Decentering Gagaku. Exploring the multiplicity of contemporary Japanese Court music

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CHAPTER 5

HIGH-SPEEDING *GAGAKU*

SOUND, NATURE, SURVIVAL[1]

Imagine being immersed in a familiar piece of orchestral classical music: perhaps Bach's 5th Brandenburg concerto, or Mozart's "Jupiter" symphony. Perhaps you like this music better when it's performed on period instruments –but for the sake of this example, let's assume you don't. In fact, let's say you're listening to a modern orchestra, with its bright, shiny sound. You close your eyes and lay back, relaxed. Now you're waiting for a certain passage, anticipating the entrance of a solo you've gradually learned to love. You wouldn't say that it's your favorite moment in the piece, but there's something beautiful about it that you can't really put into words. It's one of the pleasures of listening, this sonic anticipation,

[1] This chapter is based on fieldwork conducted between April 2013 and March 2014 and again between October 2015 and September 2016. I visited a tract of the Shin Meishin Highway on April 15, 2013 with Suzuki Haruo (Nippon gagakukai and Gagaku kyōgikai) and representatives of West Nippon Expressways (Nishi Nihon kōsoku dōro, 'NEXCO West' below). Additionally, I had the opportunity to audit the third Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed on December 12, 2013. I went to Udono for the first time on July 27, 2013, and again on December 13, 2015. On both occasions, I conducted participant observation in the context of activities organized by the Udono Reed Bed Research Center (Udono yoshi hara kenkyūjo). Follow-up interviews were also conducted with Suzuki Haruo (February 22, 2014) and Koyama Hiromichi (Director of the Udono Reed Bed Research Center) (September 11, 2016). The names of all other research participants are withheld by mutual agreement. My warmest thanks to the members of the Udono yoshi hara kenkyūjo and to the farmers who instructed us about their work with the canes. Special thanks are also due to Ms. Tanioka Suwako from Udono Reed Bed Research Center and to Suzuki Haruo, who introduced me to this case study and kindly shared with me his extensive documentation on the subject. Thank you to Daniele Sestili for introducing me to Suzuki *sensei* at the onset of my doctoral research.

this way of playing in your head the sounds that will materialize in just a few seconds, getting a taste of their effects in advance[2]*. But when the moment comes, something odd and unexpected happens: the sound you had in mind does not come out as it should. Something is wrong…it's just different from the way you knew it to be. Not that the performers are doing anything wrong; their skill is undisputed –that's why you bought the CD in the first place! But there is something odd with that instrument you love (is it the bassoon, is it the oboe perhaps?). It's the tone color. Something happened there. There used to be that depth, that warmth…now, it's flat, shallow, plain. The sound of the whole orchestra has changed, and not in a good way. An unnerving feeling, to be sure, having to listen to something that doesn't sound quite right. But it's not just you, it's the music that has lost something in the process.*

Noticing that music consists of sound may well amount to a platitude, just like saying that the sound of an instrument depends on the materials with which it is constructed. Yet, in studying music we rarely pay enough attention to the materiality of the sonic –to the apparently simple fact that sound 'touches' us first and foremost physically (see Novak and Sakakeeny 2015). After all, isn't this the hallmark of many if not most musical experiences? With such considerations in mind, the trivial thought experiment presented above can be considered as an attempt to convey a feeling or, rather, a distinctive sensation that might spread out across the small enclave of those who care about *gagaku*.

This chapter tells the complex story behind that sensation. It involves an unremarkable material known as *yoshi* or *ashi*, a common cane that grows along Japanese rivers and lakes. It also involves the sound of *gagaku*, or, rather, the consequences of environmental changes that may affect the production of these canes in an unremarkable patch of land in Osaka prefecture, called Udono. This innocuous plant found itself under attack years ago, and has learned to live with the unexpected, unlikely paring with the most dignified of all Japanese traditional performing arts. The menace has come in the

[2] "Someone waiting for a sound to appear will "pre-hear" – that is, he or she will actually hear – the expected signal, even if no sound has been emitted. is effect can be observed either in the expectation of an unknown sound, every rustling then becoming a potential sign, or in familiar situations where the listener anticipates in her or his mind, a foreseeable (or *fore-hearable*) sonic context. (…) The anticipation effect is often caused by a specific expectation concerning the sound to appear. It happens as if the desire of the event was creating its own sound envelope" (Augoyard and Torgue 2006, 25–26 emphasis in the original).

form of a highway, or rather a 10 km highway tract, while the potentially affected entity, (the sound of) *gagaku*, was recently described as nothing less than "an important cultural tool in confirming Japanese identity and a crystallization of the history of Japanese society" (UNESCO 2009, 61). If the highway is indeed realized, Japanese court music will never be the same. Imagine the disquietude of listening to music that has changed forever, when there is no going back. Music's touch is not a given after all. It, too, can change. How appropriate for a discussion of *traditional* music in *contemporary* society, one may think. Here is a textbook case of tradition against modernity, a threat to a country's legacy, the loss of an invaluable heritage. Here comes the usual indignation. Except there is so much more to say about the issue of Udono's soil and streets, about its thin but sturdy canes, about the expansion plans of politicians and engineers and the struggles of volunteers, environmentalists, passionate music-lovers. A more complex state of affairs: here in Udono, there is more than meets the eye –and the ear too.

This dissertation has traced the genealogy of early 20th-century *gagaku*; recounted the vicissitudes of local practitioners in Kansai; explored the embodied dimension of becoming a *gagaku* amateur. Each of these aspects has brought the discussion one step further from orthodox depictions of a centralized, essentialist, Tokyo-based 'Japanese court music'. Reaching the 21st century, this progressive thematic and geographical decentering has also 'zoomed in' on more and more circumscribed instances (enactments) of music-making, all the way to the resonating bodies of research participants. Ultimately, this trajectory has brought about a reconsideration of the sonic intensity of *gagaku* as materially constituted and affective: immersion in the ethnographic moments of fieldwork, for instance, have been interpreted as significant windows on the construction of an attachment to the music that is first and foremost mediated by music's materiality.

But paying attention to the tangibility of *gagaku* as sound that may touch us with vibrational force also means accepting that the study of 'Japanese court music' may include topics that exceed the purely musical, because, as we have seen, an ontology of vibrational force transcends the distinction between human and nonhuman, material and immaterial. If this is the case, *gagaku* does not have to be confined in the Imperial palace, nor in the activities of its musicians, nor even in the efforts made by amateurs to strengthen thier bonds with music and one another. Indeed, *gagaku* can be entangled in all sorts of other vibrating entities, because, once it has been decentered, its purportedly

traditional and Japanese 'essence' has also been deconstructed and rejected. It has become *a music with multiple centers*. Within this new ontological paradigm, any heterogeneous network may be conducive of *gagaku*. And the question of what it is can accommodate a number of partially related answers (Strathern). This chapters looks at *gagaku* in a highly unlikely place, demonstrating that indeed in the 21st century this performing art may resonate not only with ritual activities and aesthetic dimensions of life, but also with political debates and the struggles of peripheral communities. *Gagaku* is out there, made and remade by hands that may never touch its instruments, but that are nevertheless contributing to its circulation. It is time to draw different maps of *gagaku*. Maps that respond to a different distribution of symbolic power. Maps that include Udono.

5.1 Understanding Udono: The Contested Space of Japanese Highways

Udono is a tiny strip of land located on the right bank of the Yodo river, which originates at lake Biwa, just a few kilometers north of Kyoto, and flows southward through Osaka and into the Osaka bay (**Fig.5.1**). From an administrative point of view, Udono is part of Kanmaki, itself a neighborhood of Takatsuki, a city of about 350.000 people in Osaka prefecture[3]. From a naturalistic point of view, instead, Udono is a neatly defined green belt of approximately 75 hectares, 2.5 kilometers in length and about 400 meters wide, and house to a number of birds (such as peregrine falcons, who come here to nest) and to over 400 types of plants (Koyama 2009, 9; Suzuki 2011, 1). In a word, it is a rich if somewhat unimpressive ecosystem (see **Fig.5.2**).

[3] See http://www.city.takatsuki.osaka.jp/shisei/profilekeikaku/tokeijoho/jinko/jinkou_28/1467964626690.html (accessed September 21, 2016).

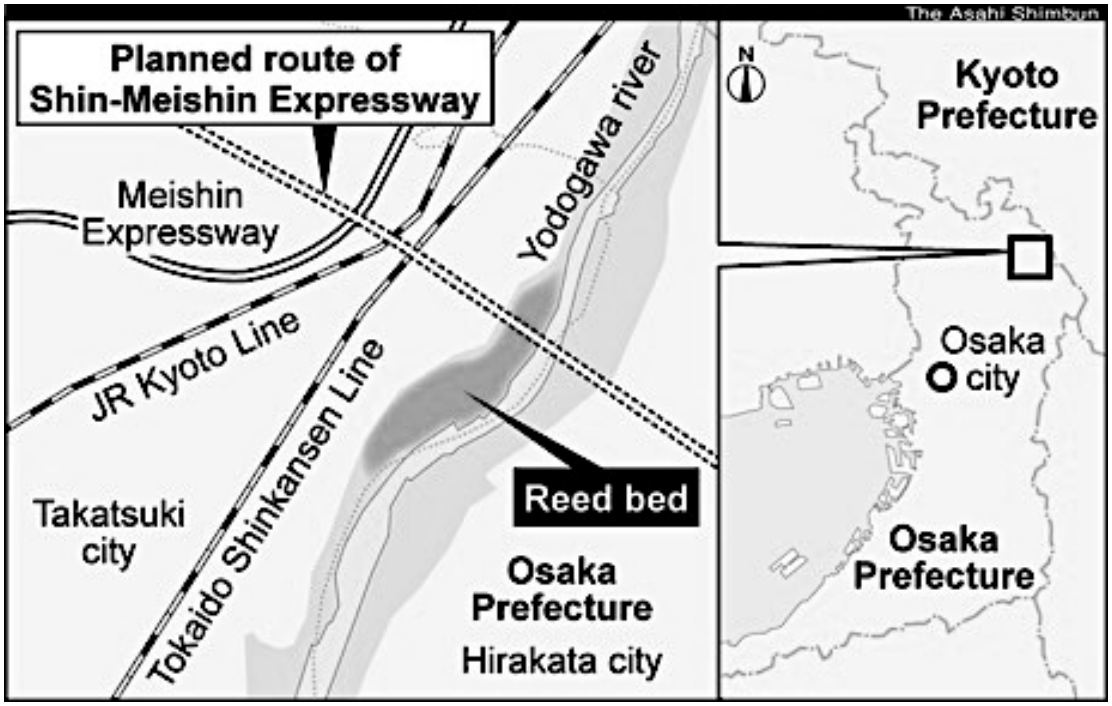

FIGURE 5.1. Map of the Udono reed bed area and planned route of New Meishin Highway (Asahi Shinbun, online edition. December 06, 2012).

FIGURE 5.2. Udono reed bed, facing South. December 2015. (Picture by the author).

Getting off the train from Kyoto at Kanmaki station on the Hankyū line, it takes about 20 minutes to reach the river on foot, passing through grayish, anonymous streets dotted by standard curry restaurants and discomforting *kaiten zushi* (cheap automatic conveyor-belt sushi restaurants). Everything in the surroundings is suburban. And yet, Udono's geographical location is the most fitting starting point to tell a story that is all the more surprising because it originates in such a distinctively ordinary place.

The site is characterized by a "perfect geographical relation" with the three former Offices of Music (see Chapter 3), being located at approximately the same distance from Osaka, Kyoto and Nara (Koyama 2009, 8). Probably this fortunate geographical contiguity to the main centers of *gagaku* determined the choice of Udono as the best harvesting site of the common canes used to produce the reeds of the *hichiriki*, the small, conical oboe used in *gagaku*. Thus the expression 'Udono reed bed' (*Udono yoshi hara*), by which this portion of the riverbed is commonly referred to. Historical records dating back to at least the 17th century testify to the excellent quality of Udono's reeds: in Abe Suehisa's treatise *Gakkaroku* (1690), for instance, it is recorded that "as for the reeds of the *hichiriki*, since antiquity the canes that are used are those that grow in the place called Udono in the province of Settsu" (quoted in Koyama 2009, 5). Even though little else can be found in the literature about the subject, the claim that Kansai's *gagaku* performers have consistently been employing Udono's materials for several centuries seems entirely plausible. Another indication of this may be the historical importance of the Yodo river as an ancient fluvial route of transportation for goods of every sort. Indeed, some even claim that the use of Udono's canes might "date as far back as the 7th century CE, when *gagaku* was introduced and musicians had to find primary materials in Japan, since it was too complicated to import them from the mainland"[4].

To be sure, this was not the sole territory with the right natural characteristics: after all, the plant in question, called Phragmites Australis, is extremely common in wetlands the world over, and it has been harvested for the same purpose on the banks of lake Biwa, as well as in several northern portions of the archipelago (Kawasaki et al. 2016, 46). Nonetheless, there is ample evidence to suggest that Udono's reeds have been considered the highest in quality by professional *gagaku* performers in more modern times too. As noticed by Tōgi Kanehiko (d.2008), for example, a document preserved in the Imperial

[4] Koyama Hiromichi, interview, September 11, 2016.

Household's library details a request made by the Office of *Gagaku* at the beginning of the Meiji period to acquire some canes from Udono (2008, 3). Today, professional performers and amateurs unanimously recognize the superiority of these reeds, despite a progressive deterioration of their overall quality and number. For these reasons, the Udono reed bed is well-known among *gagaku* practitioners throughout Japan, and it is perhaps not so farfetched to say that the most experienced *hichiriki* players associate the distinctive tone color of their instrument with this specific place, even without ever feeling the need to visit it in person.

Thus the understandable turmoil at the news that the plan to build a highway tract between the cities of Takatsuki and Jōyō was resumed in April 2012[5] (see **FIG.5.3**). According to this plan, a massive bridge sustaining the 4-lane pavement was to be constructed right above the Udono reed bed. Needless to say, such a massive construction work would threaten the very survival of this delicate strip of land: what would be of its falcons and of its rich vegetation? What would happen to the Phragmites Australis, and, consequently, to the reeds of the *hichiriki* and to its sound? Certainly, or so must have thought numerous *gagaku* amateurs, this must be stopped, not only for the environment, but in the name of the most ancient of all Japanese traditional performing arts.

When the news came out, on April 2, 2012, the reaction was one of shock, but not of surprise. In fact, the relationship between the highway plan and Udono's riverbank dated back almost 30 years, and must be understood in the historical context of a series of infrastructural projects that have gradually modified the entire Japanese landscape (see Waley 2011). Indeed, it is difficult to decide what came first, the works on the river or on the land. Arbitrarily starting from the latter means venturing into the highly contested territory of Japan's road management: a very short historical detour will prove well-worth in order to understand more fully how deeply Udono's issue is inscribed within a larger narrative encompassing some of the most heatedly debated environmental changes in the archipelago.

The "backbone" of today's fully-developed Japanese highway system is represented by six ancient routes, established during the 7th century CE as part of the centralistic Taika Reforms (Road Bureau (MLIT) 2015, 48). These were later developed and transformed

[5] In the following pages, the expressions 'highway tract' and 'highway section' are used interchangeably. 'Highway' and 'expressway' are also considered synonyms.

into an enduring early modern network of five primary roads, known as Gokaidō (see Vaporis 2012).

FIGURE 5.3. A drawing of the Takatsuki-Yawata highway tract as it should look like once completed. The Udono reed bed is clearly identifiable on the right.

(Modified from NEXCO West, *Shin Meishin Ōsaka higashi dayori Vol.5*. See http://corp.w-nexco.co.jp/activity/branch/kansai/shinmeishin/topics/topics03/. Accessed November 14, 2016).

However, for complex reasons, it was not before 1963 that the first "modern expressway", was inaugurated (NEXCO Nishi Nihon 2012, 9)[6]. The route later became a section of the larger Meishin Highway (*Meishin kōsoku dōro*), itself linking Nagoya (whose first character can also be read *mei*) to Kobe (whose first character is commonly pronounced *shin*). The most significant reason for such a late (from a Euro-American perspective) appearance of 'modern infrastructure' was that "horse-drawn carriages were not common prior to the Meiji Era", and thus roads did not need to be heavily paved: in fact, "damage caused by traffic was not severe and maintenance was relatively easy to complete" (Road Bureau (MLIT) 2015, 49)[7]. Precisely because of such previous lack of heavy carriages on the pavement, the conditions of Japanese roads decreased dramatically when transportation technologies began to be modeled on or imported from Europe and the United States. During the second half of the 19th century, "the beautifully

[6] Significantly, this 'first highway' connected Rittō, in Shiga prefecture (just a few kilometers to the East of Kyoto), to Amagasaki, a city between Osaka and Kobe (David 2014, 39).

[7] According to Vaporis, restrictions on the use of carts "seem to have been the result of the shogunate's desire to prevent any interference with the flow of traffic (heavy carts are prone to spills) and the opposition of pack-horse operators, who felt their livelihoods were threatened" (2012, 101).

maintained pre-modern roads of the Edo Era began to deteriorate under the burden of modern horse-drawn carriages and human-powered vehicles (or rickshaws)" (Road Bureau (MLIT) 2015, 50). Such a state of "backwardness" persisted for several decades.

But the situation changed dramatically when, "after the end of World War II, the Japanese government initiated the reconstruction of the transportation system including a massive road construction program. Automobiles gathered a steadily growing popularity as the economy recovered and the standard of living improved[8]. (…) Thus, road construction and improvements were a high priority in the government's infrastructure development plans" (Feldhoff 2007, 102) (see **FIG.5.4**). In fact, "to address the need perceived by the government for a national road network, in 1952 the government revised the Road Law (*Dōrohō*), which was the main regulation for road policy, and set up a system for constructing a highway network. Furthermore, the national government enacted new laws (…) in order to borrow money from postal savings because the national government's general account was insufficient to finance construction of a road network" (Mizutani and Uranishi 2008, 474). In 1956, Japan Highway Public Corporation (*Nihon dōro kōdan*, commonly known as JH) was founded, as a "non-profit government corporate" that enjoyed a number of privileges, from governmental loans to tax exemptions and the possibility to acquire the land speedily thanks to the Land Acquisition Law (David 2014, 21). Over the next 20 years, the amount of resources poured into road construction reached the incredible value of nearly one-quarter of the total public infrastructure investment (Feldhoff 2007, 104).

Such an exponential increase of governmental interest in the highway sector led to the realization of little less than 10.000 kilometers of expressways in a span of merely 50 years (Road Bureau (MLIT) 2015, 52). "From the latter half of the 1950s to the 1960s, investment was concentrated on the main trunk lines. The five longitudinal lines were constructed in the 1970s and early 1980s, and the transversal limb lines were laid starting in the late 1980s" (David 2014, 21). By the 1990s, most of the structurally indispensable roads were completed. Nonetheless, the 1987 Fourth Comprehensive

[8] "Only 130,000 vehicles were registered at the end of World War II, but the number increased rapidly, reaching 500,000 vehicles by 1951, then doubling to one million in 1953, and doubling again to two million in 1957" (Road Bureau (MLIT) 2015, 51).

National Development Plan (*Dai yonji zenkoku sōgō kaihatsu keikaku*)[9], a programmatic document which reassessed the balance between "urban centers" (namely Tokyo, Nagoya and the Osaka-Kobe-Kyoto area) and "outer areas", expressed the need for a highway network totaling 9064 km –a significant increase from the 3721 km already completed in 1985 (Mizutani and Uranishi 2008, 479). This new plan also included the realization of a New Meishin Highway, considered necessary to guarantee a smoother and faster connection on the East-West axis of the network, and devised as a way of relieving the older Meishin highway from its increasingly frequent congestions (NEXCO Nishi Nihon 2012, 9).

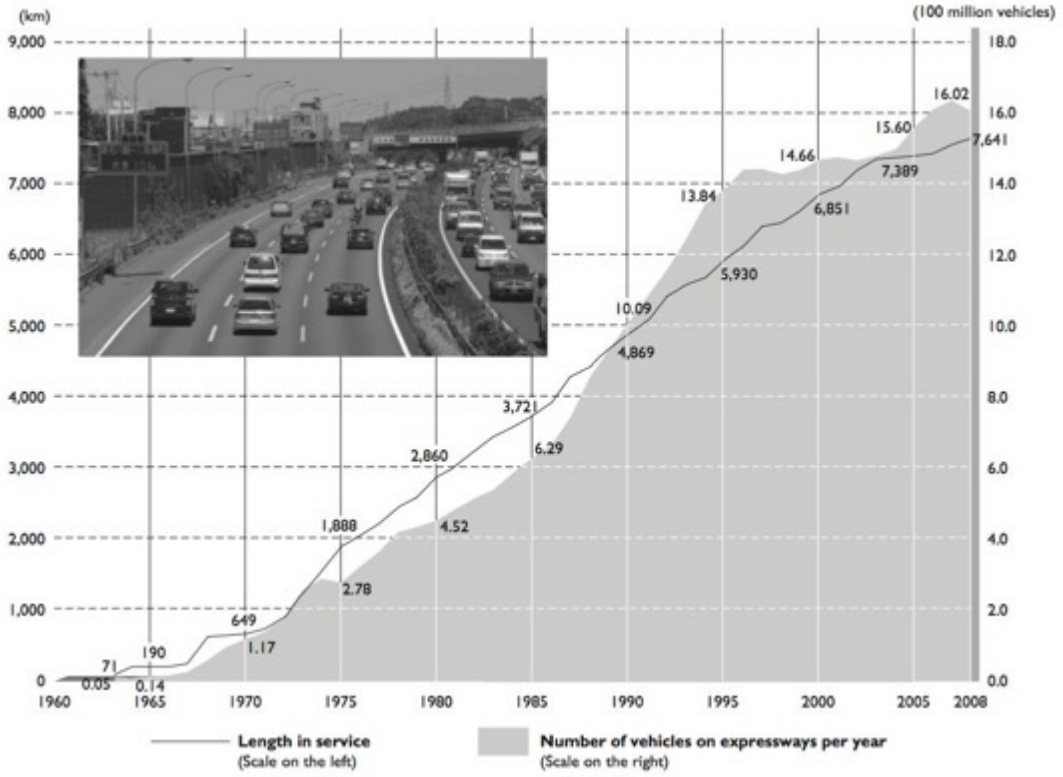

FIGURE 5.4. Relationship between number of vehicles and length of Japanese expressways, 1960-2008. (David 2014, 28).

In this context of ever-accelerating investments in road construction, the project of the New Meishin proceeded with changing fortunes, essentially shifting back and forth

[9] "The CNDPs are long-term comprehensive physical and spatial plans which identify the ideal state of the Japanese territory including land use, natural and water resources, social infrastructures, industrial locations, culture and tourism, and human resources" (Ono 2008, 507).

between permissions to initiate construction and stoppages based on heated political discussions. In fact, a bitter debate started mounting in the latter half of the 1990s over the real necessity of such a strongly subsidized construction policy. Doubts and resentment towards the astronomical debt accumulated by JH over the years resulted in a strong popular demand for the privatization of the highway sector. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) acknowledges that at the time "there were various critiques and opinions about road development, including the belief that roads were developed wastefully and sometimes redundantly, spending a large amount of both borrowed money and the national budget. At the same time, the repayment and management costs were not being sufficiently preserved due to the high-cost structure of JH's toll road system" (Road Bureau (MLIT) 2015, 52).

On December 19, 2001, a Cabinet meeting of the LDP government presided by Koizumi Jun'ichirō started discussing the issue of the privatization of JH. Shortly afterwards, the same government set up a Committee for the Promotion of the Privatization of the Four Public Roads Corporations (*Dōro kankei yon kōdan min'eika iinkai*). The report of the Committee was offered to the Cabinet on December 6, 2002. The suggestion to finally privatize JH and three other public companies was emphatically supported by the government, which devised a basic plan made public on December 22, 2003. In June 2004, the necessary legal modifications were enacted. The government decided that JH should be split into three 'semi-private' companies: Higashi Nihon kōsoku dōro kabushikigaisha, shortened to NEXCO Higashi Nihon or NEXCO East; Naka Nihon kōsoku dōro kabushikigaisha, shortened to NEXCO Naka Nihon or NEXCO Central, and Nishi Nihon kōsoku dōro kabushikigaisha, shortened to NEXCO Nishi Nihon or NEXCO West. Parallel to this "horizontal separation", a "vertical separation" was also put into place: most noticeably, the responsibility of repaying the accumulated debt was handed over to the newly instituted Japan Expressway Holding and Debt Repayment Agency (JEHDRA) (see Mizutani and Uranishi 2008, 487; Road Bureau (MLIT) 2015, 7) (see **FIG.5.5**).

Meanwhile, in 2003, the first Conference on the National Development Arterial Expressway (*Kokudo kaihatsu kansen jidōshadō kensetsu kaigi*)[10], moved to reconsider any major infrastructural project in order to cut back excessive costs. Accordingly, the

[10] These conferences were simply a new format assigned to an advisory body that had existed since 1956.

second Conference, held in 2006, explicitly recommended to "freeze" (*tōketsu*) two tracts of the New Meishin highway: between Ōtsu (Shiga pref.) and Jōyō (Kyoto pref.) and between Yawata (Kyoto pref.) and Takatsuki (Osaka pref.) (See **FIG.5.6**). At the time, this was seen as a near-definitive drawback for the project: the political climate had radically changed, in part due to the hardships of the first 'post-bubble' years, and the construction of the New Meishin seemed all but archived.

FIGURE 5.5. Scheme of the privatization of Japanese public highway corporations (Road Bureau (MLIT) 2015, 7).

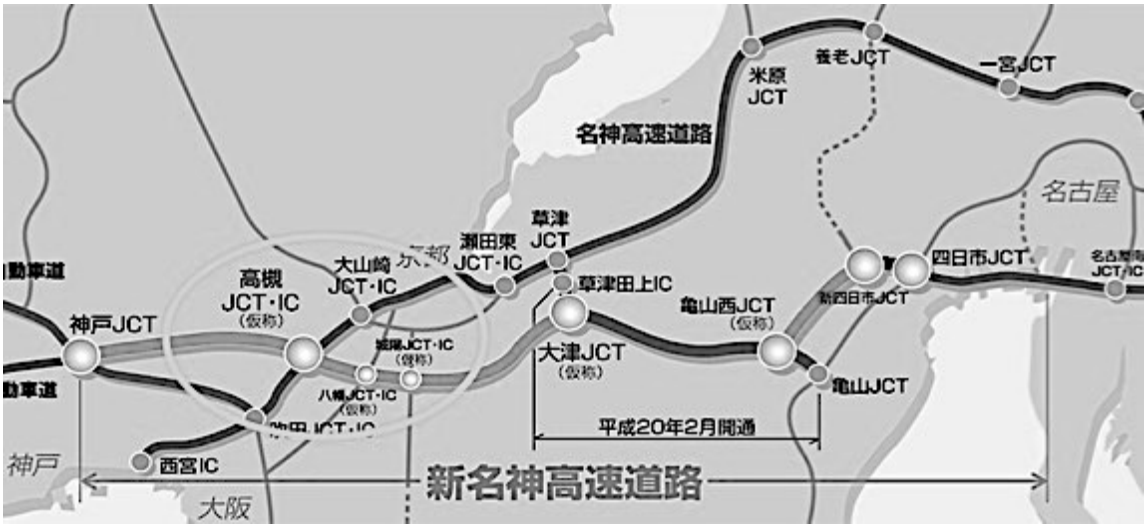

FIGURE 5.6. A map of the entire New Meishin Highway project as of 2016, spanning from Kobe and Osaka (bottom left), through Kyoto (center left) and to Nagoya (center right). The area within the yellow oval is approximately the Takatsuki-Yawata tract (Modified from NEXCO West, brochure).

And yet, the following ten years were enough to overturn the decision, bringing back menacing prospects for *gagaku* lovers. Just considering the geographical location of the Udono reed bay, which rests squarely in the middle of the mere 10 kilometers separating Takatsuki from Yawata, it seems clear that the story of its reeds must be situated within the framework and chronological arch described above. If this is the case, the original starting point for the present chapter, the 2012 green light to start the construction of the highway tracts, comes at a much later sage in the narrative of the construction of the New Meishin Highway, which in turn is an element in the vicissitudes of infrastructural policies and reforms in modern and contemporary Japan.

In addition to the realization that in Udono these different orders of magnitude come together and coexist, appreciating the complexity of this case study requires a parallel consideration of the complementary history of hydrological works in the area. Over the years, these riverine projects have had a tremendous impact on the delicate ecosystem in which the *hichiriki* canes once thrived. Upset by the consequences of these massive construction works, a small but combative group of local citizens joined forces and started to take measures to protect Udono's environment. Years later, the same concerned citizens would come to incorporate the issue of the *hichiriki* materials into a broader 'counter-discourse' on the preservation of local environmental resources.

5.2 High and Dry: River Management Policies and Udono

In the early 1970s, while Japanese cars were multiplying and running faster and faster along longer and newer highways, Udono was a less contested, and no doubt muddier, construction site. Japan was not only tracing new lines on the map, using asphalt and bulldozers as drawing tools –it was also retracing old ones, most noticeably with projects aimed at reshaping the most important water streams in the country. In this sense, the Yodo river was no exception: with the 1971 revision of the Basic Plan for Hydrological Works on the Yodo River Valley (*Yodogawa suikei kōji jisshi kihon keikaku*), a series of construction works was initiated that would forever alter the role of the river vis-à-vis the surrounding landscape. The various measures ended up lowering the riverbed by more than 3 meters, at the same time widening its channel from 120 to almost 300

meters[12]. As a result, the gap between the Udono reed bed and the surface of the river doubled, eventually reaching 7 meters (Koyama 2009, 11–12). Though there had been earlier substantial construction works on the Yodo river, most notably in 1875 and 1939 (see Takatsuki kōgai mondai kenkyūkai 1981, 36), these were arguably the ones with the greatest impact on the Udono area.

As was the case in much of Japan's territory, such massive operations were devised in order to limit the damages caused by frequent floods, something known to happen in Udono since ancient times[13]. Japan is obviously not new to the problem of rivers' seasonal flooding, caused by specific topographical and climatic characteristics of the landscape: "rivers in Japan are generally short, steep in gradient and flow rapidly down the mountains and across the plains into the Pacific Ocean, the Sea of Japan and some of them to the Seto Inland Sea (…) [Moreover,] the ratio between the maximum and minimum discharge in each river is generally very high resulting in seasonal floods. Flood control became thus an early priority for both the Government of Japan and the people living in the alluvial river valleys" (Takahasi and Uitto 2004, 63). Indeed, in the decades following the enactment of the first River Law, in 1896, "flood control projects became, next to railroads, the most important infrastructure development in Japan" (Stalenberg and Kikumori 2008, 97)[14]. Though it would surely be too simplistic, it could perhaps be said that flood control was one localized aspect of the larger process that goes under the contested label of 'modernization'.

In the second half of the 20th century, however, with the rapid urbanization of flood plains the land gradually lost its absorptive capacity, turning what was a periodic, largely expected occurrence into something more unpredictable and destructive: "flash flooding" (see Waley 2005). The government thus found itself caught up in a dilemma: while taking resolute measures to limit the effects of such calamitous events was certainly indispensable, it was equally clear that this should be done without limiting the expansion of cities into areas with high chances of flooding. Crucially, "the advancements in concrete technology starting in the latter half of the 1950s facilitated the process of

[12]For more technical details, see http://www.mlit.go.jp/river/shinngikai_blog/shaseishin/kasenbunkakai/shouiinkai/kihonhoushin/070514/pdf/ref4.pdf (accessed October 20, 2016).

[13] Koyama Hiromichi, interview (September 2016).

[14] Interestingly, the Yodo river was the first site of such projects, also initiated in 1896 (Stalenberg and Kikumori 2008, 97).

pounding concrete into rivers and significantly brought down the cost of using concrete for levee revetments and dams" (Takahasi and Uitto 2004, 65). Thus, most of the preferred engineering solutions to the problem of flash flooding started to involve those newer technologies, which, in addition to being cheaply and readily available, also held a promise of durability. "Rivers and their banks, as well as over half the country's coast, has [sic] been cast in concrete, with consequences that are only now being acknowledged. Dams were built across nearly all of Japan's rivers to provide power for industry, as well as water for the cities and irrigation for farmers" (Waley 2005, 195). In some cases, fluvial works even resulted in what was described by scholar Asano Toshihisa as "environmental destruction" (2007, 190). Part of the issue clearly derived from the managerial approach adopted by central institutions: in fact, "rivers were governed primarily by the Ministry of Construction's River Bureau[15], which saw rivers primarily in engineering terms of industrial, urban, and irrigation water supply, flood control, and hydro-electric power generation" (Asano 2007, 190).

Even though these riverine construction works were generally successful at protecting the adjoining areas from flooding, the fact that their construction often disregarded the role of rivers both in the social tissue and in the landscape of rural Japan, eventually generated a wave of protest that rapidly coalesced into a number of citizen movements. In fact, the 1970s and 1980s were characterized by a clash between environmental activism, on the one hand, and a state-sponsored policy that has been described as "development through construction in concrete" (Waley 2005, 195). It would be impossible to understand social protest in postwar Japan without considering the complex interplay of the state's investment in colossal infrastructural works; these works' impact on the environment; the changing role of (and disposition toward) the landscape itself within a broader trend of urbanization; and a growing concern with the negative effects of industrialization. In this context, pollution and its crippling effects, dramatically exemplified by the cases of mercury poisoning that went under the name of Minamata disease (first reported in 1953), were decisive factors in the emergence of organized movements articulating their widespread disquiet and mounting dissatisfaction toward postwar environmental politics (McKean 1981, 20–22, 50–59).

[15] Tellingly, it was only in 2001 that the Ministry of Construction was merged with the Ministry of Transport and renamed Ministry of Land, Infrastructure, Transport and Tourism (often shortened to MLIT).

Thus, the 20-odd years following the end of the Second World War saw the consolidation of two "narratives of dysfunctionality" with regards to the environment in general, and the management of rivers in particular (Waley 2000, 213). One, exemplified by the environmentalists, warned against "threats to a certain type of rural Japanese landscape", depicted by its champions through what was (and still is) essentially "a nativist approach to nature"; the other, probably best represented by the figure of the ministry official, put forth "a policy of economic growth that continue[d] to prioritize construction interests" (Waley 2000, 213–14)[16]. Despite its undeniably conflictual character, the relationship between these two "narratives" is best understood as mutually transformative, rather than symmetrically divergent. This was especially true in the years following the radical amendment of the River Law, in 1964 (Stalenberg and Kikumori 2008, 99; Suzuki 2011, 3). After this landmark event, both fronts had to review and modify their earlier positions: the government's shameless program of 'cementification' of the landscape was gradually rearticulated so as to give more weight to consultation (see Waley 2000, 204), while citizens became increasingly aware of the limitations of a merely oppositional mobilization, and started to devise more holistic alternative visions for the future of local ecosystems. The successive amendments to the River Law (most notably the ones enacted in 1997) reflected this trend: "the result of these reforms was a dramatic turn-around of Japanese policies concerning river management over a short period of time. Now, environmental and esthetic considerations are featured alongside those pertaining to flood control and water resources development" (Takahasi and Uitto 2004, 69–70; see also Waley 2000, 215).

In this context, rivers became especially charged with symbolic meaning, by virtue of their capacity to index the affective "landscape of nostalgia", maximally represented by the many discourses revolving around the concept of *furusato* (literally, "old-village", often translated as "hometown") (Robertson 1988, 112; see also Waley 2000, 199). Thus the political valorization of local fluvial ecosystems was often tinged with that powerful feeling described by Jennifer Robertson as "a nostalgia for nostalgia" (1988, 495), which attributes "nativist and national-political meaning and value" to the seemingly ubiquitous

[16] Needless to say, it would be pointless to try to identify these two "narratives" with specific individuals, if anything because it would always be possible to find someone who would fit both 'profiles'. Rather, the two options could be conceived as "actants" in the sense of Greimas's semiotics and Actor-Network Theory: that is, as broad narrative fields encompassing both human and nonhuman actors (see Latour 2005, 54–55).

references to *furusato* (1988, 494). Indeed, this peculiar "aesthetic of landscape nostalgia" (Waley 2000, 200) is still predicated on the alleged centrality of water to a supposedly 'traditional, Japanese perception of nature'. These, then, are the elements necessary to examine Udono's issue: aggressive infrastructural works in the postwar period, undertaken in order to fight frequent flooding; the gradual impoverishment of the land that resulted from these works; the intensification of organized public dissent; a gradual shift in policy on the part of the government, and a parallel shift in tactics on the part of citizens' movements; finally, the 'resemantization' of the riverine environment as an emblem of *furusato*, depicted as the embodiment of a value-laden discourse encompassing nature and a host of strictly related political values (see **FIG.5.7**)[17].

Each and every one of these elements reverberates today; each and every one can be consistently detected in the field: all of them, in a way, are re-presented in the canes, the mud, the conversations, the pictures and the projects drafted. But this analytical fact says little of the men and women who take care of the canes, work with their boots deep into the mud, collect data and talk passionately about their social engagement. Undoubtedly, we are confronted with an issue of *scale*. The impression is reinforced by the analysis of a monograph issued in 1981 by the Takatsuki Research Group on the Issue of Environmental Pollution (Takatsuki kōgai mondai kenkyūkai). After taking over the administration of the Organization for Nature's Observation (Shizen kansatsu kai) in 1974, the group decided to devote a separate volume to Udono's reed bed: the articles included combined historical information, scientific data, and appeals to the general population, striking a balance between a detached, technical tone and a more openly nostalgic mode that appealed to the sensibility of Takatsuki's citizens (see Takatsuki kōgai mondai kenkyūkai 1981). With its articles on the history of Udono, its hand drawn pictures of the water levels in the area before and after the most important state-sponsored works, its detailed data on the flora and fauna of the area, and, to the back, its clippings from local newspapers, the book is a perfect representation of the ways in which national discourses and dynamics were being translated at a much more confined,

[17] As noted by Waley, "rivers impose themselves on public planning and environmental action as a result in particular of their propensity to flood. It is precisely the continuing incidence of flooding and the growing damage that flooding causes that have been a major catalyst for renewed attention to rivers and to the various elements that affect the flow of water from mountain to sea. Rivers are implicated in so many issues that have an impact on people's lives, issues that invite a co-ordinated response but often give rise to dissension and dispute" (2000, 202).

'punctual' scale. But where were the canes in this complex scenario, and where was *gagaku*?

FIGURE 5.7. "Udono reed bed, the landscape of *furusato*". Final slide of a power point presentation by Koyama Hiromichi (October 2013).

At this stage, it would appear, the reeds were only given value because of their metonymic (or synecdochic) relationship to the whole fluvial environment along the Yodo river: lamenting the fact that the number of Phragmites Australis had significantly dropped as a direct consequence of the lowering of the riverbed was a way of signaling a more generalized deterioration of the environment. The reed was the part signifying the whole, the indicator of something greater than itself. And, at this stage, *gagaku* was simply not in the picture. In fact, for the local population the more dangerous consequences were on traditional commercial activities: the abovementioned lowering of the riverbank by more than 3 meters had resulted in a heavy shift in the proportion of water in the proximity of the reeds, which in turn had brought to a sudden change in the

composition of the plant life in the reed bed: because the Phragmites now received less nourishment, their number rapidly dropped, while other species such as the Japanese hop (Humulus japonicus, known as *kanamugura*) were left free to grow well beyond their former ratio (see Koyama 1981). According to Koyama, the *hichiriki* canes (*yoshi*) represented 60% of the plant life in the Udono reed bed in 1966; 20% in 1974; and merely 5% in 1982 (2009, 12). These changing figures had a significant impact on the ways locals made a living: the canes were traditionally cut and harvested in the dry season, and served as a modest but widespread material for fuel and for the making of *sudare*, typical blinds still used to shield the houses from the intense heat of July and August. Other plants present in the area, like the common cane *ogi*[18], were similarly employed in the manufacture of thatched roofs (Koyama 2009, 10).

Of course, these materials were already falling into disuse in the 1970s. Interestingly, this led to the creation of an event perceived today as a tradition of sorts. When the reeds fell out of use, they were simply left to grow on the riverbanks, where they dried out and died. Once dead, the plants obstructed the new stems below, so that the overall population of reeds rapidly decreased. At the same time, the number of insects in the reed bed rose significantly. To solve these problems, it was decided that the area should be burned periodically: this would eliminate at once the problem of the dead plants and of the insects, all the while helping the soil to regenerate. Such regulated fires, called *yoshiyaki*, began in 1952 or 1953 (Takatsuki kōgai mondai kenkyūkai 1981, 10) (see **Fig.5.8**). Since then, they were suspended several times because of complaints from the residents of the village on the opposite side of the river, Kuzuha (Koyama 2009, 12). Thick, black columns of smoke would rise up, making it dangerous for drivers to circulate.

[18] As duly noted by Kindaichi in his *The Japanese Language* (1978), "Japanese is rich in its vocabulary for vegetation. (…). Names of grasses—especially those with long leaves—are also numerous and include *take* (bamboo), *sasa* (bamboo grass), *shino* (small bamboo), *ashi* (reed), *ogi* (common reed), *kaya* (miscanthus), *susuki* (Japanese pampas grass), *komo* (water oat), *chi* (a species of reed), *suge* (sedge), *i* (rush), and *gama* (bulrush)" (Kindaichi 1978, 165). From a botanical point of view, *ogi* and *yoshi* or *ashi* belong to the same category of perennial plants (known as warm-season or C4), but the former is technically known as Miscanthus sacchariflorus, while the latter, as already mentioned, is known as Phragmites Australis. In English, both are usually referred to as "reeds", "common reeds" or "canes".

FIGURE 5.8. Some of the phases of volunteering and commercial activities in the reed bed: harvesting and amassing the reeds, burning the reed bed, manufacturing the *yoshizu* screens. (Second Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (June 23, 2013). History of the Udono Reed Bed. Available at http://corp.w-nexco.co.jp/newly/h25/0624/pdfs/11.pdf. Accessed November 15, 2016. Pictures by Taguchi Keisuke).

Nonetheless, the *yoshiyaki* are still held today, usually over two days at the beginning of February. Beyond their practical purposes, they have gradually become important appointments for the recruitment of new volunteers interested in the protection of Udono's environment. In fact, Kansatsukai or 'observation meetings' are held every year: newcomers meet old-timers and farmers, everyone gets to learn the well-rehearsed story of "Udono reed bed's problem" (including a significant section on *gagaku*), after which everyone eats a frugal meal sitting in the middle of the huge piles of reeds that were cut just a few weeks before. Ironically, then, the depletion of the area, set in motion by the rapidly changing lifestyle of the 20th century and worsened by the infrastructural works on the riverbed led to the organization of an event whose survival is predicated on the continuing existence of an environmental threat.

Walking around Udono in July 2013, when the reeds were still green and towering sometimes more than 3 meters above the ground level, an old farmer offered an interesting commentary on the whole vicissitudes of cutting and burning the reeds: "Sure, I remember how the place looked before the burnings began: it was a mess. Full of mosquitoes and other bugs. You could merely see the reeds, and finding the good ones was almost impossible. We used to get requests for *hichiriki* reeds, but there wasn't much we could do about it. So, if you ask me, the situation improved with the fires, and the place looks better now than 50 years ago". This farmer's frank and pragmatic remark is a reminder of something all too easily forgotten: that *gagaku* came later, that it was preceded by more mundane problems, having to so with blinders and a changing economy,;neighborhood squabbles over that nasty black column of smoke, insects, and messy vegetation. Today, all of this comes back as an opportunity for revival: chopsticks and Japanese paper and even business cards are produced using the *hichiriki* canes, as well as sliding panels (*fusuma*) for traditional houses[19]. But in general it is the appeal to *gagaku* that has acquired the most prominent position in the attempts of grassroots campaigns to "save the Udono reed bed" (see **Fig.5.9**). A brief overview of the main associations active in the preservation of Udono's natural resources shows how this shift has come about, bringing us closer to the present condition of this decennial dispute.

[19] Some links are available at http://www.udono-yoshihara.com/ヨシ紙-ヨシおはし/ (accessed November 04, 2016).

FIGURE 5.9. Brochure produced by the Udono Reed Bed Research Center to accompany the SAVE THE Udono Reed Bed petition. March 2013.

5.3 "SAVE THE UDONO REED BED!". UDONO'S GRASSROOTS MOVEMENTS AND *GAGAKU*[20]

Between the 1970s and the 1990s, the Udono reed bed was left "high and dry": with the last occurrence of a flood recorded in 1984[21], the process of depletion of the riverine environment was characterized by the dryness of the canes, due to the distance interposed between its roots and the river's current. Simultaneously, the unproductivity of the traditional economic activities connected to the canes resulted in even more reasons for citizens to feel frustrated about the state of affairs in the riverbed. Gradually, it became clear that the construction of new roads would benefit politicians and construction companies more than the general population. Just a few years later, towards the end of the 1990s, this lack of confidence would lead to what was promoted as a major revision of the highway sector. Under similar circumstances, it was only a matter of time before for some form of civic protest to take place.

For their part, however, local institutions were not as insensitive to environmental issues as one might expect. As early as 1975, for instance, the municipality of Takatsuki requested Mr. Koyama Hiromichi to conduct a series of comprehensive analyses of the city's environment. Then a researcher at the botanical garden of Osaka City University, the young scientist emphasized from the start the necessity to consider a number of different ecological factors jointly. In part, this was in line with the so-called "multi-nature-style river planning" (*tashizengata kawazukuri*), an approach opposed to the "modernist river planning" that was common until the 1980s (Waley 2000, 200; Koyama 2009, 13–14). More importantly, however, it meant that Koyama did not stop at the level of the chemical analysis of the soil, or of the vegetation, but rather attempted to reach a holistic understanding of the relationship between water, plants and the animal life along the river. This encompassing approach, in conjunction with Koyama's love for the rich and varied fluvial ecosystem of the Yodo river, was a central factor in his long-lasting commitment to the cause of Udono's canes. Slowly but surely, Koyama became the gravitational center and pivotal point of all the battles fought in the name of the canes (**FIG.5.10**). Already in the 1990s, he and a small group of citizens struggles to carry out the *yoshiyaki* fires established by earlier local associations like the abovementioned

[20] The following section relies heavily on Koyama Hiromichi's *In Order to Protect Udono's Reeds (Udono no yoshi o mamoru tame ni)* (2009).

[21] Koyama, interview, September 2016.

Organization for Nature's Observation and the Takatsuki Research Group on the Issue of Environmental Pollution. But for all of their efforts, it was the lack of water that was causing the most damage, and the number of canes kept decreasing year after year.

FIGURE 5.10. Koyama Hiromichi talking to the press in the Udono reed bed. From his presentation *Enjoying Udono: Creating Watersides and Dreams. Records from 40 Years* (October 2015).

It was only in1996 that the situation finally started to change. Having realized that those drawn to the cause of the environment were not just the citizens of Kanmaki and Takatsuki, but a wider audience of young, well-educated men and women, Koyama decided to rely even more on volunteers for simple but essential tasks such as cutting and burning the reeds. Subsequently, he was able to obtain the necessary permits to set up a pump that would extract water from the river and bring it to at least some portions of the reed bed. His opinion was that only a radical solution such as this could salvage the reeds. Starting in 1996, 400 meters of pipelines were laid down. When fully functioning, two years later, the pump was able to extract as much as one ton of water every two seconds. It was soon clear that the solution was extremely effective: the percentage of Phragmites

Australis rose from a meager 5% in 1988 to an encouraging 15% in 1998 (Koyama 2009, 14–15). All the while, little changed on the surface, given that the pump and pipelines left almost no marks on the ground. Unfortunately, however, the revival of the reeds came at a high price: garbage and debris quickly accumulated around the pump's entrance point, impeding the normal flow of water. Thus, volunteers had to start cleaning up the obstructed areas.

Two years after the water pump started to function, Koyama and his volunteers founded the Udono Club (*Udono kurabu*), a membership-based organization devoted to four interconnected activities: monthly "observation meetings" (*kansatsukai*) conducted in situ; occasional scientific, quantitative investigations concerning Udono's vegetation and wildlife; the publication of monthly bulletins, entitled Udono Reports (*Udono tsūshin*); and the promotion of occasional "field trips" (*kengaku*) open to a vast public[22]. The relevance of the Udono Club is best understood when considered against the specific historical trajectory in which the group was inscribed, and which it actively helped (re)shaping. In fact, the establishment of the Club represented one of several shifts in the local community's focus on the environment: after an initial overarching preoccupation with nature as a whole before the 1970s, the stress was put on the then pressing theme of pollution. With the Udono Club, the scale was further restricted, and the members' concern was clarified. "There was a need for money, that's for sure", tells me a middle-age woman who has been in the Udono Club for several years. "Still, it wasn't just about that. It was important to have one clear purpose and one clear area we were all interested in. Come to think of it now, it felt quite natural at the time to join a group with the name Udono in it!"[23].

Seen from the point of view of this historical arch, and paying attention to the dates in which each shift took place, it is clear that the faith of the Udono Club was to flow into yet another grassroots group, the Udono Reed Bed Research Center (Udono yoshi hara kenkyūjo). Established in 2001 (see Koyama 2009, 16), this continues to be the most actively outspoken organization opposing the construction of the New Meishin Highway. Koyama is his Director, and can be considered its spokesperson. Even though many (if

[22] See http://www.udono-yoshihara.com/鵜殿クラブ-鵜殿通信/ (accessed November 01, 2016).
[23] Interview, December 2015.

not most) of the activities and members of the group overlap with those of the Udono Club, there is no conflict between the two (**FIG.5.11**).

FIGURE 5.11. Some members of the Udono Reed Bed Research Center. December 2015. (Picture by the author).

The years in which the Club and the Research Center were born were also those of the heated debate on the privatization of the highway system, a time in which roads were especially contested sites [24]. Roads were seen as dangerous, potentially harmful machineries causing pollution and environmental destruction: opinions regarding their construction were thus situated along a spectrum that had expectations and distrust at its ends. According to Koyama, "for a city such as Takatsuki, which originated as a sort of satellite of Osaka, populated by workers who already commuted daily by train, the economic stimulus deriving from the construction of the New Meishin Highway was not as significant as politicians claimed"[25]. If this was the case, there is little wonder that the local communities would tend to side with the environmentalists rather than with the construction companies. There was cause for concern, too. In 1996, a plan was devised to realize the 10 kilometers of highway between Yawata and Takatsuki as a two-lane section.

[24] For a comparison with South American case studies, see (Harvey and Knox 2015).
[25] Interview, September 11, 2016.

Two years later, the section was revised so as to accommodate four lanes (Koyama 2009, 24). Even though it was repeatedly argued that the construction of this tract ran contrary to the privatizing agenda of Prime Minister Koizumi, JH and its successor NEXCO West consistently claimed that the state of the old Meishin Highway was so compromised that the road could even become dangerous, especially in the event of a natural disaster such as an earthquake. Moreover, heavy traffic had become a cause of concern: not only were travelling times excessively long, but the lack of alternative routes represented a problem in case of an accident or other emergency. Here, then, is where the river and the highway met –where the site of environmental threat materialized. Even though the environmental impact assessment had been conducted in 1994, JH officially took charge of the construction only in 1998. Thus, it is easy to interpret the constitution of the Udono Club and of the Udono Reed Bed Research Center as a reaction to the highway plan.

The faith of the Yawata-Takatsuki project was complex. At first, the tract was temporarily "frozen" as part of the broader privatization of the highway system. However, in 2009 the newly elected governor of Osaka prefecture, Hashimoto Tōru, stated incontrovertibly that "even if there was no demand for it, the construction of the New Meishin Highway would be a governmental and administrative duty" and that the administration was "working toward a rapid inauguration of the construction works on the no-go tracts (*michakkō kūkan*)" (Koyama 2009, 26). Just a few days later, the 4th Conference on the National Development Arterial Expressway confirmed its decision not to build. And yet, the decision was reversed in April 2012 by the Minister of Transportation, Maeda Takeshi, who then entrusted NEXCO West with the project. Today, works have not yet begun. They are expected to start in 2018, while the completion of the highway tract is expected by the year 2023.

It was in the span of 20 years, between the birth of the Udono Club in 1998 and the order to reopen the Yawata-Takatsuki construction site in 2012, that *gagaku* made its appearance. Once again, Koyama's role was crucial: in 1999, an encounter with reed maker Okuda Teiji opened his eyes to the painstaking work of producing these delicate objects. Okuda also introduced members of Osaka-based *gagaku* group Garyōkai to Koyama. Later on, in 2003, Koyama made the acquaintance of Tōgi Toshiharu (1929-2011), then Chief Court Musician of the Imperial Household ensemble. From that moment on, court musicians' visits to Udono became frequent, as well as concerts by *gagaku* groups (Koyama 2009, 20–21). Tōgi Hideki's homonymous first album was released in

1996. Five years later, he was at the height of his popularity: *gagaku* had made an unexpected comeback in the mainstream panorama of Japanese arts. Thanks in part to Tōgi's interest in the fate of the *hichiriki* reeds, Udono started to receive media coverage, reaching national visibility. In 2005, Crown Prince Naruhito attended an event on riverine environments that featured a small stand with descriptions of Udono's reeds.

The two worlds of *gagaku* and of Udono's environmental problems started to draw near, as both activists and *gagaku* lovers began to understand the value of speaking out jointly. The newsletter *Gagakudayori* took it upon itself to spread the news concerning Udono among its members[26]. For its part, the Udono Reed Bed Research Center acknowledged to a much greater degree the cultural relevance of *gagaku* and the historical connection between 'Japanese court music' and Udono. The most important and representative of the many initiatives organized jointly was the drafting and circulation of a petition opposing the construction of the Yawata-Takatsuki highway tract, to be presented to the Ministry of Land, Infrastructure, Transport and Tourism. Between 2012 and November 11, 2013, when it was presented to the Director of the Road Bureau of the Ministry, 79.000 signatures were collected. Despite the sympathetic words proffered by the ministry official, however, little changed in the following years. While the petitioners demand a radical "reconsideration" (*minaoshi*) of the highway project, both NEXCO West and representatives of the government have always declared that their hope is to be able to assure "the compatibility of the preservation of the environment in which high quality reeds grow and the construction works on the New Meishin Highway"[27].

The petition was distributed among *gagaku* practitioners everywhere in Japan, and constitutes the core of today's official strategy against the New Meishin project. Such a strategy has been reduced to a fittingly provocative slogan, a mixture of English and Japanese: "SAVE THE Udono reed bed!" (*SAVE THE Udono yoshi hara!*) (**Fig.5.9**). One effect of this recent exacerbation of the Research Center's communication strategy has been the mobilization of the already polarized world of *gagaku*. Spokespersons from the

[26] As a renowned *shō* maker, its editor Suzuki Haruo was and still is especially concerned with the fate of materials used to produce musical instruments.

[27] First Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (January 10, 2013). New Meishin Highway. Investigative Commission on the Environmental Preservation of the Udono Reed Bed: Rules and Regulations (Draft). Available at http://corp.w-nexco.co.jp/newly/h25/0121/pdfs/05.pdf. Accessed November 15, 2016.

most important groups, both amateur and professional, signed the petition. Both the Osaka-based group Garyōkai and the Nara-based Nanto gakuso joined the cause, and so did the internationally renowned musicians of the ensemble Reigakusha. Although the Imperial Household musicians took a more subdued stance, its former Directors Tōgi Toshiharu and Tōgi Kanehiko voiced passionate appeals. Similarly, Tōgi Hideki, arguably the best-known public figure associated with *gagaku*, repeatedly stood up for the Udono case: "I would be greatly disappointed if a piece of our culture that we present to the world with such pride is lost for the sake of an expressway", he said in November 2012 (*Asahi shinbun*, digital version, December 06, 2012). The following year, Tōgi went so far as to call the construction of the New Meishin Highway "a world-scale blasphemy against culture", referring to the whole dispute as "ruining Japanese culture for a highway" (H. Tōgi 2013, 9). Finally, when NEXCO decided to set up an Investigative Committee on the Environmental Preservation of the Udono Reed Bed, Tōgi requested to become an official 'observer', and even sent a passionate letter to the Committee on its second meeting in 2013 (see H. Tōgi 2013) [28]. Even so, activists have repeatedly expressed their disappointment toward the fleeting nature of his engagement. One man in his forties once told me, rather sharply: "Go look at the list of those who attended the meetings: he was only there the first time, then he didn't bother to show up anymore. Sure he was there when Udono made the news in 2012, but perhaps he has lost interest ever since"[29].

Another noticeable aspect of the petition was the international support it immediately received. Perhaps unsurprisingly, ethnomusicologists dealing with Japanese performing arts responded, sending messages from Europe and the Unites States (see Suzuki 2013). The International Double Reed Society [30] issued a message of support in which its executive board drew an appropriate parallel between 'Eastern and Western reed cultures', so to say: "In western culture, all reed wind instruments (including the ancient bagpipe) use reeds made from cane (*Arundo Donax*). The best reed cane grows only in a few areas of the Var region of France, and virtually all professional reed players in the world use reeds made from Var. If the resource for this reed were to be destroyed, its

[28] The letter can be found at: http://corp.w-nexco.co.jp/newly/h25/0624/pdfs/10.pdf (accessed November 15, 2016).

[29] Interview, December 2015.

[30] "The world-wide organization of double reed (oboe and bassoon family) players, instrument manufacturers and enthusiasts" (see https://www.idrs.org/. Accessed November 4, 2016).

obliteration would have a catastrophic impact on western music making and culture" (see Suzuki 2013, 3).

Despite such widespread solidarity, stopping the construction altogether seems to be an unattainable goal. Between January 2013 and February 2016, the Investigative Committee set up by NEXCO West to gather scientific evidence and take into consideration various experts' opinions organized seven meetings. The Committee is composed of six members[31] (three university professors in scientific departments, two museum directors, and Koyama Hiromichi from Udono Research Center), eight observers (among whom two stand out: Tōgi Hideki and Ikebe Gorō, Chief Court Musician of the Imperial Household ensemble) and five representatives from NEXCO West. From the numerous documents available online and as confirmed by several activists, it seems clear that despite NEXCO's accommodating attitude, the intention was never to radically reconsider the project, but rather to find a way of bringing it forth that would be deemed acceptable by all parties involved. Thus, the battle between those who support and those who oppose the project, as seen through the materials submitted by experts selected by NEXCO West and by the members of the Udono Research Center, can be understood as a 'negotiation within bounds'[32]. Needless to say, this caused some discontent among activists: "Let's just say that if you call your own experts, maybe you're not exactly as neutral as you want everybody else to think…" a woman told me while pensively sipping a beer. Koyama instantly echoed her: "We have to make our own measurements, you see. Call *really* independent experts and have them redo the analyses all over again. Except we don't always have the means to do that, and so sometimes we just have to accept some data for what they are, at face value. Although, to be perfectly honest, the main point is what you do with those data"[33].

In the end, however, the future of Udono does not depend on how many signatures are collected or on how many people gather on the riverbank. Ultimately, the fact that high-profile individuals might join the cause has little consequence. The crucial question resides rather in the reeds themselves, and is straightforward: are Udono's reeds truly

[31] Until the fourth meeting, the members were Kamada Toshirō, Koyama Hiromichi, Nakase Hisao, Nishigaki Makoto and Nunotani Tomō. In 2014, Hattori Tamotsu joined the Committee (Fourth Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (May 24, 2014). Participants' List. Available at http://corp.w-nexco.co.jp/newly/h26/0526/pdfs/02.pdf. Accessed November 15, 2016).

[32] See the numerous documents available at http://corp.w-nexco.co.jp/ (accessed November 11, 2016).

[33] Interview, December 2015.

special? And if so, what is the scientific explanation for it? The answer to this question is decisive as to whether the existence of the Udono reed bed is essential to the world of *gagaku*,. Posing the question is itself a provocation, because the message delivered to those who for many years upheld Udono's reeds as *materially consequential* to the sound of Japanese court music can be summarized quite bluntly as: "You've been hearing it all wrong!". But if that was the case, would it not mean that *gagaku* performers and listeners have been tricking themselves into *hearing things*? Is there really such a wide gap between a sound as perceived and the material constituents that concur to its production? These are the radical questions that all parties interested in the dispute over the survival of the *hichiriki* reeds must face: what's in a reed? And who is hearing things right?

5.4 WHAT'S IN A CANE? THE COMPOSITE PULP OF THE *HICHIRIKI* REED

There is a notion among *gagaku* connoisseurs that the canes used to produce the *hichiriki* reeds are inherently different from those that belong to the same botanical species but can be said to be, for all intents and purposes, musically useless. Evidence of this conviction can be found in the language used: for example, the character that denotes the plant Phragmites Australis, 葦, generally has two interchangeable readings: *yoshi* and *ashi*. However, because of the homophony between *yoshi*, the ancient form of the word for "good", and the first reading, and, on the other hand, the assonance between *ashi* and the word *aku*, denoting something negative or evil, *hichiriki* players and *gagaku* amateurs are used to refer to canes that can be turned into reeds using only the reading *yoshi*, relegating all other 'useless' canes to the pejorative term *ashi* (see T. Tōgi 2009, 2).

One of the pamphlets produced by the Udono Reed Bed Research Center accurately specifies that it was only from the Kamakura period, and starting from the region of present-day Ōmi, that the reading *yoshi* gained popularity, and adds that in the Meiji it gained a more prestigious status, taken up by botanists, and finally spread among the general population. Nowadays in Udono, *yoshi* is the preferred reading, simply because the area was for centuries a district of production of *yoshizu*, a type of traditional

horizontal screens to use in the house (Yagi 1982, 30–31)[34]. For all its political repercussions, the issue of Udono might even be conceived as a problem of translation: after all, the *yoshi*/*ashi* distinction is eminently *emic*, in the sense that it finds no immediate counterpart in the terminological toolkit of the (social) scientist. The problem, then, is to verify whether or not this distinction can be rendered in *etic* terms, to return to the abused Geertzian categories (on which, see Geertz 1974; Fetterman 2008). That this emic dimension is indeed important appears to be amply demonstrated by the peculiar relationship between a performer and his or her reeds.

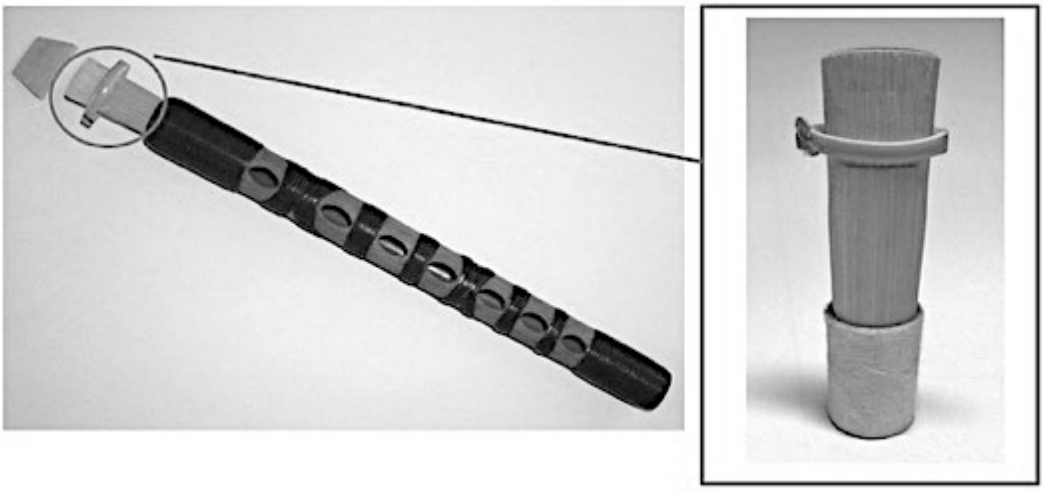

FIGURE 5.12. A *hichiriki* and its reed. From Koyama's presentation *Enjoying Udono: Creating Watersides and Dreams. Records from 40 Years* (October 2015).

When I conducted participant observation with the group Nanto gakuso, I met N. A short-haired, slender and tough-looking girl in her thirties, she was serious, focused, determined. Unconsciously, I associated her physical traits with the details of her relationship to the *hichiriki*. The way she sat with a straight back, for example; the careful gestures with which she adjusted the reed into the instrument's bore, always slightly more precisely than the persons sitting next to her; the strength of a sound that seemed to come directly from her confidence, her bodily presence… One time N. told me: "You can use the same reeds for several weeks, months if they are good. Since you use green

[34] Available at http://www.udono-yoshihara.com/鵜殿うどの/鵜殿パンフレット/ (accessed November 11, 2016).

tea, they remain quite soft[35]. At first, when you're inexperienced, they crack easily. But gradually you learn to adjust them with the knife, so they are just the right size for you. All in all, you can understand if the reeds are good in three ways: touching them, putting them in your mouth to play, and listening to the sound that results. Also, good reeds make it easier for you to play, much easier. In this sense, Udono's reeds are really the best"[36].

The essential book on the *hichiriki*, Abe Suemasa's *The Hichiriki of Gagaku. A Secret of a Thousand Years* (*Gagaku hichiriki. Sen'nen no hiden*) (2008), seems to concur. The notices that "the tone quality of the *hichiriki* varies greatly depending on the quality and condition of the reeds" and that "since ancient times the best quality reeds are harvested in a place called Udono" (Abe 2008, 65). The fact that the book contains a paragraph entitled "The Canes of Udono" (*Udono no ashi*) is telling. Mr. Okuda Teiji, a professional reed maker, is considered by many as Japan's most talented *rozetsu*[37] maker, and is one of the few remaining artisans of this kind. Based in Mie prefecture, he has learned the craft from an Imperial Household musician, Tōgi Kanehiko, and has been active for over 35 years (Suzuki 2012, 4). He too is unequivocal: "The canes that I use are those from Udono on the Yodo river. I have tried using canes from different regions, but there are no other reeds that produce the peculiar tone quality [*neiro*] of the *hichiriki* used in *gagaku*. And even in Udono, if the canes are not firm and sturdy you can't really get true high-quality reeds". As soon as it is established that the best material to produce *rozetsu* comes from Udono, the focus of attention shifts to what it takes to physically make a reed: this is a difficult and time-consuming endeavor, whose step-by-step description constitutes yet another possible answer to the question of what exactly a reed might be[38].

This is how Okuda recounts the first steps of his delicate work: "First of all, you must select the best canes available, cut them and let them dry naturally for about three years. Only then can you start working on them. Then you need to put the canes to dry three more years indoors, on an *irori* [traditional sunken hearth] inside a thatched roof house, so that the soot from the fire can settle on them. By doing that, not only will the canes get

[35] *Hichiriki* players generally dip their reeds in a cup of warm green tea for a few minutes before starting playing, so that the two ends automatically 'open up', allowing the air to pass through and allowing for the reeds' vibration.

[36] Interview, February 2014.

[37] The technical term to indicate *hichiriki* reeds. It is often substituted by the English-based *rīdo*.

[38] A short video clearly illustrates the main passages: https://www.youtube.com/watch?v=8wMaFVH6aNE (Accessed November 04, 2016). A more complete description can be found in (Abe 2008, 67–85).

sturdier, but once the reed is complete they'll last longer and have a brighter tone" (Suzuki 2012, 4–5). After drying the cane, a section of the appropriate length is cut. The skin is removed from two thirds of the total length of the segment, and Japanese paper (*washi*) is applied. The same portion is then squeezed with a special pair of pincers: the resulting walls will become the two blades of the reed (**FIG.5.13** and **5.14**). The cane is then 'treated' with charcoal fire, which provides greater strength and durability. Subsequently, the extremities are carefully shaped by carving out the material in excess. The upper end of the cane's portion is rounded, while the lower one is inserted in a separately crafted, small cone of *hinoki* wood. Finally, the buttonhole-shaped movable *seme*, used to adjust the length of the part of the reed inserted in the performer's mouth (i.e. the mouthpiece proper), is created from scratch. Several adjustments are usually necessary after these operations are completed. In any case, it will always be possible for the skilled performer to intervene on the finer details, using a special stocky knife.

The procedure is obviously complex, although it requires little technological intervention. Besides its material aspects, however, the making of a reed tells us something about certain characteristics that the final product conveys. First and foremost, a reed is a manufactured object that 'contains' tradition and expertise. But the reed is highly deceptive: it looks and feels utterly 'natural' and unspoiled, yet its appearance is the product of a finely refined process of manipulation. But the reed also conceals the process of its making. In fact, beginners are more likely to buy their reeds online, or through shops that specialize in traditional instruments. Thus, the reed may also symbolize status: in the practice room, only amateurs with many years of experience are able to work on their own reeds. These are only some of the aspects instilled in a *rozetsu*.

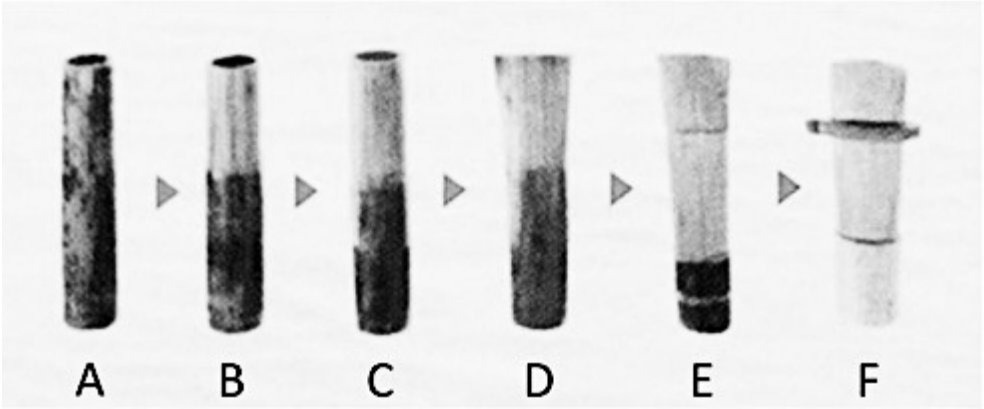

FIGURE 5.13. Various stages in the creation of the *hichiriki* reed. (Udono Reed Bed Research Center).

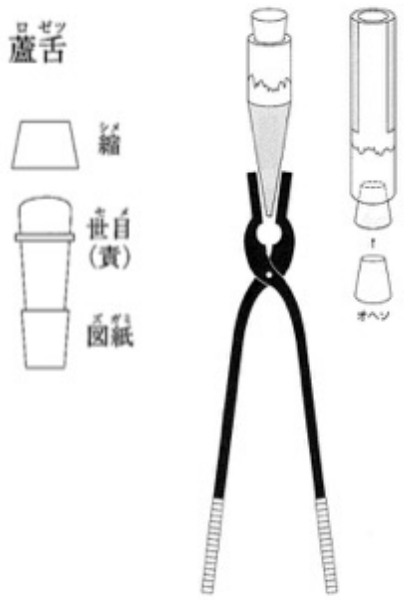

FIGURE 5.14. Pinching the reed's blades (right) and a finished *rozetsu* (right) (From Abe 2008, 45, 69).

If the craftsman's expertise can be thought of in terms of the immaterial component of the reed, its material but equally invisible counterpart is something that needs to be *extracted* from the cane: not all primary materials make for good reeds. When Okuda provided a few 50-year-old canes received from his late teacher so that Koyama Hiromichi could analyze them, two images were obtained with a microscope. Koyama explained this data in a booklet published by the Udono Reed Bed Research Center:

> "Why is it that only Udono's canes are appropriate [as reeds]? Of course there is the matter of their different size, much longer and thicker than usual. But another important element is the special combination of thickness and flexibility that makes the canes difficult to break. If we look at a picture of a high-quality stem magnified about 80 times, we can see that there are very few cavities in the phloem[39], and that the cellular structure is highly uniform. Not any cane growing in Udono qualifies for a *hichiriki* reed. To the contrary, in a very limited area only one stem in several hundreds or even thousands will do" (see Suzuki 2012, 5).

Koyama seamlessly concluded: "The protection of these precious *hichiriki*-reed canes is a big element in keeping alive the intangible cultural heritage that is *gagaku*".

[39] Vascular tissue distributing sugars and minerals throughout a plant (Mauseth 1998, 125).

For its part, NEXCO West nominated a working group (nicknamed Shokubutsu WG or Vegetation Working Group) with the aim of providing scientific analyses of the vegetation in the Udono reed bed. Since the third meeting of NEXCO's Investigative Committee (*kentōkai*), held in December 2013, the working group has been reporting on these analyses. The investigations initially focused on the botanical characteristics not only of the *yoshi*, but also of similar canes and of the vegetation at large, and later moved to the botanical and chemical properties of both the plants and the soil in the area (**FIG. 5.15**). Once more, the underlying and unasked question was, quite simply: what's in a reed?

FIGURE 5.15. Collecting specimens from Udono reed bed. July 2013. (Picture by the author).

Comparing the findings of the Shokubutsu WG with those of the Udono Reed Bed Research Center, what strikes as odd is the discrepancy between substantially similar results and diametrically opposite conclusions. Both groups established that the composition of the soil in Udono is threefold, with a superficial layer of silt (i.e. clay), followed by a "psammic" or sandy area, and by a more viscous, deeper layer close to the

water. On this basis, it was determined that the types of routes conveying the water to the plants have a quantifiable effect on the reeds. But while NEXCO declared that the water supply in the harvesting surface is independent from rainfalls, and thus disassociated the quality of the canes from that of the soil, the Udono Research Center insisted that the process by which the surface of the reed bed was distanced from the riverbed had the severe consequence of impoverishing the soil. This in turn, caused a marked decrease in the percentage of high-quality reeds. As explained by Koyama, in fact, "the best canes for the *hichiriki* reeds went through a specific lifecycle during the year: at certain times, the river would flood and the plants would be partially submerged. During these limited periods, the stems would absorb a number of chemical elements. After the water had retreated, the reeds would undergo several months with only their roots reaching the water. At such times, the nourishment previously stored was put to use by the plant"[40]. With the embankment of the riverbed beginning in the 1970s, flooding became a much rarer phenomenon. Thus, today, the plants are rarely if ever covered by water, and, according to the environmentalists, do not receive the necessary nourishment.

In this as in many other instances, the two approaches appear to differ radically in the way they look at the canes: while the activists include them in a complex dynamic regulating the entire ecosystem, the engineers-qua-scientists tend to isolate the object of their analysis. According to those opposed to the highway, the canes' lifecycle is the primary factor responsible for their quality, because the absorption of essential nourishment is believed to strengthen the plant, causing its outer walls to thicken. By thickening its walls, the canes are able to sustain the dryness of the warm season. At the same time, the substances stored help the reed enduring the colder months of the year.. After many years of research, Koyama concluded that the particular location of the high-quality canes provides the ideal balance between wetness and dryness: in fact, their roots grow much more horizontally, throughout the upper silt layer, than vertically, across the deeper strata of the soil. Thus what sets apart Udono's reeds is their thickness and flexibility, produced by their special distance from the water and by their ability to store certain nutrients thanks to their uniquely shaped roots (see Koyama 2009, 6).

Given Koyama's conclusions, it is easy to see why his preoccupation is the safeguard of the whole reed bed, as opposed to the canes in isolation. If this is the case, however,

[40] Interview, September 2016.

stopping the New Meishin projects depends on convincing the NEXCO experts of the validity of his view. But the chances of doing so were so slim that Koyama proposed to investigate the hypothesis of cloning the reeds. If safeguarding could not be achieved, perhaps preservation could. However, when the company conducted DNA analysis, scientists concluded that there were no substantial differences with canes harvested in widely different regions of Japan (Fifth Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (December 05, 2015).

Tōgi Hideki once stated: "In 'we Japanese', it seems there is a Japanese DNA. If, as DNA, music and the arts of ancient times, or the way of feeling nature, have been passed on down to modern man, this DNA yearns [to be released]. I believe that, in our modern heads, this has just been forgotten and that this sense/feeling in our cells has not been lost" (quoted in Lancashire 2003, 35). And in an interview, he added: "*gagaku* appeals to our primal instincts –we not only listen to *gagaku*, but feel it with the whole of our being. It's in our DNA"[41]. But looking at the results of NEXCO's working group, it seems clear that even if *gagaku was* actually inscribed in Japanese DNA, it would still be nowhere near the reeds of one of its instruments.

In 2016, a group of Japanese scientists published an article entitled *Why are Phragmites Australis Canes Grown in an Udono Reed Bed the Best for Reeds of the Japanese Wind Instrument Hichiriki?: A Structural and Biomechanical Study* (Kawasaki et al. 2016). Unfortunately, however, the results were inconclusive: "the quality [of the reed] is very different even among canes grown in the same place" or among "parts of the same cane" (Kawasaki et al. 2016, 49). Moreover, specimens collected in Udono compared with ones that grew in different geographical areas exhibit "thicker cell walls", providing "more uniform hardness in the whole blade" (Kawasaki et al. 2016, 49).The authors also noted that "the homogeneous structure over the hard and soft tissues would be an important condition for an excellent *rozetsu*": the higher "the homogeneity of the structure over the harder and softer materials", the better the results for the *hichiriki* player (Kawasaki et al. 2016, 49–50). Thus, strictly speaking, recent biomechanical and chemical analysis of the canes seem to point to the existence of certain 'objective' characteristics that would set Udono's canes apart from all the others.

[41] See http://www.japantimes.co.jp/culture/2002/12/29/culture/hideki-togi-out-to-gagaku-your-world/ (accessed November 8, 2016).

Nonetheless, the authors conclude: "It may be noted that we cannot say what hardness and rigidity are best for *rozetsu* because they depend on the player, the type of music, and other factors" (Kawasaki et al. 2016, 50). And, shortly afterwards, they add: "It is not easy to describe quantitatively or objectively the relation between the structure of musical instruments and the musical tones or sounds because the latter is [sic] evaluated subjectively by the feeling and sensitivity of the players" (Kawasaki et al. 2016, 50) (see **FIG.5.16**). In the end, a purely technological approach to the issue of what makes for a good reed does not seem to yield a more convincing answer than a different paradigm (such as the environmentalist perspective embraced by Koyama and the Udono Research Center). So, how can the question be answered? What makes a cane a reed?

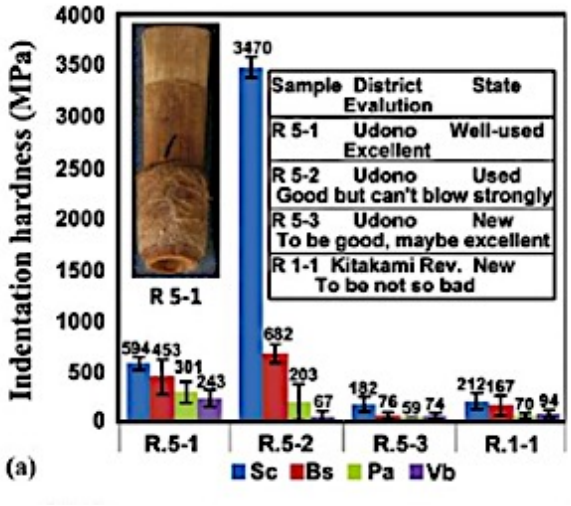

FIGURE 5.16. Analysis of the indentation hardness of four specimens of reeds. Note the performer's comments (not directly identified as such) below the name of each specimen.

(From Kawasaki et al. 2016, 50).

For one thing, it seems clear that the answer varies greatly depending on who is asking the question, and that, consequently, the issue is instrumental to specific, oftentimes opposing ideologies. The image of a rich pulp, at once flexible and sturdy, unique to the vegetation that can be found in Udono, fits particularly well with the political agenda of those who claim to be working to salvage a delicate ecosystem under threat. Conversely, data produced by laboratories can become powerful mediators in the service of corporate schemes and strategies. Indeed, NEXCO's analyses are also fascinating as powerful mediators, effectively turning something as tangible as harvesting, cutting and carving

the reeds into more manageable, fully reified 'things', such as numbers and diagrams (see **FIG.5.17**). In this way, any connection with the embodied practice of producing, performing and caring for *gagaku* is stripped off[43]. A third alternative, embraced by Kawasaki and his colleagues, is to suggest that scientific data are inconclusive. Noticeably, however, this option reinstates the subjective, attributing its shortcomings to "the feelings and sensitivity of the players".

FIGURE 5.17. A slide depicting the various stages of the DNA analysis commissioned by NEXCO West on canes collected in different regions (including Udono). (Third Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (December 12, 2013). Report of the Executive Office Shokubutsu WG. Available at http://corp.w-nexco.co.jp/newly/h25/1212/pdfs/05.pdf. Accessed November 15, 2016).

From an analysis of the many answers to the question "what's in a cane?", it seems clear that different groups look inside the hollow plants that grow in Udono and detect different things. Artisans see craft and tradition: to them, history is science, tradition is the name they give to the evidence that left a sediment in time. Engineers, on the other hand, see the hollow space between the walls of a cane, but fail to see the value in its

[43] As noted by Harvey and Knox, "the knowledges that these engineers produce do have a particular quality, namely the capacity of the specific abstraction to manifest as generic (i.e., nonspecific) and thus float free of the complex relationality of the social" (2015, 203).

preservation. Perhaps they see an obstacle to brighter possibilities, to more impressive accomplishments, an obstruction to what could be a real mark on the land and a sign of progress. Environmentalist look into the canes and see an entire panorama of ecological richness: where others see a patch of muddy land and a uniform mass of uninteresting vegetation, they feel the interconnection of vegetation and animal life, past and present, ways of life and ways of inhabiting the world.

Ultimately, each of these gazes rests upon a different way of scaling: the infrastructural gaze embraces entire portions of the 'landscape'; the scientific gaze dissects nature into smaller components and reifies them as numerical abstractions; the environmental gaze moves 'at ground level', and cares about the integration of the elements of an ecosystem. All these ways of seeing can be found inside the cane, which is essentially a complex, *multi-scale object*: in Udono its substance, its pulp, is a composite of water, cement, chemicals, measurements, tradition, hopes…and sound. The lines of a network of conflicts converge into a tiny fragment, transformed into a symbol and invested with opposing interests. Along the Yodo river, as anywhere else, the natural is turned political.

5.5 TANGIBLE, INTANGIBLE, POLITICAL. *GAGAKU* AS AN 'ENDANGERED SPECIES'

Infrastructures are dangerously seductive. Embedded in the daily life of those who inhabit them, roads, bridges, pipelines and communication cables shape people's fruition of their surroundings and dictate pathways for physical, intellectual and even spiritual movement (one could think of pilgrimages as infrastructures of emotions, for instance). Often monumental, they are nevertheless curiously absorbed by the fabric of experience, attaining a kind of invisible presence in full view. This paradoxical character of manmade material arrangements rests on two features: a dynamic of opposites conjoined, as seen in the synchronicity of absence and presence, naturalness and artificiality exhibited by rail tracks or telephone lines (technologies so seamlessly integrated in the urban environment that they often 'disappear' or become 'natural'); and what might be called a 'foldedness' of sorts[44]. Indeed, infrastructures are always presented to us as already

[44] On networks' and objects' ways of folding, holding together or falling apart, see (Mol and Law 1994; Abrahamsson and Mol 2014).

'networked', enclosing a number of smaller constituents but also pointing to larger realities. After all, as Dalakoglou and Harvey have noticed, "the realisation of such works involves financial, regulatory and technical relations that often *fold* international, national and local regimes into a single and specific location" (2012, 460 emphasis added). The 'folded state' of infrastructures thus points to a third characteristic: their ability to subsume or, rather, efface the very processes that brought them into being[45]. Though they might be 'networked', infrastructures are not easily explained by the concept of network[46]: "given the ever-proliferating networks that can be mobilized to understand infrastructures, we are reminded that discussing an infrastructure is a categorical act. It is a moment of tearing into those heterogeneous networks to define which aspect of which network is to be discussed and which parts will be ignored" (Larkin 2013, 330).

In recent years, anthropologists' attention has often fallen on the political dimension of devising, constructing, and living with infrastructures[47]. As two prominent authors have recently noticed, "the ethnography of infrastructures offers a space through which to investigate how the political takes form" (Harvey and Knox 2016). In a similar vein, in their monograph *Roads. An Anthropology of Infrastructure and Expertise* (2015) the same authors concluded that a focus on roads allowed them "to rethink the political from the more grounded, experiential, and immediate space of infrastructural formation" (Harvey and Knox 2015, 187). The specificity of the anthropological gaze as applied to infrastructures lies, then, in its power to bring to light both the political in the material and the materiality of the political.

More broadly speaking, when it comes to infrastructures anthropology has also felt the need to understand what lies behind the surface of the tangible: road building, for example, "involves a great deal more than simply the execution of a planned process of

[45] In the vocabulary of Actor-Network Theory, this is known as "punctualization" (see Latour 1999, 184).

[46] It is perhaps useful to remember that the Oxford English Dictionary defines infrastructure as "A collective term for the subordinate parts of an undertaking", clearly gesturing towards the networked quality introduced above (see "infrastructure, n.". OED Online. September 2016. Oxford University Press. http://www.oed.com/view/Entry/95624?redirectedFrom=infrastructure (accessed November 18, 2016)).

[47] See the seminal article by Susan Leigh Star (1999), those collected in (Lockrem and Lugo 2012) and the special number of the journal *Mobilities* (Vol.7 Issue 4) (2012) on roads and anthropology. For useful overviews, see also (Snead, Erickson, and Darling 2010; Salazar 2014). For a provocative piece on fresh ways to think about infrastructures, complete with an excellent list of recent anthropological sources, see (Larkin 2013). See also the post series available at https://aesengagement.wordpress.com/thematic-series/the-nature-of-infrastructure/ and https://culanth.org/fieldsights/725-the-infrastructure-toolbox (Appel, Anand, and Gupta 2015) (accessed November 16, 2016).

material transformation. As well as technical expertise, their appearance also requires a force of social and political will which is able to generate and foster the belief that these technologies have a capacity to transform the spaces through which they will pass. Roads are thus not just material forms, but are promises towards a future which is uncertain and unclear" (Harvey and Knox 2012, 523). In fact, anthropologists have consistently demonstrated that the political dimension of infrastructures plays out largely on the level of affects: "roads and railways are not just technical objects […] but also operate on the level of fantasy and desire. They encode the dreams of individuals and societies and are the vehicles whereby those fantasies are transmitted and made emotionally real" (Larkin 2013, 333).

But the emotional purview of road building or river management is not confined to how certain people live with (the consequences of) roads or bridges –and so the study of infrastructures too should not be limited to such aspects. Road building and river management have an 'affective dimension' because they have an effect on the world: affecting a state of affairs –that is what affective means, in this and other cases[48]. Thus, in this sense, "the processes by which rational projects of technological development are able to enact their promises start to become more comprehensible when we begin to pay attention to the affective engagements which accompany developmental processes" (Harvey and Knox 2012, 534). Needless to say, such a shift also clears the way for a rich cross-pollination between research on mobility, "human-technological assemblages", experience, expertise, and even performance[49].

And, incidentally, the aesthetic dimension of infrastructures is shaped by the centrality of the body in the fruition of such complex systems: "Aesthetics in this sense is not a representation but an embodied experience governed by the ways infrastructures produce the ambient conditions of everyday life: our sense of temperature, speed, florescence, and the ideas we have associated with these conditions" (Larkin 2013, 336–37)[50]. This is because infrastructures "operate at the level of surface, what Buck-Morss (1992) refers to as the *terminae* of the outside of the body—skin, nose, eye, ear—rather

[48] Of course, such a view is based on Spinoza's notion of *affectio* as interpreted and redefined by Deleuze and Guattari in *A Thousand Plateau* (2005 [1980]) (see Brian Massumi's succinct definition in Deleuze and Guattari 2005, xvi; and, for a clearer exposition, Massumi 2015, 3–4).

[49] For a wonderful example of such theoretical hybridizations, see (Adey et al. 2012).

[50] Here, Larkin is drawing from the classical Aristotelian concept of *aesthesis*: "*Aisthesis* refers not to the mental appreciation of works of art, but to a bodily reaction to lived reality: "It is a form of cognition, achieved through taste, touch, hearing, seeing, smell," Buck-Morss (1992, p. 6) argues" (Larkin 2013, 336).

than the mind inside. Softness, hardness, the noise of a city, its brightness, the feeling of being hot or cold are all sensorial experiences regulated by infrastructures" (Larkin 2013, 337). Aesthetic, affective and embodied: such are the surprising features of roads, pipes, and cables.

But the aesthetics of infrastructure is only a short step away from the "aesthetic of landscape nostalgia" (Waley 2000, 200) actively deployed by the supporters of the SAVE THE Udono Reed Bed campaign. Resorting to old and new images of *furusato*, Koyama and the other members of the Udono Reed Bed Research Center appeal to a complex imagery that more or less unknowingly draws from what anthropologist Jennifer Robertson has called "a literary genre of *affective environmentalism*, beginning in the eighth century with the *Kojiki* and *Nihon Shoki*, including poetry anthologies and Edo-period (1603-1868) farm manuals, and persisting today in the form of domestic policy platforms, city charters, and sake advertisements among others" (1988, 498 emphasis added). Just like infrastructures participate in our sensory experiences, so too the *furusato* discourse elicits an affective response mobilizing images and cultural references that resonate with people's perception of the environment.

This complex affective appeal of *furusato* is often condensed, hidden, by resorting to the word "culture". Noticeably, this was the case with Tōgi Hideki's appeals against the construction of the New Meishin Highway. Here is how he chose to begin his peroration:

> "Certainly it must be possible to harvest the canes somewhere else, you may think. But the reeds from a different location cannot harbor a sound that has been preserved without changes since the Heian period! It would be a change to our culture". And he goes on: "Culture is intricately entangled and linked to a number of things. The canes from Udono's reed bed too are entangled with not just the culture of *hichiriki* reeds, but also the unique culture of Udono. It is finely linked to the methods of burning the canes and harvesting them, and to the impact on the ecosystem there" (H. Tōgi 2013, 9).

Here, Tōgi is trying to project onto Udono "a sentimentally evoked topography" (Robertson 1988, 497) that reverberates with that entire undercurrent of Japanese classical literature mentioned earlier under the rubric of "affective environmentalism".

While this may sound too farfetched, it is worth remembering that Tōgi's intellectual move is not isolated: Koyama, for example, similarly opens his pamphlet recalling the episode, recorded in the *Tosa nikki* (935), of poet Ki no Tsurayuki travelling along the Yodo river and spending the night in an inn that he calls Udono (2009, 10). Thus the use

of Udono as an emblem of *furusato* is not at all ahistorical; on the contrary, it is filled with intertextual cues to the past. Moreover, some of the features of the reed bed, such as its proximity to the water and its role in the production of traditional artifacts, seal the analogy with a touch of authenticity: "as a landscape, the quintessential features of *furusato* include forested mountains, fields cut by a meandering river, and a cluster of thatch-roof farmhouses" (Robertson 1988, 494). According to these coordinates, Udono truly seems like the paragon of nativist hometown-ness.

But given the insistence on such well-worn tropes, how are we to judge the fact that those environmentalists are the same who once heavily intervened on the reed bed by placing there a water pump (see **FIG.5.18**)? And how can the values articulated by the discourse of *furusato* be harmonized with the suggestion advanced by Koyama to simply "clone the canes"? In short, how and why did the advocates of Udono's cause manage to intervene on the reed bed at the infrastructural level while at the same time praising the timeless beauty of the area?

FIGURE 5.18. Working on the water pump in Udono, around 1996. From Koyama's presentation *The Udono Reed Bed Sustains the Intangible Cultural Heritage of the Humanity* (October 2013).

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In order to answer these questions satisfactorily, it is important to acknowledge the impossibility of reducing the environmentalists' interpretation of what Udono is to any idealized vision of *unspoiled* naturalness. The most convincing evidence of this lies in the words of a prominent member of the Udono Reed Bed Research Center Tanioka Suwako.

On one occasion, Tanioka noted that "like *satoyama*[52], the reed plain is a 'secondary nature' [*nijiteki shizen*] that can only be preserved through human use" (Tanioka 2012, 9)[53]. Tanioka refers here to a type of nature which, "like the natural environment of rural communities, is preserved through the participation of human beings"[54]. Thus, human intervention is not rejected a priori as destructive by Koyama and other environmentalists, but rather ingrained in the very definition of nature that underlies a certain 'politics of preservation'. From this point of view, the reeds are no less natural even if they have gone through a complex process of manufacturing: "before we can hold them in our hands as *hichiriki* reeds, these [canes] have to pass through many hands, from those of the people who harvest them, to those of the people who sell them, to those of the people who manufacture them, to those of the people who buy them and finally play them" (Tanioka 2012, 3). Protecting the environment thus means not only insuring the existence of Udono's flora and fauna, but also supporting a variety of human activities. In this sense, the battle for preservation is not necessarily aimed at keeping things as they are, but rather at averting the consequences of unwanted change. The distinction is vital to understand why those who oppose the construction of the highway section between Yawata and Takatsuki have already manipulated the same environment that they actively try to safeguard.

Even though the concept of nature that emerges from the words and activities of the Udono Reed Bed Research Center is more comprehensive than one would initially expect (and similar considerations could be extended to such keywords as 'landscape' or 'environment'), their choices when it comes to the preservation of the area were always markedly in line with broad political tendencies at the national level. This chapter has

[52] "Satoyama is a word composed of *sato* (village) and *yama* (mountain). Its dictionary definition reads: "mountain near a village, connected to the life of the inhabitants". By extension, the term indicates the Japanese rural territory linearly organized as a valley floor or piedmont, downhill from forest slopes. Surrounded by woodland, *satoyama* consists of fields and rice paddies, streams and furrows, dugouts and reed beds, with gardens and houses all around. This territory is used for food-producing mixed farming, and it is maintained according to local know-hows. […] In such a temporal and spatial mosaic of intertwined milieus and habits, each component is strictly connected to the others from an ecological as well as from a utilitarian point of view. Here, there have been constant interactions between people and environment. […] Here, culture and nature have overlapped and enriched one another" (Brosseau 2014, 402–3)

[53] Here "secondary nature" is not to be confused with Shirane's homonymous concept, which indicates a "re-created or represented nature", codified by literary authors starting from the 8th century and "not regarded as being opposed to the human world so much as an extension of it, (…) a substitute for a more primary nature that was often remote from or rarely seen by the aristocrats" (Shirane 2012, 4).

[54] A definition provided by the Ministry of Agriculture, Forestry and Fisheries (MAFF): see http://www.maff.go.jp/j/nousin/jikei/keikaku/panf/02/pdf/2.pdf (accessed November 15, 2016).

attempted to elucidate some of these broader connections with the political life of postwar Japan. Indeed, the effects of the aggressive 'cementification' that characterized Japanese politics between the 1950s and the 1980s were particularly severe in places like Udono, close to a stream of water but undoubtedly suburban: "river ecosystems were destroyed, their wildlife and fauna disappeared, and many riparian landscapes lost their natural beauty. This transformation was particularly evident in rivers that ran through urban areas" (Takahasi and Uitto 2004, 65). Since the 1980s, "recovering the river environment [became] an important issue in river administration and engineering in Japan, because it was realized that the ecology of virtually all rivers in the country had deteriorated severely" (Takahasi and Uitto 2004, 68).

The explosion of a national debate over the privatization of Japan Highway and the other public companies involved in the construction of the road system, around 1998, gave the inhabitants of those areas that had already been subjected to large-scale works yet another reason to dissent. After all, as noted by Waley, "the postwar history of Japan can be seen in terms of the inexorable arch of development through construction (generally in concrete). Much of the resulting conflict has focussed on struggles over water" (2005, 195–96). In short, "rivers have become a central preoccupation, a rallying point, and a locational device for organizing activities" (Waley 2005, 196). Once again, the case of Udono is paradigmatic: the appearance of the Udono Club and Udono Reed Bed Research Center is almost concurrent with the debate on the privitazion of the highway sector.

Their dissatisfaction with national politics constitutes a third element of social critique: over the years, these overtones of civic protest were gradually reinforced by the realization that the privatization of the highway companies was merely a façade. As pointed out by Mizutani and Uranishi, in fact, the use of the term privatization "is far from accurate in this case, as the newly established expressway law rules that one-third of the shares should continue to be held by the government" (2008, 471). Despite the mounting aversion toward the expansion of the highway system (promoted by the Fifth Comprehensive National Development Plan in 1998), government policy was characterized by "an unwillingness to change a previously decided course, however unreasonable or inexpedient it is shown to be" (Waley 2005, 213). In other words, the reaction of central institutions seemed to confirm the thesis of Japan as a "construction state" (*doken kokka*) (McCormack 1996), described by Feldhoff as "a government which

puts much more public investments into the construction of public works than can be realistically justified by public need" (Feldhoff 2007, 91).

Such a failure to address citizens' concerns was worsened by the fact that "public works have not scored any real success at lessening the regional disparities" (Feldhoff 2007, 95). Once more, the issue was first and foremost political: "politicians and bureaucrats at both local and central levels have gravitated around specific construction project" (Waley 2011, 91), giving rise to a "clientelist state" in which "politicians channel distributive policy expenditures in the form of public works into their electoral districts and thereby enhance their prospects for re-election" (Feldhoff 2007, 98). According to many activists, Udono was caught up in this loop: despite the fact that the construction of a secondary highway in the area was often perceived as unnecessary, its realization was required by an essentially corrupt political system. Torn between the tangible menace of promised infrastructures, the political discomfort toward enduring national inequalities, and the ineffable appeal of a nostalgic nationalistic frame of reference, Koyama and his fellow volunteers had to navigate the troubled waters of an imbalanced negotiation with NEXCO West.

This brings us to the final matter of what these movements to protect Udono have achieved, and of what future lies ahead of them. The first question is rapidly dispensed with. During the most recent Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed, held on February 24, 2016, the image below was featured in a presentation entitled *Project for a Bridge Considering the Environmental Protection of the Udono Reed Bed* (see **Fig.5.19**). It represents a comparison of three options for the construction of the massive bridge that would cross the Yodo river, each considered from the point of view of its impact on the reed bed. According to NEXCO West, the third alternative has the highest degree of "continuity with the [canes'] harvesting area", shown in green. This solution also reduces the number of pillars necessary to the project from the original four to just one, supposedly minimizing the impact of the bridge on the surroundings. Noticeably, the last column on the right represents the cost of each option. The very fact that a plan characterized by a lower environmental impact has been devised would seem to indicate that Koyama and his volunteers have somehow managed to get their message across. After all, what better sign of a successful negotiation than a modification of the original engineering project? However, in reality, NEXCO's proposal is seen by members of the Udono Reed Bed Research Center as a far cry from any real

improvement. And in the end, given that construction works on site are expected to begin by 2018, it is hard to tell whether two years will be enough time to ensure that "option 3" becomes anything more than merely a display of good intentions.

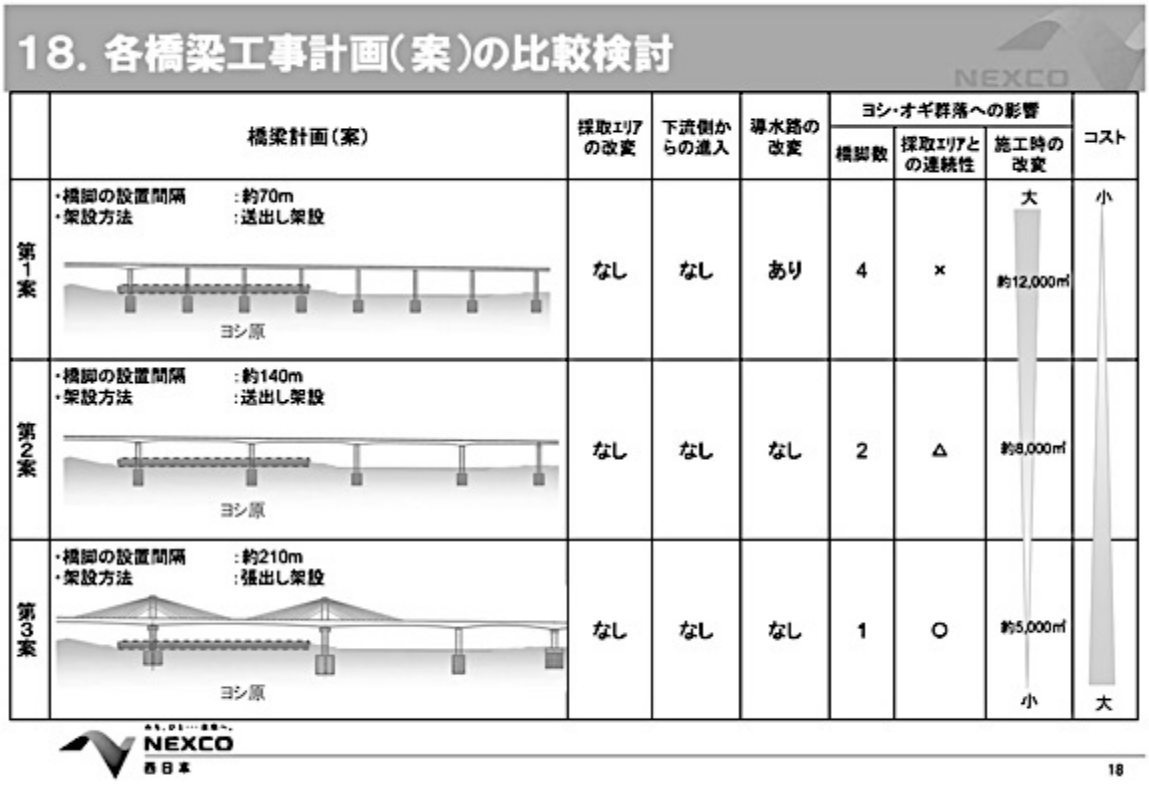

FIGURE 5.19. NEXCO's three options for the project of the bridge above the reed bed and across the Yodo river. Seventh Investigative Commission Meeting on the Environmental Preservation of the Udono Reed Bed (February 24, 2016). Project for a Bridge Considering the Environmental Protection of the Udono Reed Bed. Available at http://corp.w-nexco.co.jp/newly/h28/0224/pdfs/05.pdf. Accessed November 15, 2016.

Unfortunately, the prospects of Udono's activism are rather grim. Sure, there will be other meetings of experts, other measurements and debates, as well as countless other grassroots events. Sure, more people will join the ranks of the skeptical, dissatisfied, or simply concerned volunteers. But a close look at the documents made available by NEXCO West after each meeting of the Investigative Commission, and especially at the latest version of the brochure *Udono Reed Bed and the New Meishin Highway: The Effort of*

Environmental Protection (Ver.7, 2016)[56], indicates that the most crucial disputes have been essentially resolved. Analyses of the soil and of the canes did not reveal any substantial characteristics setting apart Udono from other areas of Japan; the bridge will have no negative impact on the canes harvested below; the spring fires in the reed bed will still be possible after the construction of the highway. The language is matter-of-fact, supported by numbers and diagrams. Even though Udono exhibits no sign of concrete changes, and one can still walk freely among its canes, there is a strong sense of inevitability surrounding the remaining phases of the project, which should be completed by 2023.

Asked to comment on what will happen in the future, Koyama stresses the importance of continuing to organizze the observation meetings (*kansatsukai*), "because more and more people should experience the beauty of Udono's nature on the ground". After our interview on September 11, 2016, he asked me to wait a few more minutes before heading back: there was something he wanted to show me. Hurriedly, he took me to an underpass just below Takatsuki's train station. Here, illuminated by neon lights, stood three big information panels behind thick glass. Each contained images of Udono, its reeds, its animals and vegetation. There were also pictures of *gagaku*: the usual ensemble playing *kangen* accompanied by a routinely description of the main characteristics of "Japanese court music". The next day, Koyama was to meet with some city administrators, who suggested they have a friendly conversation in front of those same panels. "I said: 'No, let's go to the reed bed instead. Let's meet there and have a walk'. Because you see, they should come there in person…it's too easy to meet here, too comfortable for them not to dirty their nice shoes". Perhaps it was the flickering light, or the fact that we were the only people in the underpass, but the enthusiasm of this senior campaigner seemed somewhat misplaced, perhaps even slightly grotesque. What fight was left to fight? His was a failure, a victory, or a baffling mixture of the two? The cacophonous echo of those concrete walls left little room for optimism.

An hour earlier, Koyama had told me that while his friend and former imperial musician Tōgi Kanehiko was alive, the battle for Udono could count on an eminent face and name. "Now that he's gone, there is no real spokesperson. More and more members

[56] Available at http://corp.w-nexco.co.jp/activity/open_info/progress/individual/31/pdfs/udono-yoshihara.pdf (accessed November 16, 2016).

of the Imperial Household ensemble do not belong to hereditary families. They are not from Kansai, their roots are not here. So naturally they don't care as much about the faith of Udono. The problem with *gagaku* musicians' involvement with the issue of Udono's reed bed, if you ask me, is all there: it's not personal to them anymore. It's not about their family, their home, their tradition".

Koyama might be right: perhaps musicians have lost interest in what is perceived as a matter of material resources, rather than of ethical values. But I would like to suggest that the decisive factor in the more or less acknowledged failure of the environmentalists lies in their incapacity to team up effectively with the world of *gagaku*. Despite the undeniable fact that many *gagaku* amateurs have in fact signed the SAVE THE Udono Reed Bed petition, firsthand experience with one of the most prominent groups in Kansai suggests that the vast majority of practitioners have only a vague understanding of the issue, even when the *hichiriki* is their primary instrument. More importantly, active participation in the events organized by the Udono Reed Bed Research Center is not a priority for those who perform *gagaku*. Indeed, it is something that does not concern them directly as music lovers, because it lies outside the realm of the musical, pertaining instead to the realm of (political) decisions.

This disconnection between musicians and environmentalists is all the more surprising considering that both groups have a vested interest in safeguarding Udono. Borrowing psychologist James Gibson's famous term (2014, 119), one could say that there are rich mutual "affordances" between the discourse of nature's preservation and that of *gagaku*'s. The reed, this complex and durable object, is itself full of "conceptual affordances" that stem from but extend far beyond the realm of the material (Holbraad 2014, 231): the 'timelessness' of the music in which it is used coincides with the long history claimed for Udono; its 'rustic naturalness' is easily associated to a rural landscape that resists the pressures of modernity; its role in the production of a 'harmonious' tone color may even parallel the canes' centripetal function within the communitarian life that once characterized the riverbanks. Exploiting these affordances the environmentalists conflate sound and nature: they not only portray *gagaku* as an unchanging tradition, but project the values ascribed to the environmental onto it. Thus the sounds and materials of the *hichiriki* largely overlap in this 'preservation discourse': in Udono, what may happen (and, to an extent, has already happened) to nature may also happen to music.

However powerful these associations may be, their proponents were clearly unable to articulate them into a network strong enough to overpower the one set up by NEXCO West. The components of the 'preservation discourse' remain divided: "At one end of the spectrum, then, is a narrative bemoaning the destruction of a nostalgia-suffused aesthetic of landscape, bathed by flowing water and reflected in neat paddy fields; at the other, one of focused struggle and targeted campaigns, occasionally reminiscent of the anti-pollution citizen movements of the 1960s and early 1970s" (Waley 2000, 200). Despite Waley's suggestion that there is "no hard boundary between these narratives and their adherents" (2000, 200), in Udono fragmentation is the price that those who care about the *hichiriki* reeds have to pay for their shortsighted decision to continue to play the part of the country folks "entrusted with the custody of an irreplaceable (if invented) heritage", the "curators of the landscape of nostalgia" (Robertson 1988, 509).

In the end, the concept of 'safeguard' may be the crux of the matter here. So long as *gagaku* is portrayed as an 'endangered species', so long as the discourse of those who seek to protect its materials keeps veering away from the tangible and the sonic and towards the ineffable, the timeless –that is, towards the essentialist-nationalist modern discourse surrounding "Japanese court music"- the alternative, powerful network of numbers, engineering, chemical analyses and seductive promises of economic expansion will continue to prevail. Udono's case urges us to incorporate in the study of *gagaku* both the persistence of stereotyped images of Japanese sensitivity towards the environment and a critique of 'safeguarding' approaches to traditional music. The consequences far exceed the local scale of Udono's quarrels: perhaps the most self-aggrandizing of all such shortsighted approaches is UNESCO's "safeguarding paradigm", which, by valuing the intangible, often loses track of the political significance of sustaining the tangible behind it (see Akagawa 2016). Udono thus reminds us of the importance of a *politics of the tangible*: in fact, *gagaku* can only move the listener if its materials are under the right conditions to vibrate, and if the few craftsmen left in Japan receive adequate political and financial support to continue their precious work.

What's in a reed, if not the conditions of possibility that make music resonate with those who care to listen? High-speeding *gagaku* or enrooting it in water and soil? Roots and routes: the sonic mobility of this music will have to find a way of harmonizing the two –and this process must be political.

FIGURE 5.20. Udono's reed bed from within. July 2013. (Picture by the author).