and use the official logo, the motif of which is a human hand, which signifies the importance of human input in high technology.

The companies also receive support from the city in a variety of forms. For example, the city promotes them at international trade shows and in an annual pamphlet it publishes, titled "Saitama City Leading-edge Companies," in Japanese and English.

Additionally, the city supports certified companies' development of new technology, new business, overseas expansion and employee training.

Through a screening process, a review committee established by the city screens applicant companies on the basis of originality and innovation; marketability; likelihood of submitted plans to be realized; expansion potential; and social value. The committee is comprised of specialists from corporate aid agencies, academia, international business support organizations, as well as experts in product development, marketing, financing and accounting.

This fiscal year, Saitama certified eight companies. Of them, the following four companies are small or mid-size companies with niche technologies that could elevate them to global excellence.

Representatives of companies that received "Saitama City Leading-edge Companies Certification" pose with Saitama Mayor Hayato Shimizu (center) after an awards ceremony. SAITAMA CITY

Clockwise from top left: A satellite command antenna made by Antenna Giken; Components used in medical endoscopes, machined by Kaneko Manufacturing Co.; A steel plate, used in LCD-making equipment, being dried at Nishina Industrial Co.; An ADS3000, equipment sampling electric wave from stars, made by Cosmo Research Corp. SAITAMA CITY

Antenna Giken

Antenna Giken Co., Ltd., established in 1965, is a maker of components for communication equipment, such as communication antennas, high-frequency filters and peripheral devices.

Antenna Giken's products are used in social infrastructure such as digital network broadcasting and communication systems, disaster risk reduction and fire suppression systems, railway and aviation control systems and satellite communication systems. Antenna Giken contributes to the realization of highly organized information networks as a company that develops and manufactures equipment related to electrical wave transmission.

In addition to manufacturing components, the company conducts simulations and analyses of existing antennas from outside their product range.

"As a 'development-type manufacturer,' we focus our resources on development, design, measurement and arrangement that require special technology and know-how based on long experience, outsourcing manufacturing to overseas partner companies, to better expand on the global stage," President Shigeki Takeda said in a company brochure.

"For our engineers to make full use of their originality to develop cutting-edge technology, we will continue to prepare the best environment for engineers by having the best facilities and equipment."

Cosmo Research

Cosmo Research Corp. develops and supplies various research and test equipment such as digital communication and high-speed signal processing equipment that is used in advanced communication by private and governmental research institutes.

The company collaborates with companies in different industries, mixing its core technologies with that of other companies with an eye toward developing unique products that a single company would face difficulty developing on its own. In addition to its original products, Cosmo also manufactures other companies' products.

Cosmo Research's core technologies are OFDM (orthogonal frequency-division multiplexing), which is essential technology for modern telecommunications and broadcasting such as Wi-Fi and terrestrial digital broadcasting, as well as high-speed signal processing and RF (radio frequency) technology.

Cosmo Research, with only 20 employees, boasts technology enabling the entire processes of developing and manufacturing digital wireless communication equipment in house.

Kaneko Manufacturing

Kaneko Manufacturing Co., Ltd. machines and assembles high-tech components made of steel or ceramics such as parts for endoscopes, cardiac support devices and other medical devices, components used in aircraft and airplane engines and prototypes that require machining, welding and adhesion.

It has acquired certifications such as ISO 9001, ISO 13485 and JISQ 9100, as well as a license to manufacture medical devices.

"What we emphasize the most as a manufacturer is the pride (of our engineers)," President Harufusa Kaneko was quoted in a company pamphlet.

The company motto is to contribute to the development of society and continue to be sincere toward employees, customers and society, as well as to be a company trusted by society.

Kaneko Manufacturing has strength in machining thin, miniscule and hard-to-process components.

The company also focuses on the development of products, including a world-first glasses-free-3-D module to develop MultiView (28 points), which creates a real-time 3-D-glasses-free video.

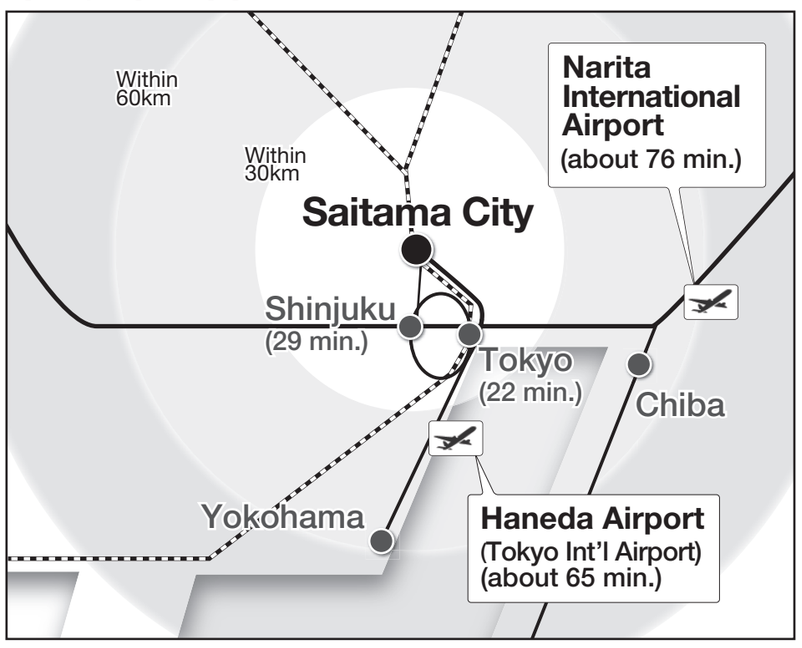
Nishina Industrial

Nishina Industrial Co., Ltd. handles surface treatment of industrial parts and products ranging from general industrial products to space, nuclear and defense-related products. The company treats objects of various sizes, including small components of just a few millimeters to enormous industrial equipment weighing as much as 20 tons.

The company has a facility in Saitama Prefecture — one of the largest such facilities in Japan — that enables electroless nickel plating of large objects, up to four meters in length and 20 tons in weight, with an excellent level of precision in uniform deposit thickness.

The company also boasts the unique technology of "compound" electroless nickel plating, which enables enhanced hardness, wear resistance and tribological properties.

Nishina Industrial, which has acquired ISO 9001 and ISO 14001 certifications, constantly strives to maintain high product quality and develop as a company. It will continue to improve its technology and hire and train a wide range of competent people to create a solid foundation of long-term prosperity.



34 certified leading-edge companies

Acoma Medical Industry Co., Ltd.	Bellnix Co., Ltd.	Hamamatsu Co., Ltd.	Kaneko Manufacturing Co., Ltd.	Nishina Industrial Co., Ltd.	Porite Corporation	TechnoScope Co., Ltd.
Antenna Giken Co., Ltd.	Calsonic Kansei Corporation	Harves Co., Ltd.	Kimoto Co., Ltd.	Nissan Motor Light Truck Co., Ltd.	Science Inc	Tokyo Titanium Co., Ltd.
Arai Helmet Ltd.	Clarion Co., Ltd.	Hasegawa Machine Works Ltd.	Koki Tec Corp.	Nissho Electronics Co., Ltd.	Softronics Co., Ltd.	Watanabe Co., Ltd.
Asahi Rubber Inc.	Cosmo Research Corp.	Hokkaimic Co., Ltd.	Nihon Dento Kougyo Co., Ltd.	Nissin Kasei Co., Ltd.	Sumita Optical Glass, Inc.	Yamada Machine Tool Co., Ltd.
ASAP Co., Ltd.	Goto Precision Engineering	Iino Manufacturing co., ltd.	Nippon Piston Ring Co., Ltd.	Nittoku Engineering Co., Ltd.	Tamron Co., Ltd.	

Davos Special

World Heritage sites in Japan

Japan had the first World Heritage sites in 1993 when UNESCO registered Buddhist monuments in the Horyuji Temple area, Himeji Castle, Yakushima Island and the Shirakami-Sanchi beech tree forest.

Since then the country has added more sites and now boasts the 19 shown on the right.

Natural World Heritage sites show magnificent views of four seasons while cultural World Heritage sites remind people of the deep, unique history of Japan.

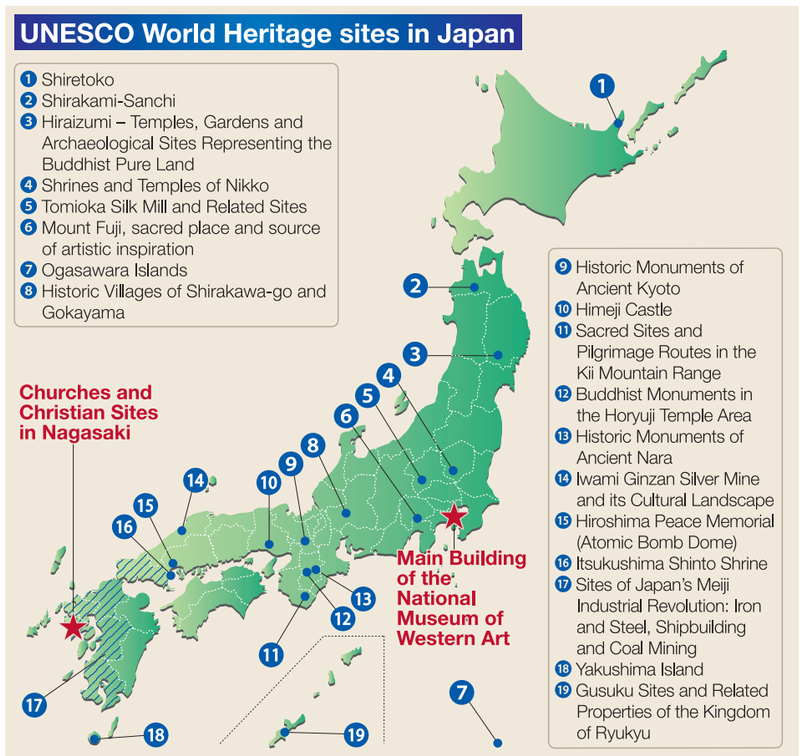
The Atomic Bomb Dome (Hiroshima Peace Memorial) is a reminder of a negative legacy that should never be forgotten.

Mount Fuji is a world-renowned mountain praised by ancient poets for its beauty and visited by many foreign tourists.

Horyuji Temple is widely recognized as one of the oldest wooden structures in the world and sits at the heart of Nara, known for its collection of temples and other historic sites.

The Ogasawara Islands are home to many unique species and a mecca of whale watching.

Japan also hopes to add more locations to the list of World Heritage sites. It has 10 sites on the tentative list, including the National Museum of Western Art and churches and Christian sites in Nagasaki, covered below.



JAPAN TIMES GRAPHIC

Himeji Castle HIMEJI CITY

Himeji Castle stands as iconic example of Japan's world heritage sites

Himeji Castle was registered as a UNESCO World Heritage site in 1993, the first in Japan, along with Horyuji Temple and other sites.

The castle is representative of Japan's early 17th-century architecture, comprising 83 buildings, with an advanced defense system keeping those inside safe.

It is nicknamed Shirasagi-jo (Egret Castle) as it reminds one of the elegant form of a flying egret.

The castle is a masterpiece of construction in wood, combining function with aesthetic appeal, both in its elegant appearance unified by the white plastered earthen walls and in the subtlety of the relationships between the floors and multiple roofs.

The area within the middle moat of the castle is a Special Historic site and five castle structures are National Treasures.

The history of the castle dates back to early 14th century when a samurai built a fortress there. The castle as it appears now was completed in the early 17th century and refurbished in 1964 and 2009. After five years of large-scale renovations, it was reopened to the public in March 2015.

For more information, see www.himejicastle.jp/en/

Le Corbusier's Japanese ghost lives on in Ueno

Julian Worrall
SPECIAL TO THE JAPAN TIMES

The Swiss-French architect and artist Charles Eduoard Jeanneret-Gris, better known as Le Corbusier, was by any measure one of the greatest architects of the twentieth century.

A torchbearer of architectural modernism in Paris in the 1920s, growing to become a figure of global stature by the 1950s, Le Corbusier designed major buildings and parts of cities across Europe, the Americas and India, and exerted enormous influence over world architectural culture in the middle years of the last century. However, despite his world-spanning reach, Le Corbusier only executed one building in the East Asian hemisphere — The National Museum of Western Art in Ueno Park, Tokyo.

This building was commissioned to house a significant collection of modern European art accumulated in Paris during the 1910s and '20s by a wealthy Japanese shipping magnate, Kojiro Matsukata. Briefly confiscated by the French after the World War II, the collection was returned to Japan in 1953 to form the core of a new museum of Western art, a magnanimous but also culturally shrewd gesture by France. While the building was built and paid for by Japan, the design was to be kept in Parisian hands — those of Le Corbusier. Significantly however, the detailed execution of the construction was undertaken by three younger Japanese architects, Kunio Maekawa, Junzo Sakakura and Takamasa Yoshizaka, all of whom had apprenticed in Le Corbusier's office in Paris and went on to become major architects and bearers of his influence in Japan.

The design develops an idea that Le Corbusier had sketched over two decades earlier as an unrealized concept for a "Museum of Unlimited Growth." This imagined a flat spiral bound by a square propped above the ground plane on thin columns and wrapping a central inner court, from which the museum is entered from beneath. The spiral could potentially be extended indefinitely as the collection expands. As realized in reinforced concrete in Ueno in 1959, the design retains the elevated centripetal organization around a light-filled inner court, with ramps providing a dynamic promenade. Major extensions were made in 1979 and 1998, however, site constraints meant that these have not followed a spiraling pattern, but a more conventional system of linear wings ranged around a garden court.

Alongside its primary nomination of the historical Christian sites in Nagasaki, Japan has also put forward this building for World Heritage listing in 2016. The inclusion is part of a multinational, multisite selection of works by Le Corbusier as part of the national submission by France, coordinated by Fondation Le Corbusier, a Paris-based organization whose mission is to preserve the architect's archive and legacy. The effort to achieve the World Heritage listing of Le Corbusier's oeuvre is remarkable in that it is a project of international cultural diplomacy dedicated to the recognition and protection of a far-flung collection of modern architecture. It is also an effort that so far has not been successful, despite multiple attempts.

When the World Heritage Committee convenes in Istanbul in July this year to determine which nominations have the "outstanding universal value" needed to be designated World Heritage sites, it will be the third time the Le Corbusier file will be examined. The first nomination was made in 2008, with 22 properties included, a submission that was referred back to its proponents to strengthen its conceptual foundation and improve its management plans. A revised nomination in 2011 reduced the selection to 19 properties and adjusted its arguments; but a decision was once again deferred. The current revision to the nomination has now cut the selection to 16 properties from six countries: Argentina, Belgium, France, India, Switzerland and Japan.

The effort to bestow World Heritage status upon a modern architect's oeuvre reflects a strengthening view in conservation circles that the built legacy of twentieth century architectural modernism is underrepresented in heritage listings and particularly vulnerable to damage or loss, due to a lack of public appreciation of its artistic qualities or cultural significance. In Japan, the conservation challenges that this category of buildings face is compounded by a societal attachment to a utilitarian "scrap-and-build" mentality that rarely values modern buildings beyond an artificially shortened economic life of around 30 years. The recognition of a postwar modernist building as a World Heritage site would constitute a powerful endorsement of the notion that such buildings can bear cultural value at the highest levels of human achievement, comparable to any other period in history.

But while the arguments for listing the museum are focused on the building — its authenticity, integrity and its position in its architect's oeuvre — there is an aspect that is rather overlooked in the official documents: its context. Le Corbusier's building directly faces another modernist building of similar size and vintage: Kunio Maekawa's Tokyo Bunka Kaikan, completed in 1961. With its sculptural upturned roof, sturdy concrete columns, scintillating polychrome-tiled interior and subtle referencing of Edo Period castle moats, this muscular building stages an exhilarating dialogue with the more restrained, introspective work of Maekawa's former master — a conversation in concrete that casts light on the sources and aspirations of a resurgent modern Japan.

Like families, societies need mantelpieces on which their collective heirlooms and talismans are displayed. Ueno Park is the mantelpiece of modern Japan. The symbols and ornaments of 150 years of Japan's absorption of modernity have accumulated here, forming an eclectic assortment of artifacts, monuments, buildings and spaces. The park is an oneiric landscape formed of the fragmented residues of successive dreams of bright modern futures.

The dream made visible on this site at Ueno Park, in the pregnant space between Le Corbusier and Kunio Maekawa's historic modern architecture, is the vision of a Japan reborn from war as a confident, vigorous democracy, striving for a cultural identity at once both modern and Japanese. The recognition of this is the true meaning of this World Heritage nomination for Japan, and the world.

Julian Worrall is Associate Professor of Architecture and Urban Design at the University of Adelaide. His research focuses on the architecture and urbanism of modern Japan.

The National Museum of Western Art (7-7 Ueno Koen, Taito-ku, Tokyo) www.nmwa.go.jp/en/ THE NATIONAL MUSEUM OF WESTERN ART

Above: Egami Church sits on a remote island where Christians in Nagasaki secretly kept their faith. Right: A unique example of Japanese Christian art, this Our Lady of the Snows was hidden in one of the houses of Nagasaki's secret Christians throughout the long ban on Christianity. TWENTY-SIX MARTYRS MUSEUM

Discovering Nagasaki's secret Christian past

Simon Hull
SPECIAL TO THE JAPAN TIMES

When people outside Japan hear the word "Nagasaki," they often think only of the atomic bombing. This tragic event seems to have obliterated not only much of the city, but also global awareness about its rich and fascinating past.

Being proposed for UNESCO World Heritage status in 2016 are a collection of historical sites which tell of the city's unique Christian history. These sites bear outstanding witness to Christianity's development within the Nagasaki region over a period of four centuries. They speak of how Christianity briefly flourished there following its introduction in the mid-16th century, of how it was subsequently banned and forced underground, and of how it remarkably resurfaced over two centuries later and was revived with strength and speed across the Nagasaki region following the lifting of the ban on Christianity in 1873.

One reason these sites have been proposed for UNESCO status is owing to their architectural value. The churches that were built after 1873 display a subtle fusion of Western and Japanese architectural techniques, and many also incorporate Japanese details such as sliding doors and window shutters or tatami mat floors. They are also rich in local character. For instance, one depicts images of indigenous flora within its stained glass, while in another the floor around the altar is comprised of blue and white tiles made from a distinctive type of local porcelain.

Nagasaki's churches also have profound contemporary relevance. As symbols of how Catholicism was revived across the Nagasaki region following a lengthy period of suppression, they speak of the survival of a religious minority that overcame intense persecution. At a time when many people around the world are still persecuted for their religious beliefs, Nagasaki's churches bear important witness to the value of religious freedom.

Perhaps the most compelling reason these sites have universal appeal is because of the remarkable story that lies behind them. It is a story about hope, and one that is certainly capable of capturing the imagination of people across the world.

Christianity first arrived in Japan in 1549, when the Jesuit missionary Francis Xavier landed in Kagoshima. It briefly flourished, and the newly opened port of Nagasaki developed into one of Asia's most important Christian centers, becoming known as "a little Rome."

In 1614, a strict ban on Christianity was issued. Churches were destroyed, and Christians in Japan faced various possibilities. Some suffered exile, forbidden from ever returning. Others were martyred, refusing to renounce their faith despite, in many cases, being severely tortured. There were also those who committed apostasy, unable to bear the torment they were subjected to.

By the 1640s, not a single priest was left in the whole of Japan. Christians in Nagasaki realized that if they, too, were to die as martyrs, the Japanese church would die with them. As persecution raged and the prospect of the Christian faith's complete eradication from Japan became imminent, these Christians made a decision that was to have dramatic consequences over two centuries later: to continue their faith in secret.

The story of the underground church is one of suffering. Throughout the ban on Christianity in Japan, people in Nagasaki were required at an annual ceremony to trample on an image of Christ or the Virgin Mary, known as a *fumie*, to prove they were not Christian. These ceremonies haunted the imaginations of the secret Christians, who were without priests to absolve them. Every year they would creep home and utter penitential prayers, begging God to forgive them for what one scholar has called "this most necessary of sins."

As the years wore on, the plight of many of the Christians in hiding became increasingly desperate. Some were deprived of almost all tangible reminders of their Catholic faith. This was especially true of those who poverty and persecution drove to cross the sea in tiny fishing boats and live in inhospitable corners of remote islands. At these windswept extremes, the flame of faith had grown so fragile that the secret Christians living there had almost nothing, save for a firm hope that one day, missionaries would return to Japanese shores.

Following the opening of Japan in the mid-19th century, a Catholic church was erected in Nagasaki, the first to be built there since before the ban on Christianity. This ban remained strictly in force, and permission for the church was granted on the understanding that it was solely for use by foreigners residing within Nagasaki's newly established foreign settlement.

Among the secret Christians, there was silent elation. By that point, they had been underground for over two hundred years. On March 17, 1865, a small group of them gathered courage and approached the church. Here they met a French priest named Father Petitjean. Kneeling before him, one whispered: "All of us have the same heart as you." They then asked the stunned priest "Where is the statue of *Santa Maria*?"

This moving episode became known as the "Discovery of Christians," and today the same statue of the Virgin Mary that Father Petitjean showed them can still be seen inside the church. In the wake of this event, thousands more secret Christians from across the Nagasaki region also came forward and confessed their faith.

The Catholic churches that were erected following the lifting of the ban on Christianity in 1873 stand in the remote locations where the secret Christians had lived. Each one being proposed for UNESCO status tells in its own unique way of how Christians in Nagasaki gave everything they had for the sake of their faith. At one church, for instance, the brickwork is slightly uneven, bearing poignant testimony to how former secret Christians themselves helped to finance and construct it. In another, it is thought that the altar stands in the exact spot where fumie trampling used to occur.

As such, Nagasaki's churches and Christian sites speak to us today of a resurrection that had once seemed impossible. They stand as symbols of hope, inviting us to reflect upon what it means to be human.

Simon Hull is a lecturer at Nagasaki Junshin Catholic University. He specializes in the history of Christianity in Nagasaki, and has been closely involved in many aspects of this UNESCO bid.