In considering the work of John Cage I’m continually struck by the ways in which musi-
cality is sculpted and crafted through an elaboration of compositional structure. That is,
through Cage’s dedication and outright obsession with conceptual strategy and structural
rigor, his works equally put forward questions of form and organization alongside music,
sound, and listening. It’s this aspect that I’m interested to turn to here, and to suggest such
methods find echo in a greater »spatial« project appearing in the 1950s and 60s.

In Steen Eiler Rasmussen’s Experiencing Architecture, the author draws upon musical
composition as a metaphor for appreciating architecture, underscoring the communica-
tive dynamic of the built environment.¹ Published originally in 1959, Rasmussen high-
lights the ways in which architecture and music act together, forming a highly suggestive
metaphoric relation in which rhythm organizes movements of light and shadow, or ma-
terial contrasts suggest melodic progression. This interplay finds expression throughout
various architect’s and composer’s works at this time, notably Iannis Xenakis, whose con-
tributions to Le Corbusier’s projects in the 50s lent a noteworthy musical addition.²

I’m interested to further consider the relation between music and architecture, and to
query how particular strategies in experimental architecture in the 50s and 60s find par-
allel specifically in the compositional procedures of John Cage. This historical focal point
uncovers a particular movement away from architecture, as static isolated form, and avant-
garde music, as relations between tonality and atonality. The importance of such develop-
ments is to be appreciated as establishing an expanded perspective onto both practices,
broadening their own internal understanding as well as their relation and ultimate con-
versation. Both can be seen to aim for new ideas of »structure«, and to conceptualize not
so much »architecture« but new platforms from which ideas of individuality and self-or-
ganization could be fostered to ultimately create a scene for dwelling, for coming together.

² Projects such as the Philips Pavilion (1957) and Sainte Marie de La Tourette (1956–60) incorporate Xenakis’
interest in stochastics, and the organization of material expression. Each building in their individual way af-
fords a glimpse onto how music and architecture may come to relate, with the Pavilion drawing upon the struc-
tures of Xenakis’ composition Metastasis and Sainte Marie de La Tourette integrating a rhythmical expression
as part of its elaborate window structures – what Xenakis referred to as the »undulating glass«.
The emergence of experimental »architecture« in the 1950s should be understood as »not quite architecture«. Rather, what Yona Friedman calls »extensive infrastructure« and which he himself would develop into a spatial vocabulary for imagining a new city – what he would further call »mobile architecture« or »the spatial city«. 3

Friedman’s project throughout the 1950s and 60s (which continues today) was organized as an attempt to nurture participatory, democratic experiences of space and spatial making. To do so, Friedman’s architecture only exists as an open platform, a sort of modulated structure or space-frame made to foster the imagination and input of persons. Architecture was to appear quite simply as a network facilitating use and social interaction. What Friedman realized was that the creativity of architecture lies not in the aesthetics of shapes or volumes, or even materials, as a final form, but the conversations it might encourage. The actual shape of architecture would materialize precisely as a process of dialogue, as a meeting between people and place.

Friedman’s work and thinking developed within a larger cultural milieu at this time, and fully echoes a range of other architects whose works equally set out to unsettle much of modernism’s architectural project. Such new architecture, articulated by the Team 10 group, challenged notions of stable, fixed and self-contained buildings in favor of this extended infrastructure, that is, platforms open to flexibility, adaptability, modulation and participation. Architecture was to be less finished and more fluid; it would unfix itself from the ground to become mobile, distributed and networked.

The work of the British group Archigram is also exemplary in this regard. Circulating around the Architectural Association in London in the early 1960s, the members of Archigram aimed to problematize what they saw as modernism’s rather »sterile« aesthetic and placid utopian visions. Integrating references to pop culture, fashion, music and consumerism, Archigram sought to make what they called »Living Cities«. Projects throughout the early to mid-60s such as »Plug In City«, »The Walking City«, »Tuned City« and »Instant City« all express a view of the urban thoroughly connected to the dynamics of social energy, cultural diversity and everyday life.

Archigram’s pop-architecture would find an echo also in the work of Peter and Alison Smithson, in particular their interest in the play of children. Inspired by the photographic work of Nigel Henderson – with whom they were participating in what was known as the Independent Group in London at this time – the Smithsons responded to how children appropriated the destroyed remains of London, playing in ruins and marking the city in forms of temporary occupation. They saw in this a model for how to develop architectural form: that it should create zones of play, social interactions and fantasy, often separate from the more operational dynamics of city life. This would also lead to a vocabulary of »extensive infrastructure« over final form – what the Smithsons called »streets in the sky« seen in their various proposals in the 1950s.

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For example, their proposal in 1957 to the city of Berlin gives expression to this concept, whereby raised pedestrian platforms would allow for free movement above the traffic. These platforms, also expressed in their Golden Lane Estate proposal and which would become notoriously realized at the Barbican Center in London about 10 years later by the office of Chamberlin, Powell and Bon, calls to mind Friedman’s »extensive infrastructure« – where the city would act as a series of connected zones, or circuits networked across the urban milieu.

These projects of »spatial architecture« in the 50s and 60s explicitly demystified much of the grand narrative of modern architecture by »de-centering« the notion of a totalizing architectural form. In contrast, a sense for the experiential, performativity, urban diversity and multiplicity were embraced, resulting in plans for a continually displaced architecture, what Reyner Banham would theorize under the heading »Megastructure«, that is, an architecture spread out and always already elsewhere.⁴

Friedman himself spent much of his career working for UNESCO and the UN developing methods for self-building housing projects in support of the poor in India and Africa. To multiply the possibilities for experiences of the built and to invite forms of participation necessarily expands architecture toward the excluded and the marginalized. In other words, spatial architecture aimed to explicitly create an open scene where everyone could join in.

### Cage

These architectural visions and conceptualizations of space parallel what I will focus on in terms of the work of John Cage, that is: his interest in »de-centering« musical practices in favor of multiplicity, noise and participation. What interests me here are the structural, or rather »unstructuring« operations found in his work. That is, the architectural or infrastructural undercurrent. From music to text to graphic notation, Cage’s works are equally experiments in organizational strategies. In this regard, composition is an appropriate term: composition as both a musical operation, as well as the very question of organization, structure, that is, how things come together, and further, what I’d like to focus on, the making of shared space.

Already with his Black Mountain Event we can witness this. The Black Mountain Event took place in the summer of 1952 as part of Cage’s work at Black Mountain College, alongside Robert Rauschenberg, Charles Olson and Merce Cunningham, and can be seen as prescient of the development of Happenings later toward the end of the 50s. The Black Mountain Event itself was radically informed by a reading of Antonin Artaud’s *The Theater and its Double* and accordingly sought to immerse an audience in sounds, images, movements and noises. At the core of the Event is the staging of multiple and simultaneous elements so as to thoroughly undo any strict idea of a single perspective.

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With Rauschenberg paintings hanging from the ceiling, Cunningham dancing through the audience, Olson reading poems from atop a ladder, as well as Cage’s own recital of a lecture on Zen Buddhism, and David Tudor playing piano, not to mention the playing of records, the work highlights Cage’s sense for composition as an expanded practice by integrating an array of media necessarily outside of music, as well as encouraging a strong consideration of the staging of a work, that is, its spatiality. This is further complemented by what I see as an extremely interesting element, that is, the positioning of the audience. For the Event, Cage arranged the seating with four sections located in the round and facing inward to an open center. This structuring of the audience begins to suggest a conceptual link between the spatiality of the piece and its material content. In other words, I take from this a consideration of the ways in which the audience is participant within the composition of the work – not as an active intruder per se, but as a figure in the larger field. Cage’s recognition of the »space around« begins to open up his musical work so as to integrate the greater architectural frame. To build a situation.

This also finds echo in many of his graphic score experiments, where the organization of musical material appears as blueprints for a future event. From *Fontana Mix* (1958), which employs a series of transparencies to generate scores, taking on a geographical quality of elements distributed within a spatial field, *Variations II* (1961), again using transparencies with lines and points to suggest sound events or trajectories of differing intensity, to *Water Walk* (1959), where a number of objects and instruments are distributed across a space to which the performer walks – this small collection of references makes a suggestive link between the composing of sounds with the composing of spatial relations, to underscore music as the construction of localized experiences: that what I hear now is related to this particular moment, and this particular configuration.

Multiplicity, contingency and simultaneity in other words, are expressed in both content and form, where the location of the audience, back at the Black Mountain Event, nurtures multiple views. In this sense, there is no one single view onto the performance, no central object, but rather each perspective is equally acceptable. As a listener one is figured as an element within a greater, temporal arrangement.

Such concern for the composition of the audience carries through with *4’33”*, presented only a month later in Woodstock, NY. *4’33”* further aims for multiplicity and simultaneity yet by turning our attention away from the piano, that is, the stage, and toward each other. In other words, the audience and the environment take their place as the center of the work, yet a center which by nature is multiple, distributed, and without stable form. The paintings overhead, the poetry reading, the dance from Black Mountain are replaced by whatever is already there in the environment. It’s no doubt that Cage, knowing the Maverick Concert Hall, would have realized that the open doors and windows, the surrounding woods, and the summer atmosphere would provide an active ambience for his four minutes of silence. Cage in other words composed a situation for de-centering the musical performance by integrating a sense for spatial architecture.

As Yona Friedman proposes, architecture should be more an infrastructure into which people can move, meet, and develop their own environments: It should facilitate what
people are already doing, which in this case, is listening. Cage seems to have located Friedman’s spatial architecture, this concern for an expanded structure, as a platform for self-organizing, into the frame of music, setting up the parameters for us to compose our own musical experience, or not. Developing strategies for organizing musical material so as to undo stable reference, even himself as composer, Cage’s work specifically cultivates forms of displacement: structures for integrating the margins. This can be further appreciated by underscoring his use of chance operations, as well as operations of indeterminancy, both of which would radically inform and contribute to structures of his works. I take such strategies as formal operations that deeply impress themselves onto the final performance, the final work. In other words, to hear Music of Changes (1952) is to hear not only piano, and the movements of a particular performance, but the figure of chance as it performs »behind the scenes« to shape, to construct, and to unfold the project.

Noise

Questions of compositional strategy, spatial architecture, multiplicity, participation and de-centered structure seem to further suggest a dynamic and compelling relation to noise. I would propose that such operations, as I’m mapping here, can be talked through under the larger conceptual umbrella of noise. What Cage teaches us is how noise relates precisely to questions of structure and composition, that is, to form. Rather than hear noise only as the ultimate moment of breakdown, of pure static, of rupture, Cage locates noise as generative of composition, musical, spatial, social. That is, as having a direct and positive impact on the construction of relations, of the encounter.

I’d like to elaborate this thought by drawing on the work of cultural and urban historian Richard Sennett, and in particular his work The Uses of Disorder from 1970. In this work, Sennett makes a claim for »disorder« as a productive tool for nurturing social life. As he states:

»What is needed is to create cities where people are forced to confront each other so as to reconstitute public power […]. The city must then be conceived as a social order of parts without a coherent, controllable whole form. […] Rather, the creation of city spaces should be for varied, changeable use.«

What I take from Sennett is an extremely provocative inversion: while urban planners and social organizers may draw upon concepts of harmony, of togetherness, of cohesion, or concensus, as means for establishing community, as in the legacy of suburban development in the United States, Sennett in contrast sees disorder, difference, and discord as productive for spaces of sharing. That is, a spatial architecture composed by multiplicity.

Place-making in other words can be enriched precisely through experiences of displacement.

I’m interested to appreciate Cage as a composer equally involved in such questions of social life, and in disrupting cultural hierarchies in favor of the possible, and through this, to see his work as an opportunity for rethinking strategies for how we organize, structure and compose ourselves. Cage mobilizes forms of such planned and careful disorder so as to introduce us into a complex and discordant space – a noise precisely for enriching the common. His de-centering, indeterminate and chance-oriented strategies open the way for multiplicity and simultaneity to confront us.

As a final work of reference, this can be appreciated by considering his *Musicircus* (though I could also draw upon any number of his works – such as already mentioned, *Water Walk, Fontana Mix*, or his totally excessive *HPSCHD* from 1969, which consists of a set of seven harpsichord solos produced through randomly-generated, algorithmically treated pieces of Mozart, Beethoven, Chopin and others, to be performed alongside 64 slide projections, 52 tapes of computer-generated sounds amplified through up to 59 channels of sound surrounding the audience – and in case that was not enough, for the performance in Illinois, they added eight movie projectors with 40 movies projected onto a 340 foot circular screen).

Returning to *Musicircus*: Composed in 1967, *Musicircus* asks for any number of musicians to perform simultaneously anything or in any way they like. The work provides a list of compositions by Cage and Satie, as well as by other composers, and it also includes a diagram for possible positions the musicians may take. As Cage states:

> «seen from a particular point of view, music is simply the art of focusing attention on one thing at a time. In my recent works, since about ’68, I have tried not to focus the attention on one thing at a time, and have used this principle that I call ›musicircus‹ – of having many things going on at once;»7

*Musicircus* is precisely a platform for noise, as the articulation of the full breadth of sound, and by extension, as the moment of encountering the other. The work was performed in London, at the National Opera house, in 2011 and consisted of a diverse range of musicians, actors and artists. What I appreciate about this presentation is the way in which the performers were spread throughout the building. From the main lobby area to rooms upstairs, the bar and even toilet areas, all areas of the building were incorporated into the performance, adding a dynamic and suggestive spatial element to the composition. Each action was precisely timed so as to elaborate this spatial choreography, and visitors were left to wander the building and happen upon the various actions with very little direction.

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To make a final cross-over between music and architecture, between Cage and the question of space, Musicircus immediately calls to mind Constant’s New Babylon project begun in 1958, also affiliated with the Situationist International. New Babylon was a conceptual architectural project consisting of networked zones determined by mood and ambience rather than any particular function or program. Consisting of labyrinths and ladders networked together to form a maze of intersecting lines and platforms, the new urban environment Constant imagined was precisely an infrastructure, a network hovering in space and open for participatory intervention. This distributed and disordered urban field expresses Richard Sennett’s claim for a city of parts designed to promote social life. New Babylon’s »extensive infrastructure« would wind its way over an existing city and be open for continual adjustment.

While New Babylon remained a conceptual work, in 1987 it takes partial shape at the Parc de la Villette in Paris. Conceived by architect Bernard Tschumi, the Parc consists of a series of 35 pavilions or what Tschumi calls »follies« distributed across green areas in an expanded grid structure. The follies each function as parts to a whole, and aim to inspire forms of drift and wandering. Each folie itself is a deconstructed cube, operating as a fragment, with stairs leading to nowhere, sculptural effects inserted into their volumes, and appearing in a bright red that breaks against the natural background. Tschumi’s project is a composition without center, or what he calls a »discontinuous city«; a highly considered structure built so as to encourage investigation, yet where we as visitors never truly arrive but are rather left to always look for more.

Such formal operations and spatial configurations set the scene for experiences of indeterminancy and chance encounters also so readily indicative of city life. As Constant’s and Tschumi’s projects highlight, as well as the entire legacy of spatial architecture, the city is an event precisely through its support of juxtapositions, what Tschumi refers to as »montage«, to form a steady weave of multiplicity. Accordingly, we may learn from city life an expanded understanding of diversity and possibility, as well the challenges afforded by encounters with »the other«. The foreigner, as Sennett further states, is a figure who may unravel or interrupt the often problematic dangers found in identification with homeland. Spatial architecture, extended infrastructures, babylon, foreignness, and decentering projects aimed at fostering social life, find direct echo in Cage’s compositional strategies. I take Cage’s project then precisely as the (un)making of a structure through which I may meet the stranger who is always beside me.

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