Work Exposed

Blood Choir: Making Music from Glucose Readings

John Kefala Kerr

There can't be many musical compositions that require the performers to draw blood. Blood Choir's appropriation of the glucose-testing procedure has resulted in a work that straddles conventional boundaries between 'music', 'sound' and 'performance'.

Like most diabetics, I monitor my blood sugar on a regular basis, says composer, John Kefala Kerr. The process gives me an indication of my glucose levels, and, when combined with medication, special diet and physical exercise, helps me to maintain a measure of 'glycaemic control'.

Since being diagnosed in 2006, I've accumulated several thousand glucose test results. Stored in paper logbooks and the internal memory of my digital meter, the numbers chart the progress of my condition. They also bring with them a degree of provocation (in the five seconds it takes my digital monitor to produce a test result I can experience a variety of conflicting emotions—anxiety, trepidation, resignation, determination, indifference...).

When, in 2012, I happened to be flipping through one of my logbooks, the thought occurred to me that I might put these numbers to creative use. Taken as a whole, they seemed to have a significance beyond the mere charting of blood sugar levels. They were a kind of history, I thought, narrating the highs and lows of my personal life, and (more fancifully, perhaps) chronicling the ups and downs of world events.

Thinking as a composer rather than as a patient, my interest in the musical potential of my blood readings signalled a desire for a more 'objective' engagement with my condition. I felt the results of my daily self-test routine might resonate beyond the pathological and into the wider symbolic economy of 'blood' per se, with its associations of violence, affiliation, religious faith, ethnicity, bodily integrity and sacrifice. In short, I felt my numbers told a story. They posed a creative challenge too, not only in terms of their musical affordances, but also their potential for squaring the circle of individual authorship versus social obligation; much of my past output has been concerned with creating new work in sites of social utility and benefit, reworking the mediating effects of everyday settings, 'composing' points of contact between my own lived experience and wider society.

I experimented with my glucose readings, translating them into musical notes by calculating the median value (5.8) and then mapping it onto middle C of the piano keyboard. In this way, sequences of readings could be 'played' and their effects gauged. Needless to say, the results weren't always melodic. Notes often leaped from 'low glucose' to 'high', and visa versa, creating eccentric, often unplayable 'melodies'. This lack of cogency didn't bother me, however, because I'd decided at the outset that I would preserve the chronological integrity of my readings, come what may. As I saw it, the sequential order of the numbers was the essence of my 'blood story', a story that not only related my successes and failures as a diabetic, but also, I hoped, would speak more broadly about human experience.

Using the above mapping method, I wrote a piece for piano (Blood Piano) and then a work for solo violin (Blood Violin), all the while seeking 'solutions' to the technical and perceptual difficulties posed by my seemingly random numbers...5.9...7.2...6.4... I considered the problem of their indeterminacy and the extent to which I should intervene in shaping the work, reminding myself that the glucose-testing procedure itself had communicative force—sound and 'concept', working hand-in-hand, these were the music. I also entertained playful questions about what 'sweet music' meant in a hyperglycaemic context, and how that conventional indicator of musical sweetness—dolce—might be interpreted.

The public dimension of my evolving 'blood series' of pieces took centre stage when a grant from Newcastle Culture Investment Fund and Tyne & Wear Community Foundation enabled me to develop a more ambitious work for voices using the same glucose-testing approach. Unlike the pieces mentioned above, Blood Choir would involve community participation, artistic collaboration and a commitment to pursuing some of the goals articulated in Newcastle City Council's Vision for Culture and Wellbeing for Life strategy.

"It was fascinating how John calculated his blood sugar count and we turned them into musical notes!" said Ryan Crawford, a Year 5 pupil at St Teresa's. "I thought this was amazing. We were using diabetes to make songs!"
Working with artists Paula Turner (choreographer and yoga practitioner) and Frances Anderson (visual artist), a series of sessions was devised for schools and community groups with the aim of increasing awareness of health-and-wellbeing issues while also contributing to the city’s “decent neighbourhoods” and “artist-led ecology” aims. Pupils at St Teresa’s and Hawthorn Primary Schools, for instance, studied the basic physiological effects of physical activity and food intake on the body. They also engaged in singing and recording activities involving the translation of glucose readings into sung notes.

A range of yoga-style exercises, vocal experiments and visual art activities were featured in a session designed specially for female refugees and migrants. One participant challenged us to clarify what we were doing, asking what our aims were and how we planned to use glucose readings to create a musical work. Such thoughtful and provocative engagement wasn’t uncommon during our sessions, and we were pleased that our approach fostered criticality, going beyond the mere transmission of dry facts about health and wellbeing.

Sessions with Better Days, a support group for adults with learning difficulties, saw participants responding to the tastes of various foodstuffs by means of microphone improvisations. The group’s facilitator, Glenn Howe, said the sessions were a completely new experience for participants: “They really got into it,” he said, “and the part when they had to make a sound which was inspired by the food was fantastic...they threw themselves into it wholeheartedly.”

Attendees at a Diabetes UK support group wrote about their experiences of the condition and submitted their most recent glucose readings via the project website for subsequent translation into musical notes. These, along with other recordings gathered during participatory sessions, contributed to an evolving soundtrack that would ultimately form the basis of the final piece.

The wide range of activities and strategies on offer during the project was viewed as a strength by the creative team, providing participants with a variety of entry points and degrees of involvement in the project. Paula Turner describes the sessions as:

“Making a space for contemplating the human body as a thinking, feeling sensing realm. I have been particularly moved by the responses of schoolchildren to the concept of conscious relaxation and mindful movement. They seem to have an instinctual understanding that this
mind-body connection is at the heart of health."

**Blood Choir** takes several forms. There’s an audio-only version, a version for live voices and soundtrack, and a ‘self-test’ version that requires singers to monitor their own blood sugar levels and eat food during the performance in order to determine (and alter) the sung notes. With no score to follow, no lyrics to learn (it’s all sung to “ah”), no previous singing experience assumed and no conductor required to perform it (merely a set of instructions for singers to follow), **Blood Choir** is adaptable for performance in a wide range of settings and presentational formats. The version for live voices and soundtrack was performed by Newcastle Choral Society on World Diabetes Day 2016, while Voices of Hope performed the self-test version to camera (including a 360° ‘VR’ array) in preparation for a future audio-visual installation. Other live and virtual performances are in the planning.

There can’t be many musical compositions that require the performers to draw blood. **Blood Choir**’s appropriation of the glucose-testing procedure has resulted in a work that straddles conventional boundaries between ‘music’, ‘sound’ and ‘performance’. Sometimes meditative, sometimes cacophonous, the work’s texture becomes gradually more ‘viscous’ over the course of its twenty-plus minutes, the accumulating dissonances perpetrating fleeting assaults on the ear that remind us of sound’s innate ferocity and the visceral qualities of the human voice. More personally, these sounds represent an attempt to explore, though solo and collective process, the interrelationship between the subjective experience of living with a chronic medical condition and the means of expressing that experience. **Blood Choir** intersperses periods of acoustic violence with moments of extreme harmoniousness and vocal vulnerability. I see these contradictory characteristics as manifestations of the perspectives I described above—a bloodstream saturated with sweetness—the isolation of disease—cries from a war-zone—expressions of human mutualiy...

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John Kefala Kerr is a composer and writer. He has created new work for museums, hospitals, theatres, cathedrals, a marine science laboratory, a field, a bus shelter, a disused electricity generating station, a sports centre, a Northumbrian village and a beach hut. His ‘musical fiction’ *Thimio’s House* was published by Perfect Edge Books in 2013. John is co-author and Programme Leader of the BA Community Music degree, delivered jointly by Sunderland University and Sage Gateshead.

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