Shrine Forests, Bonsai and Public Parks in Tokyo: Old Trees as Symbols of Continuity

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Abstract: Ninety percent of Japanese people live in cities, seemingly disconnected from the agrarian world their ancestors inhabited in premodern Japan. Focussing on Tokyo, where the apparent disconnect with the past is most stark, this article looks at old trees in public parks, shrine forests, and old bonsai, and argues that that beneath the city's modern veneer, these trees allow residents to feel close to nature, and stay connected with the history, myths and traditions the trees evoke.

Key Words: Japan, Public Parks, Shrine Forests, Bonsai, Shinrin-yoku



The Institute for Nature Study forest, in the Tokyo ward of Meguro, is an island of calm in the hustle and bustle of the city, and has become a favourite spot for Tokyo residents wanting to escape the city's stresses. In mid-October, 2019, however, the mood was very different, as visitors who would normally be walking the forest trail, letting nature wash over them, instead congregated around the 300-year-old "Ancient Pine" that had been toppled by the fierce winds brought by Typhoon Hagibis the previous day. Some prayed, while others simply bowed and said silent goodbyes.



The fallen Ancient Pine

The Ancient Pine had been an inspiration, surviving earthquakes, fires, and the American bombing in WW2, and seeing its vulnerability exposed by the typhoon came initially as a shock. However, the traditional belief in pine trees, with their evergreen foliage, as symbols of "longevity, steadfastness and endurance," was not shaken, and adjacent to the fallen Ancient Pine, the even older "Fabled Pine" stood firm, suffering only minor damage (Goto and Naka 2016, 75). Park-goers' belief in the power of nature was also unshaken by the loss of the tree to a great wind, and indeed, the incident was soon interpreted as an example of the never-ending cycle of life.

Old trees like those at the Institute for Nature Study are meaningful in another important way. The Fabled Pine was planted in the early Edo Period, and in a city where few historic buildings survive — to use Timon Screech's

phrase, the city "has memories, but few objects" — a 400-year-old pine is a rare link to an era that still captures the imagination (Screech 2020, 2). For visitors to Japan, this notion of trees as symbols of continuity can be obscured by a modernity proclaimed by bullet trains, robots and gleaming skyscrapers. In the large cities where most Japanese live, people seem totally immersed in their busy, modern lives. Focusing on Tokyo, where the apparent disconnect with the past is most stark, this article argues that that beneath the city's modern veneer, trees allow residents to feel close to nature, and stay connected with the history, myths and traditions old trees evoke.



The 400-year-old Fabled Pine

These connections with the past and with nature itself are made possible because even though the trees discussed in this article are in man-made settings — shrine forests, parks and bonsai collections — they are accepted as natural. Perhaps the starkest example in the article is bonsai, which relies on daily watering and care, but is still attributed by a grower as having the power to transport him to the "mysterious realm of nature" (Aragaki 1989, 9).

As Shirane Haruo has shown, the notion of tamed nature as natural traces back to early agricultural villages, which were surrounded by a managed forest (satoyama) that acted as a buffer against the wild untamed forest (okuyama) (Shirane 2011, 114, 115). According to Phillip Brown, over the years there were "increasingly successful efforts to dominate, subdue and control natural forces," resulting in a "complicated relationship" with nature (Brown 2013, 96, 116). In terms of this article, the consequence is that when the bonsai grower refers to "nature" he can equally mean tamed, cultivated nature as a primordial forest. Indeed, Pamela Asquith and Arne Kelland have argued that in Japan, tamed or "idealized" nature, such as a trained and pruned bonsai, or a carefully planted shrine forest, "is thought to be true nature" (Asquith and Kelland 1997, 16).

The article begins by describing how a balanced, harmonious relationship with trees emerged in agrarian, pre-modern Japan, and how this relationship was reflected in myth, folklore, and religion. It demonstrates how the connection with trees was put under stress in Edo as the city grew from a tiny village in 1603 into one of the biggest cities in the world by the end of the 17th century, but argues that it was maintained in shrine forests, bonsai, and public parks. The article shows that as the trees in these cultivated settings grew older, they were accepted as natural, and how in addition to the spiritual and emotional benefits gained from walking amongst old trees or from growing bonsai, there are also measurable physiological benefits. The article ends by showing that even when a tree like the Ancient Pine finally succumbs, it is taken as evidence that the cycle of nature is intact, and of the resilience of the natural world.

Trees, Spirituality and Harmony in the Pre-

Modern Period

Geography and climate dictated the centrality of trees to everyday life in pre-modern Japan. Japan is a mountainous country with abundant rain, and is heavily forested. This gave rise to a pattern of settlement whereby farming communities were located in small pockets of arable land, surrounded by forests. With farmers utterly dependent on rice for food, and wood for building their homes and for fuel, it is understandable that harmony with nature was sought after. Indeed, fruitful partnerships with rice and trees were a matter of life and death. But, as vital as wood was for building materials and fuel, the relationship with trees ran deeper. Trees helped protect the fragile rice fields from fierce, destructive winds, and as Conrad Totman has shown, villagers "needed wellwooded uplands to assure adequate water supply for paddy culture" (Totman 1989, 10). The trees on the fringe of the managed, village landscape also formed a buffer against the wild, mountain landscape, inhabited by fierce animals — wolves, bears and wild boar — and, importantly, spirits (Shirane 2013, 114, 115).

The world of the pre-modern Japanese farmer was alive with spirits, ghosts, and monsters, and the notion of trees as protectors gave them a place in folklore. Trees were allies in a difficult, sometimes dangerous world, and admirable traits were attributed to familiar, old trees: They could be strong, sturdy, and even faithful and wise. Over time, these traits were interpreted, metaphorically, as personalities. There were also tales of supernatural "yokai" trees, and according to folklore, when a tree was a hundred years old, a spirit known as a kodama inhabited in it (Shirane 2013, 128; Foster 2015, 151). The Japanese native religion Shinto emerged out of the same milieu as these superstitions and folkloric tales. It exhibited the same reverence for nature, and held that spirits (kami) could be found in distinctive natural features. Kami could inhabit an oddly shaped rock, a fierce wind, a waterfall, or an old tree (Reader 2007, 43). Old trees were especially significant in Shinto because people believed that they could communicate through them with the deities, and the practice of decorating sacred trees and praying to them meant that groves of old trees were essentially the first Shinto "shrines," with prayers and ceremonies taking place in a roped-off square in the middle of the grove (Jinja Honcho website). Over time these natural prayer settings evolved into manmade structures, but the association with trees was retained by planting trees around shrines.

Care should be taken not to overly romanticise life in pre-modern Japan. Farm work was relentlessly hard, and farmers lost a large fraction of the rice they grew in taxes paid to the samurai class (Dunn 1969, 45-74). They prayed to the deities that rain would fall in time for their rice to grow, or that smallpox would not ravage their village, and towards the end of the period, in the late 16th century, the country was in a state of political turmoil, ravaged by seemingly endless wars (Ferris 1985, 70, 71). Nevertheless, it is not unreasonable that the Japanese look back on the time as one when the goal of living in harmony with nature was realized. The working year was measured by the seasons, and the rice-and-wood economy was balanced to the point where, to use modern terminology, the Japanese lived sustainably.

Wood was a replaceable resource, and although demand slowly increased through the premodern period, "the timber requirements of rural people were relatively benign." In concert with communal management of logging by villagers, this restrained use meant that "forests were able to sustain themselves" while satisfying human needs (Totman 1989, 38). A wood-based style of architecture evolved that reflected this harmonious relationship. Wooden houses were practical and entirely suited to Japanese conditions. They survived earthquakes when brick buildings crumbled, and they were airy and cool in the humid

Japanese summers (Hanley 1997, 54). No metal nails or screws were used, unadorned wood was favoured over the painted surfaces found in Europe, and, most importantly, sliding wooden doors and verandas opened the house up to the garden, blurring the line between man-made and natural space (Saito 1985, 239; Hanley 1997, 32.)

Edo and the Disconnect with Nature

Ironically, when peace came to Japan under the rule of the Tokugawa shoguns, the wood-based economy became unbalanced, and people began to experience separation from trees. Peace and prosperity led to an increase in population. Statistics for the pre-modern and Edo periods have long been the subject of debate, but a study by Saito Osamu and Takashima Masanori has confirmed that the Japanese population increased quite dramatically in the 17th century (Saito and Takashima 2015, 8). The resulting surge in the demand for wood was further magnified by the building boom in the new capital of Edo, upsetting the sustainability of the old wood economy, and leading to deforestation. The response was the development of plantation forests, which changed the rural and mountain landscape and injected a commercial note into the relationship with trees (Iwamoto 2007, 4-9). As previously noted, the fact that trees might be cultivated in no way made them less natural, but because the population increase in the 17th century was concentrated in cities and towns, there was a physical separation from trees that gave rise to the broader feeling that life had been disconnected from nature (Nakai and Howell 2012, 131).

The urban disconnect from nature was felt first and most strongly in the shogun's new capital. Of course, there were other large Japanese cities, but Edo was on an entirely different scale. By 1644, just 40 years after its founding, the city's population was already twice that of

Kyoto, and it just kept growing (Firely and Stahl 2009, 64). The city's enormous area physically separated life from the countryside in ways that older, smaller cities did not, and this in turn affected the rhythm of life. "Life in the countryside was regulated by the seasons," explained Charles Dunn. "In the already artificial life of the great cities, the clock and the calendar held sway" (Dunn 1969, 131). Edo's working poor, who had less leisure time than elites, felt this new, artificial rhythm most strongly, something that was reinforced by the division of the new city into distinct residential districts. The grand houses of the daimyo and their samurai were in the centre of the city, near the Shogun's castle. This elite section comprised a massive 65% of the city's area, and the houses had space for quite expansive gardens. By contrast, merchants, artisans and workers were crammed into just 20% of the city's area, leaving limited space for private gardens (Havens 2011, 20; Firely and Stahl 2009, 65). Workers suffered most. They lived in row houses just a few metres wide, with little enough space for everyday life, and none for gardens.

Edo's newness exacerbated the disconnect from nature. Trees take time to grow, and even daimyo had to wait a generation or two before they could open their sliding doors and look out on a garden with a natural feel. Working people had even less access to greenery. As Andre Sorenson has noted, "In the Tokugawa period the Western concept of the urban park as an oasis of countryside within the city was unknown" (Sorensen 2002, 43). The only open spaces Edo's working people had were shrines, but although the forests that traditionally surrounded shrines were also potential green spaces, true shrine forests (chinju no mori) were "primeval," consisting of old trees who impart their strength and wisdom to worshippers (Rots 2017, 85). Because these old trees were ideally slow growing varieties such as camphor, gingko and zelkova, the time-lag while shrine forests matured was even greater than with the daimyo's gardens. In short, as Edo grew, the inhabitants of the new city found themselves living without the trees. Their year was no longer marked by the seasons, with new buds and blossom in spring and coloured leaves in autumn, and this cut them adrift from old traditions and ways of communicating with the gods.

Shinto Shrines as Green Spaces

The simple strategy Edo residents employed to cope with the city's lack of greenery and to recover some spirituality missing from their lives was to visit a leafy, rural shrine. The grandest shrine of all was Ise Jingu. Dedicated to the sun goddess Amaterasu, from whom the first emperor was believed to be descended, it was the spiritual home of the nation. Unfortunately, it was over 650 kilometres from Edo in the direction of Kyoto on the Tokaido, one of the five great roads that fanned out from Nihonbashi, in central Tokyo, so it was not a journey that could be made easily. In the Edo Period a common aspiration was to make it at least once in your life (Nakanashi, 2018, NPP). A more accessible shrine for Edo residents was the Chichibu Jinja, a comfortable three-day walk to the north. Although it did not have the same mythic significance as Ise Jingu, it was old, and was flanked by even older trees, including sacred, moss-covered camphor and maples that must have felt as though they were part of an ancient forest.

Shrine pilgrimages (okagemairi) revitalised people physically and spiritually. They have been described as the forerunner of modern Japanese tourism, but came with the same two drawbacks of all tourist holidays in that they were expensive and could only happen infrequently (Tormanek 1998, 165-194). In response, forestry techniques were adapted to enable the artful, expeditious creation of shrine forests. The ultimate example was Meiji Jingu,

in the Shibuya ward of Tokyo. Dedicated to the Emperor Meiji and Empress Shoken, the shrine building was completed in 1920, eight years after the Emperor died. When it was first built, the new shrine was surrounded by vegetable gardens and orchards, meaning the trees at Meiji Jingu had to be planted from scratch. The goal was to create an "eternal forest" dominated by long-lived trees like camphor, zelkova and gingko. However, because of the immediate need to have a forest with an atmosphere appropriate to a shrine, a 150-year program was devised, where fast growing hinoki cypress, cryptomeria and pines provided at least the appearance of a true shrine forest, before the slower growing, longer lived, broadleaf varieties gradually took over (Saigusa 2005).

In the early years, there was no disguising the fact that the Meiji Jingu forest was man-made. The landscape itself was entirely constructed, with ponds dug and the excavated soil used to shape contours in the terrain. Larger plantings were supported by wooden tripods and straw ropes, visible reminders that the trees needed help before they could take care of themselves Matsui 1996, 47). However, the shrine forest gradually took on a more organic appearance, and in WW2, just twenty-five years after the initial plantings, displayed the resilience that the Japanese usually associate with much older trees. The Americans began fire-bombing the city in 1942, with the Doolittle Raid, and continued into 1945, leaving large sections of the city in ruins by the war's end. With over 1000 incendiary bombs falling on Meiji Jingu, most shrine buildings were damaged or destroyed. However, the trees were largely unharmed. Many bombs that fell in the forest were simply swallowed up by the soft earth, and because broadleaf evergreens do not easily burn, the bombs that did ignite inflicted little damage (Matsui 1996, 50). For the city's warweary residents, the green shrine forest was a heartening presence, made all the more powerful by the contrast with dead and charred trees all across Tokyo, including the ones that lined Omotesando, the road leading to the shrine (Cheng and McBride 2014, 228).

Now 100 years into the 150-year growing program, Meiji Jingu already has the appearance of a genuinely old forest. The relationship people have with the trees has evolved from nurturing them to respecting them. The trees have long since outgrown the need to be supported by tripods, and today, believing the now hundred-year-old trees are inhabited by kami, the shrine's priests never fell or even prune a tree. Meiji Jingu attracts 10 million visitors every year, and significantly, an increasing number make the shrine forest part of their visit (Yamabe 2018). While in the forest they adhere to a viewing etiquette aimed at "preserving the dignity of this sacred place" (Meiji Jingu website). Visitors remain on the paths, refrain from picking leaves or seeds from trees, and remove nothing from the forest — even fallen leaves are left on the ground.

As the shrine forest has matured it has become a haven for a number of endangered plant and insect species, but according to Miki Fukutoku, the chief of Meiji Jingu's public relations department, "the forest protects kami as well as living creatures" (Yamabe 2018). Certain older trees at the shrine also allow people to communicate with the deities, and wishes for the coming year are written on wooden tablets called *ema*, which are left at the foot of an old camphor tree to be communicated to the gods (Moore and Atherton 2020, 25). But, as much as everyone wants good fortune, visitors are motivated by more than self-interest. Walking through the Meiji Jingu shrine forest reconnects Tokyoites with nature, and with all the myths bound up with old trees. Being reminded that the camphor tree is connected to the deities is as important, if not more important, than having a wish granted. As Shinto Studies professor Motegi Sadasumi explained, these "are places that remind one of distant, ancient times. This is where the voices of the gods (*kamigami*) sound in your ears. This is where our ancestors lived, humbly, in harmony with nature (Motegi cited in Rots 2017, 85).

Bonsai

While the relationship with trees at Meiji Jingu is no longer entirely defined by nurture and care, the art of bonsai prioritises these qualities. Bonsai has a long history, being imported from China alongside Buddhism and then refined by the Japanese, where it became a favourite pastime of elites including Zen monks, scholars, and the samurai class. However, its widespread use was an urban phenomenon, coinciding with the phenomenal growth of Edo in the 17th century (Long 1971, 271). There was an element of class at work here. Daimyo and their samurai might only have had nascent gardens in Edo in the 1600s, but they at least spent every second year travelling or on their own domains. By contrast, working people had, at best, a short annual trip to nearby shrines and temples such as Nartiasan Shinshoji, Chichibu Jinja, or Shinagawa Jinja, with Shinagawa at the time being a postal town outside of Edo proper. This might have been a great fillip, but for 51 weeks of the year they lived in a largely treeless environment. For these people, bonsai provided a link with nature, even if they could not afford an expensive glazed pot, or if their tree was just a common azalea. As a work entitled Kadan Komoku, published in 1681, explained:

The rage these days is for the various kinds of azalea, which are in vogue amongst all classes of society. Even the poorest people do not consider themselves human unless they have one or the other, even if they have to grow it in an abalone shell (Nippon Bonsai Association 1989, 148).

By the end of the 17th century — the Genroku Period — when a distinctly urban culture was taking shape, bonsai had become even more popular in Edo (Vaporis 2012, 230). It was just as much part of the city's fabric as tea ceremony, wood block prints, or puppet theatre (Nishiyama 1997, 5). In fact, the bonsai craze was so pronounced that it has been likened to the Dutch "tulipmania" happening on the other side of the world at roughly the same time, with bonsai specimens bought and sold for fantastic prices "according to the number of buds growing on them" (Long 1971, 266). The care of these plants was dependent on a strictly disciplined routine used by Zen monks who introduced bonsai to Japan, and all bonsai growers aspired to the Zen-inspired aesthetic.

The aim in bonsai has always been to make the trees look natural, even if they are completely dependent on man. Growing in a small, shallow pot, bonsai have no reserves of nutrients, and have to be watered every single day. (A sobering thought for trees a hundred or more years of age.) Moreover, the roots have to be trimmed every few years so that the tree does not become root bound and unable to take up water efficiently. The natural look of a bonsai is also entirely constructed through careful shaping of trunks and branches with wiring and pruning. Over time, these various styles became categorised. In Fukinagashi, the tree leans to one side, like a tree in the wild that gradually grew in the same direction as the prevailing wind. Sharimiki features a bark-less section on the trunk, mimicking trees that were damaged by storms or had bark stripped by grazing animals, and in Seki-joju the roots are exposed by having the tree grow over a small, strategically placed stone, giving the appearance of a tree growing on a mountainside, with its roots seeking out crevices and gaps in rocky formations (Hughes and Hughes 2016, 46-48).

In spite of their shaped and sculpted form, the little trees somehow always seem completely natural. In explaining this, Bonsai Master Kato Saburo makes the important point that far from being artificial, "bonsai is a living thing." Moreover, although it relies on its grower for care, attention and daily watering, the tree is not just a passive recipient of this care. "Although the plant cannot speak to you," explained Kato, "you'll sense that the plant is trying to tell you something. One day you'll know a plant is asking for water or fertilizer. When you come to that stage, you'll have developed a close bond. Bonsai responds to your love and becomes like an honest friend with no falsehood or betrayal." According to Kato, far from giving a compromised connection with the natural world, tending to these little trees, learning to know what they tell you and enjoying their loyalty, is in fact the closest urban man can come to nature (Kato 1980). Similarly, Aragaki Hideo stated that bonsai transports you "to the mysterious realms of great Nature itself." "It has no tongue," he continued, but "speak[s] to you, so that you have the illusion of a dialogue with nature in some remote mountain district" (Aragaki 1989, 9).

Age in bonsai is respected as much as in a tree growing in a mountain forest or beside a shrine. In part this reflects the simple fact that trees outlive humans and animals. They have the longevity so many people crave. Moreover, trees — even those growing in shallow pots put out new buds every spring, whereas people grow old and see their strength and vitality wane. The Japanese "sense some magical quality" in this annual regeneration of a tree growing in a shallow pot (Aragaki 1989, 9). Old trees have witnessed history, and in the case of Tokyo, survived the wars, plagues, fires and other natural disasters that befell the city with depressing frequency. This longevity was partly the result of the miniature trees' magical qualities, but was also a testament to their partnership with successive generations of growers.

The oldest bonsai in Tokyo today are in the Imperial Bonsai Collection, and at the Omiya Bonsai Village. Omiya Village was established by a group of growers who decided to move their trees to the relative safety of Saitama, on the outskirts of the city, after the Great Kanto earthquake in 1923. Residents of the village have to abide by a rule requiring each household to contain at least 10 bonsai, and the Omiya Bonsai Museum has a collection of 120 old bonsai that have "masterpiece" status in the bonsai growers' world (Omiya Bonsai Village website). The Imperial Collection also has astoundingly old specimens, including a 450-year-old Fuji (Japanese Wisteria) that tenaciously blooms every April, and a 320-yearold Tosho (Needle Juniper) which continues to thrive in spite of the fact that most of its trunk is dead wood. The dead wood effect is known in the bonsai world as shari, and combined with the fact that the juniper's pot is unusually small, the tree evokes special admiration for its stubborn good health.

The vitality of these specimens is an inspiration, and they signify an unbroken connection going back to the first bonsai boom when Edo was emerging as the nation's capital. Unfortunately, the public have limited access to the Imperial Collection, which is housed in the Omichi Teien Garden at the Imperial Palace. Moreover, although the Omiya Village is just a one-hour ride from the major hub of Funabashi on the Tobu Noda Line — an infinitely easier journey than Edo Period shrine visits — the demands of work and family mean that the trees there can only be viewed infrequently. Seeking a more practical way of reconnection with nature and the seasons, people looking for relief from the stress in their working lives are increasingly opting to own and care for their own bonsai (Miyoshi, 2005, NPP). Young professionals with plenty of disposable income have been part of this trend, and upscale department store Isetan has responded by

selling bonsai and conducting "Admiring Bonsai" presentations, while rival store Mitsukoshi holds its own bonsai appreciation classes (Mitsukoshi Nihonbashi Main Store website). The language used in these department store sessions is steeped in the notion that bonsai connects growers with nature. Participants at Isetan's sessions, for example, are reminded that the trees are living things, and that rather than forcing the tree to grow in a certain way, growers should engage it in a "dialogue." The result of this negotiated growth is that bonsai exhibit the "unexpected beauty" found in natural forests (Isetan Shinjuku News 2015 website). Bonsai Master Kenji Kobayashi conveys the same message in his classes in the Tokyo suburb of Setagaya. Many of his clients are young people who crave the "sense of season" missing in their modern, hi-tech lives, and he shows them how forming a relationship with a miniature tree can restore seasonality. "Bonsai is a traditional art," he tells them, "and it should remain in our lives" (Miyoshi 2005).

Public Parks

While Shinto shrines and bonsai are steeped in history, the Japanese have no tradition of public parks. Throughout most of their history they lived rural lives, amongst trees, and as previously noted, when cities on the scale of Edo first appeared, shrines and temples served as public green spaces, and people grew bonsai for an everyday connection with nature (Sorensen 2002, 43). The impetus for change was the Meiji Revolution and the idea that Japan had to become more modern so it could stand on an equal footing with Western nations. A truly modern, nineteenth century city had railways stations, department stores, office buildings, and parks, and in 1873 the Meiji government announced the intention to create public parks throughout the country (Eagles, Bowman and Tao 2001, 5).

The stumbling block in densely populated, heavily built cities was finding space for new parks, and as Paul Waley has shown, park creation in Tokyo was initially "little more than a change of name" (Waley 2005, 8). For example, Ueno Park, the first public park in Tokyo, was originally the grounds of the Kaneiji Temple, and according to park authorities it was "long loved by common people as a famous site for cherry-blossom viewing" (Ueno Park website). A second strategy used in freeing up land for park creation was to co-opt the private gardens of daimyo. Although there was competition for these spaces from other branches of government — the military saw them as ideal sites for bases and weapons storage — the obvious advantage of opening up private gardens for parkland was that it gave the public access to green spaces from which they had previously been excluded. The first significant example of such a conversion was Hibiya Park, which had been estates of the Mori and Nabeshima clans in the Edo Period, then were under the control of the army in the Meiji Period, before opening as a park in 1903 (Waley 2005, 18).

More generally, however, Tokyo's parks were born out of the city's two great 20th century disasters: The Great Kanto Earthquake and WW2. The Great Kanto Earthquake gave urban planners a blank slate with which to work. According to the pre-eminent historian of the earthquake, Charles Schencking, it "incinerated large swathes of Tokyo and Yokohama. Both cities," he wrote, "had been transformed into scorched, broken and almost unrecognizable wrecks" (Schencking 2013, 2). The number of people seeking refuge in Ueno Park from fires and unstable buildings highlighted the potential of parks as safe havens, and Tokyo city planners created three large parks and 99 smaller ones to be located adjacent to primary schools, serving both as green spaces for the children, and safe havens in the event of another natural disaster (Ueno Park website, Schencking 2013, 289).

The destruction wrought by the American bombing in WW2 led to another opportunity to redesign the city, and gave an even more decisive boost to the city's park system. An important part of the city's post-war redesign was an attempt to decentralize, creating subcities around the Yamanote Line, including Shinjuku, Shibuya, and Ikebukuro. In effect, modern Tokyo became a collection of cities, and this opened up potential parkland that would previously have been too far removed from the heavily populated city centre to be of any use. At the same time, the notion that Japan had to become less militaristic, pushed on the nation by the American occupiers, meant that land under the control of the army, or former daimyo estates controlled by zaibatsu, or later, land used in the occupation by the American military, suddenly became available for conversion to public parks. The Institute of Nature Studies forest, where the Fabled Pine grows, is a classic example. In the Edo Period it was the estate of the Matsudaira clan. In the Meiji Period it was under the control of the Navy and Army, and was used to store munitions. Then it was placed under the control of the Imperial Household, and was finally opened up to the public in 1949 (Institute for Nature Study website). Other parks created in the post-war period that followed a similar trajectory included Shinjuku Gyoen Garden and Hamarikyu Gardens, the result being that at the beginning of the 21st century, Tokyo was considered amongst "the greenest of Japan's big cities" (Havens 2011, 3).



The oldest tree at Shinjuku Gyoen, a 400year-old Zelkova. It has lost branches and is wrapped in a protective coat, but it stubbornly clings to life.

The 20th century expansion of Tokyo's public parks could be viewed as part of the broader modernisation of the city, however the new parks have largely retained the old Edo Period notion of recreation as "stretching the spirit [achieved] by visiting sites of beautiful vegetation not normally seen in daily city life" (Havens 2011, 20). Shinjuku Gyoen Garden is a good example. The rules governing park behaviour were designed to make sure that visitors experience the trees in a quiet, contemplative manner, free from the distraction of games and physical activity such as jogging. They also prohibit playing music, running, ball games, frisbee, skateboarding,

bicycling, or bringing alcohol or pets into the park. These rules are not dramatically different to those at Meiji Jingu, with even the same prohibition on removing fallen leaves (Shinjuku Gyoen Visitor Information website).

Within the context of the Japanese tradition of believing that simply being in the presence of old trees results in spiritual and emotional benefits, such rules enhance the park experience rather than restrict it. Reinforcing these traditional beliefs, the physiological benefits of what we now call "forest bathing" have been scientifically proven. The impetus for research in the area came in the early 1980s, with the growing concern about the stress of modern urban life. By that point, 80% of Japanese people lived in big cities, and earlier fears that life was increasingly ruled by the clock rather than by nature's rhythms had been realized. Long commutes, even longer work days, and constant pressure not to make a mistake, had resulted in the Japanese being the most sleep deprived society on earth, and stress was endemic (Moore and Atherton 2020, 28). In 1982, the director of the Japanese Ministry of Forestry and Fisheries, Tomohide Akiyama, suggested that spending time in forests would heal these stresses. He called this shinrin-yoku (Miyazaki 2018, 2).

The idea of forest bathing made "intuitive sense" to the Japanese (Li 2018, 2). That was fine as far as it went, but Chiba University Horticulture Professor Yoshifumi Miyazaki decided to put it to the test. In a series of experiments, he and his colleagues confirmed that shinrin-yoku confers psychological and emotional benefits, with test subjects exhibiting less anger, fatigue and depression after spending time in a forest (Song et. al. 2018). In subsequent experiments, Miyazaki's team also found measurable, physiological benefits. For instance, office workers with stress-related high blood pressure had their levels lowered after spending at least six hours in an old growth forest, and those with low blood

pressure had their levels raised (Miyazaki 2018, 24; Song et. al. 2017, 246-252).

Japanese research findings on the effectiveness of shinrin-yoku have been supported by work done in Taiwan, but as yet there is no scientific understanding of how it works (Chen et. al. 2018). As Miyazaki admitted, "we need to do more research" (Miyazaki 2018, 24). However, two things are known. First, it works best when the forest feels old and contains old trees. Second, there is a right and a wrong way to experience this old-forest environment. The effect of the age of trees is one of the intangibles that is so hard to quantify and put into a scientific box (Moore and Atherton 2020, 30). It comes back to the comfort the Japanese feel when they are reconnected not just with nature, but also with their history and their spiritual roots. This reconnection has implications for the way shinrin-yoku is practiced. As Qing Li, the President of the Japanese Society of Forest Medicine, explained, "This is not exercise or hiking, or jogging. It is simply being in nature, connecting with it through our sense of sight, hearing taste, smell and touch" (Li 2018, 12). In other words, forest bathers should proceed at the same sedate pace and with the same quiet, respectful attitude they have when they visit a shrine forest.

Perhaps the most compelling evidence of the healing power of old trees is that scientists found that elderly hospital patients, who are unable to leave their beds, let alone walk through a forest, become less stressed and heal quicker when a bonsai is placed in their hospital room (Song et. al. 2018; Ottosson 2006, 227-256). Nevertheless, *shinrin-yoku* works best in an old forest environment, and the best place to experience this in Tokyo is the Institute for Nature Studies. The aim at the Institute was to create a "sanctuary of natural beauty in the heart of metropolitan Tokyo" that would "bring people in touch with nature [and] induce peace of mind" (Institute for Nature

Study website). It was as if the park was designed specifically with *shinrin-yoku* in mind, and indeed, as you walk along the narrow path that wends through the trees, around ponds and over creeks, the city seems a million miles away.



The trail used by forest bathers at the Institute for Nature Studies

Seeing the Ancient Pine toppled by Typhoon Hagibis was a blow to park goers, but a comparison with the typhoon's effect on the man-made world showed that the resilience of trees, their healing power, and the greater power of nature had not been challenged. While the typhoon wreaked havoc across the nation, bringing bullet trains and airlines to a halt and causing over ¥100 billion worth of



damage, the 400-year-old Fabled Pine was still standing. Even the fallen Ancient Pine was an example of nature at work. Trees do not live forever, and Shinsuke Hagiwara, a veteran of 40 years working in plant ecology at the Institute for Nature Studies, reflected that although "humans think they are superior to nature ... in reality, nature is far more ingenious than us; we are clueless with how to deal with our own garbage, but nature keeps recycling its own waste." He pointed out that "rotting trees are eaten by insects and bacteria to become soil, which in turn becomes nutrients for other plants" (Kirzner 2013). Indeed, while governments across the country struggled to dispose of trash caused by the typhoon, the saplings growing beside the fallen trunk of the Ancient Pine are already starting to thrive. (Yamashita 2019). In a hundred years, when they are mature, those trees will have a tale to tell.

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