

# Challenging Historiographic Assumptions: Opening Up Serialism with Pierre Boulez's *Don*

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## Abstract

This article combines historiographic reflections on the open-work concept in serial music with a new philology of Pierre Boulez's *Don*, the opening piece of *Pli selon pli*. I begin by presenting challenges in defining the open-work concept. I also deconstruct the dual use of the term 'serialism' to define a set of compositional techniques and a musical style. This leads me to a reconsideration of the similarities between the changing compositional strategies of Boulez and John Cage (and their influence on others) during a time of formal and stylistic experimentation in the 1950s. Finally, I segue to Boulez's compositional plans for *Don*. In doing so, I provide a concrete example of how the techniques of serialism often belie the aesthetic and extramusical connotations at play in works that are serial in style.

Post-war art music composers on both sides of the Atlantic experimented with so-called 'open' musical forms during the 1950s (and beyond). I define such forms as a scored composition that requires performer choice in determining its form.<sup>1</sup>

Prior to experiments in form during the early 1950s, composers associated with the New York School – Earle Brown, John Cage, Morton Feldman, and Christian Wolff – used ambivalences in notation as the basis for providing new variables in performance. In these cases, flexible notation required performers to become an integral part of the compositional process by forcing decisions that could have significant impacts on the sonic outcome of a score, particularly in relation to parameters such as pitch, dynamics, duration, register, and even instrumentation. This activity culminated in Brown's 1952 series, which featured notation so abstract as to invite new spatial-navigational possibilities he characterized as 'mobile' score reading, a concept that aligns with the structural ambiguities of open works.<sup>2</sup>

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- 1 'Open form' does not have an entry in the Grove Encyclopaedia, but its aspects are discussed in the 'Aleatory' article. This article also unites these concepts with other synonyms and activities, such as 'chance' procedures and 'mobile form'. Paul Griffiths, 'Aleatory', *Grove Music Online*, 2001, [www.oxfordmusiconline.com](http://www.oxfordmusiconline.com).
- 2 Brown provides an explanation of how different scores in the series explored 'mobile' aspects of score reading. Earle Brown, 'On *December 1952*', *American Music* 26/1 (2008).

Across the Atlantic, European composers experimented in similar ways beginning in the mid-1950s. Composers such as Pierre Boulez, Karlheinz Stockhausen, and Henri Pousseur tended to combine precise notation with a series of formal modules that a performer could choose to navigate according to pre-designated pathways. The resulting compositions were similarly characterized as ‘mobile’ scores despite their fundamental notational differences from earlier models across the Atlantic.<sup>3</sup> Both sides regularly cited inspiration from other artistic fields, from Alexander Calder to James Joyce, Franz Kafka, and Stéphane Mallarmé. In sum, although experiments on either side of the Atlantic became associated with more polarized camps during the 1960s and 1970s, distinguishing aesthetic differences in their experiments beyond the variable of notation during the mid-1950s often involves specialized knowledge of corresponding documents, analyses, or sketches; in short, of composers’ intentions.

Yet, histories on either side of the Atlantic regularly contrast approaches to open form by American experimentalists and Darmstadt serialists. Many textbooks capitalize on this by opposing the two ‘schools’ with one another, highlighting significant differences in the post-war conditions in America and central Europe.<sup>4</sup> It is ironic that these comparisons often lead to maximally contrasting the influence of John Cage and Pierre Boulez, two figures whose shared interest in formal experimentation grew exponentially between the late 1940s and 1960 alongside their mercurial friendship. Indeed, Cage and Boulez exchanged many ideas (and a few visits) in the early 1950s; and during the latter half of the 1950s, Cage and David Tudor had direct channels of influence across the Atlantic.<sup>5</sup> While historical documents support the many differences between American experimentalism and the European avant-garde that justify aspects of current (and often admirable) treatments at the level of the undergraduate survey, I argue here that we need to remain open-minded to reconsidering these networks of influence as new historical methodologies (and biographical knowledge) provide different impressions of our shared musical pasts and the inherently diverse characters within them.

3 Famous examples include Karlheinz Stockhausen’s *Klavierstücke XI* (1956), Pierre Boulez’s *Troisième Sonate* (1957 forward), Henri Pousseur’s *Mobile* (1958), and *Votre Faust* (1960–9, r. 1981), and even John Cage’s *Concert for Piano and Orchestra* (1957).

4 This issue has admittedly become harder to spot in recent years. For example, while Robert Morgan’s still popular *Twentieth-Century Music* (New York: W. W. Norton and Company, 1991) clearly separates Cage and Boulez in this way, Joseph Auner’s more recent contribution to the same series (*Music in the Twentieth and Twenty-First Centuries* (New York: W. W. Norton, 2013)) is far more sensitive to their similarities at first, but still uses Boulez to cover ‘integral serialism’ and Cage to cover ‘chance’ while also emphasizing Boulez’s works from the early to mid-1950s while turning to Cage’s later works to provide maximal contrast, especially in regards to notational practices. Paul Griffiths’s *Modern Music and After* (3rd edn, Oxford: Oxford University Press, 2010) is more overt in its separation of materials, but also includes at least one paragraph (p. 25) highlighting the sympathetic resonances between these composers. Similar characteristics can be found when comparing other classics, such as Godfrey and Schwartz (*Music since 1945: Issues, Materials, and Literature* (Belmont, CA: Wadsworth, 1993), with more regularly updated books by Oxford and Norton.

5 For more on these activities, see Amy Beal, ‘David Tudor in Darmstadt’, *Contemporary Music Review* 26/1 (2007); and Martin Iddon, *New Music at Darmstadt* (Cambridge: Cambridge University Press, 2013).

Admittedly, this preamble is not itself a revisionist perspective. My argument is meant to combine new insights with familiar figures to support an active movement among specialists of serialism, but one which struggles to make its way into the classrooms of undergraduate musicians (not to mention the studios of their teachers). My goal is thus to celebrate advancements in recent scholarship, but to do so with people, music, and documents that can easily integrate into existing discussions of serialism. To this end, I have no intention of asserting the ‘innovative role’ of Boulez or Cage as more essential than others (especially since I find the uncritical embrace of ‘innovation’ as a primary criterion for inclusion in any historical narrative problematic), but I do use their existing centrality in current histories of Western art music as a means to bring an inclusive understanding of serialism to the fore. A correlate of my argument highlights the problematic use of anti-serialist rhetoric as a secondary means for diversifying historical narratives or generic categories of modern composition. Ideally, a reconsideration of what serialism means in relation to an established serial composer might also lead to a broader recognition of serialism as a productive – rather than antagonistic – force across a cultural episteme.

Returning to open form, the unique characterizations on both sides of the Atlantic sometimes confuse actions and aesthetics. This confusion is often rooted in first-hand accounts that, while authentically reported, can themselves distort facts. I am not suggesting that we privilege hindsight over first-hand accounts, but I am reminding us that the stated intentions of composers do not always align with the material results of their efforts, and that, just as importantly, compositions ultimately develop cultural meaning through their reception. Similarly, the benefits of hindsight can reveal more accurate versions of history than ethnographic methods relying on emic anthropological approaches privileging first-person documentation, whether recorded by composers in the moment or by eye-witness spectators decades thereafter. In either case, the aesthetic biases of such figures are opportunities for the ‘rhetoric of autonomy’ as much as they are mechanisms for the coercion of listeners to one version of history over another.<sup>6</sup>

Hence, when Pierre Boulez chose the title ‘Alea’ to criticize John Cage’s experiments in composition and open form, it is relevant that this term was closely associated with the role of dice, not the flipping of coins,<sup>7</sup> and that Boulez and Cage conversed at length about Boulez’s own attempts to set Stéphane Mallarmé’s *Un coup des dés n’abolira le hasard* (*A Toss of the Dice Will Never Abolish Chance*) in earlier years alongside Cage’s embrace of

6 The term comes from Charles Wilson, ‘György Ligeti and the Rhetoric of Autonomy’, *Twentieth-Century Music* 1/1 (2004).

7 Although Boulez’s discussions regarding chance, rolls of dice, René Char, and Stéphane Mallarmé all pre-date Werner Meyer-Eppler’s use of the term ‘aleatory’ in his 1955 essay ‘Statistische und psychologische Klangprobleme’, it is possible that Boulez was inspired by Meyer-Eppler’s use of the term given that he does not seem to use it prior to that publication (Werner Meyer-Eppler, ‘Statistische und Psychologische Klangprobleme’, *Die Reihe* I (1955)). Relatedly, Boulez was still likely to discuss Meyer-Eppler’s ideas (and other details of the Cologne studio) with Stockhausen and Pousseur, but my notes suggest he did not use the term in his private correspondence prior to his discussions of his own *Troisième sonate* and the broader, related context of his ‘Alea’ essay around 1957. I thank one of my anonymous reviewers for bringing this thought-provoking possibility to my attention.

the *I Ching*.<sup>8</sup> While Boulez's criticisms of Cage in 'Alea' (1957) are as caustic as could be published at the time, they are also a deliberate, purposeful misreading of Cage's compositional process and their shared explorations of new compositional horizons. As such, they reflect a flash in the pan, a targeted reaction to feelings of personal betrayal as Cage's influence grew among Boulez's close confidants during the late 1950s. Yet, it is unavoidable that even the first auditors (and later commentators) of the essay at Darmstadt in 1957 (in translation and presented by a colleague) likely recall that experience through the filter of the later publication of the same essay in French and English at some divorce from its contextual subtext.<sup>9</sup> Likewise, it is significant that the primary article in Grove on open form is titled 'Aleatory', that it makes overt reference of Boulez's article, and that its bibliography is heavily weighted with primary-source writings by composers.<sup>10</sup>

I unpack a number of such contextual elements in this article, but my focus is more specific than broad historiographic criticism: I want to open up Pierre Boulez's serial practice beyond what I see as typical assumptions people have about serialism. I do this using two strategies. The first is to outline several contingencies surrounding Boulez's adoption of open musical forms in the late 1950s. These include Boulez's relationship with John Cage and European institutions, the intensity of his work schedule, and his adoption and later rejection of the open-work concept. My second strategy is to elaborate upon many lesser-known aspects of Boulez's serial methods by looking at the opening piece *Don* from *Pli selon pli* (1960, with subsequent revisions through 1989). Throughout, I sustain a tension between serialism as a method and serialism as a style. I suggest the concept of the open work is itself caught up in the tension between these two uses of the term in ways that have marginalized shared or symbiotic experiments among composers in order to canonize polemic – perhaps even politicized – perceptions of stylistic difference.

## Opening up serialism

The term 'serialism' is often used as a double entendre because it was promoted as a compositional technique and a musical style simultaneously. Writers about music still describe serialism as a set of compositional techniques – think rules for model composition – and as a method for describing the semantics of a certain musical style, implying such techniques have a distinguishing, identifiable 'sound' as a genre. In addition, some composers are

8 Pierre Boulez, 'Alea', in *Stocktakings of an Apprenticeship*, ed. and trans. Stephen Walsh (New York: Oxford University Press, 1991). 'Alea' was delivered as a lecture at Darmstadt in 1957 in German by proxy (Heinz-Klaus Metzger) before its publication later that year in French in the *Nouvelle Revue française*.

9 Here, I highlight two playful essays by Robert Pienickowski, both of which elaborate upon the significance of subtext in reading Boulez's writings, as well as the problems this creates for their reception among most readers. See Robert Pienickowski, 'De-ciphering Boulez?', trans. John MacKay, *Ex Tempore* 15/1 (2010) and 'Le franc-tireur et les moutons ou l'avant-garde selon Boulez', in *Avant-Gardes: Frontières, Mouvements*, vol. I: *Délimitations, Historiographie*, ed. Jean-Paul Aubert, Serge Milan, and Jean-François Trubert (Paris: Delatour France, 2013).

10 Griffiths, 'Aleatory'. I am not inferring Griffiths's intentions; instead, I am suggesting that the influence of our shared history is powerfully subliminal. I thank one of my reviewers for highlighting the influence of Meyer-Eppler on the proliferation of the term 'aleatory' in music circles during the 1950s and beyond (see note 7).

serialists, and so are some works. But serialist composers do not always compose serial works, and some serial works are the progeny of composers who would deny they are serialists at all (Luciano Berio comes immediately to mind, but so do aspects of the set-based, processed-based compositions by some American Minimalists or Arvo Pärt, themselves trained in serialism).<sup>11</sup> Indeed, in one of the more recent books dedicated to representing serialism as a practice, Arnold Whittall tacitly uses this spectrum when he transitions from describing serialism as a set of techniques to writing ‘tonality’s adaptation and survival are intricately bound up with serialism’s adaptation and survival’, thus demonstrating the potential slippage from a set of compositional strategies to a broad range of stylistic practices.<sup>12</sup> In my abstract, I refer to my observations as a deconstruction of the term ‘serialism’. I do so because I believe these two definitions are in conflict with one another in such a way that to challenge one is to destabilize the nature of the other.

This tendency began decades ago, with the composers themselves. Mid-century commentators conflated these important distinctions when they suggested that serialism was a set of musical techniques for composers and that each composition *in the style of* serialism represented its own, individuated world of musical semantics, a composer’s ‘musical language’. (The journal *Die Reihe* represents this tendency in spades, as does the debate over serialism’s relationship to structural linguistics at mid-century.<sup>13</sup>) Significantly, twenty-first century revisionist considerations of this trend that rehash these arguments still reach conflicting conclusions. Composers who rebelled against the sound or aesthetics of Darmstadt serialism further confused things by suggesting their music was not *really* ‘serial’, even as they assimilated dodecaphonic or serial practices. In short, they avoided the *stylistic* connotations of serialism while borrowing from its cache of compositional *techniques*.

Granted, many of these composers – including Boulez and Berio – were not writing about music for posterity. Conflicts between what they said and what they did are rampant – a fact that is clearer since the establishment of the Paul Sacher Stiftung and the publication of numerous sketch studies of canonic serialists.<sup>14</sup> Both composers also used disingenuous

11 I applaud Whittall’s exploratory (if also concise) discussion of the American Minimalists (which draws on the work of Keith Potter). See Arnold Whittall, *The Cambridge Companion to Serialism* (Cambridge: Cambridge University Press, 2008), and Keith Potter, *Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (Cambridge: Cambridge University Press, 2000).

12 Whittall, *The Cambridge Companion to Serialism*, xi.

13 For examples of the former, see M. J. Grant, *Serial Music, Serial Aesthetics: Compositional Theory in Post-War Europe* (Cambridge: Cambridge University Press, 2001); for discussions of the latter, see also Edward Campbell, ‘Serialism and Structuralism’, in *Boulez, Music and Philosophy* (Cambridge: Cambridge University Press, 2010); Jonathan Goldman, ‘Structuralists contra serialists? Claude Lévi-Strauss and Pierre Boulez on Avant-Garde Music’, *Intersections* 30/1 (2010); and Joseph Salem, ‘Review Article: Jonathan Goldman, *The Musical Language of Pierre Boulez*’, *Journal of Music Theory* 57/2 (2013).

14 This is particularly true of central figures such as Pierre Boulez and György Ligeti, among a host of others. While many publications seek to align their comments with their sketches, even these tend to open up liminal spaces that allow for more critical perspectives. In the realm of Boulez, this is easily observed between collected volumes such as William Glock, ed., *Boulez: A Symposium* (London: Ernst Eulenburg, 1986), Jean-Louis Leleu and Pascal Decroupet, eds., *Techniques d’écriture et enjeux esthétiques* (Geneva: Éditions Contrechamps, 2006), and Edward Campbell and Peter O’Hagan, *Pierre Boulez Studies* (Cambridge: Cambridge University Press, 2016).

comparisons to others to stress their own uniqueness.<sup>15</sup> This adds additional motives to composers' explanations of their compositions. For example, Boulez's rhetoric stresses his stylistic autonomy through his autodidactic nature, thus minimizing the role of his teachers and influences at every turn, from Messiaen and Leibowitz to Schoenberg and Jolivet.<sup>16</sup> In oral histories such as these, there can be significant differences among first-hand accounts.<sup>17</sup>

At the same time, Boulez epitomized the rhetorical tactic of stressing his *autonomy* by *associating* himself with artists in other disciplines. Beginning with passionate text settings and a closely related Surrealist streak (early *mélodies* and multiple cantatas with texts by René Char), Boulez's twenties were spent with the likes of Armand Gatti (playwright, stage director, and journalist), Pierre Joffroy (journalist and writer), Bernard Saby (painter), and Paule Thévenin (editor), all while working as music director of the Madeleine Renaud–Jean-Louis Barrault theatre company.<sup>18</sup> Likewise, his later writings on open works explicitly reference James Joyce, Franz Kafka, Paul Klee, and, of course, Stéphane Mallarmé.<sup>19</sup> Boulez was not alone in using this strategy – many composers stress their musical autonomy by reference to other fields, just as Earle Brown cited Calder in relation to his 1952 series mentioned earlier. Whether intentional or not, contemporary composers participate in this practice when they write programme notes associating their compositions with particle physics, fractal geometry, race relations, critical theory, the philosophy of mind, and so on (or when artists silo their work as soundscape, sound art, and/or sound ecology to avoid association with the broad assumptions related to European traditions of composition<sup>20</sup>). In Boulez's case, the ironic takeaway is how the formal polyvalence of open form borrowed from Mallarmé strains the idea of stylistic autonomy precisely because of its intertextual resonances. Few would suggest Joyce can be thoroughly appreciated without a long list of footnotes to aid one's textual exegesis. Boulez's *Don* is not dissimilar: to call it a serial composition can be a sleight of hand that distracts us from a myriad of other stylistic associations.

15 Wilson, 'György Ligeti'.

16 See relevant sections on Boulez's student works in Suzanne Gärtner, *Werkstatt-Spuren: Die Sonatine von Pierre Boulez* (Bern: Peter Lang, 2008); 'Traces of an Apprenticeship: Pierre Boulez's *Sonatine* (1946/1949)', in *Pierre Boulez Studies*, ed. Edward Campbell and Peter O'Hagan (Cambridge: Cambridge University Press, 2016); and Peter O'Hagan, *Pierre Boulez and the Piano: A Study in Style and Technique* (New York: Routledge, 2017).

17 It is important to stress that the ontological impossibility of any definitive history does not prevent us from critiquing falsifiable claims across varied historical narratives.

18 A number of commentators have highlighted Boulez's personal relationships, with useful commentary and evidence appearing in Pierre Boulez and John Cage, *The Boulez-Cage Correspondence*, ed. Jean-Jacques Nattiez, trans. Robert Samuels (Cambridge: Cambridge University Press, 1993). However, it is the more recent work by Caroline Potter that promises to provide new insights into the influence of Surrealism on his works. See Caroline Potter, 'Pierre Boulez, Surrealist', *Gli Spazi della Musica* 7 (2018).

19 See, for example, Pierre Boulez, "Sonate, que me veux-tu?", in *Orientations*, ed. Jean-Jacques Nattiez and trans. Martin Cooper (Cambridge, MA: Harvard University Press, 1986).

20 A particularly self-aware exploration of this trend appeared back in 2002, well before the associated launch of a multitude of new 'sound art' genres and the rise of 'sound studies' also sought to define themselves against music- or composition-specific practices. See Hildegard Westerkamp, 'Linking Soundscape Composition and Acoustic Ecology', *Organized Sound* 7/1 (2002).



## Exploring the open-work concept in context

It may be problematic that textbooks – the epistemological basis for most music students and teaching faculty – separate the treatment of post-war music into chapters on Cage and the New York School on one side of the Atlantic, and Boulez and Darmstadt on the other, as both Oxford and Norton histories do. While there are many differences between American and European experimentalism, such rhetorical strategies splinter related dispositions into antitheses that resonate at geopolitical levels.

Consider that Boulez and Cage met in 1949. At the time, Boulez was barely 24 years old, while Cage was fast approaching 37. Reflective of their ages, Cage was in France with Merce Cunningham after winning two major academic awards: a Guggenheim and a National Academy of Arts and Letters grant. He had also premiered some of his *Imaginary Landscapes* (no. 1 in 1939, nos. 2–3 in 1942) and his *Sonatas and Interludes* (1948). Yet, many of Cage's most influential works – 4'33" (1952), the *Music of Changes* (1951), and other *I Ching*-based works, his tape mixes (*Williams Mix* (1952), *Fontana Mix* (1958)), and several of his theatrical, staged, and mixed-media works – were all subsequent to meeting Boulez. Meanwhile, Boulez had yet to publish a single work, despite a growing reputation as an up-and-coming composer. Both were embracing experiments in serial composition at the time of their first meeting (Cage with his *Sonatas and Interludes*, his string quartet, and the various *I Ching*-derived tables for *Music of Changes*, Boulez with *Livre pour quatuor* and *Polyphonie X*). In their subsequent correspondence, they mutually encouraged each other to explore new compositional techniques in increasingly detailed ways.

As a result, their now famous exchanges often danced around questions of dominance, leadership, and new music.<sup>21</sup> One constant, however, was each composer's dedication to serial techniques, otherwise described as their desire to use specific sets and permutations of non-tonal collections as the basic building blocks of musical structure.<sup>22</sup> In fact, their longest and most intense letters involve sharing intimate details about the serial procedures behind their works. Even Cage's discussions of chance stressed strict organizational procedures. Note, for example, the following description of Cage's *Imaginary Landscape No. 4*:

Every element is the result of tossing coins, producing hexagrams which give numbers in the *I-Ching* chart: 6 tosses for a sound, 6 for its duration, 6 for its amplitude. The toss for tempo gives also the number of charts to be superimposed in that particular division of the rhythmic structure. . . .

21 I discuss these other aspects of their relationship in Joseph Salem, *Pierre Boulez: The Formative Years* (New York: Oxford University Press, 2023), 96–106.

22 The composers' mutual devotion to serialism can also be read through their interest in Webern; indeed, both seem to have used him as a means for evaluating other composers in their correspondence. See Inge Kovács, *Wege zum musikalischen Strukturalismus. René Leibowitz, Pierre Boulez, John Cage und die Webern-Rezeption in Paris um 1950* (Schliengen: Edition Argus, 2004), 16–17.

You can see from my present activity how interested I was when you wrote of the *Coup de Dés* of Mallarmé.<sup>23</sup>

Boulez's first response is positive: 'I must write you a long letter soon on the subject of your last letter. I found it incredibly interesting. We are at the same stage of research.'<sup>24</sup> Later, he gets more to the point:

That letter gave me an extraordinary amount of pleasure. Everything you say about the tables of sounds, durations, amplitudes, used in your *Music of Changes* is, as you will see, along exactly the same lines as I am working at the moment. . . . The only thing, forgive me, which I am not happy with, is the method of absolute chance (*by tossing the coins*). On the contrary, I believe that chance must be extremely controlled: by using tables in general, or series of tables, I believe that it would be possible to direct the phenomenon of the automatism of chance, whether written down or not, which I mistrust as a facility that is not absolutely necessary. For after all, in the interpolations and interferences of different series (when one of them passes from durations to pitches, at the same moment as another passes from intensities to attacks, etc. . . .), there is already quite enough of the unknown.<sup>25</sup>

The exchange highlights many things. First, Boulez's own work on Mallarmé's *Coup* represents his early consideration of open form; second, Cage's reference to this work highlights his desire to credit Boulez's influence, and third, Boulez emphasizes the significant overlap between their experiments, but he gets hung up on using coins as a strategy. His language points to an underlying tension over the framing of compositional innovations despite what they share. A commonly cited difference is that Cage's rhetoric de-emphasized his control over the outcome, while Boulez wanted to stress the authority of the composer. But even in this respect, the composers are closer than they seem. We know from Benjamin Piekut that Cage's rhetorical strategies were too easily misinterpreted regarding his feelings about authorship, such as when Charlotte Moorman stole the spotlight.<sup>26</sup> Meanwhile, Boulez acknowledged that the use of serial processes is already a way of introducing 'chance' into the compositional process (he also borrowed the series for his very next work from Olivier Messiaen rather than coming up with his own).<sup>27</sup>

The composers discussed several works-in-progress. Longer discussions involved both composers' string quartets, Cage's *Sonatas and Interludes* and *Music of Changes*, and

23 Letter from John Cage to Pierre Boulez, 22 May 1951. Letter no. 28 in Boulez and Cage, *Correspondence*, 95–6. This appears as letter no. 29 in Pierre Boulez and John Cage, *Pierre Boulez/John Cage Correspondance et Documents*, ed. Jean-Jacques Nattiez, new edn Robert Pienickowski (Mainz: Schott, 2002).

24 Letter from Boulez to Cage, between 22 May and 17 July 1951. Letter no. 29 in Boulez and Cage, *Correspondence* and letter no. 30 in Boulez and Cage, *Correspondance*.

25 Letter from Boulez to Cage, after 28 November 1951. Translated as letter no. 35 in Boulez and Cage, *Correspondence*, December 1951. The same letter appears as no. 36, 'after 28 November' in Boulez and Cage, *Correspondance*.

26 Benjamin Piekut, 'Murder by Cello. Charlotte Moorman Meets John Cage', in *Experimentalism Otherwise: The New York Avant Garde and Its Limits* (Berkeley, CA: University of California Press, 2011).

27 I refer here to *Structures*, Book 1.



Boulez's *Polyphonie X* and *Structures*, Book 1. Letters often included schematic diagrams or notated music (even in handwritten letters on unlined paper).<sup>28</sup> Reading these exchanges reveals many aesthetic subtleties that became conflicts between them. But serial approaches to composition provided a shared foundation for their experiments even when the individual rhetoric used to codify, describe, and promote their musical goals led to oppositional comparisons.

Admittedly, Boulez and Cage's correspondence ebbs within a couple years. In the meantime, they are genuine in their sharing of ideas, methods, and sympathies. I write 'genuine' because their claims are falsifiable: we can look at sketches of Boulez's and Cage's works and confirm that what the composers said is often what they did. This is in contrast to non-falsifiable (or simply false) claims found in other contexts.<sup>29</sup> This makes the correspondence fundamental to each composer's exploration of open form throughout the 1950s.

For example, just five to seven years after their correspondence ebbed, Boulez used Mallarmé's *Livre* and Kafka's labyrinths to contrast his open musical forms as much from the aesthetics of Cage as from those of Stockhausen. In his famous essay 'Alea', Boulez was adamant that open musical forms were not loose, aleatoric, or built on 'chance'. Instead, an open form allowed for rearrangements of modular parts, thus 'opening' the structure of the work to variation. When compared with Cage's contemporaneous experiments, the differences in what constituted an open work are not so easily summarized. For example, Boulez misreads Cage's project in 'Alea' as one of unrestricted chance, even while he was well aware of the systematic compositional processes that lay behind Cage's rhetoric and how obsessed his American counterpart was with organization. This belies a further misreading that conflates, on the one hand, the use of chance in composing a work (which need not have any ramifications for performance choices in the score), and, on the other, the radical differences between open works as indeterminant graphic compositions and open works as multivalent scores with more prescriptive notation. Such distinctions are relevant across Cage's output during the 1950s, such as between the methodically composed *Williams Mix* and *Music of Changes* and the strictly choreographed but far less prescriptive notation of *Concert for Piano and Orchestra* (1958) and *Water Walk* (1959). In a thinly veiled passage, it is all too clear how Boulez chose to ignore the subtleties of Cage's disciplined practice in order vent his frustration at their ethical differences: 'I like to call this an experiment in accidental chance – if experiment is the right word where an individual, who feels no responsibility for his work, but out of unconfessed weakness and confusion and the desire for temporary relief, simply throws himself into a puerile mumbo-jumbo.'<sup>30</sup> It is difficult to reconcile this passage with Boulez's written correspondence with Cage even as late as 1954.

It would have been more appropriate for Boulez to focus on the notational experiments of Cage's New York colleagues. For if there was one major difference between the approaches of

28 Facsimiles of some of the letters are reprinted in various editions, such as Boulez and Cage, *Correspondance*.

29 Now-common examples of such a conflict between sources include Boulez's statements regarding his revisions to his *Sonatine* for flute and piano and First Piano Sonata and his altered manuscripts for these works. See Gärtner, 'Traces of an Apprenticeship', and Peter O'Hagan *Boulez and the Piano*.

30 Boulez, *Stocktakings*, 26.

European and American composers during the 1950s regarding open works, it was their scores and not the *I Ching*. Early scores by the New York School embraced new notational practices, often with an emphasis on visual simplification alongside a more flexible reading of it. (Cage may have been the leader of the so-called New York School, but Brown, Feldman, and Christian Wolff first embraced more flexible scores in this way.) For example, Brown's stave-less *December 1952* remains one of the most often cited examples of the influence of Abstract Expressionism in music, while Feldman's early works utilized a relativistic notation of high, middle, and low regions of the staff (as in his *Projections* of 1950–1). Wolff had his own similar use of lines rather than pitches to create a relative sense of higher and lower pitch motions (as in his *Madrigals* for three voices, 1950).<sup>31</sup> Meanwhile, Cage's contemporaneous *Music of Changes* features precise, conventional notation.

These comparisons are significant. Although Boulez made his way to New York and the pianist David Tudor helped to bring the works of the New York School to Europe, there was minimal interest in Europe to adopt the kind of open, flexible score notations of the early New York School during the early 1950s. Thus, although Cage continued to experiment with new visual possibilities, his 1957–8 *Concert for Piano and Orchestra* is a telling example of just how influenced he was by European models. Composed around what may have been a moment of peak curiosity for Cage's music in Europe, his *Concert* is a meticulously notated score that combines spatial formats that parallel those used by Stockhausen (*Klavierstück XI*, 1956) and Boulez (*Troisième sonate*, 1955ff.) with graphic inserts inspired by his New York colleagues. Cage's score was still unique, and its notational approximations probably influenced a host of later European composers (from Krzysztof Penderecki to Witold Lutosławski and Helmut Lachenmann). But compared with earlier works by Feldman, Brown, and Wolff, Cage's score sits on the European side of the ideological divide in title, genre, design, and notational practice. Even works as theatrical as his famous *Water Walk*, filmed lived for TV, are often notated using a timetable and performed with a stopwatch, and his *26' 1.1499" for a String Player* (1955) is also exacting in its notational standards despite its performance options. With works such as these, one could argue that the flexibilities of Cage's scores privileged structure above all else (which, as with coin tosses, is to highlight compositional strategies rather than our – or Cage's – priorities in listening). Not unlike the *Art of the Fugue*, Cage's openness to changes in instrumentation or the size of an ensemble is counterpointed by the strictness of his musical directions on the page.<sup>32</sup> In short, Cage's experimentation was pushing against the traditional composer–performer relationship, but it was doing so with complexes of precisely notated pitches, durations, and directions that

31 For a concise summary of how these innovations differed from Cage's own, see Michael Nyman, *Experimental Music: Cage and Beyond*, 2nd edn (Cambridge: Cambridge University Press, 1999), 52–60. Nyman cites Cage's rhetoric regarding his correspondence with Boulez as a means for stressing their eventual differences over and above their shared roots.

32 In one of his longest commentaries on the subject, Cage contrasts J. S. Bach's *Art of the Fugue* with Stockhausen's *Klavierstück XI* as two indeterminate works distinguished by their regard for musical structure versus other compositional elements. See John Cage, *Silence: Lectures and Writings by John Cage* (Middletown, CT: Wesleyan University Press, 2011), 35.

actually helped bridge the divide between his colleagues in America and Europe while separating himself from both. Incidentally, this complicates the traditional narrative suggesting Cage and his cohort were similar in their notational innovations and their desire to liberate the performer, or that precisely noted scores were always synonymous with the desire for greater authorial control.

For his part, Boulez was also experimenting with open forms in ways that belie traditional narratives. His *Troisième sonate* is still the most cited example of open form in his output, but it is also considerably more limited in approach than his subsequent experiments with open form, such as the second chapter of his *Structures*, Book 2, or the original versions of several pieces from *Pli selon pli*. In these later examples, Boulez's approach to open form goes well beyond the surface-level descriptions of his spatial *Constellations-Miroir* from the *Troisième sonate*. In short, while the sonata involves the navigation of soloistic passages still organized by a singular serial plan, other examples combine heterophonic blocks that themselves involve multiple or different forms of serial organization. This difference shifts the ontological nature of open form for Boulez, in that it is not merely the order of elements that is loosened, but the underlying hierarchies of serial organization – a change in the constitution rather than the mere physiognomy of any musical work. As such, these later works incorporate an openness in how their pitches and forms are derived from a *compositional* perspective, challenging the Cage–Boulez dichotomy by revealing the flexibilities and ‘improvisations’ in Boulez's changing approach to serial organization. (These points are elaborated upon in my treatment of *Don* in the following section, but are at their most obvious in the 1961 *Structures*, Book 2, Chapter 2.)

This is not to deny the many contextual forces that distinguished Cage and Boulez after their correspondence waned. For example, Boulez's notoriety increased substantially during the mid- to late 1950s. This included powerful institutional backing, with frequent overtures made by Wolfgang Steinecke to participate in the infamous Darmstadt summer courses, and Heinrich Strobel encouraging Boulez to participate in the Donaueschingen music festival. Many of these experiences pressured Boulez into the role of a figurehead, with the Shakespearean consequence that the source of his inspiration as a leader – his uncompromising pursuit of impossibly high self-standards – was exactly the ambition that came to jeopardize his personal relationships.

Meanwhile, Cage began practising Zen Buddhism, embracing the teachings of Daisetsu Teitaro Suzuki to a near fanatical degree.<sup>33</sup> His new practice informed the tone and direction of his aesthetics and gave him an original voice among a growing coterie of musicians and visual artists in New York. These teachings gave Cage a platform of positivity, possibility, openness, and humility – all in contrast to Boulez – even as he shared Boulez's stringent self-standards and similarly suffered from their effects on others.

33 Cage's explorations of Zen Buddhism are widely acknowledged; for a particularly exploratory account of how they may have permeated his life and thinking, see Kay Larson, *Where the Heart Beats: John Cage, Zen Buddhism, and the Inner Life of Artists* (New York: Penguin Press, 2012).

Cage's turn to Zen teachings aligned with the growing rhetorical rift between himself and Boulez. Whereas Boulez would often launch his harshest personal criticisms against former teachers and colleagues based on ideological differences rather than technical ones, Cage would all but ignore the actual practices of others, preaching instead of the infinite possibilities of sound with a focus on his own works and influence.<sup>34</sup> Boulez wrote privately to Henri Pousseur and Stockhausen to argue that Cage's methods were essentially bunk to counteract the American's expanding influence. Meanwhile, Cage's ironic comments regarding Boulez paint him as out of touch or irrelevant.<sup>35</sup> Distilling these tensions reveals the roots of an aesthetic-geographic divide: Boulez's greatest frustration with Cage was not how he composed, but the fact that he used the word 'chance' as a verbal metonym for his distortion of traditional Western aesthetics using an Eastern lens. In the decades that followed, composers such as La Monte Young, Philip Glass, Steve Reich, and Terry Riley continued to associate their interest in Eastern philosophy as a counterpart to Western training strongly rooted in serialism, a trend that parallels the 'rhetoric of autonomy' strategy of dissociation with a related musical coterie by association with a non-musical one. By contrast, an increasingly Eastern-European coalition continued to develop a penchant for precisely notated extended techniques (canonically represented by composers such as György Ligeti, Ernst Krenek, Witold Lutosławski, Alfred Schnittke, Sofia Gubaidulina, and Arvo Pärt, among so many others). Yet, these 'traditions' were not so geographically circumscribed in the 1950s; at that time, Cage's explorations were paralleled by a number of European composers without the strong anti-serial thrust of some later American ones, just as Boulez (and others) eagerly explored world music traditions as an escape from Eurocentrism.<sup>36</sup> While beyond my purposes here, these points remind us of the year-by-year shifts between post-war, Cold War, and post-1968 geopolitical landscapes and their influence on composers' choices of rhetoric.

Returning to 1958, it was thus massively significant when Boulez's close confidant Stockhausen suggested Cage as a lecturer at Darmstadt, a recommendation that, unbeknownst to Stockhausen, ultimately aligned with Steinecke's last-minute need to replace Boulez later that same year.<sup>37</sup> The suggestion came one year after Boulez's 'Alea' was read

34 See Cage, *Silence*.

35 Nyman, *Experimental Music*, 60, and John Cage's ironic comments in *Silence*, such as his mentions of the composer on pp. 53, 74, 77, and 276.

36 In the last twenty years, several scholars have provided increasingly penetrating accounts of Boulez's genuine interest in ethnomusicology in every respect, from understanding world music to embracing the rituals, instruments, and practices of musicians during his early travels in particular. While aspects of Boulez's compositional practices could be defined as Eurocentrism or cultural assimilation, his actions speak to a genuine interest in expanding his understanding above any desire for material or reputational benefit by misappropriating the music or traditions of others. See, for example, Rosângela Pereira de Tugny, "L'Autre moitié de l'art", in *Pierre Boulez: Techniques d'écriture et enjeux esthétiques*, ed. Jean-Louis Leleu and Pascal Decroupet (Geneva: Éditions Contrechamps), Peter O'Hagan, 'Pierre Boulez and the Project of "L'Orestie"', *Tempo* 61/241 (2007), and Campbell, *Boulez, Music and Philosophy*, 23–5.

37 See Iddon, *New Music*, 196–200. Iddon clarifies that Stockhausen's recommendation was made separately from Steinecke's need to replace Boulez. Although Boulez and Stockhausen had their differences by this time, Boulez still confided in Stockhausen in long, elaborate letters at least through the autumn of 1957 (particularly regarding his *Troisième sonate* and its incorporation of open form), which suggests there was still a strong connection between

at the festival, and two years after a public argument between Boulez and Stockhausen regarding Cage's *Music of Changes*.<sup>38</sup> Stockhausen's later recommendation thus amounted to a thinly veiled betrayal meant to challenge the aesthetic dominance of the Frenchman within his inner circle. The events help to explain the caustic yet vulnerable language of Boulez's attacks on Cage and his methods, as well as his changing relationship with Stockhausen and other Darmstadt composers at this time.<sup>39</sup> It is not an exaggeration to suggest that Boulez's correspondence with several composers dwindled shortly after this period due to these events.

Still other factors contribute to this narrative. Boulez was also beginning his ascent to the conducting podium. Although he had been music director of Madeleine Renaud–Jean-Louis Barrault theatre for over a decade, his first major conducting gig was not until March 1956, when he produced his own *Le Marteau sans maître* (1955) with the *Domaine musical*. Shortly thereafter, in June 1956, Boulez conducted his very first orchestral programme while touring with the Barrault theatre company in South America; this time, he was conducting Prokofiev, Debussy, and Stravinsky with the Venezuelan Symphony Orchestra. By 1958, Boulez's ambitions as a conductor were growing, and the challenges he undertook were of the highest calibre. Among these were conducting his own *Poésie pour pouvoir* (1958) for tape and multiple orchestras, itself a belated response to Stockhausen after the success of *Gesang der Jünglinge* (1956), *Zeitmasse* (1956), and *Gruppen* (1958), the latter of which Boulez conducted alongside Stockhausen and Bruno Maderna. Shortly thereafter, the efforts of William Glock and Lawrence Morton would help Boulez establish conducting opportunities in London and the United States, leading to major contracts with the BBC, London, and New York Philharmonic within about a decade.<sup>40</sup>

Boulez learned a tremendous amount from conducting his own works and those of his peers. Although he was never a fan of graphic notation, his tolerance for alternative score layouts and open musical structures waned primarily as a result of discovering the issues they caused in rehearsal as a conductor. This included his own works. His most prominent and varied experiments in open form occurred in the late 1950s and early 1960s – after his major criticisms of Cage and in parallel with his rise as a conductor. But the confluence of varied contexts and later revisions to some of these works have hidden these realities from view. If Boulez's *Troisième sonate* and his related essay 'Alea' is stressed, then his conflicts with Cage also take on a particular tone and context, as do his aesthetic positions regarding open form, solo performers, and authorship. But if one instead stresses his experiments with open form in the years *after* penning 'Alea', a deeper, more meaningful, and more individual embrace of practices comes to the surface.

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them at least until the turn of events in 1958. Furthermore, despite various ebbs and increasingly sporadic frequency, Boulez and Stockhausen continued to communicate in more or less playful and intimate terms into the early 1960s.

38 Iddon, *New Music*, 180. Iddon's anecdote is sourced from Joan Peyser, *Boulez* (New York: Schirmer Books, 1976), 121.

39 It is best not to get too wrapped in specific causal-effect chronology here: Boulez's comments on Cage are based on a multitude of factors and extend to various private letters during this time and continue through his publication of *Penser la musique aujourd'hui* in 1963.

40 For more on Boulez's rise as a conductor, see Salem, *Boulez: The Formative Years*, 274–85.

Boulez ultimately abandoned the idea of open form for practical reasons relating to the tendency of performers and conductors to pre-plan performances of open works on the one hand, and the inability to adequately rehearse them with ensembles on the other. His revisions to *Pli selon pli* align with his frustrations with open scores as a conductor and not with any ideological change of heart; indeed, in describing the experience, he seems careful to uphold the value of the open-work concept even while he admits its limitations.<sup>41</sup> It would be several years before the likes of Henry Brant and Cornelius Cardew's Scratch Orchestra would take variable notation with large ensembles to its furthest extreme. In the meantime, Boulez's conducting experience closed the door on open form for practical rather than polemical reasons.

This network of circumstances both clarifies and muddles our historical perception of an emerging idea across two continents over the course of the 1950s. It would be wrong to dilute the real differences between the so-called schools on either side of the Atlantic, but it is equally important to distinguish the techniques of serialism from either 1) charged ideological differences related to self-promotion or 2) their stylistic manifestations as more or less 'open' variations in authorial control or sonic outcomes. Although some composers embraced the flexibilities of graphic scores and freer notational practices, Cage's early open forms tended to privilege exacting notational standards regardless of his use of so-called chance procedures to compose them. Meanwhile, Boulez embraced the role of the performer in the late 1950s and early 1960s, only to give up on this mode of experimentation for practical rather than aesthetic reasons. Although they justified their aesthetics using different, even opposed philosophical sources, Cage and Boulez started their experiments towards new horizons together by combining precisely notated, set-based compositional processes with open forms. There is no mistaking that they pursued different ends. But to mistake Cage's rhetorical emphasis on 'chance' with an abandonment of rigorous compositional, organizational, and notational standards would be to succumb to Boulez's misreading of Cage's experiments in 'Alea'. Similarly, to assume that serialism had a leading role to play in the resulting stylistic distinctions between them risks conflating the dominance of some compositional techniques over a host of others.

### ***Don: open in design and construction***

Boulez's experiments with open forms reached new heights in two major works: *Pli selon pli* and the second movement of his *Structures*, Book 2 (1961).<sup>42</sup> *Pli selon pli* is often discussed in relation to Stéphane Mallarmé due to its three interior text settings labelled as 'improvisations' on the poet, with its two bookends – *Don* and *Tombeau* – inspired by individual lines from the

41 Pierre Boulez, *Boulez on Conducting. Conversations with Cécile Gilly*, trans. Richard Stokes (New York: Faber & Faber, 2003), 97–104.

42 *Pli selon pli* is often cited as a 1962 composition; however, the collection was first performed as a set in 1960 (with Hans Hosbaud conducting Eva-Maria Rogner on 13 June 1960 at the ISCM Festival in Cologne), and revisions of the pieces continued for decades, with the last published set of revisions in 1989.



poet's oeuvre.<sup>43</sup> As I argue in this section, the concept of improvisation was not limited to the central movements of the set. Instead, a philological investigation of *Don* provides insight into Boulez's openness regarding serialism's potential as a set of techniques exemplified by planning, play, and structural possibilities. Meanwhile, changes in the disposition of the work highlight the underdetermined nature of serialism as a style. Juxtaposing these two types of observations clarifies how the techniques of serialism should not be confused with a singular or consistent set of formal conventions or stylistic outcomes.

Boulez's increasing demand as a lecturer and conductor aligned with one of his most prolific and experimental periods as a composer in the late 1950s and early 1960s. There is little doubt that scheduling conflicts and limited energy were a catalyst for Boulez to reconsider his compositional process. I contend that these pressures led to his first pragmatic uses of transcription and improvisation as a means for inspiration and efficiency, from the reuse of row matrices across multiple works in the early to mid-1950s (as between *Oubli signal lapide* (1951) and *Le Marteau sans maître*, or between *L'Orestie* (1955), *Symphonie mécanique* (1955), and the *Troisième sonate*) to more overt reuses of composed material (as discussed later with *Don*, but also in the reuse of the early *Notations* in *Le Crépuscule de Yang Kouei-Fei* (1957) and *Pli selon pli*, among other instances).<sup>44</sup> These new strategies facilitated a much-needed boost in compositional speed. They also conveniently aligned with ongoing experiments in open form by shifting a core affordance of serialism from the organizational coherence between micro and macro musical structures (as in linguistic models of music) to the ability to assimilate different source materials and compositional processes into new works through related isographies (as in collage and spatialized musical heterophony).<sup>45</sup> In compositions by both Boulez and Cage, this shift resulted in new formal designs in which the input of the performer varied the predictability of a compositional outcome. It also disrupted any clear association between the early pointillistic examples of integral serialism from the virtually infinite stylistic possibilities of works composed using later serial techniques.

Boulez's first official sketches for *Pli selon pli* probably date from 1957, but fragments of its history are older. After the success of *Marteau* in 1955–6, Boulez was balancing increasing

43 As but one relevant example from this journal, see Arnold Whittall, "Unbounded Visions": Boulez, Mallarmé and Modern Classicism', *Twentieth-Century Music* 1/1 (2004); notable past investigations include Peter F. Stacy, *Boulez and the Modern Concept* (Lincoln, NE: University of Nebraska Press, 1987) and Mary Breatnach, *Boulez and Mallarmé: A Study in Poetic Influence* (Aldershot, UK: Ashgate, 1996).

44 Charting such reuses of material is a recent fad in scholarship on Boulez. See, for example, Joseph Salem, 'Boulez Revised: Compositional Process as Aesthetic Critique in the Composer's Formative Work' (PhD diss., Yale University, 2014), and Brice Tissier, 'Mutations esthétiques, mais continuité technique dans l'œuvre de Pierre Boulez' (PhD diss., Université de Montréal and Université de Paris-Sorbonne, 2011), as well as studies related to specific works in Leleu and Decroupet, *Techniques d'écriture et enjeux esthétiques* and Campbell and O'Hagan, *Boulez Studies*.

45 It is worth noting that Boulez was one of many making such a shift from Webern's linear treatments to more spatialized ones. Stockhausen stands out in documenting his transition to using the series as a means for organizing large-scale form (including 'moment form'), and Boulez's knowledge and imitation of his advancements in this area are well documented in their correspondence. (Boulez was particularly obsessed with Stockhausen's *Zeitmasse* (1956) and mimicked aspects of its durational freedoms in *Marteau*; Boulez's original *Doubles* (1957) and *Poésie pour pouvoir* (1958) can easily be seen as stand-out reactions to Stockhausen's *Gesänge der Jünglinge* (1956) and *Gruppen* (1958), and the correspondence between Stockhausen's *Klavierstück XI* and Boulez's *Troisième sonate* have already been mentioned.)

numbers of conducting opportunities, publications, and public lectures. He was also offering a new work to Wolfgang Steinecke and the Darmstadt summer festival. Titled *Strophes*, it was pitched as a dialogue for flute and ensemble that foreshadowed aspects of open formal structures. But circumstantial pressures coincided with Boulez's inability to compose such an ambitious project; instead, his efforts led to an unpublished work for solo flute that lacked an open form and heavily borrowed most of its musical material from his recent work for theatre, *L'Orestie* (1955). *L'Orestie* already shared an organizational matrix with two roughly contemporaneous works – *Symphonie mécanique* (1955) and the *Troisième sonate*. Its reuse in *Strophes* (and later, in *Pli selon pli*) established a broad network of serial techniques across a range of stylistically varied contexts. Thus, while these connections are not aurally apparent to the listener (*Strophes* was likely never performed, and *L'Orestie* never published), their hermeneutic relevance for *Pli selon pli* is significant.<sup>46</sup>

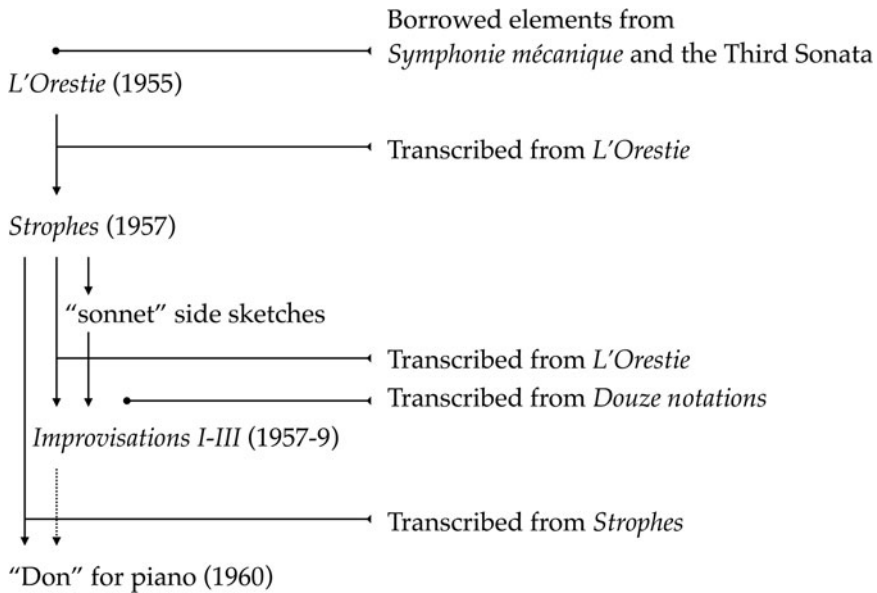
The musical associations between these works include a variety of serial practices that vary in their transparency. First, Boulez annotated a manuscript of *L'Orestie* with coloured pencil, labelling sections based on their instrumental groups that were then borrowed wholesale as the formal building blocks of *Strophes*. It is clear that this use of borrowed material dramatically accelerated the compositional process, with some passages appearing as note-for-note transcriptions from one score to the next. However, Boulez was then inspired to try a new serial technique during the compositional process; he used this new technique to systematically transform the polyphonic instrumentation from *L'Orestie* into a compound solo line for flute in *Strophes*. Ironically, this surge of creative energy almost certainly slowed the compositional process back down: the insertion of this new technique corresponds with more complex figuration and longer formal sections (including a massive coda that dwarfs earlier sections of the work), and it may be why the work never made it to Darmstadt. The new serial conversions began informally in a set of marginal sketches, but became formalized when Boulez started to label the results as 'sonnets'.

Boulez's improvised 'sonnets' amounted to five or six small melodic statements.<sup>47</sup> He annotated four of them with references to the Mallarmé *Improvisations*, which he began composing soon thereafter (Figure 1).<sup>48</sup> This small gesture immediately united these sketches with the

46 I have discussed *Strophes*, *L'Orestie*, and related works with direct reference to archived sketch materials and related primary sources in Joseph Salem, 'Teasing the Ever-Expanding Sonnet from Pierre Boulez's Musical Poetics', *Music Theory Spectrum* 41/2 (2019).

47 On the 'sonnets' more specifically, see again Salem, 'The Ever-Expanding Sonnet', which adds new sketch findings to augment the work of Robert Piencikowski and Erling Guldbrandsen. See Robert T. Piencikowski, "'Assez lent, suspendu, comme imprévisible": Quelques aperçus sur les travaux d'approche d'Éclat', *Genesis* 4 (1993). For his Guldbrandsen's most succinct treatments in English, see Erling E. Guldbrandsen, 'New Light on Pierre Boulez and Postwar Modernism: On the Composition of Improvisation I–III sur Mallarmé', in *In the Plural: Institutions, Pluralism, and Critical Self-Awareness in Contemporary Music*, ed. Søren M. Sørensen (Copenhagen: University of Copenhagen, 1997); and more recently, Erling E. Guldbrandsen, 'Casting New Light on Boulezian Serialism: Unpredictability and Free Choice in the Composition of *Pli selon pli* - portrait de Mallarmé', in *Pierre Boulez Studies*, ed. Edward Campbell and Peter O'Hagan (Cambridge: Cambridge University Press 2016).

48 The annotations included title references to possible movements and coloured brackets, which indicated serial subdivisions of the pitch material. See Boulez Sammlung G, 2b, 1–3, Paul Sacher Stiftung, Basel, Switzerland.



**Figure 1** Draft philological network connecting *L'Orestie*, *Strophes*, and *Improvisations* I–III.

poetics of Mallarmé, the politics of open form, and an altogether new set of commissions, all within striking distance of his essay 'Alea' in 1957.

Of course, improvisations are a far cry from the so-called aleatory of coin tosses. First and foremost, Cage's *I Ching* methods were incredibly time consuming, whereas Boulez's repurposing of previously composed material was a tactic designed (in part) to speed up the compositional process as competing responsibilities surged. Where the two approaches overlap is in how the seeming automation of early organizational phases was reshaped by later compositional strategies to control the resulting product. Just as Cage mediated his *I Ching* processes through several additional layers of organization, so Boulez recycled some of his musical material through multiple serial processes that radically transformed it, resulting in ordered pitch sequences that violated the intervallic relationships of their original contexts. Multistage serial processes such as these demonstrate the fine line between Cage's 'chance' and Boulez's 'choice'. They also help to distinguish serialism as a set of techniques and serialism as a genre: if composers are continually inserting corrections to serial processes to control the resulting sound of their works, then the stylistic consistency of serial techniques is themselves diminished. If this sounds outlandish, remember that Boulez 1) referenced Mallarmé's modernist poetics as a means for promoting non-linear forms, 2) called his transcriptions sonnets, 3) labelled them improvisations, and 4) processed them in new and different ways in each *Improvisation*. There is little reason to doubt that the poetics were guiding his use of serial techniques and not the other way around.

The need for compositional flexibility was magnified when Boulez received his next major commission roughly two years later. On 6 April 1959, a patron of the Donaueschingen music festival, Prince Max Egon zu Fürstenberg, died. The prince's death led to a series of

commissions by the music director of the festival, Heinrich Strobel, each of which would be featured at the start of the next festival series the following October. Just months before, on 1 January 1959, Boulez moved permanently from Paris to Baden-Baden to be the resident composer of the festival and part-time conductor of the Sudwestfunk orchestra at Strobel's request. Given his new residence – figuratively with the orchestra and literally in living across the street from Strobel – Boulez was first in line to receive the commission; Igor Stravinsky and Wolfgang Fortner were also contacted to write their own *tombeaux* for the fallen patron.

Boulez began sketching this new work almost immediately. In fact, his first sketches appear on small pieces of note paper with a business header that identifies the location as the *Haus Rubens* in Baden-Baden, a fact that suggests Boulez may have literally begun jotting things down while on or near the telephone.<sup>49</sup> Significantly, the title of *Don* also appears alongside two quotations from Mallarmé, prompting the thought that Boulez planned to multitask the commission at an early stage (Figure 2).<sup>50</sup> Although these preliminary sketches led to Boulez's fulfilment of the commission under the unwieldy title of *Tombeau: a la memoire du Prince Max Egon zu Fürstenberg*, the more significant outcome is that he ultimately dropped the Prince's name when he revised the work to become *Tombeau*, the final piece of *Pli selon pli*.

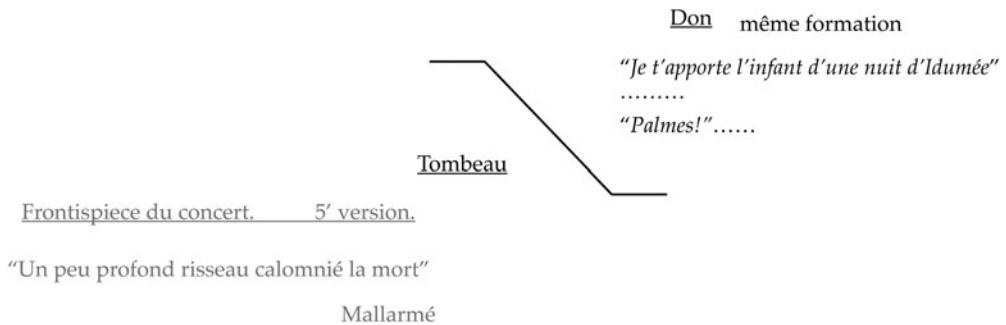
Boulez continued sketching and composing, and it is his later sketches that reveal the gestation of *Don* as a complex formal complement to *Tombeau*. Appearing as a small sketch on an index card, Boulez began visualizing an interlaced harmonic structure binding the two bookends of *Pli selon pli*. Transcribed as Figure 3, this sketch transforms what seemed like a page divide into a formal outline interlocking the movements along a diagonal gradient. In short, although the original *Tombeau* was a specific commission for a festival patron, it is clear that Boulez opted to associate it with his ongoing Mallarmé project from the start; then, he went a step further and opted to use it as a catalyst for drafting another bookend for the cantata.

However, circumstances again got the best of Boulez. The first version of *Don* was actually a work for piano and voice. In this other version of *Don* – here referred to as 'Don' for piano despite its inclusion of a small vocal part – Boulez followed the model of his *Improvisations* rather than *Tombeau* by re-using several parts from his earlier *Strophes*. In fact, he chose an even faster route, bypassing the melodic sonnets to directly transcribe the melodic lines of *Strophes* for the new piano work in ways that parallel his original repurposing of *L'Orestie* for solo flute.<sup>51</sup> All this ties 'Don' for piano back to *L'Orestie* and the *Improvisations* (Figure 4). Throughout, this network is characterized by transcription as a key compositional strategy, which stands in opposition to the preceding isomorphic relationship sketched between *Don* and *Tombeau*.

49 Pierre Boulez, *Pierre Boulez: Tombeau. Facsimiles of the Draft Score and the First Fair Copy of the Full Score*, ed. with intro. Robert T. Pienikowski (Vienna; London: Universal Edition, 2010), 25. The following discussion of *Tombeau* is derived in part from Pienikowski's account, which include facsimiles of several sketches.

50 It is worth noting, however, that 'Don' appears in a different colour ink, implying that Boulez may have returned to the sketch at a later time in considering how the movements might relate to one another. The originals for several of these sketches can be viewed as facsimiles in Boulez, *Tombeau*.

51 For specific primary-source evidence of these processes see Salem, 'The Ever-Expanding Sonnet'.



**Figure 2** Partial diplomatic transcription of Boulez’s first sketch of *Tombeau* (Paul Sacher Stiftung, Boulez Sammlung G,3f,4). Grey portions are in red on the original. Not shown: page letterhead and additional sketches, in red, of preliminary instrumentation and stage layouts of instruments.

Don

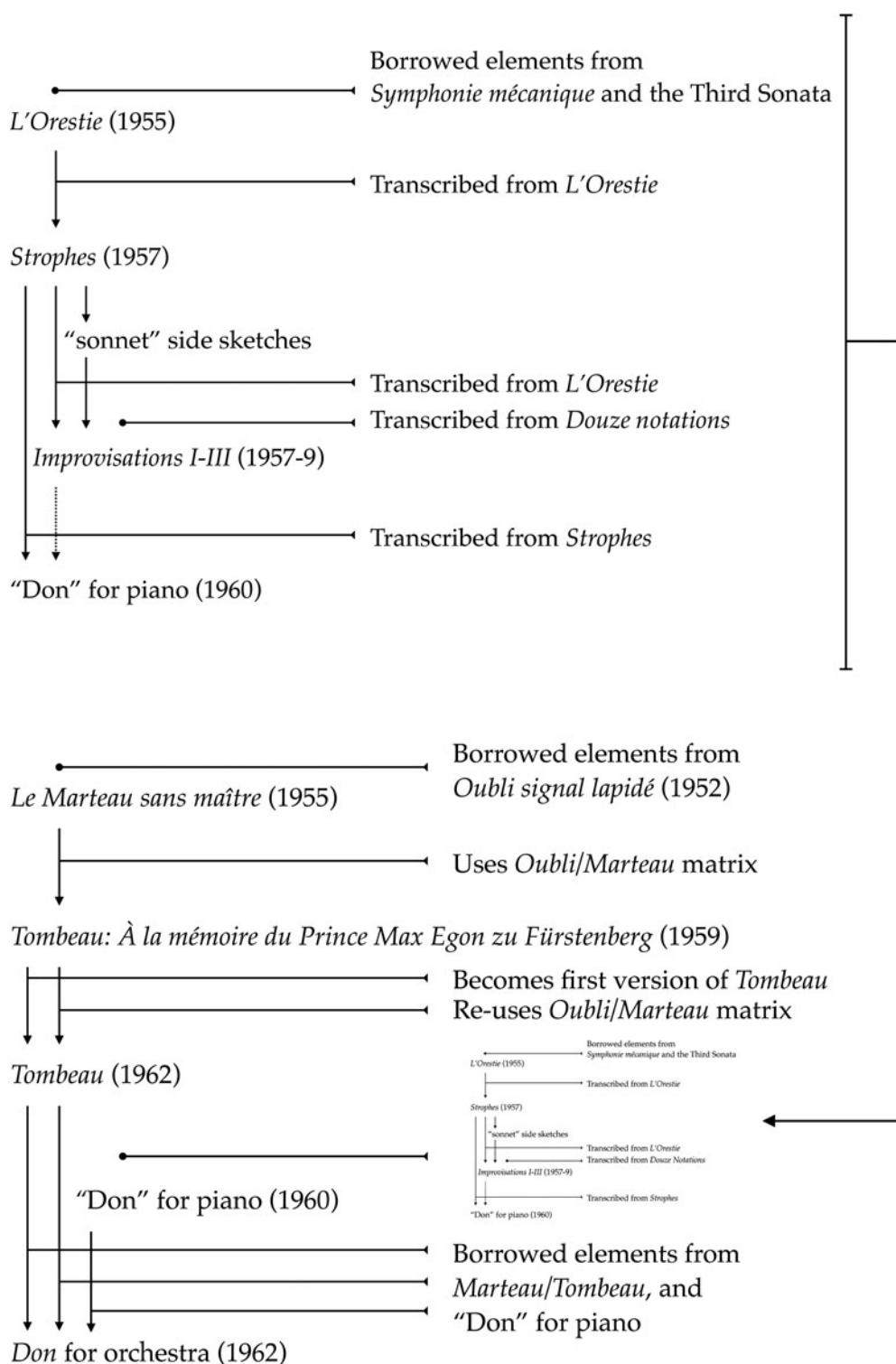
Un peu profond ruisseau calomnié-la mort	$\overbrace{1-2}$	$\overbrace{1-3}$	$\overbrace{1-2}$	1 <sup>1<sup>er</sup></sup>	2 <sup>1<sup>er</sup></sup>	3 <sup>1<sup>er</sup></sup>	Un peu profond ruisseau calomnié la mort
	$\overbrace{1-3}$	$\overbrace{1-2}$	$\overbrace{1}$	2 <sup>2<sup>e</sup></sup>	3 <sup>2<sup>e</sup></sup>	1 [ $\begin{cases} 1^{1er} \\ 2^{2e} \\ 3^{3e} \end{cases}$ ligne	
	$\overbrace{1-2}$	1 <sup>3<sup>e</sup></sup>	2 <sup>3<sup>e</sup></sup>	3 <sup>3<sup>e</sup></sup>	1 [ 3 <sup>e</sup> ligne	2 [ $\begin{cases} 1^{1er} \\ 2^{2e} \\ 3^{3e} \end{cases}$ ligne	
	1 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$	2 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$	3 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$	1 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$ ligne	2 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$ ligne	3 [ $\begin{cases} 1^{1er} \\ 2^{2e} \end{cases}$ ligne	
	2 [ $\begin{cases} 1^{1er} \\ 2^{2e} \\ 3^{3e} \end{cases}$	3 [ 3 <sup>e</sup> ligne	1 [ 3 <sup>e</sup> ligne	2 [ 3 <sup>e</sup> ligne	3 [ 3 <sup>e</sup> ligne	$\overbrace{3-2}$	
	3 [ $\begin{cases} 1^{1er} \\ 2^{2e} \\ 3^{3e} \end{cases}$	1 [ 2 <sup>e</sup> ligne	2 [ 2 <sup>e</sup> ligne	3 [ 2 <sup>e</sup> ligne	$\overbrace{3-2}$	$\overbrace{1-3}$	
	1 [ 1 <sup>er</sup> ligne	2 [ 1 <sup>er</sup> ligne	3 [ 1 <sup>er</sup> ligne	$\overbrace{3-2}$	$\overbrace{1-3}$	$\overbrace{1-2}$	

Tombeau

**Figure 3** Partial diplomatic transcription of one of multiple formal outlines speculating on the potential formal relationship between *Don* and *Tombeau* (Paul Sacher Stiftung, Boulez Sammlung G,3f,3).

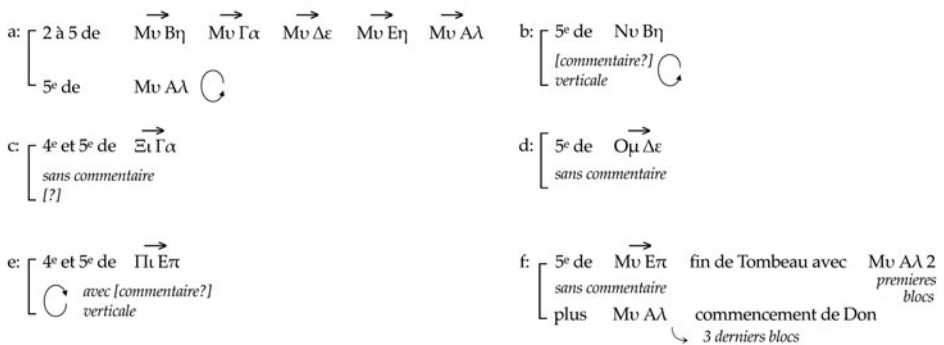
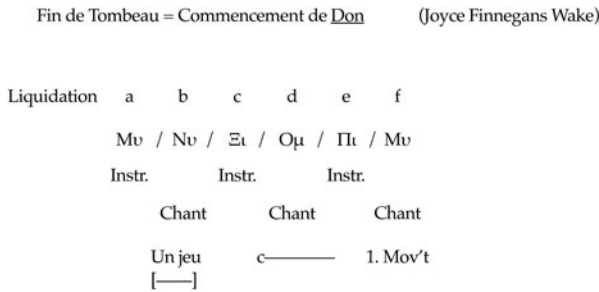
While there is more to this first version of *Don*, there is still much to report about the later orchestral version. Initial sketches that relate *Tombeau* to *Don* are based on re-using harmonic blocs from *Marteau*, which were themselves borrowed from an earlier work for chorus titled *Oubli signal lapidé* (1951). Later sketches refine this relationship, as in Figure 5. Here, Boulez provides specific readings of the Greek nomenclature used to organize the *Marteau* matrix into columns and rows of sequences for use in *Don*.<sup>52</sup> The sketch also specifically notes its

52 Several scholars have written on the *Marteau* matrix and *blocs sonores*, including my own summary of notable precedents in Joseph Salem, ‘Boulez’s *Künstlerroman*: Using *blocs sonores* to Overcome Anxieties and Influence in *Le Marteau sans maître*’, *Journal of the American Musicological Society* 71/1 (2018).



**Figure 4** Revised philological network for 'Don' for piano and *Don* for orchestra.



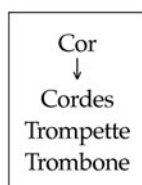
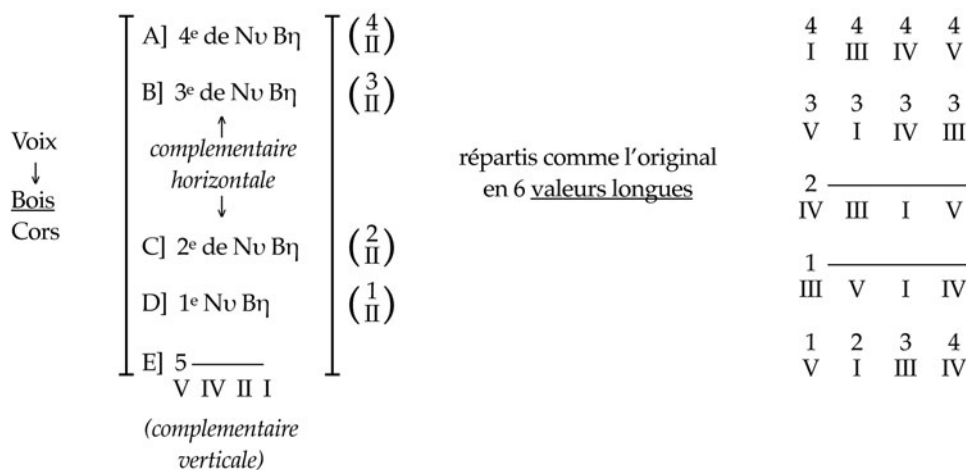


**Figure 5** Diplomatic transcription of a sketch of the formal relationship between *Don* and *Tombeau* according to the Greek nomenclature of the *blocs sonores* matrix used in *Le Marteau sans maître* (Paul Sacher Stiftung Boulez Sammlung G,3b,4).

formal isography with *Tombeau* (which features similar source borrowings from *Marteau*), although the actual progression of sequences has small variations when compared with that work. One such variance is the fact that *Don* begins on the second term (Mv Bη) of the five-unit sequence that begins *Tombeau*, which itself begins with Mv Αλ.<sup>53</sup> More drastic is Figure 6. Here, Boulez expands group ‘e’ from *Tombeau* featured in the previous sketch as the source for *Don*’s coda. This implies that the form is cut short – the isography connecting the two pieces is disrupted as an entire section, group ‘f’, is jettisoned from *Don* but maintained in *Tombeau*. The change is rationalized by the sketch annotations in Figure 5: the section that marks the end of *Tombeau* links to the beginning of *Don* by providing its missing first sequence, Mv. This feature helps to account for the reference to Joyce at the top of the sketch, as *Finnegans Wake* begins and ends with a bifurcated sentence, just as the missing first element of the sequence that begins *Don* appears as an incomplete fragment at the end of *Tombeau*.<sup>54</sup> (What the annotations do not rectify is that *Don* is still one entire section short by comparison!)

53 Piencikowski provides an analysis of the principal groups of *Tombeau* using the *Marteau* harmonies. His analysis would suggest that some slight variations occur between the two schemas. See Boulez, *Tombeau*, 30.

54 I provide a more detailed overview of these sketches and their relation to the coda in Joseph Salem, ‘Boulez Revised’. Subsequent publications – including Emily J. Adamowicz, ‘A Study of Form and Structure in Pierre Boulez’s *Pli selon pli*’ (PhD diss., Western University, 2015), and Marina Sudo, ‘More than Meets the Eye: Derivations and Stratification

e] ( $\Rightarrow$  b)

Antiphonie arrangée dans l'ordre CDAB E } ensemble  
alternés ABCD E

Renversement sur pivot de l'original: ré# / mi ♮  
sur même hauteurs que l'original (+ mi défectif)

Guitare → Mm, Piano, etc. —

Principe: Imitation (recto, contraire, défactive)  
Complémentaire chromatiques.

**Figure 6** Diplomatic transcription of a sketch of the form of the coda to *Don* (Paul Sacher Stiftung Boulez Sammlung G,3b,3).

An additional sketch provides further insight – or frustration – into *Don*'s hybrid design. [Figure 7](#) features elements from *L'Orestie/Strophes* and the *Improvisations* with no overt reference to *Marteau*. Aspects of this outline are traceable in the score. The significance of this sketch is as follows: while it is tempting to privilege isomorphic relationships between *Tombeau* and *Don* based on the borrowed *Marteau* harmonies and the elegant, inversionsal

in Boulez's "Don" (1962)', *Music Analysis* 39/3 (2021) – provide considerably more detailed analysis of the borrowed *Marteau* harmonies across *Don* as a whole, including the connection between *Finnegans Wake* and this particular adjustment in the use of *Marteau* harmonies.

a]      b] citation: 3<sup>e</sup> Improv. Instr.      c] Str. 1b      d] citation: 3<sup>e</sup> / 2<sup>e</sup> / 1<sup>e</sup> Improv.  
Voc.    Voc.    Voc.  
Instr.

e]      Str. 1c. 2b. 3b. 1d citation: 2<sup>e</sup> / 1<sup>e</sup> Improv.      f] Str. 2d. 3d. 1h      Palmes  
Instr.      SONNET

carillons 6/5      Str. 1g      carillons 4/3      Str. 1f. 3c. 2c. 1c      carillons 2/1

Str. 3a. 2a. 1a.  
↓  
L'Azur! L'Azur! L'Azur! L'Azur!

FIN

**Figure 7** Diplomatic transcription of an intermediate sketch of the form of *Don* (Paul Sacher Stiftung Boulez Sammlung G,3b,2). Note the combination of elements from the Improvisations and *Strophes/L'Orestie* (labelled 'Str.').

relationships stressed in Boulez's notecard sketches, [Figure 7](#) reminds us that 'Don' for piano has legitimate associations backward to *L'Orestie*, *Strophes*, and their reuse in the *Improvisations*. The irony is that we do not hear these relationships: in the cases where stylistic elements are most closely shared (*L'Orestie*, *Strophes*, 'Don' for piano), the works remain unpublished, and in the other cases, the nature of the borrowings is at the organizational level of serial processes, which is precisely the level that has no consistently prescribed stylistic (read: aural) connotations.

Although I have yet to discover a strict chronology for how Boulez completed *Don*, I want to reiterate that I have no reason to doubt that ‘Don’ for piano was completed before *Don* for orchestra. This raises questions as to when the *Tombeau* sketches were annotated (remember that [Figure 2](#) was sketched in two colours of ink, which suggests the annotations regarding the isography with *Don* were made separately). While some of my claims are not currently falsifiable, I believe they have enough integrity to challenge any hermeneutic privileging of the isomorphic relationship between *Don* and *Tombeau* as more significant than the myriad of poetic associations that interlace Mallarmé, the ‘sonnets’, the *Improvisations*, and even *L’Orestie* with the opening of *Pli selon pli*.

Indeed, the combination of such a heterophony of sources represents a major shift in Boulez's conception of serialism. The work appears as a collage of different elements – some organizational, others transcribed – that open up the compositional process from the inside out. Furthermore, the structure and its various elements incorporate a large degree of spontaneity, even improvisation. Robert Piencikowski's evasive speculations for *Tombeau* further ground this perspective: he first questions why *Tombeau* was not also based on *L'Orestie* or *Strophes* before wondering if *Marteau's* harmonies instead may have provided a degree of separation between the two projects as well as an accelerated path to

completion.<sup>55</sup> Given that Boulez frequently fell behind on projects when new serial derivations spun out of control,<sup>56</sup> separating the two projects may have been required to keep *Tombeau* on track as an important commission from his new boss and neighbour, Strobel. The parallels to *Don* are multitudinous. In reviewing the different versions of *Don*, it is easy to see how the use of borrowed harmonies provides exactly the same impetus to bring it to completion. Without these harmonies, 'Don' for piano was a loosely defined collage of shared materials that bound it to the *Improvisations*; with them, *Don* for orchestra gained a structural lattice that accelerated its completion and established it as a formal complement to *Tombeau* with an additional connection to *Marteau*, all without severing its existing ties.

Here, the exception proves the rule. In a recent article on *Don*, Marina Sudo trumps my previously circulated explanation of a key sketch that reprocesses the borrowed *Marteau* harmonies for the coda of *Don* (see Figure 8).<sup>57</sup> Sudo provides a brilliant explanation for a third component of the sketch that I failed to decipher in an earlier publication (we seem to agree on the first two components, although Sudo does not confirm this). We also differ in that I stress the playful whimsy of the sketch while apologizing for my shortcoming, while Sudo uses her code-breaking skills to assert the serial organicism of *Don*'s relation to *Tombeau* and other borrowed elements (from *Improvisation III*). Despite the exciting virtuosity on display in her work, I still see Boulez's three-way reprocessing of the *Marteau* harmonies in this particular sketch as a mischievous *distancing* of their structural relation to *Tombeau* and *Marteau* rather than a reification of such ties.

It is relevant, in this context, to consider that Boulez likely reprocessed his sketch shortly after completing *Improvisation III*, which itself was based on a number of serial re-processings of borrowed passages from *L'Orestie*. As I have demonstrated elsewhere, this tendency to repurpose (and reprocess) self-borrowings is an increasingly predictable tic of the composer during his formative period that accelerated as he began to reuse previously composed material across different works.<sup>58</sup> In this case, *Improvisation I* was short and was mostly transcribed from other sources, *Improvisation II* contains some elements of reprocessing (especially of the vocal parts), and *Improvisation III* was a veritable celebration of applying new serial processes to borrowed material.<sup>59</sup> By comparison, 'Don' for piano is more closely aligned with the type of transcription found in the earlier improvisations, whereas some of the borrowings in *Don* align more with the last *Improvisation*. Meanwhile, the materials borrowed for the coda of *Don* – the music relevant to the sketch in question and to *Don*'s status as an

55 Boulez, *Tombeau*, 29.

56 To name but a few missed deadlines from the same period: Boulez failed to complete *Polyphonie X* (1951) *Structures*, Book 1 (1952; actually completed 1955), *Marteau* (actually completed after its 1955 premiere in 1956), *Structures*, Book 2 (both chapters were late, with the second appearing five years after the first), *Stropes*, which was never completed, *Doubles* (1957), which remains incomplete but was partially completed as *Figures-Doubles-Prisms* roughly a decade later, *Marges* (1958), which was never completed, *Improvisation III*, which missed two different scheduled premieres, and the *Troisième sonate*, which was never completed.

57 Sudo, 'More than Meets the Eye'.

58 See Joseph Salem, 'Serial Processes, Agency and Improvisation', in *Boulez Studies*, ed. Edward Campbell and Peter O'Hagan (Cambridge: Cambridge University Press, 2016).

59 I provide strong evidential support of these claims in Salem, *Boulez: The Formative Years*.



**Figure 8** A sketch representing the reprocessing of harmonies from *Marteau* for use in the coda of *Don* (Paul Sacher Stiftung Boulez Sammlung G,3b,5). The alphabetic letters on the left relate to the different sections of the open-format coda.

open work – are perhaps the most obfuscated of all. In this sense, the ending of *Don* – likely the last composed portion of *Pli selon pli* – is ironically more aligned with Boulez’s stylistic denial of borrowed materials than his celebration of them, while the first version of ‘Don’ for piano – the potential source of any ‘organic’ conception, whether poetic or structural – imitates the more transparent reliance on transcription and borrowing that characterize *Improvisation I*.

By this point, the reader may have surmised that the actual ‘open’ formal structures in *Don*’s coda barely compete with increasing openness in Boulez’s creative process throughout the late 1950s. To succinctly review: the relevant ‘open’ structures appear in the published coda of the 1967 score as ten sections labelled AaBbCcDdEe. While the open score is one of several that demonstrate Boulez’s many different approaches to the concept, it is not a particularly interesting case. Performers link the alphabetic labels according to directions in the score to get to the end. By the time the original score was published in 1967, Boulez had effectively revised the work by establishing one preferred pathway as a conductor in performance.<sup>60</sup> This preferred pathway was not represented in print, however, until a revised score appeared in 1989 (with other significant changes).<sup>61</sup> To summarize my over-arching point: the implication is that the philology of *Don* is a far more powerful demonstration of the inherent

60 Pierre Boulez, *Don* (Vienna: Universal Edition, 1967). This publication is catalogued as Nr. 13614.

61 I discuss specific alterations to the revised score in Joseph Salem, ‘Boulez Revised’.

openness of serialism as a set of compositional techniques than its ‘open’ structures were of some new stylistic horizon for serialism as a genre.

Returning to historiography, I value the reverse engineering that is possible with sketch studies, and it tends to be the starting place of my work on Boulez. In the case of *Don*, none of the preceding research would have been possible without access to his sketches and my serial analysis of his compositional techniques. I also want to be clear that I celebrate the terrific work of Emily Adamowicz and Marina Sudo on the movement. But the narrative I construct describes how *Don* was composed as the result of creative thinking involving a multitude of works and contexts. This does not deny that Boulez sought interesting, ‘purely musical’ relationships in his sketches. But it does balance this perspective with a creative attitude that overtly put ‘serialism’ as a set of flexible techniques in the service of ‘serialism’ as a new, progressive set of stylistic possibilities in form, materiality, and even the work concept itself. Doing so challenges common stereotypes that typically (and unjustly) use the term ‘serialism’ as a derogatory term in service of the rhetoric of autonomy, or that try to associate ‘serialism’ with the sound of a few choice experiments in the early 1950s.

And there it is. Is ‘serialism’ in the preceding sentence a set of compositional techniques or a musical style? Assuming one or the other is as problematic for the New York School as it is for the Darmstadt serialists – and for the many set-based, process based compositional strategies of composers in later decades and across varied geographies. In many cases, the most radical innovations in serialism were not surface-level strategies that ‘opened up’ the ‘rigidity’ of score notation with performance choice, but the organizational tactics that distanced the techniques of serial composition from any predetermined stylistic outcome. This should give us pause regarding the use of the term ‘serialism’ and its problematic nature as a double entendre.

As an alternative, we could follow the spirit of Boulez and Cage’s early correspondence and embrace serialism as a set of techniques used to open up music to new possibilities rather than focusing on its appropriation as an antithetical node to the many competing ‘isms’ of twentieth-century music (where competition need not be a factor!). Certainly, an increasing number of specialists have embraced exactly this perspective. Doing so helps correct the misleading rhetorical strategies used to diminish the influence of serial techniques among composers so vehemently opposed to any association with its ill-deserved stylistic connotations. Celebrating such revisionist histories also helps recontextualize composers’ contributions according to their creative processes rather than their associated rhetoric. Finally, it reminds us of a simple but relevant adage for historiography: sometimes actions really do speak louder than words.

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