

The Musical Text: Theorizing Openness after Structuralism

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Abstract

This article attends to the conjuncture in the early 1970s of post-Cagean musical practice and post-structuralist theory associated with the journal *Musique en jeu* and the music department of the Centre universitaire expérimental de Vincennes. Reading the theoretical writing of figures including Daniel Charles and Ivanka Stoïanova alongside the music of Costin Miereanu, the article elaborates the account of the open work that emerges there, before turning to an LP by Miereanu, *Luna cinese* (1975), which grapples with the aporetic figure of the open record and in so doing takes the ‘openness’ of post-Cagean experimentalism in new directions. In conclusion, I begin to theorize what Miereanu’s open record suggests about the listening that records call for and the fixity of records in general.

In the years after 1970, a novel confluence formed between avant-garde musical composition inspired by such figures as John Cage, Karlheinz Stockhausen, and Dieter Schnebel on the one hand, and the radical edge of structuralist thought being developed by Roland Barthes, Julia Kristeva, and Jacques Derrida on the other. Associated with the journal *Musique en jeu*, founded in 1970 by Dominique Jameux, and the music department of the Centre universitaire expérimental de Vincennes, figures including Daniel Charles and Ivanka Stoïanova sought to bring the disruptive encounter of structuralist linguistics and literary criticism to bear on the discipline of musicology.¹ As Charles and Stoïanova saw it, their theoretical innovations were necessitated by changes in musical practice associated above all with the post-Cagean avant-garde, which put in question such central theoretical and practical objects as the musical work and the composer. This project might be characterized as an attempt to mediate two forms of ‘openness’: that of the musical work as practised or placed under erasure by the music of the American and European post-war avant-gardes, and that of the text as it emerged in the post-structuralism of Barthes, Kristeva, and Derrida.

Charles had been close to the centre of the western European musical avant-garde since the late 1950s, having studied with Olivier Messiaen, been associated with the Groupe de

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1 Daniel Charles, ‘La musique à Vincennes’, *Musique en jeu* 18 (1974); Paul Cohen, ‘La Fac Soixante-Huitarde: The Centre Universitaire Expérimental de Vincennes and the Afterlife of a Revolutionary Moment’, in *Global Revolutionary Aesthetics and Politics after Paris ’68*, ed. Martin Munro, William J. Cloonan, Barry J. Faulk, and Christian P. Weber (London: Lexington, 2020); John Mowitt, *Text: The Genealogy of an Antidisciplinary Object* (Durham, NC: Duke University Press, 1992), 179–82.

recherches de la musique concrète, and developed a particular critical specialism in the music of Cage.² Stoianova, on the other hand, was a musicologist who had studied in her native Sofia and in Moscow before joining her older sister Julia Kristeva in Paris in 1970, where she began doctoral studies with Charles.³ Charles's and Stoianova's theoretical speculation was not divorced from practice, and the composer with whom they were most closely in conversation from the early 1970s was the Romanian Costin Mioreanu. Mioreanu attended the national conservatoire in Bucharest in the early years of the Ceaușescu regime, a period marked by a degree of liberalization and cultural interchange with the West. Exposed to the western European avant-garde both during his studies and at international events such as the Music Biennale Zagreb, by 1967 Mioreanu's music had received performances in western Europe. Between 1967 and 1969, Mioreanu attended the Darmstadt Ferienkurse für Neue Musik, which from the early 1950s had enjoyed a reputation as the central hub of the European musical avant-garde, though by the late 1960s that centrality was fading.⁴

It was at Darmstadt in 1968 that Mioreanu participated in a workshop directed by Stockhausen that he would later describe as 'the most important turning-point of [his] career'.⁵ Having led a similar workshop the previous year devoted to graphic notation, in 1968 Stockhausen turned to *Textkomposition*, a form he had recently adopted consisting of written instructions for performers inflected by an Eastern meditative mysticism.⁶ Where, as contemporary observers such as Heinz-Klaus Metzger noted, such looseness did not by any stretch of the imagination necessarily entail any troubling of the 'dictatorship of the composer', for Mioreanu *Textkomposition*, once assimilated to a lineage that stretched back to the New York school of Cage, Christian Wolff, La Monte Young, and others, afforded a radical social critique of not just the performance situation but also the object of musical discourse in general.⁷

As Mioreanu put it:

The importance, though provisional, of this type of compositional attitude resided in the search for another writing, which also means placing in question the traditional status of the musician, traditional, elitist artistic circuits, and the search for another status of the musician in line with the desiderata of the *soixante-huitards*.⁸

2 'Daniel Charles: biographie', <http://home.att.ne.jp/grape/charles/dc/dc-bio.html>.

3 'Notes on Contributors', *Contemporary Music Review* 8/1 (1993), 214.

4 Ana Diaconu, 'Costin Mioreanu's Contribution to *Musique en jeu*', *Musicology Today* 12 (2021); Oana Andreica, 'Labyrinthes d'Adrien by Costin Mioreanu or the Topology of Ruptures and Junctions', in *Sounds, Societies, Significations: Numanistic Approaches to Music*, ed. Rima Povilioniene (Cham: Springer, 2017), 4–5; Jim Samson, *Music in the Balkans* (Leiden: Brill, 2013), 461–5.

5 Quoted in Martin Iddon, 'The Haus That Karlheinz Built: Composition, Authority, and Control at the 1968 Darmstadt Ferienkurse', *The Musical Quarterly* 87/1 (2004), 108.

6 Iddon, 'The Haus That Karlheinz Built', 90–1.

7 Cited by Daniel Charles in 'Dix Jeunes compositeurs', *Musique en jeu* 1 (1970), 84; Costin Mioreanu, *Fuite et conquête du champ musical* (Paris: Méridiens Klincksiek, 1995), 31.

8 Mioreanu, *Fuite et conquête du champ musical*, 33.

This conception of the indeterminate practices of the musical avant-garde as a social critique had been available in Europe at least since Metzger's 1959 exegesis of Cage's *Concert for Piano and Orchestra*, which understood Cage's piece to problematize the conception of the score as a neutral intermediary between a composer's intention and an interpreter and, crucially, to offer a glimpse of a world 'emancipated from the principle of domination'.⁹ Even before Mioreanu moved to Paris in the months following May 1968, a set of concerns – a preoccupation with writing, a critique of the author-composer, and a commitment to ideals of democratization – are discernible that would soon be articulated to the paradigm of the text.¹⁰ In 1970, Mioreanu pursued his engagement with the field of structuralism and began studies at the École des Hautes Études en Sciences Sociales with A. J. Greimas.¹¹

The open text

Mioreanu's arrival in Paris coincided more or less closely with that of the theoretical object termed 'the text'. Barthes characterizes this historical moment succinctly in the opening sentence of 'From Work to Text', in 1971: 'It is a fact that over the last few years a certain change has taken place (or is taking place) in our conception of language and, consequently, of the literary work which owes at least its phenomenal existence to this same language.'¹² A radicalization of the structuralist adoption of linguistics as a pilot science, that is, an 'ultrastructuralism', as François Dosse terms it, necessitated a reconception of the object in question.¹³ If, for example, the literary object is not so much the repository of an author's ideas and intentions that are recovered in the act of reading as a moment in a field, its sense deriving from a differential network of linguistic mechanisms that are social rather than individual, then the edges of the work must necessarily fray. If works of art are not organic, discrete unities but are instead jostled by and interwoven with other texts, the bounded object of conventional literary criticism finds itself in some difficulty (and not only this: the sociogenesis of the categories that make sense of these objects entails that they too are similarly unstable).¹⁴ In *S/Z*, published in 1970, Barthes's opposition between the 'readerly' and the 'writerly' had not just diagnosed but celebrated a certain openness or indeterminacy in the literary object, such that 'writing' is no longer the exclusive preserve of the author.¹⁵

9 Heinz-Klaus Metzger, 'John Cage, or Liberated Music' [1959], trans. Ian Pepper, *October* 82 (1997), 51; cf. Martin Iddon and Philip Thomas, *John Cage's Concert for Piano and Orchestra* (Oxford: Oxford University Press, 2020), 402–6.

10 The terms in which Mioreanu characterized the music of the Euro-American avant-garde in the late 1960s indicate an affinity for the theoretical currents sweeping the Parisian world of letters; cf. Diaconu, 'Costin Mioreanu's Contribution to *Musique en jeu*', 43.

11 Andreica, '*Labyrinthes d'Adrien*', 6.

12 Roland Barthes, 'From Work to Text' [1971], in *Image Music Text*, ed. and trans. Stephen Heath (London: Fontana, 1977), 155.

13 François Dosse, *History of Structuralism. 2: The Sign Sets, 1967–Present*, trans. Deborah Glassman (Minneapolis, MN: University of Minnesota Press, 1997), 131–2.

14 Mowitt, *Text*, 1–47.

15 Roland Barthes, *S/Z*, trans. Richard Miller (Oxford: Blackwell, 1990 [1970]), 3–16.

Openness and indeterminacy had, of course, been watchwords of the European musical avant-garde since the late 1950s. The experiments of Pierre Boulez and Karlheinz Stockhausen with mobile forms, in which composed units can be navigated freely by the performer, inspired in part by the literary precedents of Stéphane Mallarmé's *Un Coup de dés* and James Joyce's *Finnegan's Wake* (working title: *Work in Progress*) are significant here, but it is perhaps above all the figure of John Cage that placed the concept of the work in question for avant-garde musicians in the late 1950s and 1960s.¹⁶ By the middle of the 1960s, a cluster of terms – *non finito*, open work, work in progress, informal – were the common currency of music critical discourse. In Heinz-Klaus Metzger's account of *Concert for Piano and Orchestra*, Cage is read as 'dissolving . . . critically' the 'traditional concept of the work of art'.¹⁷ Cage, he suggests, replaces the work as object with the work as 'praxis, process, action'.¹⁸

Umberto Eco's canonical account of the 'open work' from 1960, which takes Luciano Berio's *Sequenza I* (1958), Boulez's Third Piano Sonata, Henri Pousseur's *Scambi* (1958), and Stockhausen's Klavierstück XI as examples, reiterates the connection between these practices and the aesthetics of Mallarmé and Joyce. However, Eco generates a concept of the open work that, despite its echoes of Metzger's thematic of freedom, arguably excludes such pieces as Cage's, insisting on an essential identity that contains its variants or to which the variants refer. The open work according to Eco is thus very much still a work.¹⁹ This is a point made by Daniel Charles in 1965, who writes that '[i]f Boulez's works have become increasingly "open", therefore, this has been in order that they might be less "aleatory"; the 'open work' is 'open, but a work' (in contrast, 'for Cage, what "opens" is the *non-work*').²⁰ Charles takes the varying attitudes of Boulez and Iannis Xenakis towards Cage as the starting point for a critique of Boulez's joint commitment to formalism and the 'autonomy of the work of art', a call for a flattening of the distinction, not yet articulated in a poststructuralist vocabulary, between the 'esthetic' and the 'artistic'.²¹

Through the 1960s, a host of musical practices had developed – from graphic and text scores to free improvisation, multimedia happenings, and scratch orchestras – that consolidated the rhetorical and practical link between 'performative freedoms, collaborative creative processes, and audience participation' and 'the antiauthoritarian and democratizing movements of the era'.²² Charles, following the line of argument set up by Metzger, interpreted

16 Robert Piencikowski, "A score neither begins nor ends; at most it pretends to": Fragmentary Reflections on the Boulezian "*non finito*", in *Pierre Boulez Studies*, ed. Edward Campbell and Peter O'Hagan (Cambridge: Cambridge University Press, 2016).

17 Metzger, 'John Cage, or Liberated Music', 61.

18 Metzger, 'John Cage, or Liberated Music', 59.

19 Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, MA: Harvard University Press, 1989 [1962]), 1–23.

20 Daniel Charles, 'Entr'acte: "Formal" or "Informal" Music?', *The Musical Quarterly* 51/1 (1965), 147–8; Umberto Eco, 'L'oeuvre ouverte ou la poétique de l'indétermination', *Nouvelle revue française* 91 (1960); Daniel Charles, 'Nature et silence chez John Cage', in *Le langage: Actes du XIIe Congrès des Sociétés de philosophie de langue française* (Neufchâtel: La Baconnière, 1966), 173.

21 Charles, 'Entr'acte', 164–5.

22 Robert Adlington, 'Introduction: Avant-garde Music and the Sixties', in *Sound Commitments: Avant-Garde Music and the Sixties*, ed. Robert Adlington (Oxford: Oxford University Press, 2009), 5.

the Cagean open work as a reversal of the disconnection between musical activity and ‘labouring society’ that the post-war acolytes of Webern had taken to new extremes.²³ The traditional composer ‘domesticates chance, to better domesticate the performer’ in a dynamic that Charles describes in tellingly Freud-Marxian terms as ‘the interiorisation of repression’.²⁴ As such, by the time that Mioreanu arrived in Paris, the compositional techniques that were central to his practice – text scores, graphic scores, and electronic music – were invested with great theoretical and political significance.

The account of *Textkomposition* (a term that for Mioreanu encompassed text scores in a limited sense along with other non-normative forms of notation) developed by the Vincennes milieu began with the conceptual framework established by writers such as Metzger. Practices such as Cage’s, they agreed, necessitated thinking in terms of processes and actions rather than musical works or fixed objects. New experimental notation practices problematized the conception of writing as the communication of a composer’s intention to a performer, and granted composer and performer something like equal status. Mioreanu had begun to develop a theoretical account of *Textkomposition* shortly after the 1968 Darmstadt workshop.²⁵ In 1967 and 1968, Cage’s aesthetics were described by Charles in terms of eternal flux and the Zen contemplation of nothingness, drawing primarily on the writing of Heinz-Klaus Metzger and Theodor Adorno, the reluctant patron philosopher of the Darmstadt of the 1950s whose writings dominated critical accounts of avant-garde music into the 1970s.²⁶ After the arrival in Paris of Stoianova in 1970, however, a new paradigm inflected the thinking of Charles and Mioreanu, one indebted to the lively theoretical writing associated with the journal *Tel Quel*, and above all to the work of Julia Kristeva. A cluster of essays published in *Musique en jeu* between 1973 and 1975 by Charles, Stoianova, and Mioreanu, while the latter two were both colleagues and doctoral students of the former at Vincennes, began to theorize contemporary musical practices in terms of a musical *énoncé*, a productivity emerging from the encounters between codes and a primordial, pre-logical, and pre-individual topos of drives and dreamwork.²⁷

The hinges of this turn are particularly perceptible in ‘L’écriture et le silence’, published in 1973. Taking up Metzger’s Adornian suggestion that Cage’s *Concert for Piano and Orchestra* rejects a capitalist logic of evaluation and reproduction of objects, Charles draws on the Marxian semiotics of Kristeva and Jean Baudrillard to suggest that something like a

23 Daniel Charles, ‘L’esthétique du *non finito* chez John Cage’, *Revue d’esthétique* 21/2–4 (1968), 25.

24 Daniel Charles, ‘L’interprète et le hasard’, *Musique en jeu* 3 (1971), 45–6.

25 Iddon, ‘The Haus That Karlheinz Built’.

26 Charles, ‘L’esthétique du *non finito* chez John Cage’; Daniel Charles, ‘Ouverture et indétermination’, *La Pensée* 135 (1967).

27 Ivanka Stoianova, ‘*Pli selon pli*: portrait de Mallarmé’, *Musique en jeu* 11 (1973); Daniel Charles, ‘L’écriture et le silence’, *Musique en jeu* 11 (1973); Daniel Charles, ‘La musique et l’écriture’, *Musique en jeu* 13 (1973); Mioreanu, ‘“Textkomposition”: voie zéro de l’écriture musicale’, *Musique en jeu* 13 (1973); Ivanka Stoianova, ‘Musique, graphie, geste’, *Musique en jeu* 13 (1973); Ivanka Stoianova, ‘L’énoncé musical’, *Musique en jeu* 19 (1975). Both Stoianova’s various contributions and Mioreanu’s were excerpted from their doctoral theses, which would in turn form the bases of Stoianova’s *Geste-Texte-Musique* (Paris: Union général d’éditions, 1978) and Mioreanu’s *Fuite et conquête du champ musical*.

productivity outside of the circulation of exchange and use values and signs might be in play: it ‘adds nothing “valuable” to the world’.²⁸ Cage’s silences are understood by Charles to pass from an ‘empty’ silence ‘thought in terms of exchange and the communication of a meaning or value’ to a “full”, “positive”, *noisy*’ silence, one that might escape from communication and discourse. Cage’s silence thus entails a confrontation with a background noise, with the inarticulate enabling conditions of meaning, a ‘productivity prior to value’.²⁹ Charles’s description of writing as ‘noise tracing itself’ appears to echo Barthes’s ironic riffs on communication theory in *S/Z*, in which he writes about a form of writing that ‘stages a certain “noise” . . . is the writing of noise, of impure communication’.³⁰

The simple displacement effected by Charles of the literary object of Kristeva’s early work is remarkably generative. As Kristeva claims of literature when approached with the apparatus of semiotics, for Cage ‘music’ does not exist. A semiotic perspective affirms the irreducibility of ‘music’ to ‘the object of normative musicology’.³¹ The noisy, interferential preconditions of musical sense that are silenced by conventional musicology are articulated by Charles in terms of Nature, and are thus connected both to a Marxian account of the labour process and to the maxim attributed by Cage to Ananda Coomaraswamy (‘art is the imitation of nature in her manner of operation’). Perhaps more fruitfully, however, this noisiness also comes to refer to the inscription of bodies, and socially organized bodies, within the musical text, a move that refuses the identification of the musical with the sonorous and allows Charles to draw Barthes’s essay ‘Le grain de la voix’, which had been published in *Musique en jeu* two issues previously and is itself in conversation with the work of Kristeva, into his account.³²

Musical text/textual music

Two issues later, an issue of *Musique en jeu* dedicated to graphic notation reflected the shared account of indeterminate notation being developed by Charles, Stoianova, and Miereanu. Miereanu’s contribution, titled ‘*Textkomposition: voie zéro de l’écriture musicale*’, invokes in its title both Barthes’s theorization of a colourless, styleless writing and Kristeva’s citation of Linnart Mäll’s semiotic studies of Buddhism.³³ The fundamental move of *Textkomposition*, Miereanu argues, is an opening up of compositional practice to the ‘extra-musical’ (a term that does not remain unproblematic), including ‘painting, poetry, linguistics, exact sciences, environment [in the artistic sense derived from Allan Kaprow], the art of gesture, mass media’.³⁴ As such, this practice represents an ‘inter-media’ in which different signifying codes displace one another. As such, the communicative function that had governed

28 Charles, ‘L’écriture et le silence’, 101–3; Charles, ‘L’esthétique du *non finito* chez John Cage’, 25; Metzger, ‘John Cage, or Liberated Music’, 57. Charles cites Metzger’s essay in ‘Ouverture et indétermination’.

29 Cf. Mowitt, *Text*, 180–1.

30 Charles, ‘La musique et l’écriture’, 13; Barthes, *S/Z*, 132.

31 Charles, ‘L’écriture et le silence’, 103.

32 Charles, ‘L’écriture et le silence’, 107–8; Barthes, ‘Le grain de la voix’, *Musique en jeu* 9 (1972).

33 Roland Barthes, *Le degré zéro de l’écriture* (Paris: Seuil, 1953); Julia Kristeva, *Séméiotikè: Recherches pour une sémanalyse* (Paris: Seuil, 1969), 136.

34 Miereanu, “Textkomposition”, 54.

traditional music until the birth of musical modernism is renounced, in favour of, quoting Kristeva, a ‘continuous reflection, a written contestation of code, of the law and of oneself.’³⁵ *Textkomposition*, they argue, brings to light the ‘kinesis of sense always in the process of formation’, what Kristeva terms *signifiance*, a ‘transformative semiotic practice’.³⁶

Against an idealist model of the fixed, closed work, Mioreanu and Stoianova posit the musical text as ‘a synthetic language, within several superimposed languages, conveyed by a multitude of open codes, infinite and irreducible in relation to one another; it is located . . . at the point of encounter between different semiotic systems’.³⁷ This text is structured by what Stoianova terms ‘discontinuous connotations’ (a metonym of Derrida’s ‘nonsynonymous substitutions’), such that ‘there is no immobile textual presence, there is no fixed material that could be susceptible to a “translation without loss” or addition’.³⁸ As a consequence, practices such as Mioreanu’s do not aspire to different or more precise forms of communication by, say, representing pitch or amplitude graphically. Rather, they refuse the goal of correspondence or faithful translation between signifying systems. Stoianova’s description of ‘a drive, a clearing, an energy becoming textual music and musical text, figural gesture and gestural writing [*graphie*], printed dance and audible dance, read music and heard music’ does not, therefore, reflect a monist synesthesia but a conception of a field traversed by slippages, breaks and tensions.³⁹ Drawing on Kristeva’s account of poetic language and the signifying process, Mioreanu and Stoianova argue that indeterminate notation practices bring the social, material, and psychoanalytic preconditions of musical meaning to bear on the production of musical sense in a way that both makes those preconditions apparent and renders strange and unstable the relation of subjects to representational and communicative musical signification.⁴⁰

As opposed to Metzger’s account of Cage’s *Concert for Piano and Orchestra*, the openness of the open work for Mioreanu and Stoianova is not a question of individual liberties or a democracy of conscious subjects: ‘it does not have to do with alternatives or with choice’.⁴¹ Instead, subjectivity is put into question – ‘on trial’/‘in process’, as Kristeva has it – in a way that reflects a particularly countercultural syncretism of Zen, mysticism, Freud, and psychedelia.⁴² Mioreanu speaks of an attitude of inspiration, ‘of intuition, of premonition, of dream, of the symbolic, of a non-linear logic’, while Stoianova invokes the ‘ahistorical temporality of “drugged” consciousness’.⁴³

35 Mioreanu, “‘Textkomposition’”, 57; cf. Kristeva, *Séméiotikè*, 136.

36 Stoianova, ‘Musique, graphie, geste’, 111, 109; Mioreanu, “‘Textkomposition’”, 52–5.

37 Mioreanu, “‘Textkomposition’”, 59.

38 Stoianova, ‘Musique, graphie, geste’, 109.

39 Stoianova, ‘Musique, graphie, geste’, 110.

40 Cf. Mowitt, *Text*, 107.

41 Stoianova, ‘Musique, graphie, geste’, 113.

42 Julia Kristeva, ‘Le sujet en procès’, in *Artaud: Communications et interventions du Colloque de Cérisy, juin-juillet 1972*, ed. Philippe Sollers (Paris: Union Générale d’Éditions, 1973).

43 Mioreanu, “‘Textkomposition’”, 59; Stoianova, ‘Musique, graphie, geste’, 112–14.

***Luna cinese*: the open record**

Such an openness is put to the test by the form of the record, a form with which Mioreanu first experimented in 1975.⁴⁴ Mioreanu's *Luna cinese* was published on the Italian record label Cramps Records, founded by Gianni Sassi, Sergio Albergoni, and Gianni Emilio Simonetti in 1973. This label emerged from a countercultural scene that drew together New Left politics and diverse forms of aesthetic experimentation including progressive rock, free improvisation, jazz, and avant-garde composition. Simonetti, who curated the *nova musica* series within which *Luna cinese* appeared, was an admirer of Cage and Fluxus who sought to foster a politically committed experimentalism indebted to Situationism.⁴⁵ Mioreanu was thus in appropriate company in a series that had been inaugurated with a record dedicated to Cage's music (including the first commercial recording of *4'33"*) and went on to include the political songs of Cornelius Cardew and the Gruppo di Improvvisazione Nuova Consonanza.

The disc represents an attempt to reconcile the conception of the open work developed from the early 1970s with the form of the record. As Mioreanu notes, 'the purely sonic fixity of the disc' was starkly opposed to the expanded conception of music that he and his associates had struggled to forge.⁴⁶ When compared with the radical indeterminacy of a piece such as *Dans la nuit des temps* (1969), a record differs little from iteration to iteration. As Cage, whose shadow looms large over *Luna cinese*, put it, records 'destroy one's need for real music . . . [and] make people think that they're engaging in a musical activity when they're actually not'.⁴⁷ Mioreanu was not alone in pondering the contradiction between the open works of the musical avant-garde in the 1950s and 1960s and the fixity of the LP.⁴⁸ Around 1970, recordings of mobile works by Stockhausen and André Boucourechliev had opted to include multiple renditions of the piece on one LP, a solution perhaps suited to the Eco-influenced – rather than Cagean – openness that these works adopted.⁴⁹ Theodore Strongin, in a 1968 review of a record by Max Neuhaus suggestively titled 'When the Listener Is Composer', posits an openness that is more resonant with that of the text, conceiving of listening as a form of 'composition' or 'realization' that prefigures Barthes's formulation of the writerly text.⁵⁰

44 Mioreanu is probably best known today through his electronic compositions, many self-released on his Poly-art label, which sit somewhere between *kosmische* reveries, postminimalist stasis, and the experiments with digital synthesis of Ensemble l'Itinéraire.

45 Gianmario Borio, 'Music as Plea for Political Action: The Presence of Musicians in Italian Protest Movements around 1968', in *Music and Protest in 1968*, ed. Beate Kutschke and Barley Norton (Cambridge: Cambridge University Press, 2013), 42–3. An excerpt from a graphic score by Simonetti appeared in Cage's *Notations* (1969).

46 Costin Mioreanu, 'Luna cinese: un récit de science-fiction musicale', *Musique en jeu* 32 (1978), 53.

47 Quoted in Yasunao Tone, 'John Cage and Recording', *Leonardo Music Journal* 13 (2003), 11.

48 Jonathan Goldman, 'Open Works on Record: An Unsung Mediation', in *Revisiting the Historiography of Postwar Avant-Garde Music*, ed. Anne-Sylvie Barthel-Calvet and Christopher Brent Murray (Abingdon: Routledge, 2023); cf. David Grubbs, *Records Ruin the Landscape: John Cage, the Sixties, and Sound Recording* (Durham, NC: Duke University Press, 2014).

49 Goldman, 'Open Works on Record', 162–4.

50 Theodore Strongin, 'When the Listener Is Composer', *New York Times*, 16 June 1968, Arts section, 19.

Luna cinese, in a subtle rejoinder to Cage, suggests that to listen to records is in fact to engage in a musical activity (a point that is perhaps suggested by works of Cage's such as the *Imaginary Landscape* series). Miereanu's solution to the aporia of the open record approached the record as a 'socio-cultural object', terming it a 'manipulable disc' (*disque-à-manipuler*) and suggesting multiple ways of listening to the record's two sides (labelled 'side X or Y' and 'side Y or X'): by looping different copies of the record, for example, or overlaying the same or different sides and manipulating the volume controls on different record players.⁵¹ Miereanu insists that '*Luna cinese* should be understood less as a finished object, as a final result, signature, initials and visiting card of the composer, and instead as a material, as the point of departure for a second realisation'.⁵²

This succeeds in producing a piece that is, on one level, remarkably similar to the insufficiently open work as theorized by Eco, which 'always falls back on an aesthetic object in the image of the fixed, traditional work'.⁵³ The piece in many ways recalls the recordings of another Parisian admirer of Cage, Luc Ferrari, combining fragments of speech in different languages, recordings of everyday noises and soundscapes, arranged through long duration, scarcely perceptible loops. Organized in parallel, autonomous layers, the materials include 'recipes, nursery rhymes, outpourings of disordered memories [and] mental transcription of discussions that actually occurred or are simply imagined'. The cumulative effect is of a generalized stasis, 'the "woven" silence of the mountains' interspersed with the 'intense noise of big cities'.⁵⁴ This 'stasis of the present moment' reflects the influence of Cage's music and its static surfaces made up of a multitude of events.⁵⁵ Miereanu's aims for the piece reflect a by now familiar preoccupation with the signifying process, with the short circuits and arbitrary connections that precede sense: he hoped that these procedures might produce a 'surrealism in the natural or unconscious state'. Side X or Y follows the emergence of the title from nonsense, a 'production process of sense, a "tracing" or *nascent* process' in much the same way that Miereanu's graphic scores were understood to set in play and foreground the emergence of musical sense.⁵⁶

The piece's emphasis on stasis, its refusal of teleological narrative (especially if manipulated in the manner that Miereanu suggests), and its formal reliance on repetition can be fruitfully placed alongside the account of American minimalist music published by Stoianova in 1977, which fleshes out the relationship between experimental musical practices and listening subjects that is implicit in her earlier writing on the European avant-garde. At its core, Stoianova's claim is that the repetitive music of composers such as Philip Glass, Terry Riley, and Steve Reich, in scrambling the communicative, interpellative mechanisms of conventional tonal

51 The subsequent record in the *nova musicale* series was by Martin Davorin-Jagodić, also a lecturer at Vincennes, and was similarly designated a 'manipulable disc'.

52 Miereanu, 'Luna cinese', 53–4.

53 Miereanu, "'Textkomposition'", 51; cf. Goldman, 'Open Works on Record', for a thoughtful discussion of the ontological questions thrown up by what he takes as the dialectical bind of the open work and the record form.

54 Miereanu, 'Luna cinese', 52.

55 Miereanu, 'Luna cinese', 51; Costin Miereanu, 'Décomposons Wagner', *Musique en jeu* 22 (1976).

56 Miereanu, 'Luna cinese', 51–2.

music, ‘offers up instances of undirected and uncontrollable identification’.⁵⁷ Its anti-functional use of repetition – marking its distance from the architectonic organization of earlier tonal music – derives from:

a *desubjectivation* of the sound *énoncé*. Contrary to the conventional practice in which the artist (author, performer) places himself temporarily in the work, which follows the flow of interiority, the tale of a subject (even a subject ‘on trial/ in process’), the repetitive statement annuls any subject of enunciation in the name of the repetitive play which has become the sole master of the situation.⁵⁸

What Stoianova seems to be positing here is an openness that is no longer so closely and exclusively tied to the sorts of indeterminate notations that had occupied her, Charles, and Miereanu for the preceding years. As John Mowitt writes, Stoianova’s ‘commitment to the textual paradigm is meant to authorize her insistence upon the interpellative heterogeneity of music when the latter is comprehended as a social apparatus’.⁵⁹ Mowitt pushes Stoianova perhaps a little further than she intends but nevertheless in a direction that is fruitful: rather than this openness being a special characteristic of the avant-garde, he argues that implicit in Stoianova’s argument is the openness or textuality of music in general.⁶⁰

Luna cinese can be understood in these terms, its openness having as much to do with its openness to multiple identifications, its flat, directionless surface, in which ‘the listener is no longer forced to follow the story of a narrative development, but can wander at will, abandoned to his fantasies’, as with the record’s appropriation of the mobile forms of Stockhausen or Boulez.⁶¹ It is here that the extreme states of consciousness that Miereanu and Stoianova invoke can be integrated into their project of a psychoanalytically informed semiotics of music: in these states the constitution of subjectivity is shaken and its preconditions become perceptible.

In an essay from 1977, titled ‘Listening’, Barthes posits a listening implied by Cage’s music, one that appears to elaborate the account of listening and the subject developed by Stoianova. Barthes sets out a ‘modern’, post-psychoanalytic mode of listening that is centreless, ‘evenly hovering’.⁶² As opposed to a hermeneutic listening, which seeks to decode, Barthes’s listening is an open, liberated one which ‘circulates, which permutes, which disaggregates, by its mobility, the fixed network of the roles of speech’. This listening is involved in a social transformation, in which ‘the sites of speech are less and less protected by the institution’.⁶³ Such a

57 Ivanka Stoianova, ‘Musique répétitive’, *Musique en jeu* 25 (1977), 71; Mowitt, *Text*, 185–6.

58 Stoianova, ‘Musique répétitive’, 73; cf. Christophe Levaux, *We Have Always Been Minimalist: The Construction and Triumph of a Musical Style*, trans. Rose Vekony (Oakland, CA: University of California Press, 2020), 139–40.

59 Mowitt, *Text*, 186.

60 Here Stoianova follows Kristeva and Barthes, who at least initially appear to take their objects as specific, exceptional signifying practices: Stoianova, *Geste-Texte-Music*, 9; Julia Kristeva, *Revolution in Poetic Language*, trans. Margaret Waller (New York: Columbia University Press, 1984 [1974]), 15; Barthes, ‘From Work to Text’.

61 Stoianova, ‘Musique répétitive’, 70.

62 Roland Barthes, ‘Listening’ [1977], in *The Responsibility of Forms: Critical Essays on Music, Art, and Representation*, trans. Richard Howard (Berkeley, CA: University of California Press, 1991), 253.

63 Barthes, ‘Listening’, 259.

listening, then, does not uncover hidden meanings in a crudely psychoanalytic sense, but picks up on the signifying process, 'the unconscious texture' that constitute the enabling conditions of sense.⁶⁴ The concluding gesture of Barthes's essay aligns Cage's music with this hovering attention, an auto-deconstructive listening, and bears a strong resemblance to the account of indeterminate music as a music that brings the signifying process to bear on musical practice developed by Stoianova, Charles, and Miereanu:

what is listened to here and there . . . is not the advent of a signified, object of a recognition or of a deciphering, but the very dispersion, the *shimmering* of signifiers, ceaselessly restored to a listening which ceaselessly produces new ones from them without ever arresting their meaning: this phenomenon of shimmering is called *signifying* [*signifiante*, a term Barthes had borrowed from Kristeva], as distinct from signification: 'listening' to a piece of classical music, the listener is called upon to 'decipher' this piece, i.e. to recognize (by his culture, his application, his sensibility) its construction, quite as coded (predetermined) as that of a palace at a certain period; but 'listening' to a composition (taking the word here in its etymological sense) by John Cage, it is each sound one after the next that I listen to, not in its syntagmatic extension, but in its raw and as though vertical *signifying*: by deconstructing itself, listening is externalized, it compels the subject to renounce his 'inwardness'.⁶⁵

Barthes recapitulates the account of the open work as a practice that abandons the paradigm of communication in favour of articulating the noisy texture from which sense emerges. Such a shimmering, hovering listening is solicited by *Luna cinese*.

Luna cinese suggests that the form of listening theorized by Barthes and Stoianova has a significant relationship with the record. This is a listening, then, that takes 'into account an increasing *instrumentation* of listening (by radio, tape, recordable CD, sampler, etc.)' and suggests, with Peter Szendy, 'that it is listeners who make music'.⁶⁶ Indeed, *Luna cinese* stages Szendy's claim for 'listening as arrangement'. If, as Szendy argues, the listening proper to the musical work is a structural listening as theorized by Adorno, then the improper listening associated with radio, tape, record, and so on would be a distracted, wavering one without a centre.⁶⁷ Adorno's disagreements with Walter Benjamin over the status of distraction turn on the potentialities of mass culture with which Miereanu and his peers were grappling, in which such forms as cinema initiate a 'shattering' of tradition, the 'choral work' might be 'enjoyed in a private room'.⁶⁸ Benjamin's mechanical reproducibility essay is a spectral presence through

64 Barthes, 'Listening', 255.

65 Barthes, 'Listening', 259.

66 Peter Szendy, *Listen: A History of Our Ears*, trans. Charlotte Mandell (New York: Fordham University Press, 2008), 99.

67 Szendy, *Listen*, 103.

68 Walter Benjamin, 'The Work of Art in the Age of Its Technological Reproducibility: Second Version', in *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*, ed. Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin (Cambridge, MA: Belknap, 2008), 22; cf. David Goodman, 'Distracted Listening: On Not Making Sound Choices in the 1930s', in *Sound in the Age of Mechanical Reproduction*, ed. David Suisman and Susan Strasser (Philadelphia, PA: University of Pennsylvania Press, 2010), 41–5.

Adorno's writing on technology and culture, including, perhaps, in his formulation of a lacunary listening in a late article on the long-playing record. The LP, for Adorno, is a manipulable disc. It invites intervention by the once passive listener, affording interruptions, repetitions, and the isolation of fragments, in which the needle (over)punctuates, as Szendy might say, the text, generating a form of musical listening that is perhaps not quite distracted, but certainly decentred: 'comparable to reading, to the immersion in a text'.⁶⁹

Just as the conception of the open, textual musical *énoncé* was, as Stoianova put it, 'imposed by the very practice of . . . musical enunciation as it asserts itself in modernity', troubling the musical object in general, so Miereanu's 'manipulable disc' troubles the association of the record with fixity and deadness. In the light of *Luna cinese*, a host of records that foreground their openness comes into view, such as Brian Eno's *Discreet Music* (1975), a record whose origin story involves the unusually quiet playback of an LP, and Augustus Pablo and King Tubby's *King Tubbys Meets Rockers Uptown* (1976).

Coda

Nicholas Cook's 2013 book *Beyond the Score: Music as Performance* opens with an invocation of the text. Quoting Barthes's 'The Grain of the Voice', first published in *Musique en jeu*, Cook writes that, like Barthes, he seeks 'to change the musical object itself'.⁷⁰ Cook hopes that by reformulating music as performance, as an open process rather than as an object more or less easily locatable in its notated form, the discipline of musicology might find itself newly alert to the various inscriptions of bodies, the social, and media. Cook's argument develops what is arguably a commonplace of 'New Musicology', building on the work of Lydia Goehr, Georgina Born, and others that problematized the work concept as a paradigm for music studies.⁷¹ As the preceding has made clear, such a transfiguration (from work to text, from a solid entity to an open-ended process) is the project to which Charles, Stoianova, and Miereanu committed themselves. This alignment of Cook with the subjects of this article suggests that the theorization of the open work undertaken in conversation with poststructuralist thought still has much to offer contemporary debates within and against the discipline of musicology, not least of which is an emphatically political critique of the work concept.

In the intervening decades between the mid-1970s and the present, the radical political character of the post-Cagean critique of the work – to be replaced by an atmosphere, a happening, or, perhaps, a stream – has appeared increasingly ambivalent. This politics might be articulated in terms borrowed from Louis Althusser's contemporaneous amalgamation of Marxism and Lacanian psychoanalysis: it hinges on the capacity of the interpellatory

69 Theodor Adorno, 'Opera and the Long-Playing Record' [1969], trans. Thomas Y. Levin, *October* 55 (1990), 64; Peter Szendy, *Of Stigmatology: Punctuation as Experience*, trans. Jan Plug (New York: Fordham University Press, 2018), 99–104.

70 Nicholas Cook, *Beyond the Score: Music as Performance* (Oxford: Oxford University Press, 2013), 1.

71 Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992); Georgina Born, 'On Musical Mediation: Ontology, Technology and Creativity', *Twentieth-Century Music* 2/1 (2005); cf. Gavin Steingo, 'The Musical Work Reconsidered, in Hindsight', *Current Musicology* 97 (2014).

mechanisms of the hegemonic organization of musical consumption to go wrong, to be misheard (Althusser's classic scene of interpellation is an auditory one).⁷² Barthes, Stoianova, and Mioreanu emphasize noisiness and mishearing: the static surfaces of American experimental music afford an encounter with the preconditions of sense and subjectivation. Paul Rekret sounds a note of caution that leans more towards Adorno than to Benjamin in discussing a form of ambience that recuperates for capital the democratizing aims of the practices of Eno and others.⁷³ Spotify's stated ambition to 'soundtrack every moment of your life' does not describe a form of semiotic democracy or dispersed musicking but the consolidation of the 'divergent subject positions' hailed by the various musics of a playlist into an imaginary unity governed by a dehistoricized general equivalence. Assimilated entirely to a social function in the service of capital, music, Rekret claims, appears not as a socialized, collective practice but as the ghost of such a music.⁷⁴

Through the 1970s, an attempt to articulate the Cagean open work to the latest developments in semiotics generated a rich account of musical practice that afforded a critique of existing musicological thinking. Drawing on the accounts of literary production proposed by Barthes, Kristeva, and others, Charles, Stoianova, and Mioreanu developed a theory of music as a signifying practice that continues to resonate with contemporary critiques of absolute music that emphasize the political, embodied, and social character of musical practice.

Bibliography

- Adlington, Robert. 'Introduction: Avant-garde Music and the Sixties', in *Sound Commitments: Avant-Garde Music and the Sixties*, ed. Robert Adlington. Oxford: Oxford University Press, 2009. 3–14.
- Adorno, Theodor. 'Opera and the Long-Playing Record' [1969], trans. Thomas Y. Levin. *October* 55 (1990), 62–6.
- Andreica, Oana. 'Labyrinthes d'Adrien by Costin Mioreanu or the Topology of Ruptures and Junctions', in *Sounds, Societies, Significations: Numanistic Approaches to Music*, ed. Rima Povilioniene. Cham: Springer, 2017. 3–23.
- Barthes, Roland. 'From Work to Text' [1971], in *Image Music Text*, ed. and trans. Stephen Heath. London: Fontana, 1977. 155–64.
- . *Le degré zéro de l'écriture*. Paris: Seuil, 1953.
- . 'Le grain de la voix'. *Musique en jeu* 9 (1972), 57–63.
- . 'Listening' [1977], in *The Responsibility of Forms: Critical Essays on Music, Art, and Representation*, trans. Richard Howard. Berkeley, CA: University of California Press, 1991. 245–60.
- . *S/Z*, trans. Richard Miller. Oxford: Blackwell, 1990 [1970].
- Benjamin, Walter. 'The Work of Art in the Age of Its Technological Reproducibility: Second Version', in *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*, ed. Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin. Cambridge, MA: Belknap, 2008. 19–55.
- Borio, Gianmario. 'Music as Plea for Political Action: The Presence of Musicians in Italian Protest Movements around 1968', in *Music and Protest in 1968*, ed. Beate Kutschke and Barley Norton. Cambridge: Cambridge University Press, 2013. 29–45.
- Born, Georgina. 'On Musical Mediation: Ontology, Technology and Creativity'. *Twentieth-Century Music* 2/1 (2005), 7–36.
- Butler, Judith. *The Psychic Life of Power: Theories of Subjection*. Stanford, CA: Stanford University Press, 1997.
- Charles, Daniel. 'Dix Jeunes compositeurs'. *Musique en jeu* 1 (1970), 78–85.

72 Judith Butler notes the relation of misinterpellation to mishearing: 'The name is called, and I am sure it is my name, but it isn't. The name is called, and I am sure it is a name being called, my name, but it is in fact someone's incomprehensible speech, or worse, it is someone coughing, or worse, a radiator which for a moment approximates a human voice'; Judith Butler, *The Psychic Life of Power: Theories of Subjection* (Stanford, CA: Stanford University Press, 1997), 95–6.

73 Paul Rekret, "'Melodies wander around as ghosts": On Playlist as Cultural Form', *Critical Quarterly* 61/2 (2019).

74 Rekret, "'Melodies wander around as ghosts"', 61, 70–1; cf. Cook, *Beyond the Score*, 348–9.

- . ‘Entr’acte: “Formal” or “Informal” Music?’. *The Musical Quarterly* 51/1 (1965), 144–65.
- . ‘L’écriture et le silence’. *Musique en jeu* 11 (1973), 99–108.
- . ‘L’esthétique du *non finito* chez John Cage’. *Revue d’esthétique* 21/2–4 (1968), 23–6.
- . ‘L’interprète et le hasard’. *Musique en jeu* 3 (1971), 45–51.
- . ‘La musique et l’écriture’. *Musique en jeu* 13 (1973), 3–13.
- . ‘La musique à Vincennes’. *Musique en jeu* 18 (1974), 63–92.
- . ‘Nature et silence chez John Cage’, in *Le langage: Actes du XIIe Congrès des Sociétés de philosophie de langue française*. Neufchâtel: La Baconnière, 1966. 172–4.
- . ‘Ouverture et indétermination’. *La Pensée* 135 (1967), 182–92.
- Cohen, Paul. ‘La Fac Soixante-Huitarde: The Centre Universitaire Expérimental de Vincennes and the Afterlife of a Revolutionary Moment’, in *Global Revolutionary Aesthetics and Politics after Paris ’68*, ed. Martin Munro, William J. Cloonan, Barry J. Faulk, and Christian P. Weber. London: Lexington, 2020. 79–102.
- Cook, Nicholas. *Beyond the Score: Music as Performance*. Oxford: Oxford University Press, 2013.
- ‘Daniel Charles: biographie’. <http://home.att.ne.jp/grape/charles/dc/dc-bio.html> (accessed 8 February 2023).
- Diaconu, Ana. ‘Costin Miereanu’s Contribution to *Musique en jeu*’. *Musicology Today* 12 (2021), 41–52.
- Dosse, François. *History of Structuralism. 2: The Sign Sets, 1967–Present*, trans. Deborah Glassman. Minneapolis, MN: University of Minnesota Press, 1997.
- Eco, Umberto. ‘L’oeuvre ouverte ou la poétique de l’indétermination’. *Nouvelle revue française* 91 (1960), 117–24.
- . *The Open Work*, trans. Anna Cancogni. Cambridge, MA: Harvard University Press, 1989 [1962].
- Goehr, Lydia. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*. Oxford: Clarendon Press, 1992.
- Goldman, Jonathan. ‘Open Works on Record: An Unsung Mediation’, in *Revisiting the Historiography of Postwar Avant-Garde Music*, ed. Anne-Sylvie Barthel-Calvet and Christopher Brent Murray. Abingdon: Routledge, 2023. 152–71.
- Goodman, David. ‘Distracted Listening: On Not Making Sound Choices in the 1930s’, in *Sound in the Age of Mechanical Reproduction*, ed. David Suisman and Susan Strasser. Philadelphia, PA: University of Pennsylvania Press, 2010. 15–46.
- Grubbs, David. *Records Ruin the Landscape: John Cage, the Sixties, and Sound Recording*. Durham, NC: Duke University Press, 2014.
- Iddon, Martin. ‘The Haus That Karlheinz Built: Composition, Authority, and Control at the 1968 Darmstadt Ferienkurse’. *The Musical Quarterly* 87/1 (2004), 87–118.
- Iddon, Martin and Philip Thomas. *John Cage’s Concert for Piano and Orchestra*. Oxford: Oxford University Press, 2020.
- Kristeva, Julia. *Revolution in Poetic Language*, trans. Margaret Waller. New York: Columbia University Press, 1984 [1974].
- . *Séméiotikè: Recherches pour une sémanalyse*. Paris: Seuil, 1969.
- . ‘Le sujet en procès’, in *Artaud: Communications et interventions du Colloque de Cérisy, juin-juillet 1972*, ed. Philippe Sollers. Paris: Union Générale d’Éditions, 1973. 43–108.
- Levaux, Christophe. *We Have Always Been Minimalist: The Construction and Triumph of a Musical Style*, trans. Rose Vekony. Oakland, CA: University of California Press, 2020.
- Metzger, Heinz-Klaus. ‘John Cage, or Liberated Music’ [1959], trans. Ian Pepper. *October* 82 (1997), 49–61.
- Miereanu, Costin. ‘Décomposons Wagner’. *Musique en jeu* 22 (1976), 64–79.
- . *Fuite et conquête du champ musical*. Paris: Méridiens Klincksiek, 1995.
- . ‘Luna cinese: un récit de science-fiction musicale’. *Musique en jeu* 32 (1978), 51–9.
- . ‘“Textkomposition”: voie zéro de l’écriture musicale’. *Musique en jeu* 13 (1973), 49–73.
- Mowitz, John. *Text: The Genealogy of an Antidisciplinary Object*. Durham, NC: Duke University Press, 1992.
- ‘Notes on Contributors’. *Contemporary Music Review* 8/1 (1993), 213–14.
- Piencikowski, Robert. ‘“A score neither begins nor ends; at most it pretends to”: Fragmentary Reflections on the Boulezian “non finite”’, in *Pierre Boulez Studies*, ed. Edward Campbell and Peter O’Hagan. Cambridge: Cambridge University Press, 2016. 93–107.
- Rekret, Paul. ‘“Melodies wander around as ghosts”: On Playlist as Cultural Form’. *Critical Quarterly* 61/2 (2019), 56–76.
- Samson, Jim. *Music in the Balkans*. Leiden: Brill, 2013.
- Steingo, Gavin. ‘The Musical Work Reconsidered, in Hindsight’. *Current Musicology* 97 (2014), 81–112.
- Stoianova, Ivanka. ‘L’énoncé musical’. *Musique en jeu* 19 (1975), 23–57.
- . *Geste-Texte-Musique*. Paris: Union général d’éditions, 1978.
- . ‘Musique, graphie, geste’. *Musique en jeu* 13 (1973), 104–14.
- . ‘Musique répétitive’. *Musique en jeu* 25 (1977), 64–74.

———. 'Pli selon pli: *portrait de Mallarmé*'. *Musique en jeu* 11 (1973), 75–98.

Strongin, Theodore. 'When the Listener Is Composer'. *New York Times*, 16 June 1968, Arts section, 19.

Szendy, Peter. *Listen: A History of Our Ears*, trans. Charlotte Mandell. New York: Fordham University Press, 2008.

———. *Of Stigmatology: Punctuation as Experience*, trans. Jan Plug. New York: Fordham University Press, 2018.

Tone, Yasunao. 'John Cage and Recording'. *Leonardo Music Journal* 13 (2003), 11–15.