

John Cage: *Three Dances for Two Prepared Pianos: Dance No. 1*

CD 3 track 7

John Cage (1912–1992) was one of the most influential American composers of the 20th century: an experimental composer, inventor of the prepared piano, champion of **chance music**, and pioneer of the **happening**. His one-time teacher Arnold Schoenberg (1874–1951) famously described him as ‘an inventor – of genius’.

Cage wrote much music for dance. He had a lifetime collaboration with the dancer and choreographer Merce Cunningham (1919–2009) and worked as a music director for various contemporary dance groups. In 1940 he was asked at short notice to compose music for a dance performance. A piano was available but Cage felt the instrument was inappropriate to the African character of the piece. Henry Cowell (1897–1965), one of Cage’s previous teachers, wrote unusual piano music in which the piano strings were plucked, scratched and manipulated. With this in mind, Cage experimented with the inside of the piano and discovered that by placing a variety of objects between the strings the piano sounded more like a percussion ensemble. He found a set of materials that worked best, less likely to fall between the strings or leap out from them. These included screws and bolts, washers and nuts, rubber, plastic, cloth, and wood.

Three Dances for Two Prepared Pianos is a virtuoso work for two amplified **prepared pianos**. It was premiered in New York in 1945. The piano preparations are quite elaborate, involving around 36 notes on each piano, using a variety of materials including screws, pennies, rubber, plastic, weather stripping, and bolts and nuts. As many as six objects can alter the sound of a single note. The work was written for Arthur Gold and Robert Fitzdale. Cage wrote several pieces for the prepared piano over the 1940s and 1950s including the large-scale work *Sonatas and Interludes*.

Following the score

This is a setting of Cage’s original handwritten score. Cage did not follow the usual rules of writing accidentals: they only apply to the note they precede and don’t last for the rest of the bar. Piano 1 is written above Piano 2. The two pianos combine to sound like an orchestra of non-Western percussion instruments. John Cage has written at the beginning of the score ‘Mutes of various materials are placed between the strings of the keys used, thus effecting transformations of the piano sounds with respect to all of their characteristics’. Two of the characteristics thus affected are the **timbre** and the pitches, so do not expect to hear the notated notes as they would normally sound. When you follow the score you should focus on the rhythms. If you lose your place, look out for bars with a sparser **texture** as landmarks.

Three Dances follows a traditional three-movement form with a slower second movement and energetic final movement. You will study Dance No. 1.

In the 1930s Cage began to experiment with the structure of his pieces. He believed that the structure should not be defined by harmony and melody; but should be determined by rhythm. This was partly influenced by his work with contemporary dancers where the choreography is guided by the number of counts. Consequently he devised an approach which linked small- and large-scale structures dependent on time itself. Dance No. 1 is 30 bars long with a rhythmic structure where each number refers to the number of bars 2 : 5 : 2 : 2 : 6 : 2 : 2 : 7 : 2. These divisions are marked in the score by boxed numbers. In this way, Cage defined a matrix dependent on time and then inserted musical fragments into the matrix. The piece contains many repetitions. The sections and phrases are differentiated by changes in timbre and by moving from one rhythm to another. Rhythmically it is very intricate as can be seen from the opening bars which are **polyrhythmic**. The time signature is $\frac{2}{2}$ – two minim beats per bar – which Piano 2 clearly falls into with four crotchet beats in the left hand and off-beat quavers in the right. Piano 1, however, uses a different metre; it is made up of groups of three quavers which go across the bar line.

The musical score shows three staves. The top staff (Piano 1) is in 3/2 time, featuring a series of eighth notes and rests. The middle staff (Piano 2) is in 2/2 time, featuring a series of eighth notes. The bottom staff (Piano 3) is in 2/2 time, featuring a series of eighth notes. The score includes dynamics such as *p*, *pp*, and *fz*.

The percussive sounds and fast interlocking patterns are reminiscent of the **gamelan**, an Indonesian orchestra made up mainly of tuned percussion instruments such as **metallophones** and gongs.

What to listen for

- Listen to Dance No. 1. Describe Cage's use of accents and dynamics.
- Analyse the role that repetition plays in the piece.
- Describe some of the different textures used.

Wider listening

Listen to further works from the 20th and 21st centuries, which created new sound worlds. In 1956 Karlheinz Stockhausen integrated electronic sounds with the human voice in his early electronic piece *Gesang der Jünglinge*. You could listen to Nos. 6–8 from *Eight Songs for a Mad King* (1969) by Peter Maxwell Davies, which uses **extended vocal techniques**.

Table of the Preparations

FIRST PIANO	TONE	MATERIAL	AFFECTED STRINGS		MATERIAL	AFFECTED STRINGS		MATERIAL	AFFECTED STRINGS		TONE
			LEFT - RIGHT	DISTANCE FROM DAMPER (INCHES)		LEFT - RIGHT	DISTANCE FROM DAMPER (INCHES)		LEFT - RIGHT	DISTANCE FROM DAMPER (INCHES)	
		THIN BOLT	1-2	1 1/8	BOLT	2-3	1 1/8				
		SCREW	1-2	1 3/8	LONG SM. BOLT	2-3	2 1/2				
		FURNITURE BOLT	1-2	4 1/2	FURNITURE BOLT	2-3	3 7/8				
		THIN BOLT	1-2	3 1/4	LG. SCREW	2-3	1 5/8				
		SM. SCREW	1-2	1 3/8	FURNITURE BOLT	2-3	7/8				
		LONG SM. BOLT	1-2	6 3/8	MED. BOLT	2-3	2 1/4				
		FURNITURE BOLT	1-2	8 1/8	SM. SCREW + NUT	1-2	3 1/2	MED. BOLT + 2 NUTS	2-3	1/2	
		SCREW	1-2	7 3/4	LG. SCREW	2-3	1 5/8				
		THIN BOLT	1-2	2	FURNITURE BOLT	2-3	6 1/4				
		RUBBER	1-2-3	N.B.†	FURNITURE BOLT	2-3	1 3/4				
		RUBBER	1-2-3	N.B.†	BOLT	2-3	2				
		THIN BOLT	1-2	6 1/2	SM. LONG BOLT	2-3	2 1/2				
		LG. SCREW (to)	1-2	3/4	BOLT	2-3	2				
		SCREW	1-2	2	SM. BOLT	2-3	6 1/2				
		RUBBER	1-2-3	N.B.†	RUBBER	1-2-3	N.B.†	RUBBER	1-2-3	N.B.†	
		SCREW	1-2	2	BOLT	2-3	2				
		RUBBER	1-2-3	N.B.†	PENNYTT	1-2-3	7 7/8	RUBBER	1-2-3	N.B.†	
		RUBBER	1-2-3	N.B.†	BOLT	2-3	2	RUBBER	1-2-3	N.B.†	
		RUBBER	1-2-3	N.B.†	PENNYTT	1-2-3	5				
		RUBBER	1-2-3	N.B.†	PENNYTT	1-2-3	10 1/2				
		WEATHER STRIP	1-2	2 1/2	SCREW	2-3	6				
		RUBBER	1-2-3	2 3/8	SCREW + NUT	2-3	2 1/2				
		RUBBER	1-2-3	1 3/4	PENNYTT	1-2-3	2				
		WEATHER STRIP	1-2	8	PENNYTT	1-2-3	1 1/4				
		SCREW	1-2	3-3 1/4	SCREW + NUT	2-3	8				
		WEATHER STRIP	1-2	9	LG. BOLT	2-3	3-3 1/4	RUBBER	1-2-3	11	
		RUBBER	1-2-3	5 1/4	SCREW + NUT	2-3	9				
		RUBBER	1-2-3	2 1/2	PENNYTT	1-2-3	3				
		SCREW	1-2	1 3/4	PENNYTT	1-2-3	2				
		RUBBER	1-2	8 1/2	LG. BOLT	2-3	1 3/4	RUBBER	1-2-3	4	
		RUBBER	1-2	8 3/4	RUBBER	1-2	5 1/2	SCREW + W.S.	1-2	15	
		RUBBER (EXISTING)	1-2	0.8 3/4	RUBBER	1-2	5 1/2	SCREW + N.S.	1-2	11 1/2	
		PLASTIC (UNDER-OVER)	1-2	1 1/2	RUBBER	1-2	5 1/2	SCREW + NUTS + W.S.	1-2	5	
		RUBBER	1-2	5	RUBBER	1-2	20	SCREW + SUB-W.S.	1-2	5 1/2	

† NEAR BRIDGE

° LACE RUBBER OVER-UNDER SEVERAL STRINGS

TONE	MATERIAL	AFFECTED STRINGS LEFT-RIGHT	DISTANCE FROM DAMPER (INCHES)	MATERIAL	AFFECTED STRINGS LEFT-RIGHT	DISTANCE FROM DAMPER (INCHES)	MATERIAL	AFFECTED STRINGS LEFT-RIGHT	DISTANCE FROM DAMPER (INCHES)	TONE
	THIN BOLT	1-2	1	LONG SM. BOLT	2-3	1				E ¹
	RUBBER (THIN)	1-2-3	2 1/4	SM. BOLT	2-3	1 1/2				D
	SCREW	1-2	2 1/2	SCREW + NUT	2-3	3/4	RUBBER (THIN)	1-2-3	1 3/4	C [#]
	RUBBER (THIN)	1-2-3	2 3/8	SM. BOLT	2-3	1 1/2				C
	SM. SCREW	1-2	1/4	SCREW	2-3	7/4				B
	SCREW	1-2	2	FURNITURE BOLT	2-3	4 1/8				B ^b
	SCREW	1-2	1 1/2	SCREW	2-3	1 7/8	RUBBER	1-2-3	3 5/8	A ^b
	SCREW + NUT	1-2	4 3/4	SM BOLT	2-3	1 5/8	RUBBER	1-2-3	3 1/2	G [#]
	SCREW + NUTS + WS.	1-2	5 1/4	FURNITURE BOLT	2-3	6				G [#]
	SCREW	1-2	7/8	MED. BOLT	2-3	2 1/4	RUBBER	1-2-3	1 1/2	F [#]
	RUBBER	1-2-3	1	SCREW	2-3	7/8				F
	RUBBER	1-2-3	6 7/8	PENNY†	1-2-3	2 1/2				E
	BOLT	1-2	1 1/8	FURNITURE BOLT	2-3	8 3/8				E ^b
	TYPEWRITER BOLT	1-2	1 1/4	SCREW	2-3	1 1/4	RUBBER	1-2-3	3 1/4	D
	LONG SM. BOLT	1-2	8 1/2	MED. BOLT	2-3	8 1/2	RUBBER	1-2-3	5 8	C [#]
	FURNITURE BOLT	1-2	N.B.†	BOLT	2-3	8				C
	THIN BOLT	1-2	1 1/2	BOLT	2-3	1 1/2	RUBBER	1-2-3	2 1/2	B
	FURNITURE BOLT	1-2	N.B.†	BOLT	2-3	9 3/4				A ^b
	SCREW	1-2	1	BOLT	2-3	1 1/2	RUBBER	1-2-3	2 1/2	G [#]
	THIN BOLT	1-2	1 1/4	BOLT	2-3	2 1/2 (3)	RUBBER	1-2-3	1 1/8	G
	RUBBER	1-2-3	4 3/8	PENNY†	1-2-3	8				F [#]
	SCREW	1-2	5	BOLT	2-3	5	RUBBER	1-2-3	5 3/4	F
	SCREW	1-2	2 1/2	BOLT	2-3	2 1/2	RUBBER	1-2-3	5 3/4	E
	WEATHER STRIP	1-2	14	SCREW + NUTS	2-3	13 1/4				E ^b
	RUBBER	1-2-3	8 9/8	LG. BOLT	2-3	3 (1 1/4)				D
	WEATHER STRIP	1-2	8 3/4	SM. BOLT + NUTS	2-3	8 1/2				C [#]
	SCREW	1-2	1 3/8	LONG BOLT	2-3	5 1/2	RUBBER	1-2-3	9	C
	RUBBER	1-2-3	1 1/4	LG. BOLT	2-3	5 1/4				B
	SCREW + WS.	1-2	11 1/2							B ^b
	PLASTIC	1-2	24							A ^b
	SCREW + WS.	1-2	8 3/4							G [#]
	SCREW + WS	1-2	1/2							G
	PLASTIC [unclear]	1-2	2 7/8							F [#]
	RUBBER RS FOR I									F

SECOND PIANO


†† MEASURE TO CENTER, TO EDGE OF OTHER NOTES.

○ = ALTERNATE POSITION.

* MEASURE FROM BRIDGE.

∞ = AFFECTS THIS TONE AND THE TWO SEMITONES ABOVE

Three Dances for Two Prepared Pianos: Dance No. 1

 CD 3 track 7

John Cage

$\text{♩} = 88$

Piano 1 *p*

Piano 2 *pp*

fz

2

3

4

5

13

17 6 7

p cresc.

p cresc.

21 8

p

p

25

p

p

29 9 10

p cresc. *f* *f*

f

33 **11**

Musical score for measures 33-36. The score is written for piano and includes dynamic markings: *pp cresc.*, *f*, and *dim.*

37 **12**

13

Musical score for measures 37-40. The score includes dynamic markings: *dim.*, *pp*, and *fp*.

41 **14**

Musical score for measures 41-44. The score includes dynamic markings: *mf* and *pp*.

45

15

Musical score for measures 45-48.

16 *ff* *dim.* *pp* 17 *pp*

pp

53

57 18 *p cresc.* *f* *mf*

61 19 *f* *mf* *p* 20 *f*

64

p *mf*

68 **21** **22**

f *pp*

71 **23**

mf *p* *f* *p*

74

cresc. *pp*

24 25

Musical score for measures 24 and 25. The score is written for two prepared pianos. The first piano part (top two staves) features a complex rhythmic pattern with various dynamics including *f* and *mf*. The second piano part (bottom two staves) provides a harmonic accompaniment with dynamics like *mf*.

26

Musical score for measures 26 and 27. The score is written for two prepared pianos. The first piano part (top two staves) features a complex rhythmic pattern with various dynamics including *p*. The second piano part (bottom two staves) provides a harmonic accompaniment with dynamics like *p una corda*.

28

Musical score for measures 28 and 29. The score is written for two prepared pianos. The first piano part (top two staves) features a complex rhythmic pattern with various dynamics including *mf*. The second piano part (bottom two staves) provides a harmonic accompaniment with dynamics like *mf* and the instruction *tre corde*.

27 28

Musical score for measures 27 and 28. The score is written for two prepared pianos. The first piano part (top two staves) features a complex rhythmic pattern with various dynamics including *fz*, *mf*, and *pp*. The second piano part (bottom two staves) provides a harmonic accompaniment with dynamics like *mf* and *pp*.

93 **29**

ppp *pp cresc.* *fz*

cresc. *p*

97 **30** **31**

p *mp*

p *mp*

101 **32**

p *mp*

p *mp*

105 **33**

p *mp*

p *mp*

109 34 35

fz p *fz p*

113

p
p dim. poco a poco

117 36

ppp *p*

121 37 38

ff

125 39

129 40 41

133

137 42 43

44

Musical score for measures 141-144. The score consists of three staves. The top staff contains a melodic line with eighth and sixteenth notes, some with accents. The middle staff contains a bass line with eighth notes and rests. The bottom staff contains a complex texture of chords and single notes, many with accents.

Musical score for measures 145-148. The score consists of three staves. The top staff continues the melodic line, ending with a phrase marked *mf*. The middle staff continues the bass line. The bottom staff continues the complex texture.

45

46

Musical score for measures 149-152. The score consists of three staves. The top staff has a melodic line with accents, marked *f* at measure 150. The middle staff has a bass line with accents, marked *pp* at measure 150. The bottom staff has a complex texture with accents, marked *p* at measure 150. The instruction *una corda* is written below the bottom staff.

47

Musical score for measures 153-156. The score consists of three staves. The top staff has a melodic line with accents. The middle staff has a bass line with accents. The bottom staff has a complex texture with accents.

157 48 49

Musical score for measures 157-160. Measure 157 starts with a treble clef and a bass clef. Measure 158 has a key signature change to one flat. Measure 159 has a key signature change to two flats. Measure 160 has a key signature change to three flats. The bass line is mostly rests with some notes in measure 157.

161 50

Musical score for measures 161-164. Measure 161 has a treble clef and a bass clef. Measure 162 has a key signature change to two flats. Measure 163 has a key signature change to three flats. Measure 164 has a key signature change to four flats. The bass line is mostly rests with some notes in measure 161.

165 51

Musical score for measures 165-168. Measure 165 has a treble clef and a bass clef. Measure 166 has a key signature change to three flats. Measure 167 has a key signature change to four flats. Measure 168 has a key signature change to five flats. The bass line is mostly rests with some notes in measure 165.

169 52 53

mf

dim. poco a poco

Musical score for measures 169-172. Measure 169 has a treble clef and a bass clef. Measure 170 has a key signature change to four flats. Measure 171 has a key signature change to five flats. Measure 172 has a key signature change to six flats. The bass line is mostly rests with some notes in measure 169. Dynamics include *mf* and *dim. poco a poco*.

173

pp cresc. *p*

177

54

cresc. *f*

181

55

56

55 56

185

57

57

189

58

59

dim.

p

193

197

60

61

cresc.

f

p

62

63

64 73

65 74

* A gradual diminuendo throughout the repeat to the end.

217 66 75 67 76

221 68 77

225 69 78

229 70 79 71 80

una corda

Ped. Ped.

233

237 72 81

tre corde