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# Hearing a *shakkei*: The semiotics of the audible in a Japanese stroll garden

**Abstract:** Though there has been some interest in the semiotics of Japanese gardens (Casalis 1983; van Tonder and Lyons 2005) as pure visual articulations of landscape elements, attention to what Schafer (1977) and Truax (2001) identify as a garden’s soundscape has been lacking. This paper investigates the gardening technique of *shakkei* (borrowed scenery) in the Tokyo garden Kyu Furukawa Teien. Utilizing the terminology of Schafer and Truax, I construct a Greimas square to interrogate the semiotic function of the *shakkei* in light of traditional Japanese uses of Chinese geomancy, and to further investigate the garden’s synthesis of landscape and soundscape elements.

**Keywords:** Japanese garden; soundscape studies; semiotic square; geomancy; landscape

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## 1 Introduction

It is perhaps the overwhelming visual impact created by Japanese garden design that has led many recent investigations (Casalis 1983; van Tonder 2007; van Tonder and Lyons 2005; Yamaguchi et al. 2008) to attempt to decode the spatial proclivities and underlying properties of such spaces as meaningful manifestations located purely within the concept of landscape as a topographical phenomenon. That the Japanese garden has been most commonly reducible to a tenet of “minaturization, in which elements such as rocks and ponds are used to represent large-scale landscapes,” (Young et al. 2005: 20) is perhaps a natural consequence of what Carlson (2000) views as the dialectical relationship they establish between the natural and the artificial. What is often overlooked is what impact their spatial manifestations of landscape form have on their resulting acoustic qualities, or what composer and theorist R. Murray Schafer (1977) calls the conditions of a *soundscape*. For Barry Truax (2001), a soundscape represents not merely the presence of an acoustic environment (which could be natural or simulated),

but also the potential of such an environment to communicate information to a listener. Both Truax and Schafer have argued that, in particular, natural environments and their acoustic behaviors produce particularly meaningful experiences to auditors, and thus the sounds within them constitute a type of mediating language between listener and environment. It is from this position that the field of acoustic ecology arose in the 1960s. Initially conceived as a means to better understand and classify the urban acoustic environment and the plethora of technologically mediated sonic objects within it, Schafer derived the term soundscape from the word landscape. As a foil to his conception that a landscape constitutes all objects within a visible environment (Raimbault and Dubois 2005), Schafer defines a soundscape as representing all *auditory* phenomena within a given environment. Through the establishment of the World Soundscape Project (WSP) at Simon Fraser University in Vancouver in the early 1970s, a diverse number of researchers from music composition, sociology, acoustic engineering, and urban design initiated a multi-disciplinary investigation into urban soundscapes. The group sought to initially interrogate the notion of noise pollution within cities as a way to propose new approaches to urban sound design. The field of acoustic ecology grew from this research group as did their codification of a new acoustic terminology and analysis methodology to describe a soundscape and the semiotics of its constituent parts.

## 2 Soundscape and the Japanese garden

Though the Japanese language terms for landscape (*fukei* or *keikan*) have been studied in contemporary usages (Gehring and Kohsaka 2007), the concept of soundscape, and in particular, the Japanese garden as a soundscape encounter, has not gained wide attention. This may be because, as Imada suggests, Schafer's concept of soundscape is Western-centric, though he also notes that "the traditional way of listening in Japan involves a sort of amalgam of environmental sound, instrumental sound and any other environmental facts" (Imada 2005: 14). Within the two surviving historical Japanese garden treatises, the eleventh century *Sakuteiki* (The Classic of Garden Making) and the fifteenth century *Senzui narabi ni yagyō no zu* (Illustrations for Designing Mountain, Water and Hillside Field Landscapes) there is no mention of gardening for acoustic effects. Instead, both concentrate on technical and visual aesthetic aspects of garden construction and design, and stress the role of the garden designer as one who synthesizes the extant topographic features of the site with introduced rocks and landscape features so as to suggest naturally found formations and conditions. Though

there is no documentation of the potential effects on the surrounding acoustic environment of the introduction of such features, the contemporary Heian (eleventh century) text *Genji Monogatari* (Tale of Genji) contains a considered passage on the effects of tuning a water feature:

The new grand Rokujo mansion was finished. . . The hills were high and the lake was most ingeniously designed. . . Clear spring water went singing off into the distance, over rocks designed to enhance the music. There was a waterfall, and the whole expanse was a wild profusion of autumn flowers and leaves. (Seidensticker 1976: 384)

This excerpt suggests that at some level the concept of acoustic design as a gardening technique was evident in the Heian period even though such techniques were never formally codified within the two extant treatises. The only Japanese gardening technique that has received wide attention, in both the traditional treatises and later discourses outside of the discipline, is the technique of borrowed scenery or *shakkei*.

Nute (2003) describes the technique of *shakkei* as one involving the procuring of a remote scene as a way to extend the perceived viewing area of the garden. This is usually achieved through the creation of a viewing frame of a low wall or grove of trees or shrubs. The frame trims the raw view aesthetically and may simultaneously incorporate a use of forced perspective as a means to conceal the true distance from the viewer to the exterior landscape feature. As such, Nute observes that: “In being visually connected to a recognizable feature in the landscape, the viewer not only knows unmistakably *where* they are, but through the apparent merging of the tectonic and the natural, is also made to feel that, like the garden, they too in a sense belong there” (Nute 2003: 21).

Perhaps one of the most stunning contemporary examples of *shakkei* in Japan occurs in the garden at the Adachi Museum of Art in Yasugi-shi, Shimane-ken (Figure 1). The garden, built in 1970 by Kinsaku Nakane, is located in a favorable topographic context akin to Kyoto’s numerous temple gardens enclosed by the Tamba highlands. The garden uses the technique of *shakkei* in a rather virtuosic manner to blur the distinction between what lies inside and outside of the garden. But Nakane’s use of *shakkei* goes beyond merely borrowing the exterior landscape, instead he accesses what Itoh (1983) describes as the true meaning of *shakkei*, that of capturing the surrounding landscape hostage:

In its original sense, however, *shakkei* means neither a borrowed landscape nor a landscape that has been bought. It means a landscape captured alive. The distinction here is peculiarly Japanese, and it reflects the psychology of the garden designers . . . when something is borrowed, it does not matter whether it is living or not, but when something is captured alive, it must invariably remain alive, just as it was before it was captured. . . From

their [the gardeners'] point of view, every element of the design was a living thing: water, distant mountains, trees, and stones. . . Understanding of the term *shakkei* does not mean a true understanding of the concept unless there is an actual sensation of what it signifies. (Itoh 1983: 15)



**Fig. 1:** *Shakkei* technique at the Japanese garden by Kinsaku Nakane (1970). Adachi Museum of Art, Yasugi-shi, Shimane-ken, Japan

In doing so, the garden at Adachi presents the dialectic to the viewer of where does the garden end and the outside begin? From numerous vantage points the foreground garden acts as portal or framing device in which Nakane's attention to design scale, form and local topography, usurp the exterior landscape as synthesized extension of the immediate viewing space. As such, the boundaries of the garden suddenly become infinite, and as Nute has noted, an underlying structural condition emerges that seems to synthesize viewer with landscape.

But the sense of a *shakkei* as operating wholly on the level of the visual articulation of landscape form is not what the original Chinese term exclusively referred to. The term first appeared in the 1634 Chinese garden treatise *Yuanye* (Chiu 1997) and as Kuitert (2002) notes:

The borrowing of scenery is not only the borrowing of a visual scene: The intent extends to inviting a liberating sense of natural landscape that affects all five senses and differs per season. Nestling swallows are invited, as are soft winds, cool breezes, and the seasonal perfumes of flowers. *Shakkei* must have been understood in this wide meaning in seventeenth-century Japan as well: China and its sense of landscape was no remote thing. Nevertheless it is only the visual aspect of the *shakkei* technique that has recently received much attention. (Kuitert 2002: 177)

Within the Tokyo garden *Kyu Furuakwa Teien*, there is a particularly striking example of *shakkei* that operates within the realm of the garden's soundscape rather than its immediate visual framing of interior and exterior space. By examining the spatial and geomantic context of the garden and using soundscape terminology devised by Schafer (1977) and Truax (1999), I will attempt to extrapolate a deeper picture of the semiotic function of the *shakkei* at *Kyu Furuakwa Teien* using a combination of what Ryan (2007) distinguishes between the coding and diagramming methods of Todorov (1969) and Greimas (1966).

### 3 *Kyu Furukawa Teien*

The garden *Kyu Furukawa Teien* is located in Tokyo's northern Kita-ku ward and was originally completed in 1917 as part of the private residence of the Furukawa family at Komagome. The site is unusual in many respects, notwithstanding the dramatic topographic falloff (ten meters) from the northeastern to southwestern corners, but also the rough division of the site into Western influences and Japanese influences. The edge of the escarpment naturally divides the English lawn, rose bed garden and Western style house (designed by Josiah Conder) from Ogawa Jijei's Japanese garden below (Figure 2).

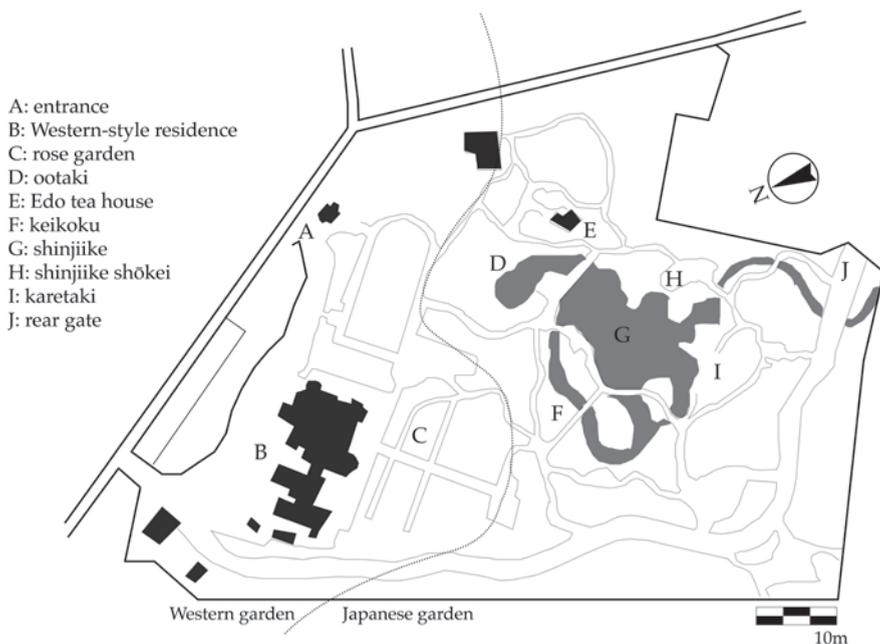


Fig. 2: Site plan of *Kyu Furukawa Teien*, Kita-ku, Tokyo Japan

Ogawa's garden is an excellent example of a Taisho period amalgamation of different influences from previous Japanese gardening periods. As a stroll garden or *chisen-shiki-kaiyū-teien*, a large pond called *shinjiike* is central to the site, from which a large waterfall, *ootaki*, feeds the pond from the northeast and a small river empties the water to the southwest. Numerous paths circumnavigate *shinjiike* and through the technique of *miegakure* a visitor's movements through the garden is carefully orchestrated so as to both reveal and focus awareness on specific aspects, features, or sounds within the garden at particular points. In addition to *shinjiike* and the *ootaki* there are three other recognizable (and formally named) landscape features within Kyu Furukawa Teien that are encountered on the circuitous path: *keikoku* (a small ravine), *karetaki* (a dry waterfall), and *shinjiike shōkei* (a seated area for viewing *shinjiike*).

Of particular note for this study is the geomantic connection between the *ootaki* and *karetaki* and the semiotics of the auditory encounter that binds these two features. According to Keane, the use of geomancy (Jp. *eki* or *fūsui*) in Japanese garden design involves the consideration of a "universal structure based on the opposing yet complimentary principles of Yang (the positive, active force) and Yin (the negative, passive force) and their mutual effects on the five basic elements: wood, fire, earth, gold (metal), and water" (Keane 1996: 24). The influence of Chinese concepts of *Yin* and *Yang*, or in Japanese *in* and *yō*, can be readily traced in the structural relationships within Kyu Furukawa Teien. The most obvious binary pairing within the garden is that of wet and dry, embodied in the *karetaki* (dry waterfall) and its counterpart the *ootaki* (waterfall).

The *karetaki* (Figures 3 and 4) is a feature designed to subtly suggest the movement of water purely through the placement of rocks. A considered articulation of rounded river stones and more oblique textured rock grain is used to represent the falling, flowing and gentle dissipation of water into *shinjiike* from a hidden source. The composition suggests both unique interconnecting scales of time and motion as the illusion of fast flowing water falling downwards is captured in the grain of a large rock in the background of the scene. The moving water is gradually slowed through the intermediate pools below, denoted by small round river stones that mark out the movement of currents and eddies. Eventually the water stalls and spreads as it feeds into *shinjiike*, with large flatter stones or *sawatari* (stepping stones) delicately leading the visitor across this threshold. Ogawa places rounded widely spaced *sawatari* as the means to cross the *karetaki* in an effect that Miller (1993) identifies as a commonly used technique for temporal manipulation by Japanese gardeners. The focus and dictation by the garden designer on evoking a slower walking rhythm through the *karetaki* creates a different type of awareness for the visitor that is highly considered and serves a particular auditory purpose. The general slowing down of the visitor at

this point allows for what Blesser and Salter (2007) might argue as conditions that lend themselves to a heightened spatial auditory awareness. In the context of Kyu Furuakwa Teien, such an opportunity then leads to the revealing of the garden's *shakkei* as one that relies not on a specific capturing of a distance landscape, but a distant soundscape. The situation of the *ootaki* to the northeast working together with the acoustically reflective water of *shinjiike* and various bordering rocks of its shallows allows sound to efficiently travel the sixty meters between the two sites, which are nominally hidden in visual terms. This means that at the threshold of the *karetaki* and *shinjiike*, during the visitor's act of negotiating the *sawatari*, one not only sees the denotation of moving water, but also *hears* moving water from the distant *ootaki*. In what Kawarada and Itoh (2000) have noted as the inverse relation between the rise in urbanization in Japan and the general



**Fig. 3:** *Karetaki* at Kyu Furukawa Teien, Kita-ku, Tokyo Japan. Round river stones denote slow moving water and angular rock grain falling water

decline in visual manifestations of the technique of *shakkei* within Japanese gardens, the encounter at the *karetaki* at Kyu Furuakwa Teien validates the indigenous Chinese concept of *shakkei* as encompassing more than simply a visual articulation of space (Chiu 1997) – here it is manifest as an auditory borrowing, facilitated through an auditory window. That the *shakkei* at the *karetaki* is one in which the sound of distant water from the *ootaki* acts as a complimentary element, also points to the geomantic concepts of balancing the forces of *in* and *yō* within the garden. That these two features are opposite in terms of materiality, the *in* energy within the moving water of the *ootaki* versus the *yō* energy in the static rocks that denote moving water of the *karetaki*, is further offset by their symbolic articulation on the east-west divide of the site.



**Fig. 4:** *Karetaki* at Kyu Furukawa Teien, Kita-ku, Tokyo Japan. The path across the *karetaki* is negotiated via *sawatari* (stepping stones)

For Schafer and Truax the semiotics of the encounter at the *karetaki* and its binary pair the *ootaki* (Figure 5) can be understood in terms of the function of the auditory events at each landscape feature. The three fundamental terms of acoustic ecology that are used to investigate the typology of a particular soundscape are *soundmark*, *keynote sound*, and *signal* (Schafer 1977; Truax 1999). Like the term soundscape itself, the term soundmark is a derivative from landmark and indicates “a community sound which is unique or possesses qualities which make it specially regarded or noticed by the people in that community” (Schafer 1977: 10). Truax notes that typical soundmarks include church and temple bells, town square clocks or foghorns (Truax 1999). Schafer devised the term keynote as one

based on the musical notion of key center or home tonality. It is a means to describe an anchoring sound within a soundscape: “keynote sounds are those which are heard by a particular society continuously or frequently enough to form a background against which other sounds are perceived” (Truax 1999). Such sounds are also described as drones and examples include the sounds of the sea for maritime communities, air conditioner or fan noise as well as the sounds of traffic in cities. Augoyard and Torgue (2005) consider drones as analogous to a ground against which other acoustic figures emerge, but also as indicators to the qualities of a space in terms of acoustic fidelity. The third key term used for auditory classification is signal, and they are regarded as foreground sounds within a soundscape. Within urban contexts this sound class may subsequently be comprised of electronically generated auditory warnings (sirens, horns, etc.).



**Fig. 5:** *Ootaki* waterfall at Kyu Furukawa Teien, Kita-ku, Tokyo Japan

## 4 Coding and diagramming soundscape/landscape elements

Examining more closely the soundscape at Kyu Furukawa Teien, and in particular, the acoustic relationship between the *ootaki* and the *karetaki* reveals an important connection between the auditory objects of *keynote* and *soundmark* and the topographic objects of rocks and water. That there seems to be an inherent interchangeability between Schafer's concept of soundmark and keynote is evidenced when one closely examines the site context and traces auditor expectations of the sounds within that environment. For example, at the *ootaki*, the landscape feature of the waterfall emerging from a ten meter high drop is complimented by the boisterous soundscape of its falling water. As a telling acoustic phenomenon, those sounds are meaningful within the larger context of the garden and present visitors an articulation of the site in auditory terms. Paths from the garden entrance lead us gradually towards this soundmark, whose situation in the northeast of the garden, and as one emerging from a northern mountain represents what Berthier (2000) describes as a traditionally Daoist conceptualization of space. In an arrangement reminiscent of a traditional Heian-era garden, the energies of *in* and *yō* are balanced in regards to the voids and fluids (falling and still water) countering the masses and solids (rocks and earth) (Keane 1996: 24).

But walking further along the route and onto *shinjiike shōkei* the visual focus of the *ootaki* is quickly subverted to the qualities of the pond and numerous plantings along the path. After leaving the viewing area of the *ootaki* the sound of the falling water quickly becomes an acoustic background to the qualities of the path and viewing area of *shinjiike shōkei*. The sounds of the *ootaki* have now become a keynote of the garden, a constant background foil propagated by the wide frequency range of the sound of falling water, drop in sound pressure level, filtering effects from trees and ground plantings, and the reflective nature of the rocks and gravel paths. These conditions make the encounter at the *karetaki* directly southwest of the *ootaki* a rather special one.

The soundscape at the *karetaki* then is one in which the landscape features readily suggest an auditory analogue. The sounds of the *ootaki*, though in the background and practically functioning as a keynote, are now foregrounded as meaningfully as a soundmark. The distance sound of falling water is no longer a drone, but has a particular semiotic function: complimenting the implied movement of water sculpted in the rocks with an actual acoustic artefact. The *shakkei* at the *karetaki* is then perhaps best conceptualized as one triggered by the recontextualization of the soundmark of the *ootaki*. One can thus consider the

connection between landscape and soundscape elements within Kyu Furukawa Teien as one predicated on a sound class transformation function.

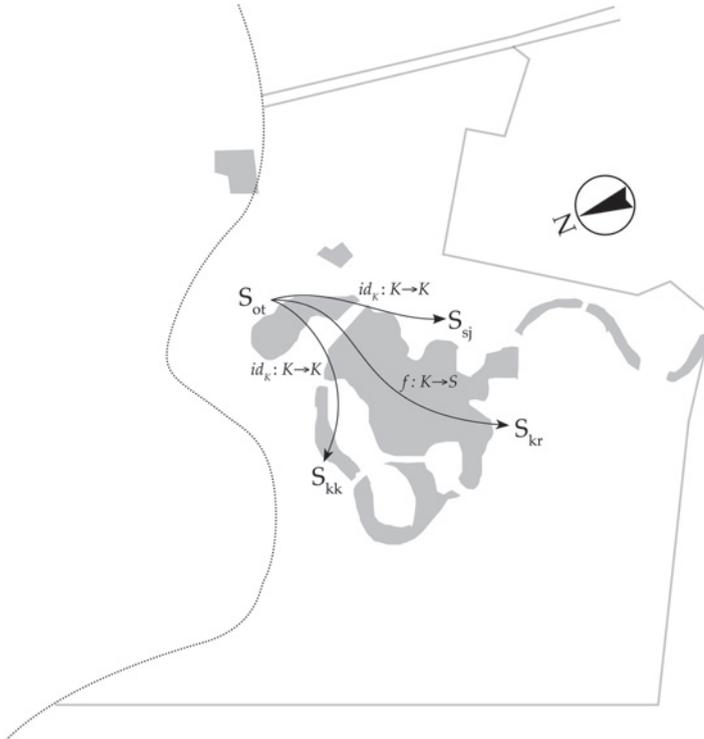
Given the predominance of the *ootaki* as the primary soundmark of the garden and its acoustic range across the three sites of *keikoku*, *shinjiike skōkei*, and *karetaki*, we can readily identify a shared *acoustic arena* (Blessner and Salter 2007) in which the sounds of the *ootaki* permeate the site, and thus can be heard from each of the other named landscape features points within the garden (Figure 6). Within the geography of this acoustic arena we can then further deduce two types of mappings (or T-functions) of soundscape classes of Kyu Furukawa Teien. These occur as both as a mapping of keynote onto itself at *shinjiike shōkei* ( $S_{sj}$ ) and *keikoku* ( $S_{kk}$ ), and as a soundmark onto itself at the *ootaki* (operations that can also be described as identity function mappings), but also as the transformation of keynote into soundmark at the *karetaki* ( $S_{sj}$ ). These transformations can be thus expressed symbolically as:

$$\begin{aligned} T^1 &= id_K : K \rightarrow K \\ T^2 &= f : K \rightarrow S \\ T^3 &= id_S : S \rightarrow S \\ \text{where } f_o id_K &= f = id_{ko} f, f_o id_S = f = id_{so} f, \\ K &= \text{keynote}, S = \text{soundmark} \end{aligned}$$

The first and third T-functions ( $T^1$ ,  $T^3$ ) are identity functions which can also be expressed as  $f(K) = K$  or  $f(S) = S$  where every element of  $K$  or  $S$  are mapped to themselves. This implies that at the site of the *ootaki*, the emanating soundmark is directly attributable to the immediate landscape feature, and similarly, when at *shinjiike shōkei* and *keikoku* the sound of the distance falling water constitutes a keynote given the immediate landscape conditions at those sites are non-referential in regards to falling water.

The second transformation,  $T^2$ , is a function in which a keynote,  $K$ , is transformed into a soundmark,  $S$ . This is the case at the *karetaki* in which the *shakkei* is one in which the sounds of falling water are denoted in the immediate landscape conditions. This also implies that the acoustic arena ( $AA$ ) of Kyu Furukawa Teien is expressible as a set of sites for which two important subsets can be defined by the first and second T-functions. Using a set builder notation this can be expressed as:

$$\begin{aligned} \text{Let } AA &= \{S_{ot}, S_{sj}, S_{kr}, S_{kk}\} \\ AA \supseteq_{EW} x &= \{x \in AA \mid \forall x \in AA, f(x) = T^1\} = \{S_{sj}, S_{kk}\} \\ AA \supseteq_{NS} x &= \{x \in AA \mid \forall x \in AA, f(x) = T^2\} = \{S_{ot}, S_{kr}\} \end{aligned}$$



**Fig. 6:** T-function mappings of soundscape elements, keynote (K) and soundmark (S) at named landscape sites of Kyu Furuakwa Teien

The acoustic arena,  $AA$  is a set containing all the named sites of the garden: *shin-jiike shōkei* ( $S_{sj}$ ), *keikoku* ( $S_{kk}$ ), *ootaki* ( $S_{ot}$ ), *karetaki* ( $S_{kr}$ ). When extracting the two subsets, limits corresponding to geographical orientation of east-west (EW) or north-south (NS), allow for derivative subsets that are defined by the two previously described T-functions  $T^1$  and  $T^2$ . These two subsets of  $AA$  thus reinforce the manner in which garden balances the *in* and *yō* forces given that  $\{S_{ot}, S_{kr}\}$  lies on the east-west axis ( $X_{EW}$ ), and  $\{S_{sj}, S_{kk}\}$  lies on the north-south axis ( $X_{NS}$ ).

In traditional Heian garden geomancy, the balancing forces at the absolute cardinal points of the compass are also offset by the relationship between quadrants (Figure 7), and also the idea that “almost all manner of things were perceived as being a result of the interrelated effects of the two energy fields [*in* and *yō*]” (Takei and Keane 2001: 71). Thus the pairing of the *ootaki* and *karetaki* in the north-eastern sector and south-western sector also corresponds to the idea that Nitschke (2003) identifies as the *topomantic* feature of an idealized landscape

which embodies the northern mountain range and the southern fertile plane (“descending *in*” and “descending *yō*”), and which is also attributable to the pairing of midnight and winter versus noon and summer. The *keikoku* and *shinjiike shōkei* similarly correspond to the balancing quadrants of ‘ascending *yō*’ (evening and autumn) and ‘ascending *in*’ (morning and spring). This concept essentially captures the geomantic dictum that all elements are moving towards their opposites.

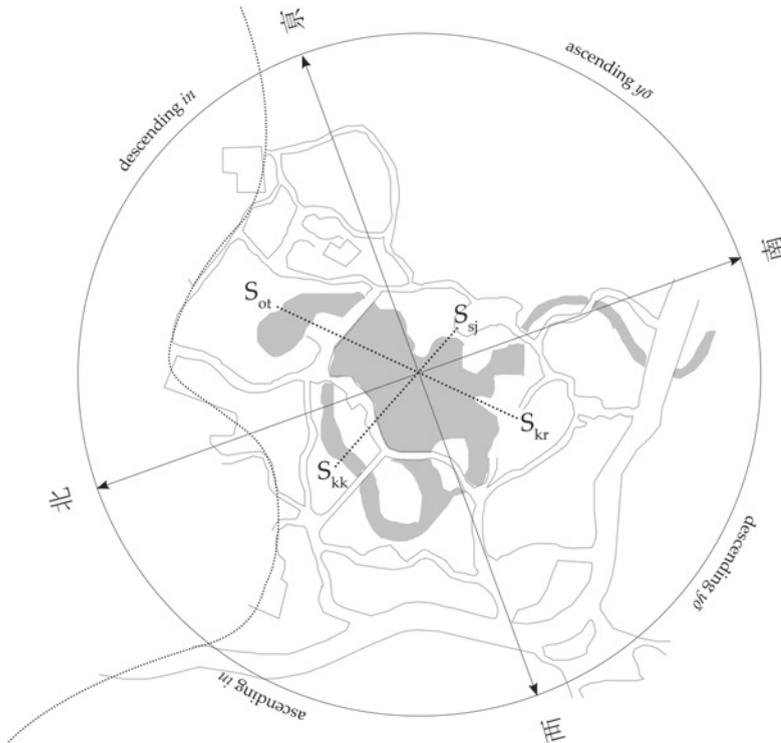
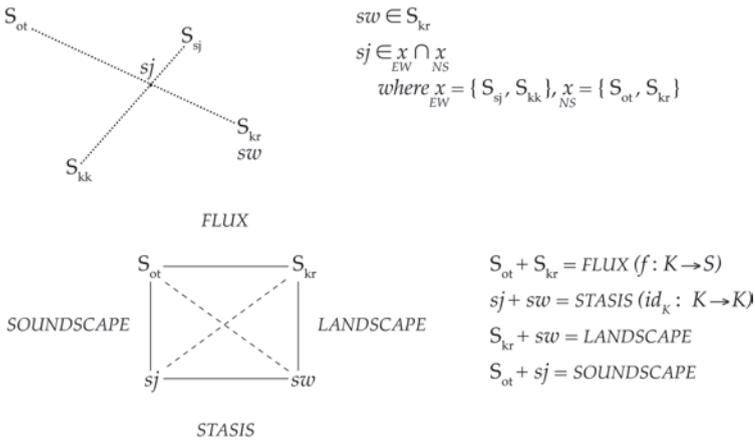


Fig. 7: Superimposition of part of the Chinese geomantic compass on site plan of Kyu Furukawa Teien showing internal site pairings and axes

Such binary pairings of concepts bound to the landscape features of Kyu Furukawa Teien and its corresponding soundscape elements readily allows for a deeper exploration of the *ootaki-karetaki* pair through the construction of a semi-otic square (Figure 8). While the initial  $S_1$  and  $S_2$  pairing correspond to the *ootaki* and *karetaki*, I nominate two derivations of landscape elements for  $\sim S_1$  and  $\sim S_2$ . By the account of Hébert (2007), the formal relationship of contradiction between

$S_1$  and  $\sim S_1$  is bidirectional, and in the case of the Kyu Furukawa Teien square the terms *sj* (*shinjiike pond*) and *sw* (*sawatari*) are similarly geomantically oppositional. As explored in Figure 7 these contradictory terms are derivations from the subsets of AA,  $X_{EW}$  and  $X_{NS}$ , in which *sj* is located at the intersection between these sets, and *sw* is an element of  $S_{kr}$  (*karetaki*).



**Fig. 8:** Semiotic square of Kyu Furukawa Teien incorporating T-functions.  $\sim S_1$  (*sw* = *sawatari*) and  $\sim S_2$  (*sj* = *shinjiike pond*) are derived from the two subsets of AA

Starting with the implication between  $\sim S_2$  and  $S_1$  (Fontanille 2003: 60) and Hébert’s (2007: 42) assertion of the unidirectional nature of this relationship, I have nominated Schafer’s term SOUNDSCAPE for the positive deixis. As the intensification between the addition of *ootaki* and *shinjiike pond*, the SOUNDSCAPE metaterm not only implies the geomantic properties of water as an *in* energy, but similarly the acoustic properties of water within Kyu Furukawa Teien as the primary designed active sound source and facilitator of the reach of the acoustic arena AA. The negative deixis, LANDSCAPE, provides a countering concept in which the *yō* forces of rocks and mountains are embodied in the addition of the *karetaki* and *sawatari*.

Finally, the complex and neutral terms capture the T-functions operable between sites within the garden. For the complex term, FLUX, the addition of the *ootaki* and the *karetaki* describes the quality of the *shakkei* in the garden as one predicated on the sound class transformation of keynote into soundmark,  $f: K \rightarrow S$ . This quality is perhaps the ultimate embodiment of FLUX, as a connotation of the unification between the forces of *in* and *yō* in the two sites via a shared

acoustic arena, diverse materialities, and the denotation of movement within each site. This sits in contrast to the neutral term, STASIS, where I read the addition of *shinjiike* and *sawatari* as analogous to the  $f: K \rightarrow K$  (or  $id_K$ ) mapping occurring within  $\underset{EW}{X}$ , for which  $sj \in \underset{EW}{X}$ .

## 5 Conclusions

To return once again to the concept of *shakkei* and its manifestation at the *kare-taki*, we can position the denotation of the landscape within this site as of moving water, though because of the presence of the auditory artefact of the borrowed sounds of the *ootaki*, I would argue that there is a connotation of *balance* that arises. If we examine all the metaterms of the Kyu Furukawa Teien square the concept of the transformation of *in* into *yō* and the geospatial and material combination of these opposing energies within the features of the garden, acts as a directorate to the spatial and semiotic dimensions emerging within the experience of the *shakkei*. The use of rocks as a manifestation of *yō* is countered both by the denotation of representing moving water (*in*) and the acoustic artefact of the *ootaki* soundmark. Added to this, the natural axial weighting between east and west that both features lie on and their mutually opposed yet interdependent material properties work in a manner to harmonize the garden as a series of poised encounters between geomantically disparate element.

Ogawa's garden design at Kyu Furukawa Teien then balances both the physical manifestation of LANDSCAPE through highly considered applications of topography, plantings, path structure and accompanying visual encounters *with* the subsequent acoustic behaviors of these elements as a derived SOUNDSCAPE. Similarly, the FLUX and STASIS of the T-functions are the connotations of the soundscape elements of keynote and soundmark whose denotations are functionally backgrounded or foregrounded acoustic signals. Though the garden is a product of an early twentieth century industrializing Japan, recently opened up to the outside through the Meiji restoration, the geomantic principles used within the design seem to point back towards well-established techniques of the Heian garden masters. But as Kawarada and Itoh (2000) have noted the presence of *shakkei* within an increasingly urbanized Japanese metropolis has necessarily reduced the opportunities for pure visual manifestations of landscape borrowing. It is perhaps that Ogawa identified this condition as an opportunity rather than a limitation, and in doing so enabled a unification of landscape and soundscape elements within the garden. Like the traditional forces of *in* and *yō*, the manifestation of interdependent yet opposite, static yet fluctuating elements of landscape

and soundscape provide the experience of Kyu Furuakwa Teien as one predicated on encountering a harmonization between the seen and the heard.

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