### **Rethinking Nature in Contemporary Japan**

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# Nature in Miniature in Modern Japanese Urban Space Tsuboniwa – Pocket Gardens

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**Abstract** This article is devoted to the study of the Japanese approach towards nature through the phenomenon of tsubo-niwa, which can be translated in various ways: 'courtyard gardens', 'small gardens in a limited space', 'pocket gardens'. The Author traces their historical development and modern interpretation in recent architectural projects both for private residences and buildings for public use. Since the recent developments in architecture tend to blur the boundaries between traditional types of Japanese gardens and since tsubo can be translated as 'small space', the Author has included various types of small gardens of urban constructions into the discussion such as the entrance gardens or front gardens, rooftop gardens, balcony gardens, gardens under the ground level, pass-away gardens, tōri-niwa and other small gardens that are typical of Japanese urban constructions within a limited area. Through the discussion of Japanese attitude towards nature in different philosophical schools, the analysis of the historical development of Japanese gardens and formation of the Japanese attitude towards nature, as well as the studies of gardens themselves, the Author concludes that the nature that is found in Japanese gardens in any period of their existence has never been authentic like the wild nature. It is a product of Japanese philosophy, culture and it is adjusted to serve people's needs. However, recent architectural and garden projects tend to reflect a more caring attitude towards nature, greater respect and a wish to take it closer to people's lives and educate the younger generation in an eco-friendly way.

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**Keywords** Courtyard Garden. Environmental Philosophy. Tsubo-niwa. Nature.

#### 1 Introduction

In the never-ending Japanese urban fabric – asphalt, concrete, metal, steel, dust, noise, crowd, rush – a pleasant relief for the eyes are tiny gardens, the so-called *tsubo-niwa*. As a matter of fact, these gardens remind us of nature (figs. 1-3) and are often placed in areas that would hardly suit for practical purposes: angles, corners and narrow spaces. They refresh, calm the mind, entertain and relax. The article will offer a study of what is the Japanese attitude towards nature and how the phenomenon of *tsubo-niwa* reflects that.





Figure 1 (Left). *Tsubo-niwa* in Kyoto *machiya* house. Photo from www.pinterest.com Figure 2 (Right). Corner *tsubo-niwa* at the entrance of the restaurant, Kyoto. Photo by A. Haijima 2013

First, let us have a look at what the term tsubo-niwa means. The word tsubo-niwa can be written with different characters: 坪庭, 壺庭, 経穴庭. In the first most common version the kanji tsubo 坪 refers either to a measurement of an area of 3.3 metres, approximately the size of two tatami  $\frac{1}{2}$  mats, or to a small courtyard entirely enclosed by buildings (see  $Japanese\ Gardening$ ). However, the actual size and form of tsubo-niwa can be varied, so the word tsubo is used to mean a 'small garden'. Also it is interesting that the size of a tatami mat,  $90\times180$  centimetres, is adjusted to the scale of the human body: a tatami mat is just as big as to sleep on and when Japanese talk about dimensions in their house they refer to the number of tatami mats, not metres or centimetres.

Another character used for *tsubo* 壺 means 'pot' or 'jar', so a *tsubo-niwa* 壺庭 is literally a 'pot-garden', or a garden contained within a small, enclosed space.

The third set of kanji (keiketsu 経穴) is associated to the flow of ki 気 energy through the human body and is used for the point at which moxa (mogusa  $\begin{subarray}{l}
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The connection between the energy flow in nature and garden is elabo-

rately described in Japanese earliest known theory on garden art twelfth-century Sakuteiki 作庭記 (A Record of Garden Making) (Takei, Keane 2008).

From the above-mentioned meanings of *tsubo* we can conclude that the term *tsubo-niwa* can be interpreted in various ways: a courtyard garden, a small garden, a pot-garden, an energetically strong place, a pocket garden. Therefore, the author of this article will use the term *'tsubo-niwa'* to talk about the gardens in a small space that are varied: courtyard gardens, corner gardens, front gardens, entrance gardens, roof-top gardens, balcony gardens, gardens below ground level, passageway gardens, etc.

There is a variety of names for this type of garden. Besides tsubo-niwa several terms are used, including hako-niwa 箱庭 (box garden). A courtyard garden in the Kansai area is called also senzai 前栽 (front plant/tree); in the northern district of the Kantō area, a common garden is called the home's tsubo (Ohashi, Saito 1997, 107). Mizuno uses the term machiya city dweller's garden (Mizuno, Yoshida 1987, 107). When translated into English, tsubo-niwa can be called 'pocket garden' since it also means a 'very small garden' (the translation of tsubo-niwa as 'pocket gardens' was used in M.Reeman's book Pocket Gardens. Contemporary Japanese Miniature Designs; Freeman, Noriko 2008).

## 2 Tsubo-niwa and Recent Environmental Philosophy

To understand the Japanese attitude towards nature through the phenomenon of *tsubo-niwa*, it is necessary to find an answer to the following questions: what is nature for Japanese? How should we protect it? What is the value of the natural environment that is non-human to Japanese? How can we best understand the relationship between the natural world and human technology and development?

In recent scholarship various opinions have appeared about how Japan's environment and natural world could be protected on a global level. Several groups of opinion can be traced. The group led by A.F. Whitehead (often labelled as "Whiteheadists") believes that, while all events in the interconnected web of life have moral standing and biospheric equality as sentient occasions of experience that enjoy attainment of life, experience, and beauty, at the same time they are developmentally organised into a hierarchy of degrees of values – including aesthetic, moral, cognitive, and spiritual values. They are opposed to the so called "Deep Ecologists" (a term coined by Arne Næss) who argue that one must affirm biological egalitarianism rejecting any type of hierarchy of values according to which some beings have more intrinsic value in the biosphere of life forms. "Animal liberationists" are opposed to "Deep Ecologists" in that they instead focus on animals and people rather than on the biosphere of holistic ecosystems (Odin 2008, 2-3).





Figure 3 (Left). Edge *tsubo-niwa*, private residence, Kyoto. Photo by A. Haijima 2013 Figure 4 (Right). Kanō residence garden, Kyoto. Courtesy of Mizuno 1987

Deep Ecology is an ecological and environmental philosophy promoting the inherent worth of living beings regardless of their instrumental utility to human needs, plus it supports a radical restructuring of modern human societies in accordance with such ideas. Deep Ecology argues that the natural world is a subtle balance of complex interrelationships in which the existence of organisms is dependent on the existence of others in the ecosystems. Therefore, human interference with or destruction of the natural world poses a threat not only to humans but to all organisms constituting the natural order. It stresses valuing other beings as more than just resources. Actions of modern civilisation lead to a reduction of biodiversity. Environmentalists are warning that civilization is causing mass extinction at a rate between 100 species a day and possibly 140,000 species a year. Deep Ecologists say what is needed to solve eco-crisis "is a transformation of consciousness" (Roberts 2011 cited in Drengson et al. 2011, 104). They criticise anthropocentric environmentalism that is concerned with the conservation of the environment only for exploitation by and for human purposes. On the other hand, social ecologists have formulated robust critiques of Deep Ecology saying that, in light of the real functions of living natural systems, it is impossible to even come close to affirming both the ability of all individuals to flourish to old age and the integrity and stability of ecosystems (Callicott, Froderman 2009, 207-210).

Imanishi Kinji 今西錦司 (1902-1992) wrote of the active interaction between individuals and their environments, of parallels in the structure of the lives of living and non-living things, and that the natural world exists, not as a resource for human life, but as a path by which we can understand

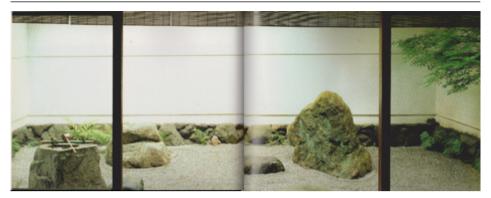


Figure 5. Masuume tea house garden in Kyoto. Courtesy of Mizuno 1987

our biological affinity with the living world, and that the roots of our behaviour are in the world of living things (Asquith 2006, 201).

Now, by keeping in mind the above-mentioned ideas about nature and its protection, let us have a look at three typical traditional *tsubo-niwa* gardens of city dwellers and see whether their appearance conforms the theories of modern environmental philosophers.

Mizuno Katsuhiko splits city dwellers gardens in three basic styles:

1) those which are boldly naturalistic, and were influenced by the land-scape gardens seen in the villas of court nobles or of the shogun family; 2) influenced by rock gardens, as often seen in Zen temples; and 3) those called roji 露地, or 'tea gardens', taking their inspiration from the philosophy and traditions of chanoyu 茶O湯, 'Japanese tea ceremony'. (Mizuno, Yoshida 1987, 104)

## He points out that

it was *chanoyu* which undoubtedly exerted the strongest influence on the garden of the city dweller. In the eighteenth and nineteenth centuries, the popularization of this artistic pastime, *chanoyu*, took on an important role in establishing a certain typical style for the *machiya*  $\square$  garden.

A typical example of this is Kanō residence courtyard garden in Kyōto, which comprises typical elements of a *roji* 露地 garden: the customary garden path *roji* leading to the cottage or room of a house (*chashitsu* 茶室) built especially to enjoy *chanoyu* 茶 $\mathcal{O}$ 湯 made of stepping stones, a stone water basin, a lantern. Besides these elements, there is a bamboo sleeve fence and a well. The water of this well is used, among other things, to sprinkle the *roji* tea garden, filling the stone water basin, and

supplying the water for the tea when guests are invited for formal tea. This garden of a typical Kyōto city dweller fundamentally includes both practical and aesthetical elements common to *roji* tea gardens, because it developed in conjunction with *chanoyu*, the tea ceremony. (Mizuno, Yoshida 1987, 104; fig. 4)

Masuume tea house garden in Kyoto is a good example of Zen temples rock garden influence.

The bright whiteness of the wall and the thin gravel of this garden are commanding. The contrast between outdoors and indoors and between light and shade gives the impression of two different worlds. The neatly combed gravel, like the waters of the sea, wash the rocks. There is a tall stone water basin in front of the veranda. From this garden, designed like the rock gardens of Zen temples, a crisp air blows into the room (Mizuno, Yoshida 1987, 104; fig. 5).

In Rakushō coffee shop (Kyōto), ferns and flowers of the four seasons that change throughout the year and exudes the cheerful air of vitality are planted in the garden. In the long, narrow pond, colourful carps swim. An arched bridge connects the two sides of the pond. Long branches of pine trees stretch down and give the garden a mountainous atmosphere. This garden could be attributed to the type that had been influenced by landscape gardens of court aristocrats (Mizuno, Yoshida 1987, 103; fig. 6).

Do these *tsubo-niwa* support the idea of richness and diversity of life forms? Trees and plants that are selected for gardens belong to a few appreciated species that have a long history in Japanese culture: pine, maple, cherry tree, etc. Traditional Japanese gardens are not the places that have biodiversity and wild ecosystems. Does non-human life in these gardens has well-being and does it flourish? Not always. Some plants are suffering from insufficient sunlight, limited space for growing and other problems. Each element in these gardens serves a certain purpose for human needs, and plants and trees and other live beings are not respected for 'their needs'. These gardens are artificial man-made objects with multilayered symbolic meaning.

Various scholars support this idea. According to Byron H. Earhart, the "appreciation of nature is a mixture of aesthetic and religious appreciation of the countryside" (Kalland, Asquith 1997, 2). Saito and Wada put it even more precise. They say that stone arrangements in Japanese gardens have several layers of symbolic meaning (this idea can be attributed to Japanese gardens in general): natural symbolism, mood symbolism, idea symbolism, spiritual symbolism, melodic symbolism (Saito, Wada 1964, 67). Brett L. Walker supports this view and argues that "Japanese have crafted an exceptional relationship with their natural world, one that is carefully sculpted like *bonsai* trees in a temple garden" and that "many scholars of Japan explore the country's cultural heritage exclusively without concern



Figure 6. Rakushō coffee shop, Kyoto. Courtesy of Mizuno 1987

for physical and biological legacies [...] and only a few have begun to explore the deep environmental consequences of modernization" (Miller et al. 2013, xii). Walker believes that at present "Japan teeters on nature's edge, a country trying to transcend – through engineering, industry, and culture – its earthbound roots".

As seen from the example of *tsubo-niwa*, Japanese approaches nature in a highly aestheticised way. To support this idea further, let us see what is the attitude towards nature in different Japanese philosophical schools and how the existing attitude towards nature in Japanese gardens formed historically.

Nature in different schools of thought is interpreted in various ways giving contradictory views at times but, nevertheless, in some of them there is plenty of ground for nature protection and respect.

Contrary to Western anthropocentrism where man is the lord of nature, in the Shinto world-view *kami* are not above but within natural world, and nature is pure, but the world of men is corrupt. "There is no place in which a god does not reside, even in the wild waves eight hundred folds or in the wild mountains bosom" (Nakamura 1964, 350; cited in Kalland, Asquith 1997, 2). The Mahāyāna Buddhism thinker Seng Zao (僧肇 384-414) wrote: "heaven, Earth and myself have the same root, all things are one corpus within me". In Shingon Buddhism Kūkai 空海, also posthumously known as Kōbō-Daishi (774–835), wrote that world is regarded in all its aspects as the manifestation of the Universal Buddha. Dōgen wrote about being no difference between animate and inanimate. "To see mountains and rivers is to see Buddha nature" (Tucker, Williams 1998). In James' opinion, if in Buddhism human beings are one with nature, this does not necessarily imply that they are in harmony with it (Callicott, McRae 2014, xxiv).

In Chan and Zen Buddhism emphasis is laid on learning from and becoming like the natural world – from the uncarved block to the flow of the river – and natural entities are seen as teachers, models, and exemplars [...] but

respecting nature cannot mean total non-intervention in the natural world (Eric 2004, 123). James believes that Zen cannot yield an environmental ethics in which natural beings have an intrinsic value and is potentially nihilistic because of its focus on emptiness (sa.  $s\bar{u}nyat\bar{a}$ ) and no self (sa.  $an\bar{a}than$ ) (Eric 2004, 123). Moreover, James points out that Zen cannot motivate environmental practices, especially political activism, because of its supposed escapism and quietism but he argues that wu wei (無爲 not doing) of Zen is not a 'letting be', that is indifferently accepting anything, since  $ahims\bar{a}$  calls for emptiness rather than holiness and accordingly does not only concern one's own actions but also others'. In Zen responsibility is perfected as a natural and effortless responsiveness to things as they are. For masters as Dōgen, mindfulness in the ordinary and everyday life is the perfection of zazen 座禅. Zen suggests that one can stir onelself and clean out eyes, ears and mind in order to look and listen responsively to things as such in their interdependence and uniqueness (Eric 2004, 124).

In Chinese Neo-Confucian thought, Zhu Xi understands the universe as an organic holistic process in which human self, cultivation is contingent in one's harmonious interrelation with the natural world. This epitomizes the philosophical shift from anthropocentrism to ecocentrism (Callicott, McRae 2014, xxiv).

# 3 Historical Development of tsubo-niwa

Japanese *tsubo-niwa* developed from traditional Chinese courtyard houses. *Feng shui* 風水 principles used to help people to harmonize with their environment. Traditional Chinese believed that it ensured prosperity and structured the Beijing courtyard dwelling. Imitating the landforms of an ideal *feng-shui* site in nature, the spatial form of the Beijing courtyard dwelling embodied the ideal *feng-shui* habitat. Emphasizing orientations and positions, serving 3 or 4 generations, the typical Beijing courtyard house was a group of yards enclosed by one-story buildings (Ping Xu 1998, 271). Also in Japanese courtyard gardens *feng-shui* principles were taken in mind.

The *feng-shui* concept of environment takes into account many factors, spiritual as well as spatial, ranging from sky to earth and from human life to nature. The major goal of *feng-shui* is to find a way to live in harmony with heaven, earth and other people. The ancient Chinese left open sky over their courtyards to represent heaven. The square courtyard dwelling symbolised the earth and the central opening of the courtyard provided the family with an individual piece of sky representing heaven and giving them a place to observe the changing paths of sun, moon and stars (Ping Xu 1998, 271).

During the Heian period (794-1185), *tsubo* 壺 was the term given to the roughly rectangular space created between several buildings and cor-

ridors in a *shinden-zukuri* 寝殿造り residence (fig. 7), which was copied from Chinese examples. *Tsuboniwa* 靈庭 simply referred to an alcove or an 'enclosed garden'. The *Genji-monogatari* 源氏物語 (The Tale of Genji), which also dates to the Heian period, describes how *tsuboniwa* created within the niches of vast palace complexes would be dominated by a particular plant, and the plant would become attached to or associated with the person who overlooked that garden in the form of an epithet. *Fujitsubo* 藤壷 (Wisteria Courtyard) and *Kiritsubo* 桐壺 (Paulownia Courtyard) are mentioned there and, although Prince Genji was fond of gardens, he was even fonder of the ladies who tended them. The nature of *shinden* architecture and the socially-restricting conventions meant that privacy was difficult to come by in noble residences, so *tsubo-niwa* were prized for their intimate ambiance, a characteristic that has dominated their design ever since. These gardens were not heavily shaded as they were not partitioned or enclosed (*Japanese Gardening*).

Taira no Kiyomori 平清盛 (1118-1181), who was the chief of the Heike clan, made a *yomogi* 蓬 (Japanese mugwort) *tsubo* in the Heian Era (794-1185). Mugwort is the grass that is said to grow on Eternity Island. Minamoto no Yoritomo 源頼朝 (1147-1199), chief of the Genji clan, made an *ishi* 石 (stone) *tsubo*. The Genji clan overcame the Heike clan and established the Kamakura Shogunate government (Ohashi, Saito 1997, 6).

In Heian period aristocrats set out on travels to select plants in the wild nature and brought them to artificially create a spot with selected plants to appreciate nature. They did not appreciate nature as a whole, but only certain elements of it. Plants were associated with land forms: maples and pine trees resembled hillsides and distant mountains respectively, whereas kerria¹ should reflect upon water surface (Kuitert 1988, 54).

In the Heian period gardens were closely connected with court culture. "Their gardens [...] formed an integral part of the elegant way of life of the Heian nobles. They did not appreciate garden as an outside form [...] for them it was emotionally experienced from within" (Kuitert 1988, 4).

The garden styles mentioned in Sakuteiki 作庭記 (late eleventh century) are idealized landscapes of the elegant and intellectual aristocrat and not copies of actually existing geographical landscapes. For example, "The Ocean Style" is reduced to a precisely defined form of one type of rough seacoast. The mental image belonging to "The Ocean style" is therefore a typification, an idealization of reality […] an idealized archetype (Kuitert 1988, 37). Sakuteiki lists a number of advice and taboos in garden making, for example: "those who follow these rules will create places encompass by Four Guardian Gods and be blessed by ascending careers, personal wealth, good health and by long lives" (Sakuteiki, section on Trees).

1 Kerria japonica, where kerria is the common name.

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Figure 7 (Top-left). The Imperial residence, Numazu. Photo from Japanese Gardening website

Figures 8-10 (Top-right, centre-left and bottom-right). Entrance of Kyoto *machiya*. Photo by A. Haijima 2013

Figure 11 (Bottom-left). Kyoto *machiya*, *Roji*. Photo by A. Haijima 2013

Appreciation of natural beauty in the world of Genji (Heian period) meant the delight that was felt when recognising themes known from lyrical poetry (Kuitert 1988, 53).

To summarize, it is possible to say that garden of the Heian period relied much more on its almost esoteric theory, on the geomantic schemes, the taboos, and on a literary appreciation (Kuitert 1988, 134). The garden was a carefully planned man-made creation where every form, size, colour, layout, direction was created following a set of rules. These rules derived from geomancy, which follows how things are in the nature, as if macrocosm had to be displayed in a miniature way in the garden. Gardens imitated the nature following the rules of geomancy. Aesthetic looks were taken into consideration. Gardening is an art and a garden is not a spot of wild nature. The forms and sizes of a garden are adjusted to the architecture following a set of rules, as written in *Sakuteiki*. Gardens of the Heian period were complex constructions. They were not simply aesthetic playthings, neatly designed pretty pictures or sculptural objects.

Courtyard gardens are also found in Zen temples and samurai residences, again, mostly because of the architectural styles favoured by priests and warriors.

For early Japanese Zen priests, perceiving of natural scenery began to be an activity of contemplation in which they referred to Chinese literature and its more intellectual world-view rather than Heian lyrics and emotional perception (Kuitert 1988, 86).

Zen Buddhist gardens became appreciated for their view and were meant for contemplation (Kuitert 1988, 89). *Tsubo-niwa* were influenced by the tradition – with ancient roots in Chinese and Japanese culture – of imitating the nature in miniature form. Whether it could be a single stone on the table of a Chinese scholar, a *bonsai* 盆栽 tray or imitation of sandy beach in the miniature garden, *suhama* 州浜, these tiny replicas of nature were connected with religious and philosophical thought and were meant to bring the energy of cosmos, the powers of nature in peoples' lives and were believed to grant people longer life, better health, harmony and peace of mind.

Sesson Yūbai 雪村友梅 (1290-1348) in 1346, upon viewing the garden of a priest Dokusho, wrote: "a little group of fist big stones makes the effect of a thousand miles" (Kuitert 1988, 94).

Gidō Shūshin 義堂周信 (1325-1388) wrote in 1384: "the suggestive effect of thousand cliffs and ten thousand valleys is woven on a tiny piece of land east of the house" (Kuitert 1988, 94).

Tray landscapes *bonzan* 盆残 – miniaturized landscapes – were the forerunners of the present-day *bonsai* miniature trees. A record of 1466 *shogun* Yoshimasa appreciating *bonzan* tray landscape states: "little water, little waves, seen far away, it looks like the spirit of an estuary mountain of ten thousand miles" (Kuitert 1988, 94).

During the Momoyama period (1568-1603), courtyard gardens were most frequently built by the  $ch\bar{o}nin$   $\Box$   $\bot$  (townsfolk) within the confines

of their machiya 町家 (town houses) and omoteya 表屋 (display stores). During this period Toyotomi Hideyoshi 豊臣秀吉 (1537-1598) had enforced the partitioning of house lots into thin strips that were called "the bed of eels" (Ohashi, Saito 1997, 6). For the houses built on these slender strips courtyard gardens were necessary for sunlight and ventilation (figs. 8-10). The term naka-niwa 中庭 (middle garden) is preferred for these urban courtyard gardens, especially when referring to the most rear garden of a long, narrow town house. Gardens at the entrance way to shops are known as mise-niwa 店庭 (shop gardens) (Japanese Gardens Online). The restrictions in size due to surrounding buildings mean that these gardens are not usually intended to be entered physically, but contemplated from nearby rooms or verandas. Tsubo-niwa that are located in the centre of the house bring in the light, provide ventilation and secure privacy (Japanese Gardening). In times of disaster, such as fire, heavy winds or earthquake, the inner garden provided a certain amount of temporary shelter (Saitō, Wada 1964, 34). Yoshida describes the development of the courtyard gardens in the *machiya* houses in the following way:

It was not until the fifteenth century or so - about the middle of the Muromachi period - that the city area of Kyōto became urbanized nearly up to what it is today [...]. There were many small merchant houses lining the street, the average sizes of these probably being about five and half meters in both width and depth. Because they were so narrow and shallow, and in the back, they opened out onto communal backyards, they got sufficient lighting and ventilation. Thus the concept of leaving an area of space open on one's own property had not yet emerged; the so called pass-through garden running from the front street to the backyard, and enclosed on top and to the side by the roof and wall of the house, was all the outer space necessary within the actual building site [...]. However, as the economy in general gradually became much more active, and the capital became more densely populated [...] merchants started building large scale shop-residences [...]. Due to the long and narrow shape of the plots on which they are built, and the fact that they are built right next to each other, the machiya of Kyōto are [...] long and narrow, causing them to be nicknamed "eel shelters" [...] one reason for deciding upon such a narrow street frontage for each plot was that in those days ax was assessed according to the amount of street frontage one owned. The merchants thus cleverly divided the land so that they could equally have a bit of street frontage and, while owning ample land [...], evade tax. Because of this shape [...] the houses had to be provided with a certain amount of open space somewhere between the front and back, so that sunlight and fresh air could come in. It was, thus, from about the early eighteenth century that courtyard gardens came to be installed. (Mizuno, Yoshida 1987, 8)

Yoshida describes his own house with a courtyard garden and his emotions towards it in the following way:

The style of architecture of this house, with its frontage of about ten meters, is called *omoteya-zukuri*, or 'streetfront-style construction'. The middle courtyard garden is located between the store, which faces the street, and our residence in back, and serves the cold season, the rooms are closed off from the garden at night by sliding 'storm doors'. I think with nostalgia about those nights of my childhood when the lady palms would be rustling and the storm doors rattling, and I would feel so merry that I could hardly get to sleep, because I knew. From those sounds, hat it was going to snow. (6)

Here Yoshida describes his  $t\bar{o}ri$ -niwa 通り庭 pass-through garden and stresses its practical purpose:

Not exactly an exterior or interior space, since it is mainly covered overhead by the roof of the house, but has no floor, it runs straight down from the door facing the street, past the middle door, then past the sink environs, and out through the back door. From there, it reaches the laundry and clothesline area, and finally leads to the storehouses in the very rear. It might be said that this kind of pass-through garden constitutes the most primitive form of garden typical of Kyōto's so-called *machiya* 町家 or inner city dwellings. (6)

From here we can see that Japanese have developed a particular sentiment towards nature that comes from the deepest heart. Particularly they appreciate seasonal change and treasure each moment since it will not be the same in the future. Upon watching a courtyard garden Yoshida Kōjirō wrote:

gardens are living and constantly changing things [...] The enjoyment we have gotten from this back garden over the eighty years of their existence, or, also from the middle courtyard garden [...] is beyond measure. (6)

From the quotation we see that gardens and nature inside them is dear to Japanese hearts but as seen from analysis above, there are a number of factors that have shaped the Japanese point of view on nature in each period of the history of the development of the garden art. There were certain types of gardens and theories that supported them, but in no historical period of the garden development in Japan can we speak of appreciating pure wild nature as it exists in the original form without altering it. All gardens have been man-made objects with the selection of certain elements of nature to appreciate, nurture the soul, remind of natural landscapes and famous views, relax, harmonise the mind, search for philosophical truths,



Figure 12. Cloister House, Hiroshima. Architects: Tezuka Takaharu, Tezuka Yui, 2009

and so on. Nature in Japanese gardens has never been what modern environmental philosophers, particularly Deep Ecologists, talk about.

From authors observation, during her stay in Japan for 12 years, she has always admired unique aesthetics with which Japanese approach everything in their life, also nature, but at the same time, while travelling in crowded trains and observing outside endless urban landscape she has constantly been missing the untouched nature: the forests, lakes and meadows that she has known in her childhood. While living in Japan and watching in her close neighborhood how more and more territories of unused ground are covered with asphalt, old trees are cut to provide more space for parking or make the roads wider, how for other trees tops and branches were cut for not to disturb electricity lines, she felt that in modern cities there is no place left for natural ecosystem, only a limited room is given to domesticated nature which serves for the necessities and comfort of people. The attitude in the society towards the wild nature in the city was negative. She saw that there was no place for wild seeds to grow. A beautiful plant with white bell-like flowers found its habitat in the crack of the asphalt and was miraculously flowering there. This plant that had too low status in Japanese hierarchy of flora and its existence in the city was 'illegal' - it was a weed. In the comfort seeking consumer society for the remains of nature there is given just a marginal space in the cities.

Drengson believes that "when we are ecologically aware, we know that we need wild places in Nature to help us realize our wholesome wild energies. This is what completes us as human Earth dwellers." (Drengson in Drengson et al. 2010, 104)

Spaces given to the nature in the cities testify Japanese longing for nature and unconscious need of that but the cultural background and practical purposes hinder nature's acceptance in a wild form.

Further, we can only talk about certain types and shapes of this domesticated nature and see whether the newest projects in architecture and garden art have shifted towards a new concept of treating the nature and protecting it.

Then, we will see several examples of *tsubo-niwa* gardens in the modern interpretation. Here the author will address the question of how Japanese apply technology and development to react to the environmental challenge, such as environmental degradation, pollution and climate change. This group of *tsubo-niwa* will be split according to four types.

# 4 Types of tsubo-niwa

While a line dividing different types of *tsubo-niwa* is difficult to draw, especially in modern projects that challenge the existing borders between disciplines and provide new attitudes towards nature clashing existing philosophical and cultural prejudices, *tsubo-niwa* could be roughly split into four groups: 1) Centre; 2) Edge; 3) Corner; 4) Image.

#### 4.1 Centre tsubo-niwa

Centre *tsubo-niwa*, following the classical layout, are gardens in the centre of the house. This tradition comes from Chinese courtyard gardens but Japanese imitated them in a smaller size. The courtyard gardens were appraised because they opened the dwelling to the sky while maintaining privacy and provided architectural focus for the entire structure. The house revolves around this central point and rooms on all four sides face inward to nature. The structure combines the feeling of openness with a sense of enclosure. The central courtyard serves to bring the outside into the interior while at the same time securing privacy for the living space.

This urban building (fig. 12) features an ascetic courtyard garden with only one tree in the centre of its structure. The central *tsuboniwa* allows more light into the building and provides a view on the garden from the surrounding rooms. The rooms are planned so that the person who arrives is gripped by the desire to make a circular tour. The building was inspired not only by traditional Japanese structures with a courtyard garden but also by medieval monasteries with a gateway around the central garden, where monks were moving around and praying. The project got its name "Cloister house" also probably because of its minimalist structure, while actually it was designed for a happy family with three small children. The children were supposed to move around the house while playing with maximum free space at their disposal (*Kenchiku Zasshi* 建築雑誌 2009, (124), 34). Simplicity and functionality were highly considered.











Figures 13-17. NEST, Hiroshima. Architect Maeda Keisuke, 2013



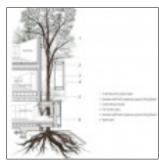


Figure 18 (Top). Shell, Karuizawa city, Nagano. Architect: Ide Kotaro, 2010

Figures 19-22. Dancing Trees, Singing Birds, Tokyo. Architect: Nakamura Hiroshi, 2010. Courtesy of Hiroshi Nakamura & NAP







Tezuka Takaharu is an architect who used to say: "how can you bring happiness to the people if you have not experienced it yourself?" (Tezuka 2013, public lecture). An architect who takes inspiration directly from life has created innovating spaces that fit well to their clients' lifestyles and needs.

Another vivid project where trees are harmoniously incorporated in the private residence is "Nest" (figs. 13-17). This dwelling, located at the feet of the mountain in the woody outskirts of Onomichi city, was designed to connect the environment with the house. The idea of the forest nest was expanded to the house. A indivisible space was created rethinking the elements such as floors and walls and creating a half-outdoor environment inside (*Kenchiku zasshi* 建築雑誌 2013, (128), 172).

A garden was designed inside the house with the trees growing through the second floor and up through the roof. The inhabitants – three women and their cat – can enjoy nature from any part of the building. This project also demonstrates that recent technologies allow people to cut deeper into what was previously regarded as unsuitable places for living as this mountain slope, and shows the process of further domestication of nature. Here the architect implies the ancient technique of *shakkei* 借景 (borrowed scenery) developed in traditional Japanese garden art.

The building in the form of a shell (fig. 18) is an interesting experiment by the architect Ide Kotaro who wanted to challenge the traditional understanding of architecture as something having a strict grid, boxed spaces, and right angles. It seems like a step forward for the building to coexist with the surrounding nature, a step forward toward greater fluidity of forms and wish to bring the outside inside and the inside outside. As a place for weekend relax it is not just a functional space but its goal is to provide us with good rest, leisure, and picturesque views that never become dull, all in the vicinity of nature.

In the centre of the prolonged structure is a circular courtyard garden with a single tree. This garden, which is in the form of a spiral, is another modern interpretation of the *tsubo-niwa*. The winding roof line further continues the circular movements creating an effect of fluid elegance.

In the Karuizawa region where there is general preference for wood as a building material, concrete was chosen to protect the villa from humidity. Unlike the usual solid, heavy and static concrete structures the architect bends it in the form of a light shell (*Kenchiku Zasshi* 建築雑誌 2010, (125), 130).

The very title of the house suggests seeing nature not as a static unit but as an ever changing, evolving system of which we are an integral part. This project can be viewed as a vivid example of the shift in recent architecture towards greater tolerance of wild nature and attempts to preserve it as much as possible with the aid of recent technologies or a new method in which, with the help of newest technologies, it has become possible for people to cut deeper into the natural world, by starting to make residences for people in the areas that were regarded earlier as uninhabitable.



Figure 23. Michimasa Kawaguchi terraced house in Tokyo in Old Kyoto style. Courtesy of M. Freeman

Here the housing consisting of six units in a three-story terrace on a slope is protruded by tiny gardens created around preserved trees. The trees are growing through the architectural structure. The wall of the bathroom is broken by the branch of the tree. The project prioritized the preservation of existing trees, avoiding felling as far as possible, protecting roots and branches and integrating the surrounding greenery in the interior. One of the façades is irregularly shaped to give priority to the trees. The construction process was extremely difficult. Three-dimensional analyses were given to trees by specifically developed computer program. In some places the foundation was bent into the snake form in order to preserve trees. The building was laid down in the spaces given by the nature. The trees prioritized in the planning give an unexpected quality to the interior space and project itself was proclaimed to be a proof towards a more preserving attitude of wild nature.

# 4.2 Edge tsubo-niwa

The second type of tsubo-niwa are edge gardens that adjoin dwellings creating the dialogue between interior and exterior. The interpretation of interior and exterior is a recurring theme in Japanese architecture. These gardens extend the dwelling into the open space, at the same time creating a buffer against urban surroundings. A special type of Japanese edge garden derives from Kyoto tradition of town houses known as machiya 町家. These houses – which are rectangular and very deep in relation to their façade – typically incorporate a long and narrow garden running











Figures 24-25 (Top-left and centre). Michimasa Kawaguchi terraced house in Tokyo in Old Kyoto style. Courtesy of M. Freeman

Figures 26-27 (Top-right and bottom-left). Edge tsubo-niwa, Kyoto machiya houses. Photos by A. Haijima 2013

Figure 28 (Bottom-right). "Garden Now Heaven", Architect Takeshi Nagasaki, Tokyo. Courtesy of M. Freeman





Figure 32. "Kansai University Mediapark Rinpukan", Osaka. Architects: Miyagi Joichi, Masuda Toshiya, Ohira Shigehiko, Hamaya Tomoyuki, 2006

the length of the property on one side. Here the term 'garden' includes a simple floor of packed earth.

One of vivid examples is architect Michimasa Kawaguchi terraced house in Tokyo in Old Kyoto style (figs. 23-25). Applying this *machiya* garden to a Tokyo house, Kawaguchi employed a wall of vertical wooden planks separated by single bamboo poles and a flooring of cement set with widely spaced small black stones. The same black stones edge the pathway, where they provide the base for a row of simple plantings. Two thick wooden beams have been placed upright near the entrance, one installed with a tap that plays water onto the concrete and a small circle of stones. The beams are topped with  $kokedama \stackrel{\rm H}{=} \pm$ , i.e. decorative plants attractively arranged in moss balls that grow around a sticky mulch (Freeman, Noriko 2008, 76). Narrow edge gardens are frequently seen in Kyoto machiya houses (figs. 26-27).

Architect Takeshi Nagasaki (figs. 28-31) designed this calm Tokyo rooftop garden borrowing Zen concepts. Its name can be literally translated as 'Garden Now Heaven'. The idea for the garden is based on nure-en 濡れ縁, an open veranda attached to a Japanese house, where people can sit and appreciate the moon in it. Here the water is symbolized by the rough surface of the concrete floor, while shore is conveyed by pebbles at one end. The reflection of the moon is represented three times, by a disc-shaped bronze object and two circular glass lights placed in different spots along the floor. Each bears a bamboo impression. Other adapted Zen techniques, including the placement of lights in a way similar to tobi-ishi 飛び石, or stepping stones, the kakei  $\mathfrak A$  bamboo water spouts sandwiched between the planks of the wooden deck seating, which carries the water away, shakkei 借景 borrowed landscape, the gardening technique of framing a distant view to incorporate it in the garden looks, and layers of misugaki





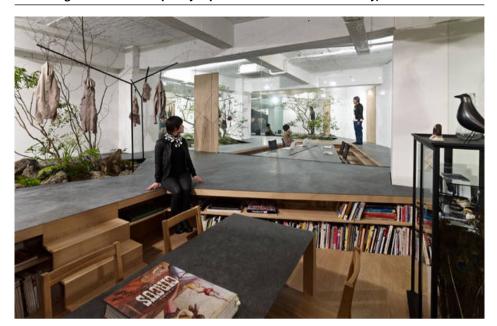
Figures 33-34. Fuji kindergarten. Architects: Tezuka Takaharu, Tezuka Yui

御簾垣 fencing, employing bamboo loosely spaced to allow partial views through it (Freeman, Sakai 2008, 78-83).

The Osaka's "Kansai University Mediapark Rinpukan" features another roof-top garden, which (because of its great scale) as a matter of fact is difficult to incorporate in the *tsuboniwa* category, but this public project itself is interesting because here landscape, architecture and education are blended into one whole. This project demonstrates the Japanese intention to raise the new generation with values of an eco-friendly lifestyle and a greater respect for nature.

The new Mediapark building commemorating University's 120th Anniversary boasts the goal to connect the surrounding environment with the building already in its title and creates a structure that is a park at the same time. The facility was adjusted to the sloping hill creating it into a Hill of Architecture. The entire rooftop is covered with plants. 120 cherry blossom trees have been planted on the roof. Also different environment-friendly technologies have been adopted including 1,600 square metre rooftop green belt, photovoltaic power generation, wind power generation, cogeneration system, rainwater utilization and garbage processing equipment. The building epitomises sustainable campus policy and provides students with opportunity to engage in various activities enjoying the closeness with nature.

While "Cloister House" was designed for a single family, Fuji kindergarten (figs. 33-34) is a public project made for 500 children. About this structure we can say that architecture does not oppress and constrain a person inside but rather liberates him/her. Here the roof of the oval shape structure is made in a way that children can run around on the roof and they love to do that; besides, projecting through the roof deck are three preserved zelkova trees that create a natural playground for the children. Kindergarten photos show that children like to play next to trees rather





Figures 35, 36. (From top to bottom) Work Oasis: Office and showroom for fashion label, Kobe. Architect: Yuko Nagayama & Associates, Tokyo. Landscape architect: Toshiya Ogino. Courtesy of Daici Ano





Figures 37-40. "ES house-02", Osaka. Architect Yada Asashi, 2012







Figure 41. Corner garden in front of the temple, Kyoto. Photo by A. Haijima 2013

than any other places. Children who have climbed the trees, sat in their shade, listened to their sounds and felt their smell should not grow up as people who will thoughtlessly demolish nature for their convenience.

The last two public projects show that architecture and landscape gardening are closely tied up with society and here they help as an aid to educate a new generation with greater awareness of the environment.

#### 4.3 Corner tsubo-niwa

Another type of pocket gardens are the ones arranged in the corner. Despite being tiny, they have the advantage of being designed for places that might be ignored or neglected (fig. 38). Corner pocket gardens do not require many materials or a sophisticated technique, so they are often seen at the entrances, as corners of rooms and patios, even as corners of the building façade. They fill in the gaps, punctuate volume and create points of view at strategic locations. Very often these small compositions surprise, catch the visitor's eye causing him to stop, pause and look. Here every possible space is employed.

Figures 35-37 depict the office for fashion label Sisii in the densely wooded foothills of Mount Rokko, a local recreation area that features several tiny gardens inside the office. The landscape planner Toshiya Ogino decided to bring the woods into its interior. Employees and customers entering the showroom with its integrated office areas take four steps up from the street and immediately find themselves on steel-plate pathways leading between oases of green. The flooring, which is black in colour due to the phosphoric acid with which the steel was galvanised, continues through the interior and in places is folded up towards the ceiling to form



Figure 42 (Top). "House in Minami Danbara", Hiroshima. Architect: Yamashita Hiroyuki, 2012

Figures 43-44 (Bottom). Toshiya Ogino, House in Tondabayashi. Courtesy of M. Freeman, 2008





partitions, or cut away altogether to reveal sunken spaces where meetings are held or employees are able to work undisturbed. At this lower level the surface of the flooring is repeated on table tops, while wooden compartments installed beneath the raised floor act as storage space for less decorative but indispensable items such as folders, printers and other office materials. Here and there the steel membrane has the appearance of being punctured by greenery, as if nature was forcing its way through the man-made floor surface with trees, shrubs, ferns and moss growing between lava stones in a complex solution made up of planter troughs and watering, drainage and ventilation systems. Since the plants do not have enough daylight in the interior, the showroom lighting stays on day and night.

"ES house-02" is located in an urban area with little free space (figs. 38-40). The family's life is enclosed in a large reinforced concrete box, which is an 'external shell' that protects the family not only from disaster and crime, but also from urban noise and pollution while capturing nature between them. Light, wind and rain are brought through the slits and holes made on this exterior shell into the interior. Three small gardens consisting of simple plants that do not require much care within the building create natural environment with high mutability, that is the ability to change according to season, weather, daytime. In this house the air blows bringing the season smells; people hear the sound of rain and enjoy sun rays (Kenchiku zasshi 建築雑誌 2012, 158).

# 4.4 Image tsubo-niwa

The fourth type of pocket gardens are image gardens where the small size garden can be taken in a single glance. The designers create them as images, often framed like a picture. In some of these gardens their elements – plants, stones, rocks, etc. – are used primarily for compositional effect; in others a certain symbolic meaning is invoked.

The "House in Minami Danbara" (fig. 42) contains a vivid example of image tsubo-niwa. Situated in an area with a high concentration of condominiums, this building was conceptualised and designed to provide all the comforts of living and still protect privacy for a married couple. Shielded by walls on four sides and with no opening to the street, a living space was created where residents can feel light, wind and spaciousness while still being isolated from the neighbourhood. On the first floor, the area is equally divided into four squares, one of which is a courtyard, serving as an entrance as well as an extension to the living room. Adjacent to this is a tea ceremony room with its own distinctive quality: a lower ceiling and a window featuring a nijiriguchi  $\mathbb{H}^{\mathfrak{h}}$   $\mathbb{H}$  – a small entrance to a tea ceremony room – through which the courtyard can be viewed. By making











Figures 45-49 (Bottom). Elements of nature in shop displays, Kyoto 2013. Photo by A. Haijima

use of different kinds of openings (full open windows, top lights and low windows), connection to external space and daylight is controlled. As the natural sunlight comes from different angles, shadows are cast on the white walls and together with carefully considered tree shapes and their locations creates pictures (建築雑誌 2012, 168).

Toshiya Ogino's designed house in Tondabayashi (figs. 43-44) has gardens designed with symbolic imagery. In the central courtyard, he focused the composition on two large flat stones that represent the sun and the crescent moon, and also form part of the stepping stones across the white gravel and moss that link the rooms.

On another side of the house, a garden area is accessed from a large tatami room by  $sh\bar{o}ji$   $\not \equiv \uparrow$  sliding screens. Here a magnificent pine symbolises connections to the past through its exposed roots, which rise up from a carefully sculpted mound of moss and stones surrounded by white pebbles (Freeman, Sakai 2008, 208-9).

As exemplified by the popularity of *tsubo-niwa* in the modern Japanese architecture, elements of untouched and unpolluted nature in general, which recently in Japan have become quite scarce and expensive, have made 'nature' an attractive tool of marketing in other spheres of city life too: a flower pot with miniature landscape placed at the entrance of a hotel in a narrow street, fresh vegetables in the basket, bamboo mat, maple leaves decorating meals on display in the restaurant window, promising customers healthy products, relax from concrete and the steel structures of the city (figs. 45-49).

Nature is much commercialised in Japan. The less of it is left, the more expensive it gets. Many Japanese have a nostalgia towards the quiet clean country environment that they used to experience in their childhood. This causes the constant search for nature and its restoring powers even in the most high-tech structures.

## 5 Essential Features of tsubo-niwa

Next, I would like to focus on the essential features of *tsubo-niwa* trying to understand the Japanese way of treating nature:

1. Nature is seen through the prism of culture. Japanese look at nature through the prism of culture. The bush is not beautiful if it is not trimmed. Contemporary Japanese architect Tadao Andō (1941-now), when describing the three main principles that guide his work, listed "Materials, Geometry and Nature". When he spoke more particularly about nature he said that he did not mean raw nature, but rather domesticated nature, nature that has been endowed by man with order and is in contrast with chaotic nature (Andō 1990, 4).

- 2. Artificiality. The concrete buildings designed by Andō look quite artificial. In his lecture entitled "Architecture in Harmony with Nature" he admitted that the construction of buildings and the protection of the environment are contradictory, and the fact that they both exist in a state conflict within him makes things difficult" (Andō 2002). In many tsubo-niwa designs we saw that, despite trying to get closer to nature, the compositions were quite artificial.
- 3. Distilled nature. In ancient Japan there was no word as 'nature'. The words that were used ame-tsuchi 天土 (heaven and earth), yama-kawa 山川 (mountains and rivers), ue-sue 上末 (above-end) speak of separate entities extracted from nature (Fujita 2012). Western people saw nature as one whole. When Japanese try to imitate nature they extract a few essential elements from the whole, limiting themselves to a few species that are carefully chosen following the principle "less is more".
- 4. Putting nature in the box, framing. Japanese architecture where right angles and rectangular forms prevail naturally causes designs where cubic forms dominate with a tendency of putting objects into a closed space, either surrounded by walls, framed or put in the box. By this artificial border they separate the so-called 'domesticated' nature from the 'raw' nature outside.
- Miniaturization. Another important feature is the miniaturization, reduction of size. Cosmos represented in microcosm has roots in Buddhist thought but there are also pragmatic reasons for small scale gardens. In general, Japanese are known for their preference for tiny and refined objects in their culture. Vivid examples are netsuke 根付 (carvings in wood or ivory), bonkei 盆景 (tray scenes; also said ko-niwa 小 庭 'little gardens', or toku-niwa 床庭, 'bed/floor gardens'), the art of creating miniature gardens in planters, ceramic vessels, or carved wooden trays is mentioned in the eleventh-century Sakuteiki 作庭記 (A Record of Garden Making). Sometimes, a tray garden would be placed on a raised stand in the garden of an aristocratic shindenzukuri 寝殿造り residence, or in a tokonoma 床の間. However, the art came originally from China, where it was known as penjing 盆 景. Philosophically, the idea of adding a tsubo-niwa 壺庭 derives at least in part from *penjing*, which was an attempt to invoke harmony and unity within buildings. "At a fundamental level of the harmony of opposites 陰陽 (yin-yang)", speculates Michael Freeman, "they bring restorative powers of nature in symbolic form to the interior environment of a home" (Freeman, Sakai 2008, 7). Related to bonkei is bonseki 盆石 (tray rocks), the art of 'growing' rocks in shallow trays. Miniature landscapes are recreated with rocks lying in, or surrounded by, sand or gravel. These intriguing rocks often imitate the Mystic Isles of the Blessed, or evoke cranes and turtles,

both symbols of longevity. The aesthetic principles of composition are based on asymmetry and triangular balance and, coupled with the paucity of materials and purity of design, they have led some scholars to speculate that dry landscapes (karesansui 枯山水) may have developed out of these art forms.. Closely related to tray gardening is bonsai 盆栽 (tray planting), the art of cultivating miniature trees and shrubs. Most practitioners of this art insist that bonsai is not about stunting or physically harming the plants, but involves the judicious pruning of branches and root systems in conjunction with the application of careful training. Although the Chinese are credited with originating bonsai, the fundamental concept of cultivating dwarfed plants may have come from India. It was introduced into Japan along with so much of China's culture around the late Nara period (710-794). Of course, the inspiration for miniature flora comes from nature as well. Looking at the blasted coastlines of China, Korea and northern Japan, or the windswept upper reaches of any mountainous region, we can find plants naturally dwarfed or contorted by lack of nutrients, poor or salty soil, insufficient sunlight, and prevailing winds.

- 6. *Simplicity, austerity*. Some gardens are designed without flowers or trees in simple colours.
- 7. Practicality. People prefer spots of nature in their homes that require minimum care or are maintenance free. Recently many tools have been invented as automatic watering system or aqua soil that keeps moisture longer than the usual one and gives relax for the owner since they keep him/her away from watering plants too often. From the examples above we can judge that Japanese have developed an individual outlook on nature and original design that inspires trials in new realms. Small gardens are economical: they occupy tiny space, require little materials to build and are cheap.
- 8. *Tranquillity*. Japanese try to construct visually restful and tranquil views, trying to escape from urban noise, stress, keeping their private life far away from the public eye. Spots with calm beauty quiet the heart while dreams hold sway.
- 9. *Unity of inside and outside*. Gardens are integrally connected with the architecture and the life of the inside. Modern architects tend to blur the line between different parts of the building, inside and outside.
- 10. Light shades. Light the source of it and the way it enters the garden is an important factor. Architects carefully plan how the light will fall into the garden since it influences the overall composition. Light can fall from above, creating a nice effect. It can shine from the side reflecting on the wall or on the water surface. Light can

- enter only partially through the fence or *shoji* screens creating a relaxed atmosphere.
- 11. *Cool, damp, shady.* Pocket gardens are often arranged in places that are not pleasant for people to stay, but in which plants endure. *Tsubo-niwa* are found within areas formed by the junction of buildings, under the overhang roofs or between buildings. It may be due to the reduction of natural light that they are austere, dry landscapes featuring sand and small rocks. They are often shady, receive a good deal of the run-off from neighbouring roofs during rain and snow. This cool, damp shadiness is reflected in the predominantly shiny, dark green flora frequently encountered in *tsubo-niwa*.
- 12. *Finely crafted details*. Gardens are pleasant when they are well cared, clean, and each detail is well-tended. The visual order probably stimulates the viewer's inner order and harmony.
- 13. *The presence of four seasons*. Many of the garden compositions are made in a way, that they are enjoyable in all four seasons, different times of the day, weather conditions.
- 14. *Rusticated elegance*. Many *tsubo-niwa* compositions include plants with simple yet stylish elegance, like pampas grass. These plants, which may not have bright flowers, are appealing to the eye.
- 15. Interval in time and space. Beauty can be found also in laconic compositions cherishing emptiness. This feature is often called ma 間, describing empty spaces, vagueness, abstraction, asymmetrical balance and irregularity. Silence, empty space and interval play an important role in Japanese culture. Already in the eighth century the poets used the word ma 間 to express the misty spaces between mountains and as a marker of the passage of time. By the eleventh century, the word defined the gaps between pillars in Japanese rooms and the in-between spaces of verandas that separated the interiors of buildings from their adjacent gardens. By the nineteenth century it described the pauses in action in Kabuki theatrical performances. Kawai Hayao (1928-2007), Japan's first Western trained Jungian psychoanalyst, incorporated Buddhist values into his ideas about psychology, describing the key to understand the psyche as a "hollow center", a reference to the Buddhist concept of mushin 無心 meaning 'emptiness' (Graham 2014, 40).

# 6 Negative Aspects of the Japanese Way of Treating Nature through the Example of tsubo-niwa

As seen from the examples above, Japanese have developed a unique way of seeing nature and offer original ideas for design, though at the same time there are certain points for concern:

- Nature is adjusted to the needs of the person and admitted in people's dwellings only to serve their basic needs. Most people are concerned with adopting it for their necessities but not so much with protecting and saving nature itself.
- 2. Domesticated nature does not provide so many changes in its looks and condition as the raw one.
- 3. Artificiality.

#### 7 Conclusion

As shown with the example of *tsubo-niwa* Japanese tend to see nature through the prism of culture. Wild and untamed nature is abhorred. However, in the recent projects we see that there is a tendency towards a greater acceptance of nature in its raw form. To protect nature means to change the dominant perception of nature as a static world into seeing nature as heterogeneous, constantly changing and evolving system of which we are an integral part. Nature should be viewed as a passive and vulnerable identity that must be protected from the interests of humans.

Particularly after Fukushima disaster Japan has become the country with one of the most degraded environment in the world. Through the examples of new architecture, modern gardens and the way Japanese organise their everyday environment, as demonstrated in this article, we can see that Japanese are aware of this and have shown a greater wish to coexist with nature in this 21st century. If beforehand nature was demolished to give space of living for people, now we are one step forward towards a greater tolerance of nature. Japanese being conscious of their mistakes towards nature and aware that the suffering of nature will eventually influence their own lives, are developing one of the best environmental-friendly technologies in the world and are demonstrating their wish to educate the new generation with values of respect towards the world's ecosystem, an eco-friendly lifestyle and a respect for the traditions. In the field of modern architecture and garden art, as demonstrated in this article, instead of blindly copying achievements of other countries, Japanese place great value in their own ancient traditions and give them a fresh interpretation in the 21st century.

Meanwhile it is possible to conclude that, within the long period of the development of the Japanese gardening art, Japanese have achieved a highly sophisticated level in mimicking nature and have worked out a number of techniques to secure comfortable living and proximity of nature even in the derogated city environment suffering from intense urbanisation, overpopulation, noise, pollution and other unfavourable conditions. The nature that accompanies Japanese life in the cities is a domesticated one or, as Shirane calls it, a "secondary nature", the function of which is to "create an ideal environment through linguistic, visual, tactile, and alimentary means" (Shirane 2012, 16).

Besides, as the above-mentioned kindergarten and the university projects show, Japanese place importance on educating the younger generation in an eco-friendly way, which incorporates such elements as teaching responsibility and care towards the environment from an early age. Meanwhile Japanese do not perceive nature in the way as, for example, Deep Ecologists postulate; rather, their approach is more practical, trying to balance the interests of nature and those of people, even though in some recent projects they give more way to the nature. The previously-described modern projects of *tsubo-niwa* testimony to the search of a new balance between man's activities and nature within a renewed attitude towards nature in the twenty-first century.

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