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Chapter 11

Vestiges of Twelve-Tone Practice as Compositional Process in Berio's *Sequenza I* for Solo Flute

Irna Priore

The ideal listener is the one who can catch all the implications; the ideal composer is the one who can control them.

Luciano Berio, 18 August 1995

Introduction

Luciano Berio's first *Sequenza* dates from 1958 and was written for the Italian flutist Severino Gazzelloni (1919–92). The first *Sequenza* is an important work in many ways. It not only inaugurates the *Sequenza* series, but is also the third major work for unaccompanied flute in the twentieth century, following Varèse's *Density 21.5* (1936) and Debussy's *Syrinx* (1913).¹ Berio's work for solo flute is an undeniable challenge for the interpreter because it is a virtuoso piece, it is written in proportional notation without barlines, and it is structurally ambiguous.²

It is well known that performances of this piece brought Berio much dissatisfaction, a fact that led to the publication of a new version by Universal Edition in 1992.³ This new edition was intended to supply a metrical understanding of the work, apparently lacking or too vaguely implied in the original score. However, while some aspects of the piece have been clarified by Berio himself,

¹ A three-note chromatic motif has been observed running as a unifying thread in all three works. See Cynthia Folio, 'Luciano Berio's *Sequenza for Flute*: A Performance Analysis', *The Flutist Quarterly*, 15/4 (1990), p. 18.

² The observations regarding the difficulty of the work were compiled from informal interviews conducted between autumn 2003 and spring 2004 with professionals teaching in American universities and colleges, to whom I am indebted. In particular, I would like to thank Brooks de Wetter-Smith and Richard Hermann for their invaluable advice.

³ See Chapter 1 in this volume by Cynthia Folio and Alexander Brinkman for a more detailed discussion of the circumstances leading to the publication of the 1992 score.

others remain obscure. The work still poses a great challenge to flute students, professionals and teachers alike, not only because the metric and note values are complex, but also because the compositional language is not easily grasped.

This study offers a structural analysis of the work in order to shed some light on a piece that has suffered from historical mystification, largely because of its seemingly ambiguous musical language. Rhythm, proportional notation and performance practice have been critically discussed elsewhere;⁴ what is presented here is an analysis of the work based on ideas of form, motivic unification and compositional language as they relate to the opposing compositional aesthetics of the 1950s.

History and its stories: Composition in the 1950s

Berio's early musical studies were initially limited by the post-war environment in Italy. His introduction to the music of the twentieth century came in 1946, when he first heard Schoenberg's *Pierrot Lunaire*.⁵ Independently, he investigated other works of the Second Viennese School, but from 1950 it was the influence of the teaching and the music of Luigi Dallapiccola (1904–75) that shaped his early compositional language. Although Berio was not exclusively committed to one technique over another, serialism was the central organizational principle of his works in his early days. As David Osmond-Smith comments:

In [Dallapiccola's] scores, Berio found a striking demonstration of the generative impetus that serial matrices can give to melodic invention. But he was never greatly enthralled by the impeccable musical geometries of the Weberian tradition ... Berio took on board the exigencies of serial orthodoxy only in as much as they suited his creative needs.⁶

Another important aspect of Berio's formative years was his involvement with the Darmstadt School. His first trip to the annual summer school at Darmstadt took place in 1954 and the second in 1956, where he presented his *Cinque Variazioni* (1953) and *Nones* (1953–54). There he met several important composers, including his contemporaries, Pierre Boulez and Karlheinz Stockhausen. This generation of young composers was particularly interested in total serialism, the application of the twelve-tone system to all aspects of the work. Boulez's essay 'Schoenberg is

⁴ See Claudia Andersen, 'An Operatic View of *Sequenza*', *Flute Talk Magazine*, 24/2 (2004): 12–15; Robert Dick, 'Berio *Sequenza*', *Larry Krantz Flute Pages* (2003), accessed 11 September 2003 at <http://www.larrykrantz.com/rdick2.htm#bseq>; Aralee Dorough, 'Performing Berio's *Sequenza*', *Flute Talk Magazine*, 19/7 (2000): 11–13; Cynthia Folio, 'Luciano Berio's *Sequenza for Flute*'; and Harvey Sollberger, 'Luciano Berio's *Sequenza for Solo Flute*', *Flute Talk Magazine*, 6/2 (1986): 12–18.

⁵ David Osmond-Smith, *Berio* (Oxford/ New York, 1991), p. 4.

⁶ *Ibid.*, p. 6.

Dead' (1952) was instrumental in disseminating the group's philosophy.⁷ In this essay, Boulez acknowledges Schoenberg's discovery of serialism, but condemns him for 'creat[ing] works of the same nature as those of the old sound-world which he had only just abandoned.'⁸ Boulez goes so far as to say that it is not possible to test the new technique of serialism without leaving behind nineteenth-century form, structure and 'the global architecture of the work ... The two worlds [of nineteenth-century form and serialism] are incompatible.'⁹ Boulez challenges his audience by asking:

How can one associate oneself unreservedly with an output [Schoenberg's] that displays such contradictions, such illogic? ... What are we to think of Schoenberg's American period, which shows utter disarray and the most wretched disorientation? ... From now on technical rigour is abandoned.¹⁰

Boulez's dissatisfaction, although aimed at Schoenberg, was in fact directed towards his contemporaries and the way the new generation of composers approached the twelve-tone system. To Boulez, it was not enough to use pitch as the main element of serial technique: instead, all aspects should be considered. He concludes his argument by asserting that 'it is not leering demonism but the merest common sense which makes me say that, since the discoveries of the Viennese School, all non-serial composers are *useless* (which is not to say that all serial composers are useful).'¹¹ Boulez asserts how the new generation of composers should treat aspects of the music other than pitch serially, suggesting that serial process could equally be applied to the generation of structure, as well as to duration, dynamics, attack and timbre in a more holistic and creative approach to serial procedure: '[perhaps] we might expect of a composer some imagination, a certain measure of asceticism, a bit of intelligence, and finally a sensibility which will not blow away in the first breeze.'¹²

As a result, Boulez, together with Stockhausen, scorned or treated with indifference any composer who did not adhere to their compositional philosophy or was not part of their group. Berio was greatly impressed by Boulez's writings, not only at the time but throughout his life.

Although the Darmstadt School was one of the most progressive movements of the time, it was confronted with the emergence of chance music, which John Cage had been pursuing in America since the 1940s. Cage had met Boulez in Paris in 1949 and after Cage's return to America, they maintained a steady flow of

⁷ Reprinted in Pierre Boulez, *Stocktakings from an Apprenticeship*, collected and presented by Paule Thévenin, trans. Stephen Walsh (Oxford, 1991), pp. 209–14.

⁸ Ibid., p. 212.

⁹ Ibid.

¹⁰ Ibid., p. 213.

¹¹ Ibid., p. 214.

¹² Ibid.

communication through the series of letters they exchanged until 1954.¹³ Initially, they engaged in friendly conversation but, little by little, their differences amounted to an obstacle too great to cross: total indeterminacy and the total control of strict serialism were fundamentally incompatible. As early as 1951, Boulez wrote to Cage: 'The only thing, forgive me, which I am not happy with [in Cage's *Music of Changes*], is the method of absolute chance (*by tossing the coins*). On the contrary, I believe chance must be extremely controlled.'¹⁴ Although he had visited Europe on three previous occasions, the only year Cage attended Darmstadt during this period was in 1958, after his disagreements with Boulez had already become public. He was scheduled to perform *Music of Changes*, but the performance was cancelled and instead he delivered three infamous lectures. The first lecture discussed *Music of Changes*; the second publicly criticized Stockhausen, asserting that his use of indeterminacy in *Klavierstück XI* was altogether unnecessary and ineffective; his third lecture attacked the Darmstadt School composers themselves for their fixation on the total control of the musical process, suggesting that they were 'stupid and unable to listen' and asking, 'if one of us says that all twelve tones should be in a row and another says they shouldn't, which one of us is right?'¹⁵ As Christopher Shultis comments, 'no other event in Darmstadt's history ever generated more controversy than Cage's 1958 lectures.'¹⁶

Berio appears to have been initially distanced from the passionate intellectual arguments between Boulez and Cage regarding the main compositional currents of that decade. In 1952, the year of Boulez's article 'Schoenberg is Dead', Berio composed only *Study*, for string quartet. The following years, he stayed in Milan, producing few if important works, while at the same time actively pursuing his electronic studio research at the RAI Studio di Fonologia with Bruno Maderna. In 1957, Berio was commissioned by Gazzelloni to write a miniature flute concerto, which Gazzelloni premiered with the Ensemble du Domaine Musical, directed by Boulez; and the following year, during a residency at the Darmstadt Institute, *Sequenza I* for solo flute was written and dedicated to Gazzelloni. These facts may lead us to speculate that Berio sided with the European side of the argument at that time, although Cage's impact and ideas did not go unnoticed by Berio.¹⁷

For Berio, reconciliation between freedom and total control came with a prominent literary scholar from Italy, Umberto Eco. Eco proposed a new approach to structure, the 'open work', which he defined as:

¹³ The letters are collected in a series called: *The Boulez-Cage Correspondence*, ed. Jean-Jacques Nattiez and Robert Samuels (Cambridge, 1993).

¹⁴ Quoted in Christopher Shultis, 'Cage and Europe', in David Nicholls (ed.), *The Cambridge Companion to Cage* (Cambridge, 2002), pp. 20–40, p. 35.

¹⁵ Ibid., p. 36.

¹⁶ Ibid., p. 38.

¹⁷ For example, in November 1958, Berio invited Cage to Milan to work at the RAI Studio di Fonologia, where Cage composed *Fontana Mix* (dedicated to Berio and Cathy Berberian) and *Aria* (dedicated to Berberian).

one that 'produces in the interpreter acts of conscious freedom, putting him at the center of a net of inexhaustible relations among which he inserts his own form.' ... What is more important, adopting the proper attitude toward an open work has political and social ramifications: the open work denies conventional views of the world, replacing them with a sense of its discontinuity, disorder, and dissonance.¹⁸

Examining the works of James Joyce, Eco could offer an explanation and justification of the divergent aesthetics of the time. The old forms were to serve as a frame, while the artist distorted the surface of the work by interpolating layers of other materials that opened up the work to multiple interpretations. Therefore, while holding on to some type of archetypical form, the artist could provoke a sense of disorder. This dichotomy is captured by Timothy Murphy:

Eco's exemplary open musical works consist of rigorously composed parts that may be assembled in many different orders (as in Stockhausen's *Klavierstück XI* [1957]), or of parts whose relation is capable of change even if their order is fixed (as in the durations and tempos of Berio's original *Sequenza* for flute [1958]); an open work is not improvisatory like jazz or Indian raga, nor is it a complete refusal of intention and control, as in Cage's Zen-influenced works. Open works are not indeterminate, not totally without pre-existing structure, but rather suspended between many different but fully determinate structures. Thus they enable a composer, in principle at least, to reconcile the apparently contradictory imperatives of complete control, which reached its apotheosis in the total serialism of the earlier Boulez and Stockhausen, and the freedom in performance that was the hallmark of Cage's aleatory works.¹⁹

Joyce's works served as a literary analogue where the open work could actually exist alongside with the most modern tendencies of the time. It was specifically *Finnegans Wake* (1939) that had the most impact: to this day, it is debated and discussed as Joyce's highest achievement, according to his advocates, but generally regarded as difficult to understand in terms of both its language and plot:

Finnegans Wake could be considered an attempt to answer the question, 'What happened to HCE?' ... The problem is the same with the story of HCE: we try to choose one version. But which one? Unfortunately, 'Zot is the Quiztune' (110.14) and Joyce, like Hamlet, ... knew it.²⁰

¹⁸ Deborah Parker and Carolyn Veldstra, 'Umberto Eco', in Michael Groden and Martin Kretzschmar (eds), *The Johns Hopkins Guide to Literary Theory and Criticism* (2005), accessed 13 January 2006 at <http://litguide.press.jhu.edu/>. Work cited: Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, 1989), p. 4.

¹⁹ Timothy S. Murphy, 'Music After Joyce: The Post-Serial Avant-Garde', *Hypermedia Joyce Studies*, 2/1 (1999), accessed 21 March 2007 at <http://hjs.ff.cuni.cz/archives/v2/murphy/index.html>. HCE is the main character, Humphrey Chimpden Earwicker.

²⁰ Vincent John Cheng, *Shakespeare and Joyce: A Study of Finnegans Wake* (University Park, 1984), p. 23.

Finnegans Wake's mesh of stories, distorted language, quotations, references and other influences offer multiple readings because of the many embedded associations that not only change the meaning of the words but also add layers of interpretation to it. The technique of distorting the surface of the work, of incomprehensible quotations and of frequent and apparently meaningless repetition combined with investigation and discoveries in the field of electronic music may be the generating impulse behind Berio's music at the time. In 1953, Berio wrote his first work using Joyce's poems, *Chamber Music*. The work, set for mezzo-soprano, clarinet, cello and harp, is a song cycle written for Cathy Berberian using three poems from Joyce's homonymous work: I: 'Strings in the Earth and Air'; XXXV: 'Monotone'; and IX: 'Winds of May'. *Chamber Music* is not the only Joyce-influenced composition in Berio's artistic output. Joyce's works were to be a continuing influence on Berio, and other compositions employing Joyce's texts are: *Thema: Ommagio a Joyce* (1958), *Epifanie* (1961), *Sinfonia* (1968) and *Outis* (1995–96). Osmond-Smith remarks that *Thema* was the 'culmination of an investigation, with Umberto Eco, into the musical aspects of language'²¹ a fact that greatly affected his treatment of musical structure.

Analysis: Serialism and the 'Open Work'

It is now possible to place *Sequenza I* for solo flute in the context of Berio's compositional style, considering the literary influence of Joyce and the strong claims for serialism made by the Darmstadt composers. Berio had already used the twelve-tone method in earlier compositions, including *Chamber Music*, *Cinque Variazioni* and *Nones* and traces of twelve-tone practice can also be found in *Sequenza I*, something which is largely overlooked in other analyses of the work.

Berio once said that his 'title [*Sequenza*] was meant to underline that the piece was built from a sequence of harmonic fields (as indeed are almost all the *Sequenzas*) from which the other, strongly characterized musical functions were derived.'²² Berio may be referring to the saturation of certain intervals according to the partition of the initial row and to the use of a fixed pitch sequence, as will be discussed shortly. Musical functions may refer to musical gestures employed at certain times (cadenza-like passages contrasted with lyric moments). These two features certainly point to a structural conception of the work: a coherent harmonic material expressed monophonically, where unity is guaranteed by elements such as repeated patterns, melodic contour, rhythmic gestures and groupings of notes.

²¹ Osmond-Smith, *Berio*, p. 14.

²² Luciano Berio, *Two Interviews with Rossana Dalmonte and Bálint András Varga*, trans. and ed. David Osmond-Smith (New York/London, 1985), p. 97.

The first staff of the piece presents 21 pitches (see Ex. 11.1). By eliminating repeated pitches, the following twelve-tone series is obtained: 9 8 7 6 5 4 1 3 2 0 T L.²³ This row presents several interesting properties. Two distinct hexachords define the main 'harmonic fields' of the piece: <987654>, a chromatic subset, and its literal complement <1320TL>.²⁴ These hexachords are combinatorial at T₆, T₇I and T₁I. Because both hexachords are members of set class [012345], transpositions at the interval i=6 will always yield a combinatorial arrangement.²⁵ This row affords three distinct combinatorial row areas:²⁶

1. P₉ R₉ I₄ RI₄
2. P₉ R₉ P₃ R₃
3. P₉ R₉ I_T RI_T

With exception of I₁, all the recognizable forms of row from 1.1 to 3.3 (the first major section of the piece) are the invariant pairs P₃ and R₃ (combinatorial) and P₂ and R₂ (not combinatorial). These forms of the row appear after the first entrance of P₉ in 1.1, as follows shown in Table 11.1.

Example 11.1 Opening of *Sequenza I*



In Ex. 11.2, the pairing of forms of the row is indicated side by side. It is not surprising that the combinatorial rows (Exx. 11.2a and 2b) exhibit a high level of invariance; however, it is also worth noting the high level of invariance in the forms of the rows employed, either at the trichord or the dyad level, and with the pair that is not a combinatorial one (Ex. 11.2c).²⁷

²³ References to the music are to the Zerboni edition of *Sequenza I*. In the absence of barlines, examples are located by means of page and staff numbers (e.g. 2.3 refers to the third staff on page two).

²⁴ For those not familiar with set class theory, T=10 and L=11, using a fixed 'do' system in which C=0. This set is therefore referred to as P₉ where 9 indicates the pitch A as the starting note. Angle brackets indicate <ordered sets>. Square brackets indicate [pitch class universe].

²⁵ T, here, refers to transposition, where the same integer is added to each element. Combinatoriality refers to a 12-tone practice of combining a form of the row with a transposed or inverted forms of itself (or its complement) to create an aggregate.

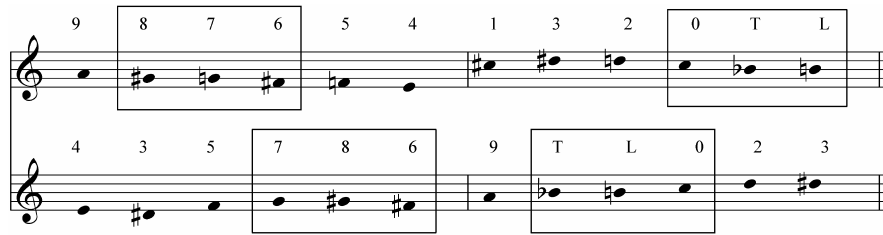
²⁶ The forms of the row are indicated by the first pitch of the prime or inverted order. Retrograde and retrograde-inversion take their names from the prime and inverted orders. For example: the retrograde of P₉ is R₉, despite having L as its first pitch.

²⁷ Berio was familiar with the idea of combinatorial pairs, as he had analysed the works of Maderna that made use of such technique. See Berio, *Two Interviews*, p. 68.

Table 11.1 Recognizable row forms appearing between 1.1 and 3.3

Row Form	Combinatoriality	Appearance
P ₉		1.1
R ₂	non-combinatorial	1.2
R ₃	combinatorial	end of 1.2
P ₂	non-combinatorial	end of 1.4
I ₁	non-combinatorial	beginning of 1.6 (from C# grace note)
P ₃	combinatorial	1.6 (fragments)
P ₉		end of 1.7
R ₃	combinatorial	last note of 2.3
I ₁	non-combinatorial	last note of 2.5
P ₉		2.9
P ₃	combinatorial	2.10
P ₂	non-combinatorial	3.1

Example 11.2 *Sequenza I*: pairings of forms of the row**a) P₉ and R₃**
b) P₉ and I₁

Example 11.2 (cont.)**c) P₉ and R₂**

Four complete occurrences of P₉ can be found at 1.1, 1.7, 2.9 and 5.4 (see Ex. 11.3). On two other occasions, fragments of P₉ can be seen starting on the last note of 3.10 and at 4.4. The four statements of the row are not identical, but similar manipulation of the melodic material occurs. For example, the initial statement of P₉ presents several pitch repetitions: if we take this first appearance of P₉ and extract the notes of P₉ from it to leave only the repetitions, we obtain two layers of P₉, where the second layer is a compressed version of the first. Similar procedures are used each time P₉ reappears: in 1.7, three pitches appear out of order; in 2.9 and 5.4 pitch repetition (usually as a pair of notes) interpolates the ordering of the row, only one pair actually appearing in exchanged order.

Example 11.3 Sequenza I: entries of the four complete occurrences of P₉**a) 1.1****b) 1.7****c) 2.9**

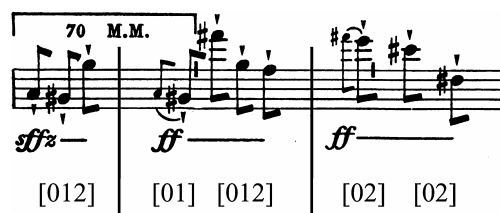
d) 5.4



The original row is derived: that is, its four discrete trichords are all variations of the first three notes of the row, and all therefore belong to the same set class [012]. The consistency of the row also results from the limited number of intervallic relationships within the row itself. The row allows only $i=1$ (seven times), $i=2$ (three times) and $i=3$ (once) between adjacent intervals. Not by accident, the most prevalent interval classes throughout the piece are $i=1$, 2 and 3.

Other observations can be drawn from segmenting the piece into small motifs and phrases. A designation of 'phrase', in this context, suggests a group of notes that are separated by break marks in Berio's score and are formed by several smaller segmentations of groups (motifs) of between three and ten notes. These motifs form meaningful musical gestures and are usually linked by similar notation: in the Zerboni edition they appear either as grace notes, or are separated by a considerable distance, or are notated with larger or smaller note sizes. Ex. 11.4 shows a possible segmentation of the opening phrase. These small motifs play an important role because they reappear throughout the piece. An association can be made between them because of similar intervallic and/or contour relationships to the opening gesture. The motif is transformed in myriad ways throughout the composition by the use of register, attack, contour and duration. The three-note opening motif [012] is especially prevalent, appearing more than 110 times; it not only generates the row, but it is also responsible for another important prominent idea of the piece, the whole-tone dyad [02] that occurs as frequently as the opening motif itself. Given that [02] is embedded in the [012] motif, both of these most prominent motifs therefore find their origin within the derived trichord of the row. The most salient unification of the work is provided by [012] and [02].

Example 11.4 *Sequenza I*: half-step and whole-tone motifs (segmentation)



Even when the integrity of the [012] motif is lost due to melodic manipulation of the original material, its consistency and audibility is guaranteed by the contours of the musical gestures. The trichord motif [012], expressed as $\langle -1+11 \rangle$ prevails throughout the composition. As the composition progresses, the more transformed

this motif becomes: the most frequent manipulation is that of altering the size of the interval leap: instead of +11, the contour is expressed with leaps of +13, +14, -1 and so on. Table 11.2 charts the appearances of the main chromatic motif and its contours.²⁸

Table 11.2 Appearances of the main chromatic motif

Row form	Contour of [012] motif	Page and staff location
P ₉	<-1+11>	1.1
R ₂	<-1-14>	1.2
P ₂	<-1+10>	1.4
I ₂	<+1-11>	1.6
P ₉	<-13+11>	1.7
R ₃	<-1+2>	2.3–4
P ₉	<+11+11>	2.9
I ₂	<+1+13>	2.10
P ₂	<-1+10>	3.1
R ₇	<+11+14>	3.4
P ₅	<-1+11>	3.5
I _T	<-11-11>	3.8
P ₉	<-1-1>	4.1
I ₃	<-11+1>	4.3
P ₉	<-1+11>	4.4
P ₂	<+11-1>	4.5
P ₄	<+11+11>	4.9
P ₉	<+11-11>	5.4
I ₂	<+1+13>	5.5
P ₂	<-1+35>	5.6–7
I ₂	<-11+1>	5.9

Richard Hermann offers a different explanation for the motivic manipulation in this piece. He has pointed out that adding or deleting pitches to an established motif or series is an early example of electronic studio techniques applied directly to an acoustic composition. He writes:

Berio's transformational processes in the pitch dimension can generally be described as 'filtering,' that is deleting pitches of a chord or motif, or 'flanging,' adding pitches to a chord or motif. These are early electronic studio techniques. These same techniques can

²⁸ Contour describes the shape of a set expressed as semitone steps up (+) or down (-).

also be thought of as linguistics' morphological processes such as the affixes: prefix, infix, and suffix.²⁹

The use of flanging and filtering techniques, as indicated by Hermann, contributes to a sense of disordering in regards to the main idea of the piece. Berio manipulates each phrase, which initially may have been based on one or two (or even more) forms of the row, by adding and omitting pitches, or simply altering the order, given that the reappearances of P_9 are not pitch-identical. There are many examples of both filtering and flanging every time that P_9 – or any other form of the row – is presented. For example, in the first entrance, the first two pitches A and G# are reiterated after the third pitch of the series (G) is introduced: this would be an example of flanging. An example of filtering occurs in the second entrance of P_9 at 1.7, when the repetition of the note A that occurs in 1.1 is omitted (see Ex. 11.3). The continual transformation of the original idea and the flanging and filtering of the series provoke a loosening of twelve-tone compositional procedures and give Berio more freedom in the composition. At the same time, the unifying framework offered by the series is what guarantees a modicum of structural integrity.³⁰

Although the piece is highly consistent and strongly unified through a saturation of its two main motivic ideas, a clear compositional twelve-tone practice is not easily perceived. The forms of the row are difficult to identify because row order is continually severed or because there are too many reiterations of pitches. If Berio does not lock himself into strict twelve-tone practice, is it relevant that the row allows a restricted number of relationships? What purpose does a row serve if most of its melodic properties are diluted in the way Berio manipulates the melodic material here? Notwithstanding questions such as these, the row's importance is to provide an underlying structure to the work. It is this aspect of the compositional process that may be compared to Joyce's literary technique: the structure is open, allowing the row to be projected in a multi-dimensional way (see Ex. 11.5).

The row is also projected into the structure of the piece by the way in which Berio organizes the form and the motivic ideas. Serial technique manifests itself by defining large areas of the piece. The reappearances of P_9 in 1.7 and 2.9 reaffirm the harmonic consistency of this area, pointing to a formal region of the piece. Another striking consistency is the literal repetition of a pitch collection that amounts to a much greater number of pitches (that is, greater than 12). Not only are the notes literally repeated, but the entire area from 1.1 to 2.2 reappears twice more, although the last occurrence is condensed. Therefore, these large areas tend

²⁹ Richard Hermann, 'Why is Berio's Music So Hard to Understand for an Anglophone North American Music Theorist?' Paper presented at the Eastman Festival in Honor of Luciano Berio, Rochester, NY, 29 April 2003.

³⁰ Similar procedures can also be found in *Sequenza V* for trombone (1966), where a vestige of serial practice is manifested in the opening section of the piece by reiterations of pitches, which eventually form a 12-tone row.

Example 11.5 *Sequenza I*: multidimensional layers of P₉

The image shows a musical score for three staves, likely representing different voices or instruments. The notation is complex, featuring many accidentals (sharps and naturals) and fingerings (numbers 1-9). Arrows connect notes across the staves, indicating relationships or transformations between them. Below the staves, there are labels: 9, 8, 7, 6, 5, 3, 2, 1, 0, L, T. These labels are positioned under specific notes or groups of notes, suggesting a mapping or sequence of pitches.

to point to a form more than to a series. In order to avoid repeating identical pitch orderings Berio does not use literal forms of the row, which is instead constantly altered through repetition and exchanged pitch ordering.

Cynthia Folio and Francesca Magnani have both noticed that there are indeed several pitch repetitions taking place in the composition. They individually conclude that some type of serial arrangement is present, without necessarily implying the idea of a row or other twelve-tone techniques. They argue that an unusually large note series appears at least three times. Folio comments:

Since many of Berio's works are serial, it is not surprising to find that the flute *Sequenza* is based on a repeating pitch pattern. What is unusual, however, is that this pattern is a super-tone-row of approximately 175 notes; it is treated very freely (in fact, I studied the piece for a long time before I discovered the row); and notes are often repeated after being stated.³¹

Folio maps the first 175 notes from 1.1 to 2.2 against the same sequence of pitches starting in 2.9. Magnani makes a similar suggestion, pointing out the recurrence of a large note pattern that appears three times in the composition. She takes the sequence starting at the end of 1.2 to the beginning of 1.7 and maps it against two other occurrences from 2.10 to 3.2 and, in an abridged version, from 5.5 to 5.8 (see Ex. 11.6).³² These two scholars do not exactly agree on the placement of the super-set series. Magnani says:

³¹ Folio, 'Luciano Berio's *Sequenza* for Flute', p. 18.

³² Folio, 'Luciano Berio's *Sequenza* for Flute', p. 20 and Francesca Magnani, 'La *Sequenza I* de Berio dans les Poétiques Musicales des Années 50,' *Analyse Musicale*, 14 (1989): 74–81, p. 79.

If we make comparisons within the network of pitches, we discover that the sensation of a unity constantly in the process of being transformed derives not only in the elemental ‘series’, the architecture of the entire work, but also in the fact that all the material exposed within the first section is the object of the two reprises, as all of this material (lines 1–7) is, effectively, contained within the last section (lines 40–46), just as it is contained in the beginning of the second (lines 16–19).³³

Example 11.6 *Sequenza I: Magnani’s series*

Series 1 (1.2–1.7)

Series 2 (2.10–3.2)

Series 3 (5.5–5.8)

This sequence undeniably occurs three times in the composition, although the repetition of notes is varied by the use of different registers, durations and forms of attack. Because this is a large section of the music, these three distinct regions are not only not hegemonic but not even easily perceived. On the contrary, the notes cross over boundaries such as fermatas and rests, and avoid falling into similar phrase arrangements.

Berio has said that his idea of form is directly related to the notion of transformation:

³³ [Si nous faisons la comparaison avec le réseau des hauteurs, nous découvrons que la sensation d’une unité perpétuellement en voie de transformation tire son origine non seulement du fait que la ‘série’ féconde, l’architecture tout entière, mais que c’est tout le matériau exposé dans la première section qui fait l’objet de deux reprises, car la dernière section (lignes 40–46), en effet, s’y trouve entièrement comprise (lignes 1–7), de même que le début de la seconde (lignes 16–19).] Francesca Magnani, ‘La *Sequenza I* de Berio’, p. 79.

I think it is more interesting to think in terms of formation than of form. The real enriching experience is to be able to perceive processes of formations, transformation – of changing things – rather than solid objects.³⁴

Formation (or process) is a better term here due to the continual manipulation of the implied harmonic material: the melodic material never returns unaltered. This blurs the idea of form on the surface of the piece, while maintaining harmonic coherence at the structural level.

If the reappearance of pitch-ordered formal sections (A and A') may be identified, then a (contrasting) middle section must separate them. Although this seems to be an obvious consideration, the subject of the piece's form has been one of great debate and speculation. Among the published analyses of the work, a number of formal interpretations have been offered, including sonata form, sonata rondo, binary form and other more unusual formal arrangements. Seven possible interpretations of the structure are summarized in Fig. 11.1.

The disagreement over form goes to the core of the concept of the open work. If the work is perceived as open, then several readings and interpretations are possible. To lock the piece into one formal type of closed arrangement (e.g. sonata form) would seem to contradict Berio's approach to form in the 1950s. On the other hand, ascribing the idea of open form to the work would allow a multi-dimensional structure inviting multiple readings. Eco, who had already compared Berio's work to the literary movement of the 1950s, said again more recently:

It is not really necessary, but it is useful to remind ourselves that 'structure' in those days [the 1950s] and particularly in Italy, was something to avoid; it meant scaffolding, mechanical artifice that had nothing to do with moments of lyrical intuition, and at most stood out in a Hegelian sense as a negative impulse, as conceptual residue, which at best served to let the moments of poetry shine like individual jewels.³⁵

At a remote background level, all of the analyses indicate a more or less complex binary arrangement, where A is invariably determined by the reappearance of P₉ and B is a more lyrical, fluid and cadenza-like gesture. Analysis I only shows the four appearances of P₉ (Fig. 11.1) as identified in my analysis. Analysis II reflects the dynamic contrasts that the piece exhibits. There are three main subdivisions of the work according to the way the dynamics are arranged. In the music from 1.1–3.3, all phrases that are separated by rests end with diminishing dynamic markings, going from *sfz* to *pppp*. From 3.4–5.3, the phrases end with loud and rising

³⁴ David Roth, 'Luciano Berio on New Music', *Musical Opinion*, 99 (1976): 548–50, p. 549, as quoted in Gale Schaub, *Transformational Process, Harmonic Fields, and Pitch Hierarchy in Luciano Berio's Sequenza I through Sequenza X* (PhD dissertation, University of Southern California, 1989), p. 6.

³⁵ Umberto Eco, *On Literature*, trans. Martin McLaughlin (Orlando, 2002), pp. 201–2.

Fig. 11.1 Seven interpretations of the formal structure of *Sequenza I*

		Page 1			Page 2			Page 3			Page 4			Page 5					
I	P ₉ appearances	1.1		1.7			2.9										5.4		
II	Contrasting Dynamics	1.1–3.3							3.4–5.3							5.4–end			
III	Sonata form (Sollberger)	1.1–1.6 First theme			2.1 – 2.2 Tr	2.3–2.8 Second Theme		2.9– 3.1 Refrn	3.2– (unspecified) Development								5.6–end Coda		
IV	Sonata-rondo/ Opera scenes (Andersen)	1.1–1.7 Scene I A			2.1–2.8 Scene II B			2.9–3.2 Sc. III A	3.3–5.3 Scene IV C						5.4–end Coda				
V	Binary form (Schaub)	1.1–1.7 A			2.1–2.8 B			2.9–5.3 A2							5.4 – 5.5 A3	5.6–end Coda			
VI	Dorough’s analysis	1.1– 1.4 A	1.4–2.8 A’				2.9–5.4 Development								5.5–end Coda				
VII	Pitch ordering (Magnani)	1.2–1.7 A1						2.10– 3.2 A2							5.5–5.8 A3				

dynamic markings, going from *pppp* to *sfz*. From 5.4–5.10, the dynamic markings return to the original pattern, going from *pp* to *pppp*.³⁶

Analysis III shows Sollberger's sonata-form arrangement.³⁷ Sollberger suggests 272 'measures' that produce a sonata-form structure, with 1.1–1.6 as the first theme or subject, 2.1–2.2 as the transition, 2.3–2.8 as the second theme, followed by a 'refrain' of the first theme (2.9–3.1), a development starting at 3.2 and a coda from 5.6 to the end. Although Sollberger does not indicate a recapitulation (which could be located at 5.4, the point at which P₉ returns), his analysis favours the phrase arrangement over all.³⁸ Analysis IV shows Claudia Andersen's sonata rondo or 'opera scenes' approach.³⁹ Her analysis is closely related to Sollberger's, although she does indicate a recapitulation taking place at 5.4. Analysis V is Gale Schaub's analysis, which also favours the pitch repetition model, identifying the sections as a binary arrangement in the form ABAA plus Coda.⁴⁰ Analysis VI shows Aralee Dorough's interpretation, in which a mixed form nonetheless still resembles a binary arrangement.⁴¹ Analysis VII shows Magnani's pitch ordering. She only indicates the literal repetition of a large portion of the music, as already discussed. The main recurring sections are from 1.2 to the beginning of 1.7, 2.10–3.2 and 5.5–5.8, and are interpolated by contrasting sections. The pitch repetition does not agree with the break markings and fermatas that are indicated by Berio himself.⁴² The following features are common to each approach:

1. Almost all of them show the entrances of P₉ as the main thematic idea.
2. A contrasting section occurs somewhere between 3.1 and 5.3.
3. Almost all of the analyses read a Coda in the last five staves.

Therefore, as regards the form of the work, should we then choose one archetypical form over another or stay with a very loose ABA arrangement? As Joyce may have answered: 'Zot is the Quiztune.' This multiplicity of interpretations does not necessarily imply that all approaches to the form are interchangeable and equally valid. The ability to produce different readings is what makes for the complexity of the work. Berio demonstrated that he was well aware of the many possibilities of making, listening or talking about music when he said:

³⁶ Ernst Křenek (in the 1940s) had already suggested using extreme dynamic contrast and range as means of defining a formal region. See Ernst Křenek, *Music Here and Now*, trans. Barthold Fles (New York, 1939), p. 159.

³⁷ Sollberger.

³⁸ Harvey Sollberger calls each break mark as one 'measure', which he numbers from 1 to 272.

³⁹ Andersen.

⁴⁰ See Schaub, *Transformational Process, Harmonic Fields, and Pitch Hierarchy in Luciano Berio's Sequenza I through Sequenza X*.

⁴¹ Dorough.

⁴² In the 1992 Universal Edition, rests are substituted for the break markings.

When music has sufficient complexity and semantic depth, it can be approached and understood in different ways[,]... can be heard on many levels, and is continually generating musical meaning ... The more concentrated and complex [a musical discourse] is, the more complex and selective are its social relations, and the more ramified its meanings.⁴³

The many different readings regarding the structure of this piece may be obtained not only through a pitch series, but also through the use of register, dynamic and motivic manipulation. Extreme register and dynamic levels combined with different durations and the frame of breaks and pauses help to create an impression of polyphony. *Sequenza I* is composed using a recurring motivic pattern [012] that is serially arranged as a twelve-tone derived row. Sometimes, one form of the row is stated polyphonically, occasionally two forms of the row are used simultaneously, and at other times forms of the row are scrambled and diluted into a cadenza-like figure. These compositional procedures are open to observation and analysis, but the difficulty of the piece remains in the fact that the transformational processes are sometimes performed systematically, as with the choice of row, forms of the row, literal repetition of pitches and dynamic levels; and sometimes done intuitively, as with the choice of flanging and filtering pitches. The continual manipulation of the melodic material allows the piece to be understood in multiple ways, as is apparent in the divergent readings of the form.

Berio has said that 'in the *Sequenzas* as a whole there are various unifying elements, some planned, others not'.⁴⁴ Open form may only help us to know that more than one reading is possible, leaving the interpreter to complete the process, either at the background level of the form, or the motif level through the dilution of the initial motivic idea, or at the micro-level of the notes (the spatial notation gives some room to the performer to apply slightly different durations).⁴⁵ The beauty of the work is the enigma it presents and the debate it encourages. Berio understood that this was a virtuoso work, designed to challenge the performer: 'my own *Sequenzas* are always written with this sort of interpreter in mind, whose virtuosity is, above all, a virtuosity of knowledge.'⁴⁶ We can only agree with him.

⁴³ Berio, *Two Interviews*, p. 22.

⁴⁴ Ibid., p. 90.

⁴⁵ In the first version of 1958, Berio clearly implies a steady beat through the inclusion of metronome markings. Notes were supposed to be placed according to the beat. His 1992 version of the work leaves less room for rhythmic alterations, although at some remote level, any performance of any work is never precisely the same.

⁴⁶ Berio, *Two Interviews*, p. 91.