

<TABH>Music and Sound Art

<CT>Towards a Spatial Understanding of Openness: Richard Sennett's "Five Open Forms" and/in Music

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<AT>Abstract

<ATX>This article offers a new strategy for cognizing musical indeterminacy based on Richard Sennett's "five open forms for the city," an intrinsically spatial way of thinking about what is "open" and how it is open. Sennett's five forms ("synchronicity," "punctuatedness," "porosity," "incompleteness," and "multiplicity") are explored individually as they impact our understanding of openness and/in music, illuminated by examples from contemporary experimental music.

<1>Preliminary Remarks

<TX-N>Many accounts of the complex lineages of openness and/in music begin with Umberto Eco's "The Poetics of the Open Work," an essay published as part of *The Role of the Reader* (1962) [1]. Here, Eco illustrates a distinction between what he terms "closed" and "open" works using musical examples. The former is "an assemblage of sound units which the composer [arranges] in a . . . well-defined manner before presenting it to the listener" [2]. In contrast, Eco highlights a new "[form] of musical communication" pioneered by Karlheinz Stockhausen, Luciano Berio, Henri Pousseur, and Pierre Boulez [3].

<TX>Works by these composers (specifically, Stockhausen's *Klavierstück XI* (1957), Berio's *Sequenza I* (1958), Pousseur's *Scambi* (1957), and Boulez's *Third sonata for piano* (1958)) "offer themselves not as finite works which prescribe specific repetition along given structural coordinates, but as 'open' works, which are brought to their conclusion by the performer at the same time as he experiences them" [4]. In these works, the performer is required to make various structural decisions concerning sounding identity, including linear sequence of events and duration of attacks. As Eco's examples reveal, the notion of a musical "open form" was especially prevalent in the late 1950s and 60s, espoused especially by

participants in the Darmstädter Ferienkurse at the Internationales Musikinstitut Darmstadt. One symptom of the Darmstadt-centricity of mid-twentieth-century music historical writing is a continued commitment to a rather limited definition of “open form”: a noun of yore rather than a living adjective.

Whilst a number of writers, thinkers, and composers have since analyzed comparable phenomena to those referenced in Eco’s writing across the fields of music analysis, art history, architecture, and urbanism---including DeLio (1984), Brown (1986), Boehmer (1988), Bourriaud (2009), Griffiths (2010), and the Hansens (Kędziorek and Ronduda [2014]) [5]---the purpose of this paper is not to survey this extensive discourse as it has unfurled across predominantly (but evidently not exclusively) European and North American scholarly contexts, but instead offer a new strategy for cognizing musical openness based on Richard Sennett’s “five open forms for the city,” an intrinsically spatial way of thinking about what is open and how it is open [6]. The five “open forms” operate as a critical lens for thinking and writing about musical indeterminacy in its various guises.

In *Building and Dwelling: Ethics for the City*, Richard Sennett identifies five “open forms for the city” [7]. Sennett suggests that in urban construction, “*synchronous, punctuated, porous, incomplete* and *multiple* forms do not exhaust all the possibilities . . . but they are enough to turn . . . experiences into built form” [8]. His starting point for the city is not dissimilar to Umberto Eco’s suggestion in *The Role of the Reader* that each performance of an open work “*explains* the composition, but does not *exhaust* it” [9]. However, Sennett’s work departs from Eco in his development of a theoretical framework comprising five separate typologies. This said, it is necessary to first justify using an urban model to examine musical openness.

An initial explanation lies in the work of Galia Hanoch-Roe. Whilst the aforementioned scholarship details individual lineages of openness as they relate intradisciplinarily, her work is interesting in its bridging of disciplinary boundaries between architectural scholarship and musicology. Hanoch-Roe’s 2003 article “Musical Space and Architectural Time” suggests that the process of performing an open composition is “similar to that of a movement within a structural space, where the observer chooses his way about it” [10]. The score is imagined as a physical environment that is “explored” through the process of performance.

Indeed, Hanoch-Roe's work reveals a tendency in open form scholarship to use spatial language to describe the performance process. Earle Brown again refers to his music as a "you-can-begin-here-and-go-there, or begin-there-and-go-here situation," suggesting that the performer exists in a "field of activity in which you can go from left to right or right to left, up, down, or whatever" [11]. The same is true for Christian Wolff. In the composer's own liner notes for a 1970 vinyl release of Wolff and Cage's music---a reissue of a 1963 LP---the former remarks that performing his scores is "like [taking] a walk with a friend or friends, going by whatever ways you like, agreeing on the way, with a direction in mind or getting lost or going nowhere in particular . . . the landscape in which they walk is what is given [12] Wolff responds similarly in an interview with Damon Krukowski in which he describes his scores as "a space within which the performer could operate" [13]. More recently, pianist Philip Thomas has echoed Wolff's own conceptualization of score spatiality in his description of "an arena" and the "mapping out of a situation to be explored" [14].

Accordingly, if the open work is so readily identified as an explorable, three-dimensional arena, then it makes sense to use vocabulary intended for the analysis of physical environments. Employing Sennett's vocabulary as a starting point for analysis facilitates a realized, situated, critical understanding of spatiality, whilst retaining the spirit of the scholarship on openness discussed above.

Rather than defining the limits of "open form," this project explores various properties of openness to produce a generative and expansive model---based on Sennett---for discussing such musical works. This approach considers openness in realization and reception, rather than only thinking of openness as something set in motion by the composer and articulated by the relationship between the score and the performer. Above all, each heading operates as a jumping-off point within a kaleidoscopic network of references and formulations.

<1>Synchronous

<TX-N>For Sennett, there are two ways to organize activities in the city. In one, people do various different things at the same time; in the other, they concentrate on one thing at a time [15]. The former is a synchronic space, whilst the second is sequential. The ancient Athenian *agora* was a large gathering space that served a variety of public functions: housing monuments, altars, temples, as well as a marketplace for use by free citizens. Here, events

occurred synchronically. The inhabitant of the agora could only encounter numerous simultaneous “snatches of conversations,” a more fragmentary experience of language and dialogue [16]. Conversely, the *Pnyx* was a space used for political meetings in which attendees could take in a more extensive linear sequence of words and sentences. Here, events unfolded sequentially. Sennett suggests that these kinds of spaces articulate contrasting politics and argues that the “fragmentation of verbal communication in the town square can oblige people to use their eyes and ears,” whereas the audience inspired by a speaker’s rhetoric is “unthinking” [17].

Ostensibly, the space of musical performance is sequential---more akin to the *Pnyx* with its “performances of dancing and plays” than the ancient agora [18]. However, through the prism of Georgina Born’s three kinds of “multiplicity” at work in “musical and sonic experience,” the space of performance can be understood as richly synchronous [19]. Like the agora---replete with a plurality of individuals using “their eyes and ears”---the space of performance is habitually home to many different bodies, voices, and interpretations of performers and audience alike [20].

<TX>Considering the audience, there are two factors at play. To claim the spatio-temporal synchronicity of multiple audience interpretations is to acknowledge the Barthesian assertion that the perception of any artwork involves the “interplay of stimulus and response” and that each perceiver “is bound to supply [their] own response to their patterning” [21]. Thinking more literally, each audience member will also experience a musical event from a unique point in space in the physical world. Imagining the audience as an assembled collective of individuated subjectivities, perceptions, and listening bodies, we can speak of a synchronous “multiplicity of viewpoints” in the space and time of performance [22]. This approach to audience reception plays into Born’s assertion that “any human subject’s experience of music and sound” will be “mediated by subjectivity, corporeity . . . given location and . . . movement through it,” as well as acknowledging the “social multiplicity given by the existence . . . of many human subjects” in the performance space [23].

This approach can also be applied to performers. Imagine an ensemble work that employs a graphic score. In any single performance of this work, there are a number of “interpretations” of the score occurring simultaneously. There may be rules agreed on in advance by the performers about approaches to specific graphic elements, but ultimately it is the

responsibility of each individual to make decisions about what they play and how it relates to the score. Like the audience, we could imagine this ensemble as a synchronous “multiplicity of viewpoints” that each brings their own subjectivities to the space of the score.

One example of a work that engages with the concept of synchronicity is Ragnar Kjartansson’s *An die Musik* (2012). The piece is a simple proposition: Five pairs of singers and pianists play Franz Schubert’s song “An die Musik” at their own speed, on loop, in the same space, for seven hours. In December 2017, I attended a performance of *An die Musik* as part of London Contemporary Music Festival. I arrived an hour after the performance had started and stayed for about three hours, moving around the cavernous Ambika P3 venue to a number of different vantage points. The five sets of performers were spatialized in a Z-shape spanning the underground hall, each pair no more than five meters away from the next.

Hearing five---or ten, counting pianists and singers separately---interpretations of the same short lied superimposed was an overwhelming experience. As Sennett notes, “This is the challenge of synchronicity: it breeds a spatial experience both stimulating and disorientating” [24]. As an audience member, I continuously sought new entry points into the sonic sculpture. I felt keenly the experiences of fellow audience members. Catching the eye of another concertgoer across the hall, I was struck by the notion that my foreground was their background---an individual performance of the song in which I felt so totally immersed was lost in the ambient sonic wash filling the space from twenty meters away.

Kjartansson’s synchronous space highlights each performer’s unique interpretation by stacking five separate “readings” of the score on top of one another. Individual audience members can then attempt to disentangle this sonic wash; their own perspective(s) “makes sense” of the chaotically beautiful sonic sculpture. As Born writes, such an experience is “mediated by subjectivity, corporeity . . . given location and . . . movement” [25]. The piece also explicitly acknowledges variety in audience reception, even leading us---as in my experience---to try and hear empathetically the perception of another in the space. We could thus say that *An die Musik*’s openness is vested in its synchronicity: of performer interpretation, but also of audience perspective.

<1>Punctuated

<TX-N>The open city is “punctuated.” Just as writers curate our experience of words and sentences through carefully placed punctuation marks, it is also possible to shape an urban inhabitant’s journey by similar means. Like the “exclamation mark” of an obelisk that declares a town square’s importance, urban punctuation represents an “intrusion” in city space that asks the citizen to stop and consider their surroundings [26].

<TX>How, therefore, might we understand this rather complex notion of “punctuation” in the context of musical performance? This category of openness is most applicable to the realm of pitch space---more specifically, in the score. Western staff notation already comprises a number of elements that could be considered “punctuation” in typographical terms: metronome markings, articulation marks, dynamics, phrase markings, rests, and bar lines are all punctuating in character. The double bar line is archetypical in this sense. In a Classical sonata, the double bar line might demarcate a key change, which itself could suggest the beginning of a new section within the piece’s overarching form (e.g., sonata, rondo, theme, and variations) [27]. To my mind, this kind of punctuation demarcates a top-down compositional structure. I would argue that this kind of punctuation is composer-centric and serves to articulate a formalistic and hierarchical---but ultimately conventional---relationship between score, performer, and composer.

What if the score could be punctuated in a way that acknowledges its inherent relationality, destabilizes the hierarchy of composer and performer immanent in the aforementioned “monumental” forms of score punctuation, and recognizes that musical performance is a live process of mediation rather than a passive realization of the notation? An example of such notation exists in Christian Wolff’s 1959 work *For Pianist*, which contains a curious example of “punctuation.” In the score, Wolff indicates that a note should be performed “as soft as possible” [28]. He offers three potential pathways to continue reading based on the result of that action: If the performer feels the note was inaudible, they follow one line; if the performer feels that they succeeded in playing as soft as possible, they follow a second; and if they feel that the note played was louder than “as soft as possible,” they follow a third line. Each of these lines comprises different notated material.

This punctuation mark draws attention to the fact that performance from a score is not a one-way, simplistic procedure in which the notation is realized perfectly but rather an ephemeral, sometimes chaotic process that brings both parties into active dialogue. The score includes a

“fail state”: Wolff recognizes that performance is not the dispassionate realization of notation, but rather carries an element of risk. Furthermore, this moment relies on the subjective nature of listening---the focus is on “the individual ear” rather than any kind of perceptual objectivity [29]. The ambiguity of “as soft as possible” requires a performer to set for themselves the threshold between success and failure in completing this task. This emphasis on subjective listening calls to mind Cage’s notion of “renewed listening as a mode of absolute individualism” [30]. The system relies on the aural subjectivity of the individual performer, causing them to pause and acknowledge their role in the process of musical performance---like Sennett’s urbanite, who upon encountering such punctuation, “takes [their] bearings... reckoning where [they] are” [31].

<1>Porous

<TX-N>According to Sennett, there are two ways of thinking about edges in “natural ecologies”: “borders” and “boundaries” [32]. Borders are “porous edges” where “different groups interact”; boundaries are edges “where things end,” a “low-intensity edge” [33]. However, to suggest such an explicit dichotomy is oversimplification, and it is more accurate to suggest that “porosity exists in dialogue with resistance” in the same way that a cell wall and a cell membrane aren’t simply barriers and entry points, respectively, but rather will let different things in at different times [34]. In this way, “porosity” acknowledges the fact that an edge is “sometimes open” and “sometimes retentive” [35].

<TX>Musically speaking, we can think through porosity in a variety of ways. Every performance takes place in a space that is sonically porous. The sounds of humans---breathing, coughing, muttering, fidgeting---are commonplace in the concert hall. Similarly, the sounds of the street---cars, buses, bikes, commuters---may permeate the ticket-holders-only spaces of musical performance despite a venue’s best efforts. There may too be more-than-human agents at work in this seeming cacophony: the sounds of plants, animals, and the weather can figure in a listener’s experience of a given musical event.

While it is nothing new to propose that the spaces of musical performance are replete with the commonplace sounds described above, existing discourses on spatialized music practices are somewhat resistant to this suggestion. Writing on spatial music often implies that the realization of these works occurs in hermetically sealed spaces: the concept of porosity lends

us a vocabulary to talk about practices of spatialization that actively encourage a flexible membrane between the space of performance and “everyday” space, acknowledging that no performance---to use the age-old adage---takes place in a vacuum.

Two brief examples are interesting in the context of this discussion. R. Murray Schafer’s *Music for Wilderness Lake* (1979) is a composition for twelve trombonists who are positioned around a lake and cued using flags from a raft or canoe. They perform music at dusk and dawn, and their material often mimics the soundscape of the local area, such as bird calls, wolf howls, and water sounds. Those present at a performance are encouraged “to listen to the trombones but also to listen to the environment” [36]. In Schafer’s composition, the space of performance is porous to the more-than-human sounds of the acoustic ecology within which it is situated. Schafer suggests that audience members “return to a more remote era . . . when musicians played to the water and to the trees and then listened for them to play back to them” [37]. Thus, beyond merely accepting or tolerating the presence of the wider sonic environment, Schafer’s composition actively engages in a two-way process, looking towards unexpected natural sounds as a key element of the performance.

A performance that engages with the wider sounding environment to a different end is Kathy Hinde and Jony Easterby’s *Nightingales and Cello* (2014). Composed for an immersive night walk in Ynys-hir (an RSPB reserve in Wales), the piece references a 1924 event in which Beatrice Harrison played cello with nightingales in her garden during a live BBC radio broadcast. In Hinde and Easterby’s homage, a live cellist performs the same music with “1920s recordings of nightingales from Beatrice’s garden, commenting on the dramatic drop in the UK Nightingale population” [38].

Whilst both Schafer and Hinde and Easterby’s compositions are performed in sonically vibrant environments, the former engages primarily with what is present, while the latter draws attention to what is absent. In her analysis of *A Nightingale Sang in Berkeley Square* (an event organized by Extinction Rebellion in collaboration with “Sam Lee’s Singing with Nightingales” & The Nest Collective [39]), Flo Lines suggests that works built around bird song “[create] a space that [gives] primacy to the sounds of more-than-human life” [40]. Listening to 1920s recordings of nightingales “translates an abstract notion of extinction into a personal and sensory awareness of what is no longer *here*” [41]. The space of performance in Hinde and Easterby’s work is as porous as that of Schafer’s, but that porosity is employed

to frame absence and extinction. As their work illustrates, porosity can be utilized to political ends, situating performances firmly in the living---and dying---human and more-than-human world “outside of” the space of performance.

<1>Incomplete

<TX-N>The open city is incomplete “on purpose” [42]. One example of an incomplete form is the “shell,” “whose possibilities are not exhausted in any particular configuration imposed at the start” [43]. Such a design requires more than one individual to bring the form to fruition. Like Chilean architect Alejandro Aravena’s “half-built” houses that “inhabitants could fill in with their own labor,” the shell form makes collaboration possible [44]. However, the shell’s capacity to be built and rebuilt *ad infinitum* renders it vulnerable to becoming “pure process,” “degraded” by the “shapeless drift” of alterations over time [45]. Accordingly, the shell form is open---but it is also open-ended.

<TX>One way of thinking through the relationship between performer and score is through the notion of “incompleteness.” In sociology, “incomplete form” is known as “dialogics” [46]. Dialogics concerns the way that good listeners can put “disconnected bits of ideas together” when we talk to one another, acknowledging that “people do not think or speak in . . . perfectly concise and clear sentences” [47]. Naturally, the way these fragments are received and assembled is culturally and socially mediated and will therefore vary from interpreter to interpreter. The same is true of the score: Each performer may see different performative possibilities in the notated material.

Accordingly, one might say that a score is “assembled” into a performance according to a number of factors, including but not limited to social, cultural, historical, and corporeal considerations. It could be argued that Western staff notation already comprises numerous elements that are constructed at the point of interpretation and/or performance, such as tempo, expression, and dynamic range.

The composer David Pocknee contends that all scores

<EX>[define their own] margin of error to some extent, setting the boundaries outside of which lies error, and inside of which lies a statistical set of acceptable possibilities.

The size and nature of this probabilistic area changes according to the score, thus a highly indeterminate score would likely have more acceptable possibilities than a highly precise one [48].

<TX>Pocknee's understanding suggests that as the continuum extends toward its "incomplete" limit, the "probabilistic area" in which an interpretation is deemed acceptable increases in size. This understanding leads us naturally onto Sennett's final dimension of openness, the quality of being "multiple". If something has to be "finished," then it can be finished in many different ways.

<1>Multiple

<TX-N>If you sow a seed in "different circumstances of water, wind and soil," you will yield different results [49]. In urbanism, "seed-planning" refers to an approach in which architectural spaces are built in such a way that they can change and grow based on the environments in which they are situated. Function completes form according to circumstance. Accordingly, a single "seed" type-form can produce a multiplicity of manifestations. Although this process may be set in motion by the architect, it is "not entirely controllable"---there is always "something unforeseen . . . at work" [50]. As Sennett writes: "Seed-planning seeks to create 'pockets of order'. . . . The essence of seed-planning is minimum specification (*incompleteness*) of how form relates to function; this leaves room for maximum variation and innovation (*multiplicity*)" [51].

<TX>Sennett's model for a "multiple" urban object is twofold, requiring both an object to be multiplied---a "seed"---and conditions that generate "variation and innovation": a "habitat" of sorts [52]. Situating the incomplete "seed" object in different environments makes possible the process of mediation and change based on those circumstances.

How might we think through this concept with regard to musical performance? In many practices, we might understand the score space as the "seed" type-form, the "thing-being-situated." The question is then: How can score spaces be prepared deliberately for this kind of situated engagement? How do composers draw attention to the fact that performing or installing music in a specific environment changes our experience of that site; that sound

informs our experience of the social, architectural, acoustic, political dimensions of space, and vice versa?

One such preparation concerns systems that change based on material, spatial, or environmental circumstances. Like Sennett's seed-planning, notational systems can be constructed to create a "pocket of order" that may produce a multiplicity of results [53]. Many text or "event" scores house the potential for radically different realizations. For example, the realizer of Bill Drummond's *Show* must ask a hundred residents to "describe a sound in [their] city" [54]. These responses are then presented to the residents in the form of an exhibition. Drummond's initial text score---comprising the aforementioned instructions---acts like a "seed" object that grows differently in varying urban "habitats." Accordingly, the result is directly mediated and shaped by the city in which the work is being realized. A different approach is present in George Brecht's *Time-Table Music*, in which realizers use railway station timetables to determine the durations of performed sounds. Again, Brecht's brief text score is subject to transformation in performance based on the circumstances of its realization. It is easy to imagine how a performance of this piece at the Central Line's Roding Valley station---the least used on the whole of the London Underground---would differ from one at the bustling Oxford Circus. The difference between these two compositions lies in the type of data they collect. Drummond's employs a more qualitative sense of the "local" conjured through subjective listening, whilst Brecht's uses discrete---yet just as localized ---data to produce a more fixed ruleset for performance.

<1>Closing Remarks

<TX-N>These five dimensions of openness---synchronicity, punctuatedness, porosity, incompleteness, and multiplicity---help to establish some of the more specific ways that musical compositions may be described as "open." Although the last two dimensions that Sennett describes ("incompleteness" and "multiplicity") are in many ways reminiscent of a historicized "open form", thinking through these dimensions critically allows us to move beyond limited or generalized descriptions of openness and toward a more specific understanding of what is open and how it is open. In particular, this situated approach is key to understanding the political dimensions of open works. For Sennett, openness in urban design is conducive to a more democratic, equal society.

<TX>“The closed city can be designed and operated top-down; it is a city which belongs to the masters. The open city is a bottom up place; it belongs to the people” [55].

Can the same be said for open music? To my mind, a critical analytical approach must first be attuned to the specific political conditions of the work, rather than claiming a politics of openness on a broader scale. To make sweeping statements at this stage is to revert to a kind of formalism. Such an approach would be sympathetic to the composer and their imagined “intentions,” but not to the hugely variable experiences of audience members and participants who may not read a score’s call for participation as transgressive or revolutionary. It is not in my interest to flatten out the bumpy subjectivities, anomalies, and idiosyncrasies that form the rich tapestry of the lived world. Openness is as much about the elements of performances that aren’t planned or “don’t work”---the people who don’t participate, the people who feel alienated rather than empowered, the people who would rather stay quiet---and the politics of these encounters.

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