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<https://escholarship.org/uc/item/3sw7g6h9>

### ISBN

978-0-691-16948-4

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### Publication Date

2015

Peer reviewed

# Non-Repetition and Personal Style in the *Inventions* and *Solis*

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Recent scholarship shows how the indigenous, neo-classical, and avant-garde elements of Chávez's early music reflect a complex network of allegiances.<sup>1</sup> But little has been written about the later music, especially the challenging chamber works that demonstrate the composer's continuing interest in a high modernist style that challenges listener and performer alike. As Chávez entered the 1960s and continued to teach and conduct ever more widely, his compositional output followed two divergent tracks: traditional works intended for large ensembles and familiar venues, and experimental compositions that—with several exceptions—were written for solo instrument or small ensembles. This chapter looks at the later *Solis* for chamber ensembles (*Soli II*, 1961, and *Soli IV*, 1966) and the *Inventions* for piano (1958), string trio (1965), and harp (1967), works that occupy a singular position within Chávez's late output.<sup>2</sup>

The abstract language and forms of the *Solis* and *Inventions* attempt to forge a personal, progressive compositional legacy that resists imitation, capitulation to neoclassical formulas, or “repetition” in its broadest sense, distinct from the more fulsome language of the symphonies and dramatic works that preceded them. In these works Chávez explored a central idea first sketched in *Soli I* but now pursued within the context of an advanced harmonic language, one indebted to twelve-tone technique but only intermittently serial. *Soli I*, written for an unconventional ensemble of oboe, clarinet, bassoon, and trumpet, was commissioned in 1933 for the New York League of Composers and exhibited clear allegiances to jazz and native Mexican influences akin to other works of the 1930s. But it also represented one of the composer's first attempts at non-repetitive writing. *Soli I* reflected a desire to forgo traditional techniques such as sequence, development, and structural symmetry in favor of a kind of endlessly unfolding counterpoint. Chávez's linear progressions left behind the mnemonic signposts of Wagnerian endless melody

for a constantly evolving musical discourse that favored “the element of renewal rather than repetition.”<sup>3</sup>

In 1958–59 Chávez held the Charles Eliot Norton Chair of Poetics at Harvard University. The fourth of the Harvard lectures, which were collectively published in 1961, was devoted entirely to “Repetition in Music.”<sup>4</sup> Here Chávez analyzed rhythm and symmetry in all of its musical forms with copious examples, from the two-note motive of Beethoven’s Ninth Symphony, through the vagaries of meter and metric feet, to the principles that structure a symphonic movement. But Chávez chose to close the essay on a more philosophical note, one that considers the future of music and repetition in general. If Beethoven’s Ninth Symphony pointed toward a new music, it is partly because the composer finally relinquished a mechanical play with motive to explore continuous melodic expression.<sup>5</sup> Hence Chávez valorizes non-repetition—the active expectation of newness—as a desirable, even ethical way forward, while “lazy memory,” which relies on repetition, corresponds to a passive approach to life.<sup>6</sup> Against the common association of similarity and symmetry with the “good,” and contrast and disorder with the “bad,” Chávez advocates for the notion of “constant rebirth, of true derivation: a stream that never comes back to its source; a stream in eternal development, like a spiral, always linked to, and continuing, its original source, but always searching for new and unlimited spaces.”<sup>7</sup>

All of the *Inventions* and the *Solis* share in this spirit of “eternal development,” which may explain some of their shared structural and harmonic traits. The former include the lack of breaks between sections, rapidly shifting rhythmic divisions, and a formal design determined more by tempo than texture or style. Chávez’s harmonic language varies among the five featured works but relies in every work on the periodic use of major sevenths and minor ninths as harmonic intervals, as well as the contrast of whole-tone and chromatic harmonies—specifically the “Viennese” trichord (0, 1, 6)—to distinguish the shift from one phrase to another.<sup>8</sup>

### The *Inventions*

As Robert Parker notes, a good 30 percent of Chávez’s output was written for piano, reflecting the composer’s long experience as a performer and improviser.<sup>9</sup> Hence the long eighteen-minute, single-movement *Invencción* suggests Chávez’s comfort with exploring an early extended exercise in non-repetition for this instrument. The *Invencción*, written in 1958 and premiered in April of that year, fuses the rhythmic complexity of the *Seven*

The image displays a musical score for Example 1, consisting of four systems of piano and bass staves. The music is in 4/4 time. The score includes various dynamic markings such as *f*, *mf*, and *f whole-tone*. Annotations with letters 'a' through 'e' and 'b at T7' are placed above or below notes to indicate specific musical elements. Dashed boxes and circles are drawn around certain passages in both staves to highlight hidden repetitions or structural relationships between different parts of the piece. For example, a 'whole-tone' interval is marked in the bass staff at the beginning, and another 'whole-tone' is marked in the bass staff at measure 6. A '3 a' annotation is present in the bass staff at measure 8, indicating a triplet.

Example 1. Hidden repetition in the *Invención*, mm. 1–9.

*Pieces* (1923–30), the contrapuntal voice independence of the ten *Preludes* (1937), and the extreme chromaticism of the 1949 *Etudes*, without any evident structural repetition.<sup>10</sup> The *Invención* may appear to be based on a serial, ten-note subject, but it is written in a free atonal style, its only concession to its Baroque namesake being the primarily duple rhythmic divisions and the lack of clear section breaks. *Invención* is organized roughly by three expressive divisions (Con anima, mm. 1–183; Lento, mm. 184–238; Vivo, mm. 239–468), further demarcated by twenty-one finer tempo gradations. Each section shifts freely in texture, from the two

voices that prevail in mm. 1–34 to three and four, and six-voice harmonies punctuate the close of each section (mm. 178, 210, and 461).

The *Invencción* is thoroughly chromatic but not serial, adhering rigorously to the principle of non-repetition; duplication is restricted to extremely subtle recurring pitch and intervallic motives, as shown in an analysis of the opening “subject” in Example 1 (mm. 1–9).

At moments the work attains a certain modal clarity, as when tonal triads announce the first *Pochissimo meno mosso, il tempo sempre giusto* section in the bass (mm. 20–24), or float above that bass in the right hand (measure 28 and mm. 153–54). A clear diatonicism emerges at several points, before dissolving almost immediately into the prevailing chromatic.<sup>11</sup> Several grand Romantic gestures emerge during the *Lento* section (mm. 184–238), notably at mm. 204–5, measure 210, which rests for two beats on the hexatonic hexachord  $HEX_{3,4}$ , and mm. 213–15. The latter passage cadences on an implied D-seventh chord (asserted again within a six-voice D-eleventh harmony in measure 223), and the *Lento* closes with a stepwise descent in bass from G to C (mm. 236–38). Yet these moments are fleeting, mere glimpses of the type of homage to Chopin captured by the *Etudes* within an otherwise rigorous contrapuntal exercise. The *Invencción* approaches the coda through a rousing hocket-like passage that returns to the texture of the beginning, yet without the merest hint of a recapitulation (mm. 354–84).

*Invention II* for violin, viola, and cello, written seven years later, features the same type of kaleidoscopic melodic motion, but sets it within the context of a concertante texture that includes only occasional deviations in texture. Three movements and an extended coda are identified solely by tempo markings: *Molto moderato* (mm. 1–60), *Molto lento* (mm. 61–97), *Vivo* (mm. 98–181), and a closing *Pochissimo meno mosso* (mm. 182–217). As in the *Invencción* for piano, slight figures recur in the background to shape the inexorable flow of the work: melodic chromatic and whole-tone trichords, the frequent appearance of the “Viennese” trichords (0, 1, 4) and (0, 1, 6), and the reappearance of the E/A fifth at the transition to a new section. For instance, the *Invention*’s “exposition” cadences with (0, 1, 6) in measure 25, followed by a transition that pits chromatic and whole-tone figures against one another to lead into a new section, as shown in Example 2 (mm. 25–31). Yet the second section commences in measure 30 with a twelve-tone canon launched in cello and composed of five successive rows.<sup>12</sup>

As the durations of each canonic voice are unique and never repeat, the lead voice is soon left behind; the end of the canon is signaled by the unison  $C_4-D_4$  in the upper strings (repeated as  $D_3-B_4$  in cello), whereupon

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25 *sempre in tempo giusto* ♩ = 60

Vln. *sempre ff* *pizz.* *arco* *pp*

Vla. *ff* *f* *mf* *mp* *p* *pp*

Vc. *ff* *f* *mf* *mp* *p* *pp*

(0, 1, 6) (0, 1, 3) (0, 1, 2)

29 *ff subito* *p sub.* *mf* *f subito* *mf*

(0, 1, 3) *ff subito* *p* *mf* *f subito* *mf*

(0, 1, 4) *beginning of 12-tone canon*

entrance in violin

entrance in viola

Example 2. First transition and beginning of canon in *Invention II*, mm. 25–31.

the *Invention* returns to the fantasia-like character of the opening. The first movement builds to a *furioso* climax in measure 60, pitting quintuplets against duple and sextuplet divisions of the beat, prior to the measure rest that signals the onset of the second movement. The Lento opens with series of four sustained chords, followed by a kind of faux imitation, involving all three strings in a continually evolving conversation, punctuated by diatonic and whole-tone vertical trichords that open up the harmonic texture.<sup>13</sup>

The Vivo begins with a twelve-tone solo in violin that dissipates into free atonality when joined by viola (measure 110); the viola soon abandons the violin for a duet with the cello in measure 123. A series of vertical harmonies slow the advance of the Vivo, beginning with a (0, 1, 3) trichord in the highest register in measure 134 (F<sub>5</sub>–G<sub>b</sub><sub>6</sub>–E<sub>7</sub>). The Vivo's central passage gives some idea of Chávez's approach to harmonic and rhythmic variation within the context of non-repetition. A delicate diatonic cadence in mm. 164–65 asserts a temporary focus on D. Yet this is followed by a series of rotating, non-repeating chromatic hexachords in an even half-note rhythm, which culminates in the single harmonic repetition of the series: pitch-class set (0, 1, 2, 4, 7, 8) (Forte's 6–z17, measure

164

Vln. *sempre p*

Vla. *sempre p*

Vc. *sempre p*

T5

(0, 2, 6)

(0, 1, 3, 4, 5, 7)

(0, 1, 2, 3, 6, 9)

(0, 1, 2, 6, 7, 9)

(0, 1, 2, 4, 7, 8)

(0, 2, 3, 4, 6, 8)

(0, 2, 3, 4, 5, 8)

(0, 1, 2, 3, 6, 7)

(0, 1, 2, 4, 7, 8)

170

Twelve-tone row

*f subito*

Example 3. Central passage in the Vivo, *Invention II*, mm. 164–73.

169). Here the viola launches a solo from D, once again articulating a twelve-tone row featuring nine different rhythmic values, as shown in Example 3.

The viola is joined by cello with an eleven-note row in cello (measure 175) en route to the Coda, which begins with an extended passage in harmonics on all three strings (mm. 182–94), after which the *Pochissimo meno mosso* continues with strummed quadruple stops in all voices punctuated by brief runs. The final harmonies shift from chromatic to hexatonic, accumulating pitches until reaching a ten-note chord at the close, voiced over the same low C that anchored the opening bass line in mm. 3–9.

Chávez completed the *Invention III* for solo harp, dedicated to Nadia Boulanger, in 1967. *Invention III* is a fascinating curio, as Chávez makes a virtue out of the limited chromatic possibilities available on the harp. The first nineteen bars run through every possible horizontal, vertical, and contrapuntal permutation of the [0, 1, 2, 3] tetrachord (spelled B $\sharp$ , C $\sharp$ , D, E $\flat$ ), and the next twenty-three measures subject its transposition by semitone to the same endless variation (C $\sharp$ , D, E $\flat$ , F $\flat$ ). Various degrees

Example 4. Voice exchanges in *Invention III*, mm. 61–63.

of harmonic and melodic closure are distinguished by subtle variations in the registral placement and doubling of harmonic semitones and chromatic trichords. Tempo indications again mark out three unequal sections, the first of which closes on  $C\sharp_2/D_3$  (measure 32), and the second, slower section ends on its inversion ( $D_2/C\sharp_3$ , measure 55). As the *Invention* progresses, larger sections are separated by a return to the opening tetra-chord, or its transposition and abridgment to a dyad or trichord (as in mm. 72–112). The final section traces a web of voice exchanges between adjacent pitch classes, as shown in Example 4, and the central trichord gradually ascends in pitch from [2, 3, 5] to [6, 7, 9] (mm. 72–100). In formal terms the *Invention* traces an arc from  $B\sharp$  to A, as the [6, 7, 9] trichord contracts and inches downward once again to close with the trichord that opened the work [1, 2, 3], in measure 128.

### *Soli II* and *Soli IV*

Chávez gave the name *Soli* to a group of movements characterized by two features: each instrument of the movement receives a solo but without reducing its fellows to the role of mere accompaniment.<sup>14</sup> The second *Soli*, a quintet for winds, was commissioned in 1961 by the Inter-American Music Festival Executive Committee and premiered the same year by the Philadelphia Woodwind Quintet at the Second Inter-American Music Festival in Washington, D.C. The quintet would pick up the thread of *Soli I* almost three decades later, but discard its overt neoclassical and indigenous references in favor of a purist approach to the principle of non-repetition.<sup>15</sup>

*Soli II* relies much more heavily on twelve-tone techniques than either of the two chromatic *Inventions*. Although Chávez notes that a “minimal amount of repetition through symmetry is implied (almost ironically) by the designation of the movements as Sonatina, Rondo, Prelude, and

41  
Fl.  
Ob.  
Cl.  
Hn.

*mf* *ff* *pp* *mf*

repeats mm. 19.4–21

43  
*ff sempre* *ritard. poco*  
con sord. *cuivrez*  
*mf* *mp*

Example 5. Close of Preludio in *Soli II*, mm. 41–45 (reduction).

Aria,” he does not mention that the Aria and Sonatina are based almost exclusively on all-combinatorial twelve-tone rows that carry their own inherent repetitive properties.<sup>16</sup> Much like the *Inventions*, *Soli II* contains no obvious section breaks, features concertante writing almost throughout, and establishes an arch form through shifts in tempo and rhythmic activity, relying—as in *Invention III*—on major sevenths and minor ninths to mark phrase closure. Unlike the *Inventions*, *Soli II* bears an obvious debt to Chávez’s earlier neoclassical works, with contiguous movements identified with formal descriptors. And *Soli II* has a pronounced lyrical character, with a more relaxed approach to contrapuntal invention. Each movement features a different solo instrument, although there are few unaccompanied lines, and the poignant harmonies that shape its evolving form draw equally from diatonic and chromatic collections, although its harmonic language remains resolutely atonal.

The opening Preludio begins with an inverted wedge between flute and bassoon, but features flute throughout, traversing a range of styles, punctuated by trichordal, diatonic cadences every four or five bars. The flute abandons a rhapsodic atonality for a climactic, fully twelve-tone melody in mm. 37–40, only to subside into a slightly altered repetition of three bars (mm. 19, beat 4–21 in mm. 41–42). This leads into a contrapuntal cadence with horn that introduces a major third over E as the closing harmony, as shown in a harmonic reduction as Example 5 (mm.

41–45). This third resolves into an E-seventh chord to begin the Rondo, which is cast in ABABC BAB form: A, mm. 46–53; B, mm. 54–91; A2, mm. 92–99; B2, mm. 100–15; C, mm. 116–37; B3, mm. 138–40; A3, mm. 141–45; B4, mm. 146–89.

The Rondo's refrain is characterized by staccato articulation, and—surprisingly—is repeated verbatim in A2 (A3 brings back only the final 5 measures of A). The B sections by contrast are denser, played legato, and feature terraced dynamics. These sections contain only minor, hidden repetitions, and are distinguished from C primarily by the latter's sparse texture, and the half-note three-chord punctuations played in hemiola prior to the return of A (at mm. 134–36 and 137). The final B section ends on two diatonic harmonies: a symmetrical (0, 1, 5, 6) tetrachord (measure 180), that shifts to a diatonic B–C♯–G♯ trichord (0, 2, 5) before fading to B–C♯ to introduce the Aria (mm. 182–89).

The bassoon picks up the C♯ that ends the Rondo, yet continues it with a twelve-tone solo that launches the Aria. The solo runs through each form of the row: R1, followed by P1, I1, and RI1, before dissolving as the flute joins the bassoon in canon.<sup>17</sup> Trichordal partitions of the row produce three (0, 1, 6) harmonies, and the whole-tone trichord, which suggests a dominant harmony (0, 2, 6); thus the Aria has a homogenous harmonic character defined by the tritone and its transposition or suspension. This may explain why Chávez places a rare emphasis on one pitch class—B♭, sustained by flute and clarinet in mm. 210–16—to anchor the Aria, although the movement's form is again defined primarily by tempo and texture, as it moves from *largo* (♩ = 46–48) to *piu mosso* (♩ = 60) and back.

The main theme of the Sonatina references the atonal lyricism of the Preludio and Rondo, and its subordinate theme is constructed with an all-combinatorial row beginning on the pitch-class B. As in the Rondo, the primary theme returns almost exactly in the recapitulation, and the subordinate theme returns in transposition. The Sonatina's featured instrument is clarinet, which opens the exposition with a sprightly main theme, one that includes a five-note recurring chromatic scale motive that recurs throughout the exposition (mm. 242–67), as shown in a harmonic reduction of the opening three bars, Example 6.

By contrast, the subordinate theme (mm. 267–92) is more lyrical, relying—as in the Aria—on all four forms of its combinatorial row (P11, I11, R11, RI11), and—once again—including a brief canon, this time between clarinet and bassoon. The development (mm. 292–339) references both main and subordinate themes, bringing back P11, I11, and RI11 forms of the row, while the recapitulation reintroduces the subordinate theme

Example 6. Opening of Sonatina, *Soli II*, mm. 242–44.

with its inversion and retrograde inversion at the perfect fourth (I4 and RI4). The clarinet returns to the main theme in the coda (mm. 390–406).

The Finale traces a slow arch form as a showcase for horn, beginning with a high neighbor figure on B–C#–B succeeded by an elegant descent. Plaintive harmonies mark regular cadences (mm. 411, 414, 417) before shifting to a concerted section with horn, which precedes the ensemble’s slow march to the cadence in measure 440. The suite-like construction of *Soli II* suggests a reversion to neoclassical archetypes. Yet its five movements skillfully mask the repetition of slight motives and row forms within the constantly evolving dialogue based on the principle of non-repetition that characterizes all of Chávez’s works.

The challenges of composing an extended work with this principle come into sharper focus in the later *Soli IV* for brass trio, as they did in the second *Invention*. *Soli IV* for French horn, trumpet, and trombone was commissioned in 1964 by Mario di Bonaventura for the Hopkins Center Congregation of the Arts Festival at Dartmouth College. Chávez’s claim that “it has about it a rather special kind of ‘atonality’” is a bit ingenuous, given *Soli IV*’s severe chromatic language.<sup>18</sup> The quasi-serial, seven-note “row” that begins the work in the trombone is composed of a chromatic segment E–E♭–D–C#–G–G#–F#. Yet *Soli IV* soon reveals itself as a cousin of the *Invention* for harp. Although *Soli IV* employs a free circulation of the total chromatic, Chávez works primarily with four- or five-note chromatic segments within a given passage. As in the *Inventions* and *Soli II*, sections are determined primarily by tempo markings and slight shifts in texture and style. Occasional instrumental solos are overshadowed by the constant interplay among ensemble members. This evolving melodic interplay is punctuated frequently by sharp vertical harmonies, which

119  
Tmpt. Hn. *f* *ouvert* *ff* *p con sord.*  
Tmbr. *sempre f* *ff* *ff* *p con sord.*

A $\flat$  A B $\flat$  B C C $\sharp$  E $\flat$  E F E E $\flat$  F F $\sharp$  G G $\sharp$  G F B $\flat$  A

122 *cresc. molto* *ff* *senza dim.* *p* *con sord.* *p con sord.*  
*senza dim.* *p*

B C $\sharp$  D D $\sharp$  E F F $\sharp$  D $\sharp$  F E  
C B C $\sharp$  D E $\flat$  (0, 1, 2) G E F $\sharp$  (0, 1, 2)

Example 7. A pointillistic texture gives way to chords in *Soli IV*, mm. 119–25.

consist almost universally of the chromatic trichord (0, 1, 2), with (0, 1, 3) preceding it on occasion to form a two-chord “cadence.” Each section of *Soli IV* is introduced by trumpet or trombone, and the entire work boasts continual shifts in articulation (including muted passages and glissandi) and a quasi-serial use of terraced dynamics.

Whereas the lyrical first section is moderately paced, the following section strikes a lively tone (mm. 30–42). Announced by trumpet, the second section includes frequent repeated notes and hocket-like rhythmic interplay. Sections identified at mm. 43 and 85 continue in the same vein, until the pause in measure 92 that precedes the penultimate section. Here a *subito* attack in trombone leads to a long glissando cadenza (mm. 100–103) that introduces a slow final section ( $\text{♩} = 50$ ). A second long glissando in trombone leads into a pointillistic section (measure 112), succeeded by sedate, homorhythmic chords (measure 124). A harmonic reduction of this section shows how the pitch travels resolutely by chromatic step toward and away from dissonant cadence points (Example 7).

The passage launches an evenly paced cycle through varied dynamics and articulations that culminates in a third, measured trombone glissando that ends the work with a final (0, 1, 2) harmony: trombone on high E $\flat_5$ , joining the trumpet’s F $_5$  over E $_4$  in horn. As in the *Invention* for

harp, chromatic dyads, trichords, and melodic segments travel through every possible registral permutation, aided by a volley of distinct articulations; this confined harmonic language, in the context of a trio, serves to bring the individual character of each instrument and its expressive qualities more clearly to the fore.

Reflecting on his earlier career in the Harvard Norton Lectures, Chávez stated: “To try to be ‘national’ seemed a good way to try to be personal.”<sup>19</sup> The chamber works of the late 1950s and 1960s represented a new notion of the personal for the composer, coming as they did at the height of his international influence and renown. If, as Chávez wrote at the close of “Repetition in Music,” “The man, his character, what he has to say, his need for communication, all these are in the last analysis the ensemble of deep causes that determine unity and cohesion in a work of art,” then progress and the pursuit of a personal style were synonymous.<sup>20</sup> The pursuit of unity and cohesion in art become the measure of an artist’s character. Both meet in the composition of a music like that found in the *Inventions* and the *Solis*: a music that renounces the repetition of past styles, conventions, and iconic identities in favor of a unique approach, one dedicated to a singular, constantly evolving musical fabric that expresses the personal in the spirit of the universal.

## NOTES

1. See especially Alejandro L. Madrid, *Sounds of the Modern Nation: Music, Culture, and Ideas in Post-Revolutionary Mexico* (Philadelphia: Temple University Press, 2008); and Carol A. Hess, *Representing the Good Neighbor: Music, Difference, and the Pan American Dream* (Oxford: Oxford University Press, 2013).

2. *Soli III*, as an orchestral work, will not be addressed here, although it does feature a concertante group consisting of bassoon, trumpet, viola, and timpani as continually interacting “soloists.”

3. Carlos Chávez, liner notes to *Soli I/ Soli II/ Soli IV*, Odyssey LP, Y31534 (1972).

4. Carlos Chávez, *Musical Thought* (Cambridge: Harvard University Press, 1961).

5. *Ibid.*, 80.

6. *Ibid.*, 82.

7. *Ibid.*, 84.

8. Pitch-class sets follow the conventions established in Allen Forte, *The Structure of Atonal Music* (New Haven: Yale University Press, 1974). Distinct octatonic and hexatonic collections are identified by a subscript denoting the first unique semitone in each collection when counting upward from C (0), e.g., OCT<sub>0,1</sub> denotes the collection that contains C and C#/D<sub>b</sub> [0, 1, 3, 4, 6, 7, 9, 10]. Square brackets refer to pitch-class sets in normal form (the pitch classes as found in the score), and parentheses indicate pitch-class sets reduced to prime form.

9. Robert L. Parker, *Carlos Chávez: Mexico’s Modern-Day Orpheus* (Boston: Twayne Publishers, 1983), 33.

10. William Masselos premiered the *Invención* on 14 April 1958 in Cambridge, Massachusetts. Parker lists an earlier unofficial premiere by Masselos at La Maison Française in New York. *Ibid.*, 40.

11. A diatonic B-flat-major collection appears in measure 37, and in measure 40, a G-major collection resolves into D. Other diatonic moments occur at measure 61, mm. 67–78, and mm. 118–19.

12. The canon begins with a row built on a hexachord combinatorial at  $T_9I$ , [11, 0, 1, 2, 3, 5], followed by a row built on the all-combinatorial chromatic hexachord. The canon then returns to the same hexachord as at the beginning, but in a different order; the fourth and fifth rows duplicate that same row with hexachords switched on each repetition. As in Webern's practice, the end of each row shares a pitch with the beginning of the next, and several rows feature occasional, Schoenbergian "swapped" dyads; that is, F–G becomes G–F.

13. The Lento opens with two symmetrical harmonies: the Dorian hexachord on C (mm. 62–63, [0, 2, 4, 5, 6, 8]) and the major-minor tetrachord (measure 67, [3, 6, 7, 9]), followed by the unrelated hexachords [4, 6, 7, 8, 9, 0] and [4, 6, 7, 9, E, 0].

14. Chávez, liner notes, *Soli I/ Soli II/ Soli IV*.

15. The relation of *Soli I* to *Soli II* is explored in Lyman Bruce Blanton, "Two chamber works of Carlos Chávez which include Clarinet: *Soli 1* and *Soli 2*" (D.M.A. diss., University of South Carolina, 1998).

16. Chávez, liner notes, *Soli I/ Soli II/ Soli IV*.

17. Rows are identified by the pitch-class number that begins each referential P (prime) and I (inversion) form. R (retrograde) and RI (retrograde inversion) are identified by their final pitch class.

18. Chávez, liner notes, *Soli I/ Soli II/ Soli IV*.

19. Chávez, *Musical Thought*, 14.

20. *Ibid.*, 84.

