

APPENDIX A: ERRATA TO SCORES OF THE PLAYER PIANO STUDIES

Conlon Nancarrow's hand-written scores, while generally quite precise, contain numerous errors. Most commonly these are errors of omission (e.g., missing rests, accidentals, dots, ties, meter markings, clef signs, and octave displacement lines); more occasionally, notes are misplaced on the staff by one line or space. The errors can often be deduced due to the use of transparent compositional methods such as canon, isorhythm, and other clearly recurring patterns.

In order to be as profitable as possible to scholars studying Nancarrow's scores, the following list of score errors includes those that are already noted in the major sources in the literature as well as those noted by this author during the course of this study. In all cases, the final authority on the accuracy of the scores is the recordings made from the piano rolls; all errors listed here have been verified on the recordings whenever possible.

•noted in Margaret Thomas, *Conlon Nancarrow's 'Temporal Dissonance': Rhythmic and Textural Stratification in the Studies for Player Piano* (1996)
+noted in Kyle Gann, *The Music of Conlon Nancarrow* (1995) or in Gann's score copies
§noted in Philip Carlsen, *The Player Piano Music of Conlon Nancarrow: An Analysis of Selected Studies* (1988)

Study #1 (This is the only published score not in Nancarrow's hand. Apparently Elliott Carter had the score recopied before publication in *New Music*. See Gagne and Caras, 1982, p. 291).

E♭

A♭

p. 2, m. 4, bass clef: chord should be spelled D♭

p. 9, third system, bottom staff: bar line is missing after first two notes; sixth note (D₁) should be a dotted eighth note (dot is missing)

p. 10, second system, second staff: fifth note should be C#₆ (sharp sign is missing)

p. 14, first system, bottom staff: dotted-sixteenth rest missing at end of first complete measure

Study #3a

p. 4, second system, middle (second) staff: eighth rest missing on seventh eighth-note beat

p. 8, third system, middle staff: quarter rest missing after each sixteenth note

p. 16, third system, bass staff: ostinato should switch to C pattern in second measure; also, in last system ostinato should be G pattern for first two measures and become C pattern in last measure

Study #3b

- p. 1, first system, bass staff: second note in first measure (D_{b3}) should be dotted eighth note (dot is missing)
- p. 5: all initial clefs are missing from both systems
- p. 5, first system, bottom staff: second note in first measure should be a dotted eighth note (dot is missing)
- p. 5, second system, bottom staff: first note should be B_{b1} (flat sign is missing)
- p. 8, second system, bottom staff: repeat sign is missing in second measure
- p. 12, bottom system, top staff: in second measure, first and sixth chords should contain $C\#$ octaves (both C_5 s are missing the sharp sign)
- p. 21, first system, third staff: in second measure, fourth chord should be a dotted eighth note (dots are missing)
- p. 24, last system: initial clefs missing (treble-treble-bass)


Study #3c

- p. 3, third system, top staff: first note in second measure (A_{b4}) should be dotted quarter note (dot is missing)

Study #3d

- p. 1, fourth system, top staff: second chord of second measure should be $D\#$ octave (sharp sign is missing on top note)
- p. 1, fourth system, bottom staff: dotted-half note chord on second beat should have flat signs repeated for notes B_{b3} and D_{b4}

Study #4

- p. 1, second system, treble staff: tie is missing from first note (E_{b6})
- p. 1, third system, bass staff: F_2 should be tied over for 6 bars rather than change to G_2
- p. 7, second system, middle staff: first measure contains 8 sixteenth notes and does not fit ⁶ **16** meter; perhaps dot should be removed from dotted quarter?; also, in the same measure, the staff above should contain 5 sixteenth notes—flag should be added to first note. It is difficult to determine what is intended here since each line of the system might contain a different (and constantly varying) number of sixteenth-note beats.
- p. 8, first system, bass staff: third note from end of that line should be A_{b1} (flat sign is missing)
- p. 8, second system, top staff: penultimate note should be B_4 and not G_4
- p. 8, second system, bass staff: ⁵ **16** meter signature is missing after ¹³ **16** measure
- p. 8, last system, bass staff: in the three ⁵ **16** measures that follow the ¹⁰ **16** measure, the rhythm should be  (flag is missing from first note in each of those measures)
- p. 10, second system, bass staff: meter should not change to ⁵ **16** until third measure
- p. 10, last system, bass staff: meter signature for first complete measure should be ⁵ **16** and for next measure ⁶ **16**
- p. 12, first system, bass staff: last note of that line should be E_{b2} (flat sign is missing)

Study #5

- p. 13, tenth staff: ⁷16 ostinato (see ostinato figure on p. 11) should be stated beginning with 47th sixteenth note of that line—figure should be preceded by blank ³⁵16 measure and ²¹16 measure
- p. 19, second staff: ostinato figure should be notated one sixteenth note later than it is
- p. 20, third staff: time signature ³⁵16 should precede last note (C₇)
- p. 28, fifth staff: three time signatures missing (²¹16, ³⁰16, ²¹16)
- p. 32, first staff: sharp sign missing for F#₆ across whole line
- p. 32, fourth staff: flat signs missing from chord B_{b5}–D_{b7} on last note

Study #6

- p. 11: all initial clef signs are missing (treble-treble-bass-bass)

Study #7

- p. 1, third system, treble staff: tie missing between sixth and seventh measures
- p. 1, last system, treble staff: tie missing between fourth and fifth measures

Study #8

- p. 1, third system, bottom (bass) staff: first note (G₂) should be an eighth note

Study #9

- p. 3, first system, top staff: m. 4 should be ^{D6}B^b₅ eighth note on beat 1, and present mm. 4–5 should become mm. 5–6 (in other words, present mm. 4–5 should be notated one measure later)
- p. 14, third system, bottom staff: sharp sign is missing for bottom note of second chord (should be F# octave)

Study #10

- +p. 4, second system, bottom staff: in third measure, chord should change to ^{F3}G₂ and be tied over to fourth measure ^{D3}

Study #11

- p. 7, second system, top staff, last measure: chord should be ^{D7}A₆ for correct voicing of M7 chord (no 5th) that occurs consistently on each ⁵8 bar that opens a 20 eighth-note segment

Study #12

- p. 4, second system, top staff: dotted eighth rest needed at beginning of line to fill up ¹⁵16 measure

- p. 6, first system, bottom staff, third measure: flag is missing on second note (should be dotted eighth note)
- p. 9, first and second systems: time signature at end of first system should be $\frac{9}{16}$ (not $\frac{6}{16}$) to be consistent with metric pattern of opening canon the first three times, and following measure should have $\frac{6}{16}$ signature
- p. 12, third system: last meter change ($\frac{27}{16}$) is notated one bar too early

Study #16

- p. 7, staff “e”: first note of second measure should be ♩ rather than ♪

Study #17

- p. 4, first system, top staff: first chord on that line should be an octave G
- p. 4, third system, top staff: tempo change ($\text{♩} = 138$) not notated at double bar ($\frac{5}{8}$ measure)
- p. 8, first system, bottom staff: clef should be bass and not treble

Study #20

+(Gann notes existence [p. 291, n4] of errors in the score, particularly in rhythmic series)

Study #22

- p. 5, second system, middle staff: this staff should begin with a continuation of the rest that ended the previous line

Study #23

- p. 1, third system, bottom staff: 8va. b. line is missing below this staff (without this, Gann’s assertion [p. 156] that the same note is not used twice in this line is not true)

Study #24

- p. 12, third system, bottom staff: chord in first $\frac{6}{4}$ measure should be open fifth stack, and F_2 should not be flatted (see Gann, p. 176, transposition levels for Canon 9)

Study #25

- p. 1, first system, top staff: third “exploded” arpeggio is based on overtone series, so fifth note should be A# rather than A
- p. 2, first system, bottom staff: extension line after B_2 is missing (note should be sustained)
- p. 5, first system, fourth staff: top note of second chord should be $C\#_7$ (leger line is missing)
- p. 6, second system, bottom staff: first, sixth, and seventh chords are missing notes in this context of root position dominant seventh chords
- p. 7, first system, bottom two staves: note E₃ appears to be missing (context is root position dominant seventh chords)
- p. 8, second system, second staff: extension lines to indicate sustained notes are missing from final chord in the system

- p. 20, second system, arpeggio layer: accidentals are missing in second and third arpeggios; second arpeggio should state first a B_b and then a C triad, while third arpeggio should state first an F and then a B triad
- p. 21, first system, arpeggio layer: accidentals are incorrect in first arpeggio, which should state first a D and then an A_b (not A) triad
- p. 21, second system: left brace is missing
- p. 22, first system, arpeggio layer: in second arpeggio, final note should probably be G₃ rather than D₄ to fit pattern of 16-note arpeggios stating first 16 notes of the overtone series
- p. 23, first system, arpeggio layer: first arpeggio appears to be missing note E_{b6} (to complete the overtone series)
- p. 24, sixth staff: in third (last) arpeggio *8 b.* marking is missing under last five notes
- p. 24, bottom staff: stems missing from all notes
- p. 26, bottom staff: bass clef sign missing between sixth and seventh notes
- p. 32, fourth staff: initial bass clef sign is missing
- p. 41, first system, arpeggio layer: final 16-note arpeggio is based on G overtone series, and last two notes should be G₃ and G₂
- +p. 44, second system, top two staves: C₃ in first arpeggio is probably an error as it does not fit E_b major arpeggio (see Gann p. 294 n. 5)
- p. 50, bottom staff: to fit the row statement (pitch 6 of P11), bottom note of second chord should be E and not D#
- p. 53, fourth staff: extension lines for sustained notes are missing after first chord
- p. 59: left brace is missing, and bottom three clefs from top down should be treble, treble, bass
- p. 59, bottom three staves: extension lines from previous page should extend to beginning of first staccato chord
- p. 74, bottom system: left brace is missing, and clefs should be treble, bass
- p. 76, top system: under the second *8va.* marking, it appears that last five notes are missing sharps to fit B major scale

Study #26

- p. 5, second system: all initial clefs are missing; the order, from top, should be: treble, treble, treble, treble, bass, bass

Study #27

- p. 3, second system, bottom staff: there should be a brief rest notated after F₁, occupying half the note value
- p. 3, third system, bottom staff: there should be a brief rest notated after E₁, occupying half the note value

Study #28

- p. 2, first system, third staff (first “occupied” staff): octave higher designation is missing from third note through bass clef
- p. 3, second system, third staff (first “occupied” staff): line denoting octave lower is missing

Study #31

- p. 2, third system: eighth note rests are missing in entire line (meter is $\frac{4}{8}$)

p. 3, second system, middle (second) staff: rhythm in sixth complete measure should be



Study #32

p. 1, fourth system: $\frac{9}{8}$ meter marking is missing in third measure and $\frac{6}{8}$ meter marking in fourth measure

p. 2, fourth system, middle staff: *8va b.* continuation line is missing under first two measures

p. 3, first system, middle staff: first note of fourth full measure should be F# rather than F \flat

p. 3, second system, bottom staff: $\frac{6}{8}$ meter marking is missing in last measure of the line

p. 5, second system, bottom staff: all meter changes are missing in this line: $\frac{9}{8}$ in second complete measure, $\frac{6}{8}$ in next measure, and $\frac{9}{8}$ in final measure

p. 5, third system, second staff from top: octave higher designation in mm. 4 and 5 is erroneous

p. 5, third system, bottom staff: *8va b.* marking should continue through first note

p. 6, first system, second staff from top: note in last complete measure should be F $_2$ rather than F $_3$

p. 6, second system, top staff: $\frac{9}{8}$ meter marking is missing in last (incomplete) measure

p. 6, third system, top staff: C# $_5$ ♯ is missing (tied over from previous system) in incomplete measure at beginning of line

p. 6, third system, top staff: $\frac{6}{8}$ meter marking is missing in first complete measure

p. 6, third system, top staff: note in seventh complete measure should be C $_4$ rather than C $_3$

p. 8, first system, bottom staff: $\frac{9}{8}$ meter marking is missing in first full measure

p. 8, second system, bottom staff: $\frac{6}{8}$ meter marking is missing in first full measure

p. 9, first system, bottom staff: all meter changes are missing in this line: $\frac{9}{8}$ in second complete measure, $\frac{6}{8}$ two measures later

p. 10, third system, top staff: change to treble clef missing in third full measure

Study #33

p. 30, second system, bottom staff: first complete measure should have a $\frac{5}{16}$ meter signature

Study #34

p. 5, last system, middle staff: $\frac{8}{8}$ measure is missing three eighth rests (beats 2, 4, and 7)

p. 7, second system, top staff, fifth full measure: eighth rest missing on second beat

p. 11, second system, bottom staff, third measure: rest on second beat should be eighth rest rather than quarter rest

- p. 11, third system, middle staff, third measure: eighth rests missing on beats 2 and 4
- p. 11, third system, bottom staff: articulations missing in entire line (all eighth notes staccato except those beamed to a following eighth note; beamed eighth notes slurred together)

Study #35

- +p. 27, last system: tempo designation in bottom two staves should be $\text{♩} = 283\frac{1}{3}$ rather than 204

Study #36

- p. 2, third system, top staff: $\frac{4}{4}$ meter signature should appear prior to the entrance of this voice
- p. 18, third system, bottom staff: in last measure, top note of half-note chord should be $D_{\flat 3}$ (flat sign missing)
- p. 47, first system, third staff: $\frac{4}{4}$ meter change should be inserted at beginning of third full measure
- p. 48, first system, bottom staff: $\frac{4}{4}$ meter change should be inserted at beginning of third measure

Study #37

- p. 60, seventh staff from top: $\frac{4}{8}$ measure is missing an eighth rest at end of measure
- p. 67, seventh staff from top: tempo marking ($\text{♩} = 200$) is missing at beginning of this staff

Study #41a

- p. 1, first system, top notated staff: change to bass clef is needed before final four notes of system
- p. 3, third (last) system, third staff: line indicating drone note should be on B_2 rather than G_2
- p. 5, first system, top staff: 23-note run at beginning of system should be marked *pp* rather than *ff*

Study #41b

- p. 25, second system: left brace is missing in this system

Study #43

- p. 1, second system, bottom staff: rests are missing after first quarter note in $\frac{11}{4}$ measure: dotted half rest followed by whole rest
- p. 1, third system, third staff: initial treble clef is missing
- + (marked in Gann's copy of the score) p. 1, third system, fourth (lowest) staff: first note of $\frac{7}{4}$ measure should be $E\#_3$, not $G\#_3$
- p. 6, second system, bottom staff: first $\frac{4}{4}$ measure is missing a quarter rest on second beat

- p. 6, third system, second staff from top: first $\frac{4}{4}$ measure is missing a quarter rest on second beat
- p. 9, first system, third staff from top: quarter rest is missing at end of $\frac{11}{4}$ measure
- p. 21, second system, second and fourth staves: in measure that begins with shared barline, clef should change from treble to bass
- p. 35, third system, bottom two staves, and p. 36, first system, bottom two staves: $\frac{8}{4}$ measure that begins on bottom of p. 35 concludes after first half note at top of p. 36; barline and $\frac{10}{4}$ meter signature should be inserted after this half note and the present $\frac{10}{4}$ barline deleted

Study #45a

- p. 9, top system, middle staff: glissando at beginning of system apparently is missing a concluding A_4
- p. 11, top system, middle staff: glissando is missing a concluding E_4
- +p. 12, bottom system, top staff: tenth note should be a C major triad rather than note G_6
- p. 21: piece concludes in the bass layer with a C octave, which is not noted

Study #45b

- +p. 2, first system, bass staff: the eighth note (F_2) occurs earlier in the recording than indicated on the score—it occurs before, not after, the grace notes and chord in top voice
- p. 8, bottom system, middle staff: after fourth eighth note, a B_4 eighth note is missing (in the same rhythm as previous four notes)
- +p. 9: Gann notes that an entire system (system 23) is apparently missing after top system on this page
- p. 13, bottom system, top staff: the glissando at the end of the line appears to be missing the note D_5
- p. 14, second system, middle staff: *8b.* indication missing under first four notes
- p. 14, second system, top staff: *8va.* indication missing over chord $F\#-A\#-C\#$
- p. 15, middle system, top staff: sustain line from top staff of previous system is missing
- p. 15, bottom system, bottom staff: after second C_4 (near middle of system), note E_{b4} is missing
- p. 17, top system, bottom staff: fourth note (written as $F\#_2$) should be one octave higher ($F\#_3$)
- p. 18, top system, bottom staff: eighth note (written as C_4) should be one octave lower (C_3)

Study #45c

- p. 2, third system, bottom staff: eleventh and twelfth eighth notes should be A_b , rather than A natural
- p. 8, fourth system, top staff: A major triad is sustained after third glissando, but is missing in score
- p. 14, first system, second staff: line should end with a major triad eighth note built on F_4

Study #48

pp. 3–6: some of the initial clefs are missing on the bottom system (p. 3, treble clef on third line from bottom, bass clef on second line from bottom; p. 4, same as p. 3; p. 5, treble clef on third line from bottom; and p. 6, bass clef on second line from bottom)