Borrowing Sound

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Abstract

Japanese architect and mathematician Kazuo Shinohara (1925–2006) is known for coining the phrase "beauty in chaos" in architectural discourse. He argued that extreme visual juxtapositions, such as a section of New York City's Fifth Avenue counterposing a traditional Shinto shrine "would create conditions for each to bring out the best in the other." Over the past year, I've been observing Tokyo's sound environment in order to uncover similarly striking instances of a sort of "beauty in chaos" from the vantage point of street cafes. The street cafe was chosen as a site for observation because it allows for an extended stay in an area exposed to urban conditions. By using field recordings, architectural drawings, and text descriptions of the sonic experience, my research attempts to communicate the rich spectrum of Tokyo's urban sonic experience.

Embedded in high density areas, these street cafes often occupy interstitial spaces—chairs fill in gaps between buildings, alcoves tuck into volumes adjacent to multiline, bustling commercial centers and seating clusters negotiate available space with air conditioner units and sidewalk slithers. Here, sound is almost always characterized by a fusion of otherwise unrelated activities. Yet, despite this lack of cohesion, "beauty in chaos" and unexpected relationships tends to emerge. In one instance, for example, a street cafe occupies a series of alcove space which, due to the presence of early reflections, would normally offer customers little acoustic privacy. However, it also sits across a pachinko (gambling) hall and, as a result, conversations are masked by the sound of striking metal balls. In another cafe, a double-height steel wall surrounds the cafe area in order to block views of adjacent parking lots. However, because it neighbors a motorcycle lot, a regular flow of revving engines cause this metallic plate to resonate with thunderous rumble.

In Japanese landscape design, the practice of "borrowing scenery" is a common practice. In cities, sound is inherently mediatory in nature, but can it be "borrowed" in a design context? Rather than generalizing the urban sonic experience, my research zeroes in on site-specific situations that deal with particular combinations of materiality, acoustics and activities in an attempt to develop a new vocabulary and ideas for future sound situations. It explores how a lack of conscious consideration for the acoustic quality of from these street cafes consequently expands the possibilities of urban sonorous conditions to experience. By grasping a better understanding of the rich spectrum of specific interactions between sound, space and activities in cities such as Tokyo, we can begin to explore new ideas for intervention within the urban sound environments.

Keywords:

1. Introduction

The aim of this research is to explore how sound is "borrowed" in Tokyo, taking cue from the well-known practice of "borrowing views" in traditional Chinese and Japanese landscape design. By using the term "borrow," I'm specifically interested in appropriation tactics. How does a specific arrangement of spatial volumes, sound sources and urban conditions combine in order to filter sound in a particular way? This research focuses on "sound fields," defined as a composition of sound sources in relationship to a specific urban conditions and arrangement of spatial volumes which operate as an instrument, a body from which these sounds resonate.

The spatial form of a valley, which implies a particular acoustic experience, has been linked to sound throughout Tokyo since the designation of "listening valleys" described since Edo (1603 to 1868). Each listening valley is identified as an optimal site for listening to a specific sound, such as the chirping of warblers, cuckoos, wild geese or insects.

Today, urbanization processes constantly rearrange "listening valleys." Warbler valley, located near present-day Uguisudani (warbler) Station was initially redesigned during the Genroku Period (1688-1704), when the head priest of Tokyo's Kaneiji temple imported a flock of warblers from Kyoto: "The chirps of these birds (from Kyoto) are indeed beautiful, and they do not have the provincial accent of the local uguisu." [1] Today, the chirping of warblers not only heralds spring's arrival, but also morning rush hour commutes on a year-round basis—Japan Railways has electrified the distinctive chirp and broadcasts it daily at Uguisudani Station between 8-10 a.m. The warblers themselves, who continue to populate several listening zones today, shift the frequency of their calls in order to avoid the mask produced by Japan Railways. Noise does not imply suppression. Tokyo warblers, Kyoto warblers and electronic warblers compete with one another for airtime, and this dialogue is generative: new sounds, behaviors and, consequently, new atmospheres are produced.

Beyond listening valleys, Tokyo presents a fascinating case in how traditional sound paths can squeezed, stretched out or rerouted. In Ginza, a detour was required in order to reroute the sound of worshippers' claps to a shrine that was relocated to the top of a 9-story private building. As a compromise, the owner constructed a miniature shrine on the ground floor and connected a gutter-like apparatus from the Haiden (outer worship area) up to the rooftop, transporting the sound of claps to the Hondon (main shrine). Rather than being drowned out by ringtones and megaphone-wielding shopkeepers on the sidewalk, claps

ascend toward the receiver. Such "constructions of customizations" run rampant in Tokyo's dense agglomeration. [2]

In both the case of this Ginza shrine and "warbler valley," the site is fixed. The sound source still exists (warblers and claps). But the arrangement of these sounds across the spatial field and their accompaniment is radically altered. Ultimately, the valley still resounds with warblers (real and electronic) and a gutter-like apparatus harnesses the worshipers' claps—infrastructure is used a tool for "borrowing" sound in a complex urban environment. Although these augmentations may seem trivial, they reflect a larger underlying structure of Tokyo's spatial practice.

2. The street cafe as a sound field

This research focuses on sound fields within the context of an specific program: the street cafe. This is an optimal site for observation because it allows for an extended stay in an area exposed to urban conditions. Embedded in high density areas, Tokyo's street cafes often occupy interstitial spaces—chairs fill in gaps between buildings, alcoves tuck into volumes adjacent to multiline, bustling commercial centers and seating clusters negotiate available space with air conditioner units and sidewalk slithers. For this research, over 60 cafes were analyzed from Daikanyama, Jiyugaoka, Nakameguro, Omotesando, Shibuya and Shimokitazawa. The observation in each cafe was limited to April–July of 2013 during weekday afternoons between 1–5pm, an oftentimes lull period in between lunch and rush hour.

Each cafe is classified in terms of its spatial type and street condition. The latter has three categories: alley, 2-lane, and 3-lane or larger. Spatial types include: cafefront, setback, raised, cave, alcove, plastic-wrap, canyon, gap and courtyard.

2.1. Cave

The cave is defined as deep, a semi-enclosed space in which the cafe set back from the street and surrounded by at least five sides. It's characterized by a excessive reverberation, which can afford cafe-goers acoustic privacy.

Waterfall Cafe

Water spills across a retaining wall wedged in between a construction site and a hotel on a bustling shopping street. The cafe is sunken two stories below street level and completely surrounded by brickwork. Above the retaining wall, tarps billow from the neighboring construction site with a pale blue color that matches the obscured sky. The hammering of construction workers on the scaffolding can be seen, but only audible as a distant rumble, masked by the waterfall, which consists of a constant low frequency drone coupled by high frequency splatters of droplets hitting brickwork.

Ventilation Cafe

Stretching back from the 5-lane, tree-lined Omotesando, this cafe spills out of a corridor that leads to a wedding chapel. A string of ventilation units punctuates this passage and blasts air beneath a concave roof. A drone and excessive reverberation make conversations across tables largely unintelligible and the sound of individual cars seem to blend from inside the passage. This space also serves as a procession for wedding parties and, on these occasions, bells are handed out to the cafe's customers, transforming it into a giant instrument that signals the departures of newlyweds. On other days, rolling carts filled with wedding garments resound throughout.

A/C Wallpaper Cafe

Tucked behind restaurants, below an apartment complex, and adjacent to a flower shop, this cafe sits on an 8-foot-square wooden pedestal lined with a picket fence. Aside from the occasional revving motorcycle and bike bell, the roar of vehicles on the street beyond blend into a single drone together supplemented by a generous supply of ventilation units that resound in this partially enclosed courtyard. This monotonous drone is interrupted by the chirping of birds that bounce off a concrete overhang, below which is a lure: bundles of flowers on display.

2.2. ALCOVE

The alcove is a defined an a narrow insert deep enough to fit, at most, two chairs. The close proximity of these walls to the occupant produces early reflections, which can enable crisp communication.

Amplification Cafe

This cafe is positioned directly between the street and a full-height concave window. Whenever anyone inside of this small alcove speaks, it's amplified by this curved surface and projected outwards toward everyone sitting inside of that space, despite the steady stream of traffic outside.

Pachinko Cafe

This cafe is divided up by a column supports. Each unit holds four people. Conversations are crisp and audible given the early reflections of the alcove. Except when sliding doors open across the street. That actions triggers a sound leak: the rattling of metal balls inside this pachinko (gambling) parlor dominate and the alcove's acoustic effects and effectively erased, if only for a few seconds each time.

Island Cafe

This cafe is an island, severed from its parent by a pair of escalators leading to the underground metro. Opposite, a crossover and parked delivery truck partially veils an intersection. The intersection orchestrates alternating sounds of revving engines and pedestrian footsteps, and the screeches of trains from Shibuya Station can also be heard on an intermittent basis. Potted flowers on the table vibrate from the encircling traffic flows. Cicadas buzz on a lonely tree decorating the curb. During my observations, cafe customers were still audible, as they spoke at higher volumes, competing with all other sound sources.

2.3. Cafefront

Cafefront describes a cafe that's placed directly in front of the parent cafe and either adjacent to, or on top of, the street. If abutting an open facade, these cafes can have an interior atmosphere.

Utility Pole Muzak Cafe

Nestled in a 3-foot-wide alley, a string of chairs with tables placed alongside fits exactly in between the cafefront and a white traffic strip, accommodating a path for cyclists, motor-bikes and pedestrians. Also sharing this space is a utility pole outfitted with the ward-wide speaker system that broadcasts muzak from 9am until 5pm. The cafe's sliding glass doors remain open and this cozy gap creates an intimate environment: everything can be heard above the quiet broadcast: chairs pushed on the asphalt, conversations, footsteps, birds

perched on wires, clinking cups and saucers, and ongoing construction sounds from a house on the same street.

Parking Lot Attendant Cafe

Two multistory parking garages with metallic facades sandwich this cafe in a canyon. Garage entrances are staffed with two parking attendants each that yell announcements for each outgoing and incoming vehicle. The cafe's facade is sealed shut, but the facade is outfitted with a speaker that amplifies music. Footsteps and conversations from the nearby shopping street Harajuku are audible, as well as a variety of musics spilling out of different storefronts.

2.4. Courtyard

Courtyard define a cafe situated in the central, open-roofed area of a building with a direct connection to the street. The spaciousness can also produce excessive reverberation.

Rumbling Motorcycles Cafe

This cafe sits opposite from a motorcycle lot and adjacent to a car lot. A two-story metal wall blocks the view of the latter and is covered with vegetation that serves as a nesting site for birds. The sounds of people talking, an indoor fountain gurgling, birds nesting on the metal obstruction and music dominate. That is, except when revving motorcycles pulls out of the lot, which resonates with a deep rumble on the metal cladding.

Underground Fountain Cafe

Seating is arranged at the back of a U-shaped building which frames a central staircase leading to an Italian restaurant. Hidden from view but amplified by the atrium is an underground water fountain. Sandwiched directly in between the cafe and the street, the fountain, together with the sound of rustling leaves from the trees squeezed inside the courtyard, almost mask the traffic beyond. Still, screeching cars at the intersection beyond interrupt every now and then. The echo of footsteps pronounces the entrance of every visitor into the courtyard.

3. Conclusion

All of these observations of "sound fields" describe interactions between unrelated activites and, therefore, can be perceived as chaotic. In architecture discourse, Japanese architect and mathematician Kazuo Shinohara (1925–2006) coined the phrase "beauty in chaos."[3] During Japan's modernization, he argued that extreme visual juxtapositions, such as a section of New York City's Fifth Avenue counterposing a traditional Shinto shrine "would create conditions for each to bring out the best in the other." [4] These observations illustrate that similarly striking instances of "beauty in chaos" can be heard from the vantage point of street cafes. With a better understanding of how sound can be carried into a field, by exploring how these everyday, undesigned interactions between sound sources, spatial volumes, and urban conditions operate, we can begin to explore new possibilities for "borrowing sound" in cities.

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