
HMD

Croatian
Musicological
SocietyHrvatsko
muzikološko
društvoKroatische
musikwissenschaftliche
GesellschaftSociété
croate de
musicologie

Inventive Listening: The Aesthetics of Parataxis

Author(s): James Wierzbicki

Source: *International Review of the Aesthetics and Sociology of Music*, June 2014, Vol. 45, No. 1 (June 2014), pp. 21-46

Published by: Croatian Musicological Society

Stable URL: <https://www.jstor.org/stable/23758165>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Croatian Musicological Society is collaborating with JSTOR to digitize, preserve and extend access to *International Review of the Aesthetics and Sociology of Music*

JSTOR

Inventive Listening: The Aesthetics of Parataxis

James Wierzbicki

University of Sydney
Arts Music Unit
Room 428, Seymour
Centre JO-9
SYDNEY, NSW 2006,
Australia
E-mail: james.wierzbicki@
sydney.edu.au

UDC: 78.01

Received: March 11, 2013

Primljeno: 11. ožujka 2013.

Accepted: February 10, 2014

Prihvaćeno: 10. veljače 2014.

In his splendid 2007 account of how an accidental high-seas spill of thousands of bathtub toys triggered not just an impressive wave of research into oceanographic flow patterns but also an urban legend of global proportions, Donovan Hohn documents a particular instance of 'the metamorphosis of happenstance into narrative and narrative into myth'.¹ That narrative evolves into myth is, for the critic reared on poststructuralist theory, almost a truism. But what of the metamorphosis of happenstance into narrative?

Clearly such transformation takes place, and probably with some frequency, although most often it occurs on a small scale, and without fanfare of the sort generated by the tale of the seafaring rubber

¹ Donovan HOHN, 'Moby-Duck, or, the Synthetic Wilderness of Childhood,' *Harper's Magazine* 314, no. 1880 (January 2007), 42. Hohn revisited the topic in a second article for *Harper's* and then expanded the material of both articles into *Moby-Duck: The True Story of 28,800 Bath Toys Lost at Sea and of the Beachcombers, Oceanographers, Environmentalists, and Fools, Including the Author, Who Went in Search of Them* (New York: Viking, 2011).

Abstract - Résumé

This essay explores the perceptual experience that transpires when auditors confront paratactic music, that is, music whose elements in whole or in part are not purposely put together but, rather, are juxtaposed or superimposed as the result of accident. It suggests that sympathetic auditors, in their efforts to 'make sense' of sounds that in fact are devoid of syntax or semiotic-semantic code, likely impose upon such sounds 'meaningful' structures of their own making; it suggests as well that parataxis in even the most self-consciously post-narrative music typically morphs—in listeners' interior spaces, and for very human reasons—into something resembling old-fashioned musical narrative.

Keywords: parataxis
• syntax • Minimalism •
indeterminate music •
serial music • Adorno
• Darmstadt

duckies. When announced in public, the organisation of random events into sequences of apparently connected phenomena is likely to be met with derision, its practitioners accused of leaping to conclusions or, if logicians are present, of committing the dread fallacy of ‘post hoc ergo propter hoc’. In the privacy of one’s own thoughts, however, invented relationships between one thing and another can be freely entertained without fear of reprisal. Such relationships can of course get out of hand, but so long as they are held in check by reason they can be psychologically satisfying. Indeed, there is a healthy appetite associated with a person’s capacity to observe myriad bits of information and perceive in them patterns that *seem* to make sense. It may be that only God, as St Augustine and Isaac Newton proclaimed, can in fact make ‘order out of chaos’,² but thinkers aplenty—including more than a century’s worth of secular psychologists—have suggested that mere mortals at least try to do it on a daily basis. To discover guiding threads amongst tangles of stimuli, one suspects, is a fundamental human need.

When it connects stimuli that exist in the temporal dimension, such a thread tends to be called a narrative. The word is commonly equated with ‘story’ or, tellingly, ‘story line.’ It stems from the Latin verb ‘narrāre’ (‘to relate’), but most dictionaries with etymological content speculatively link it with both the Latin ‘gnārus’ (‘knowing’) and the Greek ‘gnōsis’ (‘investigation’ or ‘knowledge’).³ These ancient roots are significant, for in most cases narrative entails quite a bit more than the mere chronologically ordered reporting of events.

In narratives that readers or listeners in general might find at least somewhat interesting, the account in most cases features both a sorting out of events according to their relative importance and the demonstration, or suggestion, of cause-and-effect relationships. In narratives geared to specific audiences, the account usually includes the placing of reported events into some sort of large-scale perspective, the locating of specific occurrences within a cultural or ideological framework with which the targeted audience likely has an affinity. In narratives deemed genuinely compelling even to audiences not predisposed to the subject matter, the account most often involves first the separation of the material at hand into opposing forces, then the exploration of tension between those forces, then an explanation of whatever resolution might ensue. The goal of all such narratives is to make some sort of point, to provide the narrative’s consumer not just with an entertaining yarn but also with a message—the moral of the story, as it were—that a sympathetic reader/listener might indeed interpret as ‘knowledge’.

² The Latin phrase ‘ordo ab chao’ is one of the oldest of Masonic mottos. Curiously, the phrase is nowhere to be found in Bartlett’s or any other of the standard dictionaries of familiar quotations. Unofficially, ‘order out of chaos’ is attributed as often to Plato, Boethius, Milton, Napoleon Bonaparte, and Nietzsche as it is to Augustine and Newton.

³ In film studies, a fashionable synonym for ‘narrative’ (more specifically, the fictional ‘narrative world’ inhabited by a film’s characters) is the Greek-derived ‘diegesis’. The word belongs to the vocabulary of rhetoric and means, as does ‘narrative’ in modern English, simply ‘story-telling’.

This model applies to almost everything, for better or worse, that Western culture characterises as 'narrative'. Summarizing the thoughts of several generations of cultural anthropologists and structuralist literary critics, and in effect paraphrasing the Hegelian dialectic formula of thesis + antithesis = synthesis, Christopher Small writes:

Behind all Western storytelling for the past three hundred years or more ... lies a kind of master narrative, a meta-narrative, which not only gives shape to the story and directs the nature of the events portrayed but controls the very manner of the storytelling itself. This meta-narrative can be put in three very short sentences:

Order is established.

Order is disturbed.

Order is reestablished.⁴

Narrative music, 'code'

In his next paragraph Small offers synopses from literature to show how 'the scale of the initial order' may be small or huge. But the creative work that, for Small, typifies the meta-narrative is hardly limited to writing *per se*. In the passage indicated above by the ellipsis, he notes that Western culture's meta-narrative over the last three centuries has manifest itself in virtually every example of 'novel, play, film or piece of symphonic music'.

The repertoire of symphonic music indeed includes compositions—Berlioz's *Symphonie Fantastique*, Tchaikovsky's *Romeo and Juliet*, Strauss's *Don Quixote*—that purport to 'tell stories' in much the same way that novels, plays, and films do. Programme music of this sort is deemed 'symphonic' because of its medium, i.e., the symphony orchestra, but in today's concert hall it tends to be overshadowed by non-representational works deemed 'symphonic' as much for their structure as for their medium. Works in the genre we call 'symphony' typically comprise multiple movements whose conclusive finale is preceded by movements of lyrical or dance-like nature and by an introductory movement cast in so-called sonata form. The form features an exposition of contrasting thematic materials, a mixing of those materials, and then a reprise of the materials more or less in their original guises. The reprise, it is important to note, not only brings back the thematic materials but also resolves the apparent conflict between them.⁵ As initially stated,

⁴ Christopher SMALL, *Musicking: The Meanings of Performing and Listening* (Hanover and London: Wesleyan University Press, 1998), 160.

⁵ Although many pedagogues today use the terms 'development' and 'recapitulation' for the second and third sections, Adolph Bernhard MARX, who coined the term 'sonata form' in his *Die Lehre von der musikalischen Komposition* of 1845, astutely called the sections 'Verwicklung', or 'complication', and 'Befriedigung', or 'resolution'.

the themes differ in tonal orientation as well as in content and character; as reprised, the second theme is heard not in its original key but in the same key that earlier had grounded the first theme and which, in the long run, grounds the entire movement.

Music dependent upon the audience's recognition of singular themes sounded in various tonalities would have been unimaginable before the first strivings, around the middle of the eighteenth century, towards the tuning system known as equal temperament.⁶ Likewise unimaginable before the middle of the eighteenth century – albeit for reasons more philosophical than technical – was music that followed the dialectic model by presenting markedly different musical ideas, engaging them in argumentative fashion, and then ultimately bringing them to some sort of intellectually/aesthetically satisfactory agreement.

Like dialectic thinking in general, dialectic music is a product of the Enlightenment, and its underlying concept is hardly limited to compositions for orchestra. The exposition-complication-resolution scheme is abundantly evident in the opening salvos of multi-movement works for chamber ensembles and solo instruments. But the Hegelian idea of affective conflict that is somehow brought into harmony permeates even relatively short pieces. Whilst it may well be that modernist critics prefer to take a purely formalistic approach to nineteenth-century music, it remains, as Michel Chion reminds us, that 'this was not the way composers produced it and listeners heard it at the time'. Chion writes:

Even if it is not true that Chopin's ballades were (according to Schumann) inspired partly by ballads by the Polish poet Adam Mickiewicz, we can still hear in them something like a declamation without words – mute music. Romantic music for piano, particularly that of Chopin, Schumann, and Liszt is, in fact, often similar to the voice of someone humming a poem or a melody with mouth closed: a melody with unheard words.⁷

The comment from Chion – once an avant-garde composer affiliated with Paris's school of *musique concrète* and more recently a film critic and theorist of sound in general – comes from a recent anthology of reflections on music's representation in various filmic contexts. The collection includes an essay by British musicologist Peter Franklin, who, in the course of illuminating Max Steiner's

⁶ For lucid accounts of the move towards equal temperament, see Stuart ISACOFF, *Temperament: How Music Became a Battleground for the Great Minds of Western Civilization* (New York: Vintage Books, 2001), and Ross W. DUFFIN, *How Equal Temperament Ruined Harmony: And Why You Should Care* (New York: W.W. Norton, 2007).

⁷ Michel CHION (trans. Claudia Gorbman), 'Mute Music: Polanski's *The Pianist* and Campion's *The Piano*', in *Beyond the Soundtrack: Representing Music in Cinema*, ed. Daniel Goldmark, Lawrence Kramer, and Richard Leppert (Berkeley: University of California Press, 2007), 89–90. Chion explores the idea further in *Un Art sonore, le cinéma: histoire, esthétique, poétique* (Paris: Cahiers du cinéma/essais, 2003).

score for *Gone with the Wind*, notes how commentators on music in by-gone years very often lapsed into narrative mode:

It is striking how often nineteenth-century descriptions of musical experience involve the inner eye, from Wackenroder's Joseph Berlinger (1797) through Wagner's early elucidations of Beethoven, as far as (and probably beyond) Helen Schlegel's experience of Beethoven's Fifth in *Howard's End*. Musical experience, and specifically symphonic experience, was frequently recorded and described in proto-cinematic visualized narratives of striking boldness. These arguably constitute a literary subgenre.⁸

In academe a half-century ago, 'literary' interpretations of music were regarded as naïve. Story-telling analyses might be appropriate for tone poems or other works whose composers consciously followed the prompts of a clearly stated programme, but even with music of this sort, the modernist critic would have argued, sophisticated listeners might be best rewarded if their attention focused primarily on small-scale patterns of tension and release and on large-scale patterns of thematic presentation.⁹ For persons seeking to understand music, especially those who sought their understanding in university classrooms, this argument carried the force of a mandate. Echoing the postwar idea that logical pattern is the source of 'meaning' in music, and that one's 'understanding' of music is directly proportional to one's perception of pattern, Edward T. Cone in 1960 declared that 'the greatest [musical] analysts ... are those with the keenest ears; their insights reveal how a piece of music should be heard'.¹⁰ But even Cone later admitted that how music *should* be heard was not necessarily how music, in fact, *is* heard.¹¹

How music in fact is heard likely will never be proved. Not discounting the still-pioneering work of cognitive scientists, what we have nowadays vis-à-vis the 'hearing' or 'understanding' of music is still, for the most part, opinions. In these opinions we can observe certain trends, and one recent trend—interestingly—seems to involve a return to the nineteenth-century approach. Over the last two decades it has gradually been taken for granted (at least by certain practitioners of semiotics and the so-called New Musicology) that it is not naïve but, rather,

⁸ Peter FRANKLIN, 'The Boy on the Train, or Bad Symphonies and Good Movies: The Revealing Error of the »Symphonic Score«', in *Beyond the Soundtrack: Representing Music in Cinema*, ed. Daniel Goldmark, Lawrence Kramer, and Richard Leppert (Berkeley: University of California Press, 2007), 16. The 1797 story to which he refers is Wilhelm Heinrich Wackenroder's 'The Remarkable Musical Life of Joseph Berlinger'. Helen Schlegel is a central character in E.M. Forster's novel *Howard's End*, the Beethoven-laden film version of which, directed by James Ivory, was released in 1992.

⁹ For a detailed explication of how these small- and large-scale patterns might be regarded as the very essence of post-Enlightenment Western art music, see Leonard B. MEYER, *Emotion and Meaning in Music* (Chicago: University of Chicago Press, 1956).

¹⁰ Edward T. CONE, 'Analysis Today', *Musical Quarterly* 46 (1960), 174.

¹¹ See especially E. T. CONE's *The Composer's Voice* (Berkeley: University of California Press, 1974).

perfectly natural to regard post-Enlightenment Western art music of all sorts as somehow akin to literary narrative.¹² Indeed, some would argue that even a minimal appreciation of such music involves not just the audience member's attending to the music's dynamic flow from one *topos* to another but also on his response to the emotive qualities of various rhetorical devices, identification with various affective or mimetic gestures, and correct interpretation of various musical symbols. Referring to the syntactical logic and multitudinous signifiers that permeate virtually all examples of mainstream post-Enlightenment Western art music, the French philosopher Jean-Luc Nancy has recently suggested that the understanding of such music has direct correlation with the audience member's ability to, in effect, get the message. Playing on the difference between effortful listening ('écouter') and satisfied hearing ('entendre'), Nancy writes: 'Perhaps we never *listen* to anything but the non-coded, what is not yet framed in a system of signifying references, and we never *hear* anything but the already encoded, which we [then] decode'.¹³

Taken by a philosopher currently fashionable with forward-looking music theorists,¹⁴ Nancy's stance vis-à-vis music seems remarkably conservative. What he seems to be saying is that the only music that can truly be heard—that is, understood—is music laden with code with which its auditors are thoroughly conversant. We might agree with Nancy that a certain kind of comprehension (a 'grasp' that is at once intellectual, emotional, and visceral) of certain types of music (more or less traditional post-Enlightenment Western art music that holds to the narrative model) indeed depends on the acculturated auditor's quick and knowing response to the music's syntax and semantic content. But what of music from alien cultures, music that might indeed be rich in semiotic code but whose 'foreign-language' message, at least for the moment, defies translation? And what of music that stems from within the auditor's own culture but whose code, perhaps for ideological reasons, is knowable only by members of an elite group?

¹² See, for example, Peter KIVY, 'Music as Narration', in *Sound and Semblance: Reflections on Musical Representation* (Princeton: Princeton University Press, 1984); Jean-Jacques NATTIEZ, 'Can One Speak of Narrativity in Music?', *Journal of the Royal Musical Association* 115/2 (1990); Lawrence KRAMER, 'Musical Narratology: A Theoretical Outline', *Indiana Theory Review* 12 (1991); John RINK, 'Translating Musical Meaning: The Nineteenth-Century Performer as Narrator', in *Rethinking Music*, ed. Nicholas Cook and Mark Everist (Oxford: Oxford University Press, 1999); Raymond MONELLE, *The Sense of Music: Semiotic Essays* (Princeton: Princeton University Press, 2000); and Susan McCLARY, *Conventional Wisdom: The Content of Musical Form* (Berkeley: University of California Press, 2000).

¹³ Jean-Luc NANCY, *Listening*, trans. Charlotte Mandell (New York: Fordham University Press, 2007), 36. Emphases original.

¹⁴ The philosophy interest group of the Society for Music Theory devoted a discussion session to Nancy at its annual meeting in Baltimore, Maryland, in November 2007, and it followed up with the presentation of formal papers on Nancy during its joint meeting with the American Musicological Society in Nashville, Tennessee, in November 2008.

Nancy seems not unaware of the problems posed by music that falls under the rubrics 'non-Western' and, especially, 'avant-garde'. Regarding the latter, in an endnote affixed to the above-quoted passage he asks:

How can we listen, in the West, when the great tonal system is undone, and when 'in the era of contemporary music, there is an essential dissociation of writing and perception ... [an] abyss that henceforth radically separates the eye from the ear' ... ? This also means that the contemporary era of music, bringing about the dissolution of a coded and signifying ensemble, *makes us listen or restores us to listening*—and, precisely, listening to all musical registers, not only those of Western musical provenance.¹⁵

What Nancy means by this is hardly clear. One guesses, though, that he is suggesting that music not immediately 'heard' just forces its auditors to 'listen' all the harder. With effort, he suggests, even the oddest music might eventually be understood. To comprehend strange music, Nancy seems to be saying, all the auditor need do is decipher the music's semiotic code and then follow its quasi-narrative line. The admonition, in effect, is: 'Seek, and ye shall find'.

But what if there is nothing to find, or no line to follow? What if a specimen of music, or a sonic phenomenon that one might choose to regard as music, is devoid not just of decipherable semiotic-semantic code but of code of *any* sort? What if the music's flow is neither linear nor logical, if its patterns result not from a willful *composition* of sounds but from sounds' accidental *juxtaposition* or *superimposition*? What if its content is not at all syntactic but only paratactic?

Parataxis, 'cool media', '*musique informelle*'

'Paratactic' is the adjectival form of 'parataxis', a Greek word that means the side by side setting down of things. It is a grammatical/rhetorical term, and it is contrasted most often with 'syntax' but sometimes also with 'hypotaxis'. The prefixes of all three terms indicate the relationship between whatever ideas are 'set down': in syntax the items are presented in a way that makes them seem somehow connected, in hypotaxis they are presented in a way that suggests that one item is subordinate to another, and in parataxis they are presented in a way that offers no connection whatsoever.¹⁶ All the sentences in this paragraph are syntactic in that their arrangements of words hold to the 'connective' rules of

¹⁵ J.-L. NANCY, *Listening*, note 21, 81–82. Emphases original. Of the phrase in inverted commas, Nancy writes that it is from 'François Nicolas, quoted by Sofia Cascalho in a study devoted to this question (*La liberté s'entend*, a doctoral dissertation in music directed by Antoine Bonnet, Université de Paris VIII, September 1999, 9'.

¹⁶ The *Merriam Webster Dictionary* defines paratactic writing as writing that involves the 'placing of clauses or phrases one after another without coordinating or subordinating connectives'.

English grammar, but this sentence in particular is overtly syntactic because the words 'but' and 'because' indicate a strong linkage between its component ideas. The paragraph's first sentence, with a subordinate clause following the initial statement, is an example of hypotaxis; the post-colon part of the third sentence, in which the terms are simply explained one after the other, is an example of parataxis.¹⁷

Theodor Adorno used the word 'parataxis' in the title of the keynote address he delivered at the 1963 meeting, in Berlin, of the Hölderlin Society. Originally titled 'Parataxis: Zur philosophischen Interpretation des späten Lyrik Hölderlins' but shortened to 'Parataxis: Zur späten Lyrik Hölderlins' when it was prepared for publication the following year, Adorno's commentary dealt with the aphoristic and fragmentary qualities that characterised the later works of the German poet Friedrich Hölderlin (1770–1843). Hölderlin's valedictory lyrics are to a certain extent cryptic, Adorno granted, yet at the same time they are 'musiclike' in that their 'transformation of language' results in 'a series whose elements are conjoined otherwise than in a proposition'.¹⁸ The various elements of Hölderlin's later poems are indeed 'conjoined', Adorno wrote, but not in obvious ways, and therein lie their beauty and their potency; for all their breaks and ruptures of syntax, the verbal elements of Hölderlin's poetry are nonetheless meaningful—and thus musical—because of the subtle ways in which they are 'juxtaposed to each other within the larger structural context that creates the meaning' of the poem as a whole.¹⁹

The 'Parataxis' speech generated immediate publicity less for its commentary on the poet than for its bitter attack on the address that Martin Heidegger had given to the Hölderlin Society four years earlier.²⁰ But Adorno's celebration of literary

¹⁷ For a lucid explication of 'hypotaxis' versus 'parataxis', see both Erich AUERBACH's *Mimesis*, trans. Willard R. Trask (Princeton: Princeton University Press, 1953) and the convenient summary of Auerbach's ideas in Eric S. RABKIN's 'Spatial Form and Plot', *Critical Inquiry* 4, no. 2 (Winter 1977), 268–69. For an account considerably more laboured but nonetheless relevant to musical studies, see Michael SPITZER's 'Haydn's Creation as Late Style: Parataxis, Pastoral, and the Retreat from Humanism', *Journal of Musicological Research* 28, nos. 2–3 (2009), 223–48; Spitzer's article is noteworthy because it offers, in a lengthy footnote on p. 224, a summary of the hypotaxis/parataxis dichotomy as delineated by Johann Georg SULZER in his 1771–74 *Allgemeine Theorie der schönen Künste*.

¹⁸ Theodor W. ADORNO, 'Parataxis: Zur späten Lyrik Hölderlins', in *Gesammelte Schriften*, second edition, vol. 2 (Frankfurt: Suhrkamp Verlag, 1984), 471. The translation is Susan GILLESPIE's, in 'Translating Adorno: Language, Music, and Performance', *The Musical Quarterly* 79, no. 1 (Spring 1995), 57; an alternative English translation of Adorno's 'Parataxis' essay, by Shierry Weber Nicholson, can be found in Theodor ADORNO, *Notes to Literature*, vol. 2 (New York: Columbia University Press, 1992).

¹⁹ S.H. GILLESPIE, 'Translating Adorno', 57. Gillespie notes that her summary statement on Adorno's view of Hölderlin is a paraphrase of a passage (p. 18) from the section headed 'Der musikalische Zusammenhang, der den Sinn stiftet' in Adorno's 1948 *Philosophie der neuen Musik*. Later in her article, Gillespie suggests that Adorno's prose writing, especially his later efforts, is arguably 'musical' for precisely the same reasons that, for Adorno, Hölderlin's later poetry is musical.

²⁰ For a full report on reaction to the speech, and a thorough discussion of the published article, see Chapter 2 of Robert SAVAGE's *Hölderlin after the Catastrophe: Heidegger, Adorno, Brecht* (Woodbridge, UK: Boydell and Brewer, 2008).

parataxis surely circulated, and perhaps it had an influence on at least a few of the archly avant-garde composers associated, as was Adorno, with the summer programme in new music at the German city of Darmstadt.²¹ It should be noted, however, that Adorno's speech and the Hölderlin-based compositions of such Darmstadt regulars as Bruno Maderna and Henri Pousseur were symptomatic of a trend;²² 'during the 1960s', Carola Nielinger-Vakil reminds us, 'Germany was swept by a Hölderlin renaissance to which neither pronounced left-wing musicians ... nor the Darmstadt »elite« remained immune'.²³ It should be noted, too, that during the 1960s a comparable trend was sweeping the English-reading world.

Just a year after Adorno delivered his 'Parataxis' address, the Canadian literary theoretician Marshall McLuhan published a book that articulated concepts he had developed over the course of almost a decade. As Adorno did in his 1963 'Parataxis' speech, McLuhan in his 1964 *Understanding Media: The Extensions of Man* suggested that paratactic forms of communication were potentially far richer than their hypotactic counterparts because they required intellectually creative effort on the part of their receivers. McLuhan used the term 'hot media' to describe communications so loaded with explicit information that audience members had little choice but to passively 'get' whatever messages were being put forth; in contrast, for communications in which 'little is given' and 'much has to be filled in by the listener', for communications 'high in participation and completion by the audience', McLuhan used the intriguing term 'cool media'.²⁴

Although they both wrote intensely about various forms of media, and although in the early 1960s they both celebrated temporal art forms that were of 'low definition'²⁵ or which deliberately featured 'a certain vagueness',²⁶ Adorno

²¹ Established in the wake of World War II and first led by music critic Wolfgang Steinecke, the Internationale Ferienkurse für Neue Musik, Darmstadt (International Vacation Course for New Music, Darmstadt), was held annually between 1946 and 1970. Adorno participated, as lecturer or discussant, in nine of the sessions: in 1950, 1951, 1954, 1955, 1956, 1957, 1961, 1965, and 1966. For details on Adorno's contributions to the Darmstadt programme, see Gianmario BORIO, 'Die Positionen Adornos zur musikalischen Avantgarde zwischen 1954 und 1966', in *Adorno in seinen musikalischen Schriften*, 163–79 (Regensburg: G. Bosse, 1987).

²² Between 1964 and 1969 Bruno Maderna engaged with a series of works based on texts from Hölderlin's novel *Hyperion*; in 1968–69 Henri Pousseur used Hölderlin texts for the improvisational pieces he called *Mnemosyne*.

²³ Carola NIELINGER-VAKIL, 'Quiet Revolutions: Hölderlin Fragments by Luigi Nono and Wolfgang Rihm', *Music & Letters* 81, no. 2 (May 2000), 245. Although it focuses on the composers named in its title, Nielinger-Vakil's article deals as well with Hölderlin-inspired works by Maderna, Pousseur, Heinz Holliger, Hans Zener, and György Ligeti.

²⁴ Marshall McLUHAN, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964), 36.

²⁵ *Ibid.*

²⁶ S. H. GILLESPIE, 'Translating Adorno', 57.

and McLuhan seem not to have been aware of one another's work.²⁷ As suggested above, the coincidence of Adorno's and McLuhan's published ideas likely has to do only with the fact that the 'time' for thoughts of this sort had arrived. Neither Adorno in his 1963 'Parataxis' address nor McLuhan in his 1964 *Understanding Media* was advocating a radically new approach to creating or understanding temporal art; they were simply commenting on, and articulating the niceties of, a new strain of temporal media that quite independent of theoretical urgings had been healthily evolving since the end of World War II.

Indeed, Adorno commented on this new strain of temporal media—albeit tangentially, and with skepticism—in a lecture he gave in 1961 at the Darmstadt summer school. Delivered in German, the lecture nonetheless bore a conspicuously French title, 'Vers une musique informelle', the noun coined 'as a small token of gratitude towards the nation for whom the tradition of the avant-garde is synonymous with the courage to produce manifestoes'.²⁸ Precisely what Adorno meant by his neologism remains open to debate. Adorno in his lecture said that '*musique informelle* resists definition in the botanical terms of the positivists', and he added that 'if there is a tendency, an actual trend, which the word serves to bring into focus, it is one which mocks all efforts at definition'.²⁹ Commenting more than forty years later from the perspective of a scholar who has earnestly attempted to explain *all* of Adorno's writings on music, Richard Leppert supports that point and concedes that Adorno's formulation of *musique informelle* is 'frustratingly abstract'.³⁰

It seems clear enough, however, that what Adorno meant by his coined term was not music that is informal in the sense of casual but, rather, music that is non-formal, or a-formal, in the sense that to one extent or another it dispenses with

²⁷ McLuhan is mentioned nowhere in Adorno's writings, and Adorno is mentioned neither in McLuhan's writings from the 1960s nor anywhere in the collection of responses to McLuhan's work that was published in 1967 under the title *McLuhan: Hot & Cool* (the volume was edited by Gerald Emanuel Stearn and published in New York by The Dial Press; along with rebuttals from McLuhan, it includes essays by Frank Kermode, Dwight MacDonald, Jonathan Miller, Howard Rosenberg, Susan Sontag, George Steiner, Tom Wolfe, and twenty others). Aside from various publications in the mid-1990s that spring from the Ph.D. thesis of Canadian media scholar Judith Stamps, most comparisons of Adorno and McLuhan are fairly recent; see, for example, Lydia GOEHR, 'Three Blind Mice: Goodman, McLuhan, and Adorno on the Art of Music and Listening in the Age of Global Transmission', *New German Critique* 35, no. 2 (2008): 1–31; and Mark POSTER, 'McLuhan and the Cultural Theory of Media', *Media Tropes* 2, no. 2 (2010): 1–18.

²⁸ Theodor W. ADORNO, 'Vers une musique informelle', in *Quasi una Fantasia: Essays on Modern Music*, trans. Rodney Livingstone (London: Verso, 1998), 272. Adorno's *Quasi una Fantasia* was first published in Frankfurt by Suhrkamp Verlag in 1963.

²⁹ *Ibid.*

³⁰ Richard Leppert, ed., *Theodor W. Adorno: Essays on Music*, with translations by Susan H. Gillespie (Berkeley: University of California Press, 2002), 111. 'Vers une musique informelle' is not included in this massive and impressively edited anthology, and Leppert's commentary on the essay is minimal.

traditional formal constraints. Although his focus is music composed since 1945, Adorno observes that restriction-free music had in fact been around for quite some time; as examples, he mentions not just works by a composer he championed (Arnold Schoenberg's 1909 *Erwartung*, 1910–13 *Die glückliche Hand*, and 1911 *Herzgewächse*) but also a work by a composer he consistently despised (Stravinsky's 1913 *Three Poems from the Japanese*).³¹ Adorno compares these early manifestations of musical modernism with more recent efforts by Karlheinz Stockhausen, Pierre Boulez, and John Cage. He says that he has been 'very favourably impressed' by certain works of Stockhausen and Boulez, and he admits to being 'deeply moved by a single hearing', via radio, of a large-scale piece by Cage.³² Nevertheless, he finds these newer works to be in various ways problematic.

What the early works most obviously have in common with the later works, Adorno writes, is not so much their abandonment of tonal harmony as their discarding of 'all forms which are external or abstract'.³³ What makes the later works strikingly different to their predecessors is their lack of apparent 'coherence' [*Verbindlichkeit*].³⁴ However freely composed might be the older examples of *musique informelle*, they nevertheless hold to traditional norms in that they project 'logic and even causality'³⁵; their unity results from a dynamic 'becoming' and 'a process of revelation', and it is their deliberately chosen 'fixed pattern[s] of notes' that make possible the 'knitting together of themes so that one follows from another'.³⁶ In contrast, however rigorous the newer examples of *musique informelle* might be in their compositional methods (methods that range from the tightly controlled extended serialism of Stockhausen and Boulez to the extreme indeterminacy of Cage), their equally 'fixed' patterns of notes produce music that is not so much dynamic as static. The musical notes of the later works of course follow one another in time, but the result is 'a succession in time that denies its own progressivity' and thus 'sabotages the obligations of becoming, of process', a succession that 'fails to motivate *why* this should follow that and not anything else'.³⁷

Adorno goes so far as to suggest that a sense of motivation—the listener's impression that there is indeed a reason why sonic events occur in a particular order—is a *sine qua non* of music, and to drive home his point he refers to language.

³¹ Th.W. ADORNO, 'Vers une musique informelle', 273.

³² *Ibid.*, 270. The works he mentions are Stockhausen's *Zeitmaße* (1955–56), *Gruppen* (1955–57), *Kontakte* (1958–60) and *Carré* (1959–60), Boulez's *Sonatina for flute and piano* (1946), *Piano Sonata No. 2* (1947–48), *Le marteau sans maître* (1953–57) and *Piano Sonata No. 3* (1955–57), and Cage's *Concert for Piano and Orchestra* (1957–58). Adorno, and his translator, incorrectly refer to the Cage piece as 'Piano Concerto'.

³³ *Ibid.*, 272.

³⁴ *Ibid.*, 290.

³⁵ *Ibid.*, 293.

³⁶ *Ibid.*, 295.

³⁷ *Ibid.*, 297. Emphasis added.

In a composition that is genuinely musical, he says, 'relationships have to be established between events which succeed each other directly and indirectly'.³⁸ The mere juxtaposition of compositional sections, he says, results only in monotony; in order to be musical, sections 'must be placed in a dynamic relationship, comparable to the relationship of subordinate clauses and main clause in grammar'.³⁹ Referring again to older examples of *musique informelle*, and to the linguistic/rhetorical models on which those examples seem to have been based, he emphasises the importance—to the listener—of thematic linkages. 'Only with musical postulates which are as vivid as the configurations of thematic music once were', he says, 'will it be possible to create the tension in which the musical consciousness of time can actualize itself'.⁴⁰

Rigorous though they are in their methodologies, the pieces by Stockhausen, Boulez, and Cage to which Adorno refers obviously lack the musical equivalents of 'postulates', and thus his own experience of these works, he says, is 'qualitatively different' to his experience of older works in the modernist stream. Perhaps with a combination of wistfulness and mock self-deprecation, Adorno early in the lecture confesses that with the newer works he is 'not able to participate, as it were, in the process of composing them as I listen'.⁴¹ But then he quickly offers that the reason for this is not his 'own subjective inadequacy' but, rather, the likelihood that the experience of 'serial and post-serial music is founded on a quite different mode of apperception'.⁴²

Varieties of musical parataxis

Adorno's insistence that music *must* involve 'dynamic relationship[s]' comparable to those of grammar is not dissimilar to Jean-Luc Nancy's statement that the understanding of music in essence is the decoding of language-like messages. For that matter, it is not dissimilar to an idea about music that fairly pervades Western culture. Although the American musicologist Leonard B. Meyer drew deeply from the fresh springs of Gestalt psychology when, five years before Adorno's Darmstadt lecture, he published his *Emotion and Meaning in Music*, he summarised a criterion for music—and for art in general—that had been firmly in place since the Enlightenment:

The presumption that nothing in art happens without a reason and that any given cause should be sufficient and necessary for what takes place is a fundamental condi-

³⁸ *Ibid.*, 311.

³⁹ *Ibid.*

⁴⁰ *Ibid.*, 314.

⁴¹ *Ibid.*, 271.

⁴² *Ibid.*

tion for the experience of art. Though seeming accident is a delight, we believe that real accident is foreign to good art. Without this basic belief the listener would have no reason for suspending judgment, revising opinion, and searching for relationships; the divergent, the less probable, the ambiguous would have no meaning. There would be no progression, only change. Without faith in the purposefulness and rationality of art, listeners would abandon their attempts to understand, to reconcile deviants to what has gone before, or to look for their *raison d'être* in what is still to come.⁴³

By these standards of measurement, the paratactic music that is the subject of this essay is arguably not music at all. Most of it meets the familiar dictionary definition of music as 'organised sound', but invariably its sounds are not organised in ways that suggest to a listener, or even to a score analyst, that any particular sound has a *raison d'être*. To one extent or another, this paratactic music and/or the experience thereof embody if not the 'real accident' then at least the effect of it, and thus the music is, as Meyer rightly suggests, 'foreign' to Western culture's conception of 'good art'. And yet Western culture contains a great many such works, some of which remain quite celebrated.

The rich field of paratactic music certainly includes compositions that Adorno heard at Darmstadt. Most obviously, it includes precisely notated pieces that are both *hyper*-determinate and *indeterminate*, pieces (such as Boulez's 1951–52 *Structures I* for two pianos) that exemplify so-called total, or integral, serialism,⁴⁴ in which virtually every detail—not just pitches but also registers, volume levels, modes of attack, and durations of both sounds and silences—derives from the systematic manipulation of series of sonic elements, as well as pieces (such as Cage's 1952 *Music of Changes*, for solo piano) that exemplify 'chance music', in which just as much meticulous detail results from purely random operations. It includes as well Darmstadt-era pieces that are not conventionally notated at all, pieces (such as Morton Feldman's 1953 *Intersection 3*, Christian Wolff's 1958 *Duo II for Pianists*, and Earle Brown's 1952–54 *4 Systems*⁴⁵) whose instructions for

⁴³ Leonard B. MEYER, *Emotion and Meaning in Music*, 75.

⁴⁴ The term 'integral serialism' was coined by the American composer Milton Babbitt in the late 1940s; the terms 'serialism' and 'total serialism' are of uncertain origin, although most historians attribute them to Stockhausen, and some scholars have suggested that Stockhausen ca. 1950 borrowed the term 'serialism' from the writings of the French architect Le Corbusier. For more on the terminology, see M.J. GRANT, *Serial Music, Serial Aesthetics: Compositional Theory in Post-war Europe* (Cambridge: Cambridge University Press, 2005), 5–7.

⁴⁵ In a 1958 Darmstadt lecture titled 'Indeterminacy', Cage described all three of these pieces as music 'indeterminate with respect to its performance'. See 'Indeterminacy', in *Silence* (Hanover: Wesleyan University Press, 1961), 35–40.

Feldman's *Intersection 3* is a piece for one or more instruments whose 'score' consists only of a series of boxes whose vertical dimensions indicate a range of pitch, whose horizontal dimensions indicate a span of time and—importantly—whose encased numerals indicate an allowed number of sonic events; Wolff's *Duo II for Pianists* is similarly unspecific regarding pitch, rhythm, etc., and its only 'rule' is that its two performers respond to one another within what Cage (38) called 'gamut limita-

performers are for the most part verbal or graphic and whose different realisations are thus likely to bear little resemblance to one another. And it includes Darmstadt pieces (such as Stockhausen's 1956 *Klavierstück XI*) that in one way or another combine hyper-determined composition with performance that is at least to some extent indeterminate.⁴⁶

But the paratactic music that prompts this essay goes far beyond the temporal and geographic boundaries of post-war Darmstadt. It includes pieces representative of the early days of the so-called Minimalist movement, pieces whose sonic content is fixed as well as fluid, pieces whose recordings on magnetic tape (such as Steve Reich's 1965 *It's Gonna Rain* and 1966 *Come Out*) or pieces whose notated scores (such as Philip Glass's 1969 *Music in Fifths*, *Music in Similar Motion*, and *Music in Contrary Motion*) result from the careful working out of a pre-compositional process⁴⁷ as well as pieces (such as Terry Riley's 1964 *In C*) that come into existence only as a process of some sort is set into motion by human performers.⁴⁸ It includes examples of so-called installation pieces that range from sound-generating gizmos whose predictable output simply fills the air of exhibition spaces to set-ups (such as Alvin Lucier's 1977 *Music on a Long Thin Wire*) that respond in unpredictable ways to their physical environments.⁴⁹ It includes, too, installations (such as Iannis Xenakis's 1967 *Polytope de Montréal*) whose sonic material emanates from a number of sources and whose received content thus varies considerably

tions'; created as a birthday present for pianist David Tudor but described by Cage as for 'one or several players' (37), Brown's *4 Systems* is a piece whose 'score' consists of an array of horizontal lines of varying length and thickness that in overall appearance resemble the perforations of a pianola roll and whose interpretation is left entirely to its performer(s).

⁴⁶ The serially generated pitch and rhythmic elements of *Klavierstück XI* are fully notated, but the score, instead of being a continuous set of instructions, is a set of nineteen fragments through which the performer 'wanders' whilst applying to each new fragment a tempo and volume level given at the end of the preceding fragment.

⁴⁷ The Reich pieces exist only as recordings, and each of them involves a short fragment of human speech that is subjected to a process that begins with two identical tape recordings of the fragment repeatedly sounded in unison and then—by means of subtle manipulations of the tape machines' reels—has the fragments gradually moving 'out of phase' with one another; the new patterns created by the various 'phase shifts' are in turn recorded and subjected to the same process, resulting in increasingly dense textures and increasingly complex rhythms.

The Glass pieces are precisely notated compositions originally designed for 'live' performance, at fast tempos and high volume levels, by Glass's elite ensemble of woodwind and electronic keyboard players. Each piece starts with a short 'cell' representative of whatever species of traditional counterpoint is named in the title; after the initial cell is repeated numerous times, the music progresses (on cue) through a long series of similarly much-repeated cells, each one identical to its predecessor except for—in most cases—one added or subtracted note.

⁴⁸ Designed for any number of performers, the score of *In C* consists of fifty-three short musical units, each one precisely notated and playable only in the order specified, but repeatable for as many times as an individual performer chooses.

⁴⁹ Lucier's *Music on a Long Thin Wire* consists only of sounds produced by breeze-triggered vibrations of the eponymous wire, amplified and 'tuned' by means of various sine wave oscillators.

from person to person as listeners move through a three-dimensional space.⁵⁰ To push the idea to its limit, the paratactic repertoire under discussion here even includes the panoply of sounds that fill our daily lives, so long as we are willing to think of these sounds—as we might whilst experiencing Cage’s famous ‘silent piece’ of 1952—as music.⁵¹

One way to sort exemplars of musical parataxis is by the nature of their content. Some pieces have content that from performance to performance is always the same; some pieces have content that remains *more or less* the same but is presented, from performance to performance, in endlessly varied ways; some pieces have content that is most likely not at all the same from performance to performance.

Another way to sort them is by the nature of their temporal limits. Some paratactic pieces have finite endings determined objectively by a pre-compositional method or subjectively by a decision on the part of the composer. Some pieces, which result from processes that seemingly could go on forever, have finite endings that are not so much conclusions as simply cessations.⁵² Some pieces, although in realisation they of course have measurable durations, have open-ended timeframes whose limits are set either by the performers or by some composer-imposed ‘rule’.⁵³ Some pieces in effect have no timeframes at all, their temporal boundaries defined only by whenever a listener enters and leaves the sonically charged space.

Still another way to sort them is by the nature of the relationship between the music and its listeners. Many paratactic pieces follow the model of traditional Western art music at least to the extent that they constitute linear sequences of sonic events that are generated by performers and received, as they transpire, by auditors. No matter how the music’s content originates, and no matter how its

⁵⁰ Xenakis’s 1967 *Polytope de Montréal* is a set of four six-minute pieces for chamber orchestra, precisely notated and in content hyper-determined (albeit not by serial methods), that was designed as the audio portion of a multi-media installation in the French pavilion at the Expo 67 world’s fair, with looped recordings of the four orchestral bits playing continuously from loudspeakers located in different areas of the pavilion’s atrium.

⁵¹ Cage’s 1952 ‘silent piece’ is often called ‘4’33’’, because its first performance consisted of segments whose total time amounted to four minutes and thirty-three seconds, and it is often said to be a work for solo piano, because its first performance was offered by pianist David Tudor, who marked divisions between segments by opening and closing the lid of a piano. The ‘silent piece’ in fact has no title, and its written instructions specify neither duration nor instrumentation. All that matters, in any realisation, is that ‘the performance’ (as opposed to the time that precedes or follows ‘the performance’, or the time that transpires in between segments of ‘the performance’) be clearly divided into three discrete sections. For a lucid and richly detailed report on the history and implications of Cage’s so-called ‘4’33’’, see Kyle GANN’s *No Such Thing as Silence: John Cage’s 4’33’’* (New Haven: Yale University Press, 2010).

⁵² The Reich pieces, for example, end with fade-outs, and the Glass pieces end with abrupt cut-offs.

⁵³ Stockhausen’s *Klavierstück XI*, for example, ends when any one of its fragments is visited for a third time.

temporal limits are determined, the sounds resonate from a concert platform (or from a recording) and audience members collectively take in these sounds. The engagement with the sounds of some audience members may be more intellectually charged, or more enhanced by knowledge and experience, than the engagement of others, but the same could be said for a situation in which the sounds belonged to a Mahler symphony or a Mozart sonata. It remains, with Boulez's *Structures I* or Brown's *4 Systems* as much as with Mahler or Mozart, that *all* the persons who attend to a particular performance (or recording) receive the same auditory information.

With other paratactic pieces, however, persons exposed to the very same sonic stimuli in fact take in quite different information. Were Xenakis's *Polytope de Montréal* to be performed live, it would involve four identical fifteen-piece ensembles located at cardinal points on the perimeter of a large venue, and audience members presumably would sit quietly as they listened to six minutes' worth of music coming from hither and yon.⁵⁴ But a performance of that sort, like the CD recording that was issued in 2003,⁵⁵ would arguably be contrary to the main purpose of the work, which was to lend a sonic element to the interior space of Jean Faugeron's architecture and to be a musical counterpart to Xenakis's own lighting display. In Montreal, fair-goers took in the music, or ignored it, as they moved up and down staircases and wandered along balconies filled with exhibits that had to do with various aspects of French culture. If relationships between one orchestral bit and another were indeed perceived, they resulted not from the quite analysable content of Xenakis's score but, rather, from whatever an otherwise not distracted pavilion visitor happened to notice as he turned his head this way or that.

After a brief exposure to the above-mentioned Reich, Glass, Riley, or Lucier pieces, members of an audience would likely report that they had received more or less the same sonic information. Prolonged exposure to the Lucier piece, however, or exposure to the entirety of the Reich, Glass and Riley pieces, would likely prompt quite divergent reports.⁵⁶ Whilst all of this music might give a first impression of being static, in fact it is in almost constant, albeit gradual, flux. Thus with music of this type, much more so than with traditional Western art music,

⁵⁴ The piece was indeed performed live, by members of Montreal's Ensemble Instrumental de Musique Contemporaine under the direction of Konstantin Simonovitch, as part of Expo 67's inauguration festivities.

⁵⁵ The recorded performance, originally issued on LP and re-issued on CD on the Édition RZ label (RZ1015/16), is by members of the Ensemble Ars Nova de l'ORTF under the direction of Marius Constant.

⁵⁶ Reich's *Come Out* and *It's Gonna Rain* are available on Nonesuch 979 169-2; *Come Out* has a duration of 13:09 and *It's Gonna Rain* has a duration of 17:49. Performed by the Philip Glass Ensemble, *Music in Fifths*, *Music in Similar Motion*, and *Music in Contrary Motion* are available on Nonesuch 79326-2; the durations of the recordings, respectively, are 23:19, 17:11, and 15:31. The 1968 recording of *In C*, under the direction of the composer (Columbia MS 7178, re-issued on Sony SNYC 45368), has a duration of 42:03.

the listener is given the choice of focusing, at any given moment, on the relatively steady textural-timbral quality of the music as a whole or on any of the music's infinite number of highly active and ever-shifting small-scale details. In a very real sense the music is defined not by the composer but by the listener: its dynamic qualities have to do less with the actual ebb and flow of sound than with the ebb and flow of a listener's focus on that sound, and the music's content, insofar as the individual listener is concerned, has to do not with the sonic stimuli *per se* but only with those aspects of the stimuli that, for whatever reasons, are noticed. Just as the sounds of Lucier's *Music on a Long Thin Wire* depend on random fluctuations in the wire's behaviour, so the aesthetic experience of some Minimalist pieces—not just the effortful 'listening to' the sounds but the actual 'hearing of' whatever music those sounds might convey—depends on random fluctuations in the intensity and target of the auditor's attention.

A 'different mode of apperception'

In his 1961 Darmstadt lecture on *musique informelle*, Adorno rightly suggested that certain examples of the newer music, when compared to traditional Western art music, seemed to be 'founded on a quite different mode of apperception'.⁵⁷ It is telling that Adorno used not the word 'perception' but, rather 'apperception'. Hardly a noun that figures in everyday conversation, 'apperception' has deep roots in German philosophy since Leibniz and Kant, and it has appeared in psychological writings since the early work of Herbert Spencer. Its subtlety is contained in its pair of prefixes. Both 'perception' and 'reception' have as their etymological root the Latin 'capere' ('to take in'), but whereas 'reception' implies the indiscriminate 'taking in' of whatever phenomenological 'things' ('res') are presented to a sensory organ, 'perception' implies not just a 'taking in' of data but also a 'taking in' of understanding that results from a sorting 'through' ('per') that data. With an additional prefix derived from the Latin 'ad' ('towards'), 'apperception' implies not an end result of comprehension but only a process that might—or might not—lead to comprehension.

Adorno never explains how the newer music's 'different mode of apperception' works, but over the ensuing fifty pages of his published lecture he drops hints that he believed this 'different mode' had a great deal to do with creativity on the part of the listener. In works of art, he says, 'concepts like logic and even causality ... operate [not] literally ... but only in a modified way'; these concepts are fundamentally related to humankind's 'passion for order', and thus they are

⁵⁷ His original phrase is: 'Die serielle und postserielle Musik dürfte auf eine prinzipiell verschiedene Apperzeption angelegt sein ...'. Theodor W. ADORNO, *Gesammelte Schriften*, vol. 16 (Frankfurt am Main: Suhrkamp Verlag, 1978), 494.

concepts that not even the most extreme examples of *musique informelle* can 'entirely dispense with'.⁵⁸ Referring to the 'unjustly forgotten' psychologist Ernst Kurth, he states that 'the site of all musicality' is *a priori* not the notated score or even its sonic realisation but, rather, 'an interior space' in the mind of the listener, 'and only here does [music] become constituted as an objective reality'.⁵⁹ Foreshadowing the kerfuffle fomented by practitioners of the so-called New Musicology in the 1990s, Adorno asserts that the 'meaning' of any work of art is not something contained within the work but, rather, something ascribed to it, something that 'imposes itself on works of art against their will', something 'produced' not by the artist but by its audience.⁶⁰

'Nothing could be further removed from traditional music' than Cage's *Concert for Piano*, Adorno says, but even a work such as this, in which 'all interconnections [between sounds] have been ... rigorously eliminated', creates 'new meanings by virtue of that very rigour'.⁶¹ But perhaps Adorno misspeaks here. In numerous ways 'indeterminate with respect to its performance' and also richly indeterminate with respect to its composition, Cage's 1957–58 *Concert for Piano* can never sound the same in different realizations of its graphic score, and thus it—because there *is* no 'it'—can neither contain nor create musical 'meanings'. What Adorno likely means is that any rigorously indeterminate piece along the lines of Cage's *Concert for Piano*, like any rigorously hyper-determinate piece along the lines of Boulez's or Stockhausen's experiments in total serialism,⁶² prompts individual listeners to *find* meanings in sequences and combinations of sounds that, by definition, are meaningless.

What is intended here by the word 'meaning', of course, is a purely musical meaning of the sort elucidated in the above-mentioned 1956 book by Leonard B. Meyer and later discussed at length by numerous contributors to academic music

⁵⁸ Th.W. ADORNO, 'Vers une musique informelle', in *Quasi una Fantasia: Essays on Modern Music*, 293.

⁵⁹ *Ibid.*, 300–01. The reference is to Ernst Kurth, *Musikpsychologie* (Berlin: M. Hesse, 1931), 166 ff.

⁶⁰ *Ibid.*, 316–17.

⁶¹ *Ibid.*, 317.

⁶² As early as 1960 both the American composer George Rochberg and the Hungarian composer György Ligeti commented on the essentially identical aesthetic effect of indeterminate music and music representative of total serialism. G. ROCHBERG made the observation in 'Indeterminacy in the New Music', *The Score* 26 (January 1960): 9–10. Specifically comparing Boulez's *Structures I* and Cage's *Music of Changes*, but generalising about all music of this sort, Ligeti, a regular at Darmstadt since 1957, made the observation in 'Wandlungen der musikalischen Form', *Die Reihe* 7 (1960): 5–17; five years later, in a translation by Cornelius Cardew and titled 'Metamorphoses of Musical Form', the article was reprinted in an English-language collection of *Die Reihe* essays titled *Form—Space*: 5–19.

In 1963 the American pianist Leonard STEIN made similar observations in 'The Performer's Point of View', *Perspectives of New Music* 1, no. 2 (Spring 1963): 62–71. Th.W. ADORNO, for his part, made similar observations in a 1966 Darmstadt lecture titled 'Form in the New Music'; the text appeared for the first time in English, in a translation by Rodney Livingstone, in *Music Analysis* 27, nos. 2–3 (2008): 201–16.

journals.⁶³ In tonal music, the seventh degree of a major scale is commonly called the leading tone, but it functions as a leading tone—i.e., it has the ‘meaning’ of a leading tone—only when a certain melodic-harmonic situation indeed causes it to ‘lead’ to the scale’s tonic; the same pitch has an entirely different musical meaning when it serves as the fifth tone of a minor triad based on the scale’s third degree, or when it is a component of an ambiguous diminished seventh chord. In atonal music, a cluster in the piano’s upper register has one purely musical meaning when it interrupts the slow decay of a sustained low-register note, quite another meaning when it is the third element of an ascending series of similarly articulated clusters, still another meaning when it echoes a sound heard a few seconds earlier, and so on.

In both examples, the specific musical meaning of the ‘sonic object’ under examination depends crucially on context, on how the object relates to what comes before and after. The isolated object can of course be described, either objectively (as an A-flat above middle C or as a tone with a vibrational frequency of 409.6 vibrations per second, as the interval vector <200121> or the pitch-class set [0,1,5,6]⁶⁴) or subjectively (as a ‘pleasant’ sound played on a piano, as a ‘harsh’ or ‘crunchy’ harmony). The isolated sonic object can also be ascribed extra-musical meaning (it can be interpreted as an alarm signal, it can remind a listener of his mobile phone’s ring tone). Only when presented in some sort of context, however, can the sonic object have a meaning that is purely musical; only by means of its relationship with other sounds can it be heard as part of a gesture, as a point of arrival or a departure from a norm, as part of a progression of increasing or decreasing intensity, as a component of a rhythm.

It is doubtless tautological to say that in deliberately syntactic music, no matter what the style, the contexts in which sonic objects occur, and thus the objects’ musical meanings, result from willful decisions on the part of composers. Yet the redundant statement seems worth making, for it services an important comparison between musical situations that involve sonic objects brought together for a purpose and situations that involve sonic objects brought together solely by chance. In both types of situation clearly there is context, and thus in both types of situation clearly there is musical meaning. The essential difference between the two types of situation has to do not so much with the efforts of the composer as with the efforts of the person who participates in the linked processes of reception, perception and apperception; it has to do not so much with musical meaning

⁶³ See, for example, articles authored in the 1960s by such theory-oriented composers as Milton Babbitt, Arthur Berger, Benjamin Boretz, Edward T. Cone, Ernst Krenek, and Roger Sessions.

⁶⁴ The notation for the ‘interval vector’ given here indicates two semitones, one major third (or minor sixth), two perfect intervals, one tritone; the same harmony is represented by the notation for the example’s ‘pitch-class set’. The terminology and orthography for interval vectors and pitch-class sets originated with Allen FORTE’s 1973 *The Structure of Atonal Music* (New Haven: Yale University Press).

as with the avenue by which the listener arrives at that meaning. In deliberately syntactic music, all of which exemplifies what Jean-Luc Nancy might call 'coded and signifying' messages or what Marshall McLuhan might call 'hot media', the listener approaches meaning via a route that the composer has laid out for him; in the very 'cool' medium of paratactic music, the listener approaches meaning via a trail that he blazes for himself.

Parataxis → Syntax

A central character in Jorge Luis Borges's 1941 short story 'The Garden of Forking Paths', contemplating a phrase in the cryptic Chinese novel that is at the narrative's core, says:

I lingered, naturally, on the sentence: *I leave to the various futures (not to all) my garden of forking paths*. Almost instantly, I understood: ... the phrase 'the various futures (not to all)' suggested to me the forking in time, not in space. A broad rereading of the work confirmed the theory. In all [traditional] fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Ts'ui Pên, he chooses—simultaneously—all of them. *He creates*, in this way, diverse futures, diverse times which themselves also proliferate and fork.⁶⁵

Near the end of the first part of his 1973 novel *The Castle of Crossed Destinies*, Italo Calvino has his narrator reflect on the travelers' tales that thus far have been told only through prose translations of tarot card arrays. The narrator says:

[T]he task of deciphering the stories one by one has made me neglect until now the most salient peculiarity of our way of narrating, which is that each story runs into another story, and as one guest is advancing his strip, another, from the other end, advances in the opposite direction, because the stories told from left to right or from bottom to top can also be read from right to left or from top to bottom, and vice versa, bearing in mind that the same cards, presented in a different order, often change their meaning, and the same tarot is used at the same time by narrators who set forth from the four cardinal points.⁶⁶

⁶⁵ Jorge Luis BORGES, 'The Garden of Forking Paths', in *Labyrinths: Selected Stories & Other Writings*, trans. Donald A. Yates (New York: New Directions Books, 1962), 26. Emphases original.

Originally titled 'El jardín de senderos que se bifurcan', Borges's story first appeared in English translation in 1948.

⁶⁶ Italo CALVINO, *The Castle of Crossed Destinies*, trans. William Weaver (New York and London: Harcourt Brace, 1977), 41. In its complete form, Calvino's *Il castello dei destini incrociati* was published in 1973; its first part, *Tarocchi: Il mazzo visconteo di Bergamo e New York*, was first published in 1969.

Addressing an audience at the University of Chicago's 1976 Festival of French Arts, Alain Robbe-Grillet noted that whereas the traditional novel is based on a 'succession of facts' and a 'system of causalities', the New Novel involves 'elements which should be interchangeable one with the other' but which are forced into a chronological, and thus apparently causal, order only by the physical nature of the printed book.⁶⁷ A year earlier, referring to films as well as novels, Robbe-Grillet told an interviewer:

The modern work presents itself as a space unmarked by buoys, traversed in diverse ways by our multiple and ever-changing sensations; in the exploration of the work, any sensation itself is less important than the circular, gliding path it takes.⁶⁸

These images, all of them drawn from descriptions of literature, shed useful light on musical works that revel in parataxis. Whether its content is of necessity presented in chronological order or whether its content is presented more or less simultaneously, whether its notated material is hyper-determinate or indeterminate, whether its generated material is the result of improvisation or process, paratactic music invites audience participation. As does real life, it offers its observers a panoply of stimuli, some of which may indeed be syntactically linked but most of which, probably, are not. Whilst human ears receive the whole of it, the human brain perceives just a part of it, and what the brain perceives depends very much on both the type and the level of its owner's involvement.

Paratactic music invites participation, but it does not demand it, and thus its auditor has options. These options fall into three basic categories, only two of which are denoted by common words in English. The first category of options involves neither 'listening' nor 'hearing' but only the physiological taking in of sounds; as with any music, the auditor of paratactic music indeed 'takes it in' yet can choose to block it completely from his consciousness or to take note of it and then dismiss it as so much noise — pleasant or otherwise — that hovers in the background of more pressing concerns. The second category of options involves 'listening' as defined in the above-mentioned book by Jean-Luc Nancy, that is, as a willful act in which attention is concentrated, at least for a while, on the sounds at hand; as he might with any music, the auditor who actually listens to paratactic

⁶⁷ Alain ROBBE-GRILLET, trans. Bruce Morrissette, 'Order and Disorder in Film and Fiction', *Critical Inquiry* 4, no. 1 (Autumn 1977), 5.

⁶⁸ Alain ROBBE-GRILLET, quoted by Michael Fano in 'Musique et film,' in *La musique en project* (Paris: Gallimard; 1975), 153–4. The original French text is: «L'oeuvre moderne se présente comme un espace non balisé, traversé dans des directions diverses par des sens multiples et changeants; et, dans cette circulation du sens à travers l'oeuvre, le sens lui-même est moins important que le fait qu'il circule, glisse, se modifie».

music might well conclude that what his focused ears attend to is nothing more than acoustic rubbish, but he might also conclude that the sounds at hand—for any number of reasons—amount to something of interest. If the auditor's investment in listening indeed pays a dividend, then his experience has moved into the third category of options, a category whose many variants might be grouped under the rubric 'hearing'; as with any music, the auditor's 'hearing' of paratactic music might range from a purely hedonistic wallowing in sonic stimuli to a translation of discrete sonic phenomena into units that somehow make sense.

Why would a listener take disconnected sounds and link them, in his mind, into the musical equivalent of a 'train of thought'? Confronted with what Leonard B. Meyer called 'the music of transcendentalism' that 'cannot be analyzed, only described', why would a listener *hear* such traditionally analysable musical qualities as contrast, dynamics, and pattern?⁶⁹ Why would a listener not just seek but actually find musical order in what in fact is sonic chaos?

The long answer to these questions would meander, through a 'space unmarked by buoys' or along forking paths comparable to those described in Borges's novel-within-a-novel, through such topics as the classic fallacy 'post hoc ergo propter hoc' and its exploration by Scottish philosopher David Hume in the 'Cause and Effect' chapter of his 1772 *An Enquiry Concerning Human Understanding*, Carl Jung's notion of synchronicity and its relevance not just to the *I Ching* but also to such fashionable bromides as 'there are no coincidences' and 'everything happens for a reason', the apparent fact, as the Soviet filmmaker Serge Eisenstein put it in a 1938 reflection on the nature of cinematic montage, that 'two film pieces of any kind, placed together, inevitably combine into a new concept, a new quality, arising out of that juxtaposition',⁷⁰ the so-called chaos theory that was introduced into scientific discourse in the 1970s and later elevated to the status of a pop culture 'meme' via the utterances of the character Ian Malcolm in the 1993 film *Jurassic Park*, and, not at all finally, the principal of 'self-organisation from noise' that originated in 1983 with an immunologist but which has lately infected scholarship in fields as diverse as artificial intelligence and comparative literature.⁷¹

⁶⁹ Leonard B. MEYER, 'On the Nature and Limits of Critical Analysis', in *Explaining Music: Essays and Explorations* (Berkeley: University of California Press, 1973), 6; the book is based on the Ernest Bloch Lectures that Meyer gave at the University of California, Berkeley, in 1971. As exemplars of 'transcendental music' characterized by 'complete homogeneity and nondifferentiation' Meyer mentions the work of John Cage, Earle Brown and Henri Pousseur.

⁷⁰ Serge EISENSTEIN, 'Word and Image', in *The Film Sense*, ed. and trans. Jay Leyda (London: Faber and Faber, 1943), 14. The first chapter of the book is derived from Eisenstein's 'Montage in 1938', translated by Stephen Garry and first published in London in *Life and Letters To-day*.

⁷¹ As first coined by the Algerian biologist-immunologist Henri Atlan, the term 'self-organisation from noise' referred only to the activity of insentient microorganisms. It has come to mean, however, 'the capacity [of sentient creatures] to turn hitherto uncoded variety into part of an enlarged pattern'. William PAULSON, 'Computers, Minds, and Texts: Preliminary Reflections', *New Literary History* 20, no. 2 (Winter, 1989), 301.

The short answer would focus simply on human nature. Our species, as has already been suggested in the second paragraph of this essay, has both the capacity and the need to 'read between the lines' and find meaningful relationships in whatever events happen around us. This capacity/need for credible explication has prompted several millennia's worth of legitimate scientific research, but it has also prompted—and continues to prompt—countless speculations.

Near the end of his 1980 novel *The Name of the Rose*, a mystery tale set in a medieval monastery, the Italian writer Umberto Eco has his protagonist humbly admit that his solving of a complex mystery resulted primarily from his accidental stumbling upon a few isolated clues. William of Baskerville's young assistant—a naïve Doctor Watson-like sidekick to the Sherlock Holmes-like main character—cannot believe that the just unraveled web of murder and mayhem had in fact consisted, for the most part, of random events. In response, William explains:

The order that our mind imagines is like a net, or like a ladder, built to attain something. But afterward you must throw the ladder away, because you discover that even if it was useful, it was meaningless. ... It's hard to accept the idea that there cannot be an order in the universe because it would offend the free will of God and His omnipotence.⁷²

Offering a more secular perspective, William Paulson, in one of his numerous essays on the relationship of parataxis to contemporary literature, notes:

To most scientists, an explanation (at least a valid one) must be something like an algorithm that compresses existing data series and predicts what is to follow Among cognitive psychologists, explanation is more likely to mean a particular kind of behavior, namely that of imposing meaning or sense by whatever means necessary—'cooking up' explanations.⁷³

A few pages later, Paulson states: 'Explanation of the *a posteriori* variety is in general a form of invention, of poiesis, one that exploits randomness and noise. Where there is randomness and not pattern, redundancy *must* be sought and added ...'.⁷⁴

Paulson here is commenting only on the typical reader's response to modernist literature, but the principle he articulates applies easily to history, the actual experience of which is most often 'an inherently disorderly process' but the telling

⁷² Umberto ECO, *The Name of the Rose*, trans. William Weaver (New York: Harcourt Brace Jovanovich, 1983), 500–600. Eco's first novel, *Il nome della rosa*, was originally published in 1980 in Sonzogno by Fabbri-Bompani.

⁷³ William PAULSON, 'Chance, Complexity, and Narrative Explanation', *SubStance* 23, no. 2, #74 (special issue: Between Science & Literature) (1994), 15.

⁷⁴ *Ibid.*, 17. Emphasis added.

of which, in most cases, involves a yielding to 'the demand for [ever] more order and the demand for a master narrative'.⁷⁵ And it would seem that the demand for master narratives in history is echoed by demands for micro narratives in the hearing of paratactic music, which—as a former practitioner of such music once noted—'probably will have only such relationships as we impose on [it] through our need to make experience behave'.⁷⁶

At around the same that the American composer Roger Reynolds made that last-quoted statement, and around the same time that McLuhan was summarizing his thoughts on 'cool media' and Adorno was musing on both parataxis in the poetry of Hölderlin and the *musique informelle* he had lately heard at Darmstadt, Eco—a philosopher long before he became a novelist—published a book in which he discussed thoroughly the nature of what he called 'the open work'. Not insignificantly, Eco in his first few pages refers specifically to such works as Stockhausen's 1956 *Klavierstück XI* and Boulez's 1955–57 Piano Sonata No. 3,⁷⁷ and in a later chapter he expounds at length on 'information theory' as it relates to music in various modernist veins as well as to traditional tonal music.⁷⁸ But Eco's focus throughout the book is not parataxis in music but 'the open work' in general.

Eco speculates as to why 'the open work'—that is, the work left in some way unfinished by its author, the work whose 'completion' is relegated to its performer or, more to the point of this essay, to its audience member—had come to the fore in the years immediately following World War II. To his basic question he offers a pair of arguably paradoxical answers. 'It would be quite natural', he writes, 'for us to think that [the open work's] flight away from the old, solid concept of necessity and the tendency toward the ambiguous and the indeterminate reflect a crisis of contemporary civilization'.⁷⁹ Then, taking a more optimistic view, he writes: 'On the other hand, we might see these poetical systems, in harmony with modern science, as expressing the positive possibility of thought and action made available

⁷⁵ James A. WINDERS, '»Narrative«: Postmodern Temporality and Narrative', *Issues in Integrative Studies* 11 (1993), 29.

⁷⁶ Roger REYNOLDS, 'Indeterminacy: Some Considerations', *Perspectives of New Music* 4, no. 1 (Autumn–Winter 1965), 139.

⁷⁷ Umberto ECO, *The Open Work*, trans. Anna Cancogni (Cambridge, Massachusetts: Harvard University Press, 1989; orig. *Opera aperta* (Milan: Gruppo Editoriale Fabbri, 1962)), 1–2. The other pieces Eco mentions in his first two pages are Henri Pousseur's 1957 *Scambi* (for magnetic tape) and Luciano Berio's 1958 *Sequenza I* (for solo flute).

⁷⁸ In the English version, Eco's introductory chapter (pp. 1–23) is titled 'The Poetics of the Open Work'; the chapter that deals with music and information theory (pp. 44–83) is titled 'Openness, Information, Communication'.

⁷⁹ U. ECO, *The Open Work*, 17.

to an individual who is open to the continuous renewal of his life patterns and cognitive processes'.⁸⁰

The Stockhausen and Boulez pieces in which Eco took such a keen interest—music whose component segments are thoroughly composed yet playable in variable order—are often described as being in 'open form' or 'mobile form'. In terms only of their fluid structure, these works are paratactic only to an extent, and the disparity between their theoretical mobility and their actual sonic stability in performance should be obvious. In terms of their highly serialized content, however, these same works are paratactic to the extreme. The coincidence of the blossoming of these and similarly hyper-determined works with the blossoming of completely indeterminate works is hard to ignore. Seeking to 'cook up' an explanation, we might well conclude that the simultaneous rise in the late 1950s of such ideologically opposite yet aesthetically similar works indeed owes, somehow, to a combination of the 'crisis of contemporary civilization' and attitudes 'in harmony with modern science'. With suitable variations, such a recipe perhaps also works for the short-lived heyday of Minimalist music in the 1960s and early 1970s, and for the still burgeoning interest—albeit now less vital in music-oriented communities than in communities centred around the visual arts—in installation pieces.⁸¹

In any case, the reasons for the existence of paratactic music are quite beyond the scope of this essay. From the start, this essay has presumed that paratactic music exists, and the essay's purpose has been to explore how it is that musical parataxis seems to change—in the ears/minds of its listeners—into something resembling musical syntax. The nonverbal symbol (→) used in the heading of this concluding section is borrowed from mathematics; the symbol is an arrow, but its meaning is not that the entity on its left side *leads to* the entity on its right side but, rather, that the left-hand entity simply *approaches*, but never equals, the right-hand entity. Like the travels of the rubber duckies described in Hohn's article, the content of paratactic music results for the most part from sheer accident; whether this accident undergoes a metamorphosis into myth remains to be seen, but for the moment it seems clear enough that sonic happenstance—for very human reasons—indeed approaches the state of syntax that in the long run constitutes musical narrative.

⁸⁰ *Ibid.*, 17–18.

⁸¹ For insights into installation pieces from the perspective of the visual artist, see, for example, Trevor WISHART, *On Sonic Art* (New York and London: Routledge, 1996); Douglas KAHN, *Noise Water Meat: A History of Sound in the Arts* (Cambridge, Mass.: M.I.T. Press, 2001); Seth KIM-COHEN, *In the Blink of an Ear: Toward a Non-Cochlear Sonic Art* (New York: Continuum, 2009); and Caleb KELLY, ed., *Sound: Documents of Contemporary Art* (Cambridge, Mass.: M.I.T. Press, 2011).

*Sažetak***Inventivno slušanje: estetika paratakse**

Ovaj esej istražuje estetiku glazbene paratakse, odnosno perceptivno iskustvo koje se događa kada se suosjećajni slušatelji suoče sa glazbom čiji elementi u potpunosti ili djelomično nisu namjerno konstruirani prema tradicionalnim narativno utemeljenim linijama, nego su više podređeni ili dodani kao rezultat nečega što je – ako ne u stvarnosti onda barem u efektu – čisti slučaj. Kao primjer glazbene paratakse esej citira različite instalacijske komade, djela prve generacije tzv. minimalista te dobro poznata djela koja predstavljaju i indeterminaciju i totalni serijalizam. Ipak, fokus eseja nije usmjeren na specifične glazbene primjere nego na općeniti smisao. Esaj sugerira da slušatelji u svojim nastojanjima da pronađu smisao u zvukovima koji su tehnički lišeni bilo kakve sintakse ili semiotičkih/semantičkih kodova vjerojatno takvim akustičkim fenomenima nameću 'smislene' strukture vlastite izrade; također sugerira da se parataksa čak i u najneobičnijoj postnarativnoj glazbi obično pretvara – u unutrašnjosti slušatelja, a iz vrlo ljudskih razloga – u nešto nalik staromodnoj glazbenoj narativnosti.