



# Holiest of holeys

One hundred years ago, on 27 October, a musical genius was born. You may not have heard of him. He lived much of his life in isolation, creating highly complex yet emotional pieces that were beyond the scope of human pianists. But his music remains a source of inspiration to this day.

**David Kettle** tells the fascinating story of Conlon Nancarrow

If you've ever learnt the piano, you can probably play three against two – in other words, a triplet and a duplet at the same time. You can maybe even play four against three, but how about 20 against 21? Or even 21 against 24 against 25? Or 2 against the square root of 2, or pi against the irrational number  $e$ ?

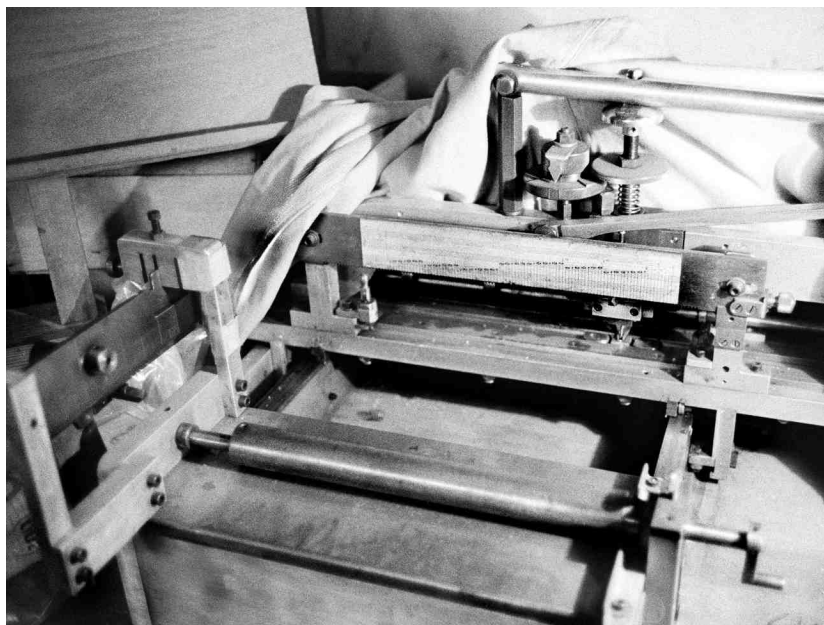
It's enough to make your head spin. And it will probably come as no surprise – not to mention a relief – that music of such rhythmic complexity wasn't written for human players at all. It was created for the mechanical “player piano,” by the composer with one of the strangest careers in classical music, Conlon Nancarrow.

Although more than three-quarters of his pieces are for the rather archaic instrument, which slowly swallows a roll of paper, dotted with punched holes to determine which of its notes should be sounded and when, the sheer breadth of Nancarrow's output, its stylistic variety and its overwhelming invention make comparisons with the likes of Franz Liszt and Federico Busoni far from ridiculous.

Nancarrow was admired, but only towards the end of his life and only by a relatively small number of devotees who had discovered his music. These included rock radical Frank Zappa and fellow composer György Ligeti, who wrote, “His music is so utterly original, enjoyable, perfectly constructed, but at the same time emotional... for me it's the best music of any composer living today.”

High praise indeed. But it's the “perfectly constructed, but at the same time emotional” bit that's most significant here. For, despite the complex mathematical constructions of many of Nancarrow's pieces, it is music for the heart as much as for the head and it bristles with energy, a mischievous sense of fun, drama and even confrontation.





It was certainly in Nancarrow's character to be confrontational. Born in 1912 in Texarkana, Arkansas, he dropped out of the schools his oilman father hoped would instill some discipline in him, devoured frowned-upon books on sex, anarchy and atheism as a boy, and joined the Communist Party upon moving to Boston in the 1930s. He set sail for Spain in 1937 to join the fight against Franco's fascist Republicans, dodging bullets and lice in the trenches. Upon returning to the USA and encountering persecution from the authorities because of his communist sympathies, he up and moved to Mexico in 1940, where he spent the rest of his life.

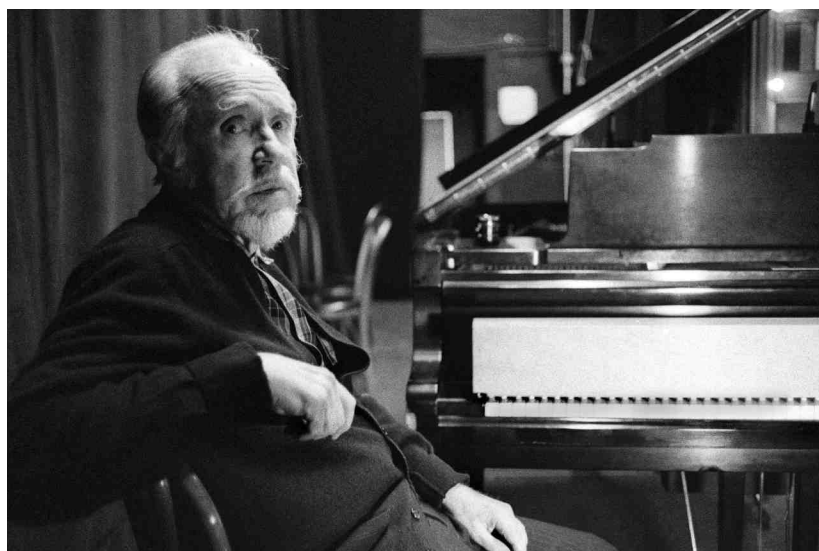
And there he lived in almost complete isolation. Nancarrow had had his friends and champions in America, who had done their best to promote his music, which was at that time relatively straightforward and composed for conventional instruments. Aaron Copland had written a flattering review and Elliott Carter was intrigued by his rhythmic experiments. But Nancarrow left all that behind.

The contemporary music scene in Mexico City was hardly thriving. Determined to push his rhythmic experiments still further, but faced with a shortage of performers, Nancarrow hit upon the solution to both problems: the player piano. In 1947 he made a brief return to New York to buy one, as well as an all-important hole-punching machine.

Fully equipped, Nancarrow embarked on the series of pieces that would eventually be his

Above: the machine Nancarrow made to cut his piano rolls

Below and bottom: portraits of the charismatic Nancarrow, in a cafe and at the Telluride Composer-to-Composer Festival in 1989, shown with the first of several digitally driven boxes – able to attach to any piano – that were fabricated by Conlon's friend, the mad genius and fellow MacArthur Award recipient, Trimpin.



legacy: more than fifty rather self-effacingly titled *Studies for Player Piano*. Composed over the following forty years in the small studio next to his house in Mexico City, these would range from light-hearted, jazzy offerings (Nos. 3 and 10) to overwhelming virtuoso spectacles (No. 25); from lazy, Spanish-sounding rhapsodies (No. 6) to abstract, avant-garde workouts (No. 28).

But the form that Nancarrow explored most thoroughly was the simple canon, where different voices playing the same material follow each other around and around. Yet whereas a composer like Bach might have related the tempos of his voices in a simple ratio of 2:1, Nancarrow used more complex relationships of 4:5 (No. 14), or the aforementioned 21:24:25 (No. 31), or 2:root 2 (No. 33), or pi:e (No. 40). Study No. 37 is a canonic tour de force, with twelve different voices moving at twelve different tempos (related to the pitches in a chromatic scale) and thereby generating a vast web of sound.

Even among this mathematical complexity, though, emotion and energy abound. Whenever voices move at different speeds, those voices will ultimately rejoin together for a brief moment of arresting calm before hurtling off in different tempo directions again.

It's a remarkable example of an emotional effect being generated by an intellectual process, and one that Nancarrow pushed still further in later experiments with rates of acceleration and deceleration, and with trademark sonic effects that could only come from a mechanical instrument: huge, hypersonic cascades of notes from one end of the piano to the other and



## Where to begin

### Recordings

**Studies for Player Piano** (complete)

Wergo. WER 69072

**Studies for Player Piano** (excerpts)

Calefax Reed

**Quintet, Ivo Janssen** (piano)

MDG 619 1548-2

### Recommended pieces

**Study for Player Piano No. 3** (Boogie-Woogie Suite)

Nancarrow collected five short pieces together for his third player piano study, which he named Boogie-Woogie Suite. Frenzied jazz, which sounds as though it's being played by a crazed automaton rubs shoulders with more reflective, subtler movements.

**Study for Player Piano No. 6**

A lazy, easy-going, Spanish-sounding composition with singing melodies, which might sound improvised but are, in fact, precisely constructed rhythmic workouts.

**Study for Player Piano No. 21**

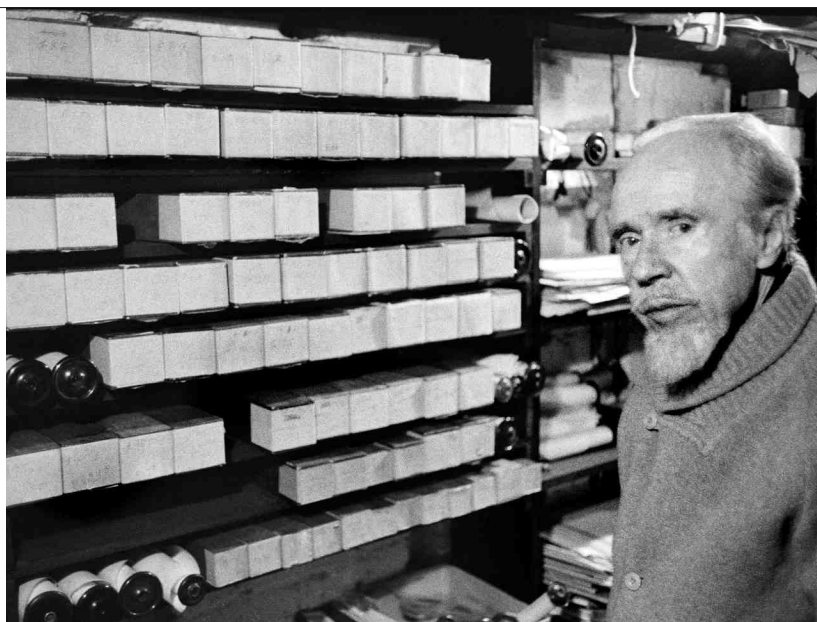
A very simple idea using just two melodic lines: the lower one begins very slowly and gradually accelerates throughout the piece, and the upper one begins very quickly and gradually slows down throughout the piece. The result plays remarkable tricks on the ear, and also generates an astounding sense of drama when the two parts get closer and closer together in terms of tempo.

**Study for Player Piano No. 25**

If you want to hear a piano like it's never sounded before, go straight to this virtuoso showpiece. There are spectacular, high-velocity glissandos, vast chords and enormous explosions of sound – 1,028 notes whizz by in the piece's last twelve seconds.

**Study for Player Piano No. 37**

A twelve-voice canon with rhythmic proportions between 150 and 281 1/4. Its rhythmic complexity might at times be overwhelming, but Nancarrow ensures that there's also enormous subtlety and wit in the piece.



Top: Nancarrow in 1992 with his collection of piano rolls

Above: Studies for Player Piano by Conlon Nancarrow. The self-effacing title belies the complexity of the music within

towering staccato chords that seem to strike all of the instrument's notes at once.

Few of Nancarrow's player piano studies last more than five minutes – not surprising, given that it took the composer months to punch the holes required for just a short snatch of music. And unusually, Nancarrow began his compositions not on conventional manuscript paper, but by marking out the distances necessary to articulate his complex tempo relationships on the piano roll sheets. He only moved on to manuscript paper after punching all his holes, laboriously, by hand.

But if this is music that simply cannot be played by a human, where does that leave the issue of interpretation? Isn't it simply lacking an ingredient that is vital to true musical performance?

It's an interesting philosophical question and one for which Nancarrow had a typically forthright answer. In a 1987 interview, he said, "That's what I don't understand about musicians and music lovers – they always want something different and they never say that they would like to have *War and Peace* different each time, or the Shakespeare sonnets."

In any case, as his music became better known from the 1980s onwards and as he began reluctantly to accept acclaim at festivals around the world, several performing groups, including New York's Alarm Will Sound and Bang on a Can All-Stars, and the Calefax Reed Quintet from Holland, have made multi-instrument arrangements of Nancarrow's studies that are playable by human musicians. In the year of his 100th anniversary, though, there are still worlds of complexity and energy to discover in his thrilling, mind-bending music. ■