Introduction

We live in a world where everything is remembered (on hard drives) and everything forgotten (by us). Memory – social memory, political memory, cultural memory – is outside (in the cold, one might say), does not have to be absorbed. We do not need to know the full meaning of, say "democracy." We can scroll down the Wikipedia article. Then we can (safely?) forget it. We do not need to know, say, the Beethoven string quartets. They will always be there on YouTube (in the cold, one might say).

The arts, however, believe in different kinds of memory: the memory that artistic works constitute of themselves, as successive generations of composers, performers, and listeners remember and transform what went before, and the memories of that memory that we each of us build through life. Works of art resist obsolescence, and they resist stasis. They are engaged in something else: a continuing process, of long range.

That process is put severely at risk by our instantaneity and forgetfulness. And yet we here – composers, performers, and listeners – will go on behaving as if it can continue to operate. To write a string quartet is to gesture towards what defines the process: change within continuity. Extraordinary performers can help extraordinary new solo pieces enter the process, become alive. Listeners can listen, witness, and remember.

Pauline Oliveros (1932-2016)

Bye Bye Butterfly

An electronic piece, directly composed into digital memory – or, in the palæolithic era of the art, onto magnetic tape – might seem fixed for all time. That, however, would be to

underestimate what time can do: constantly alter the ways we perceive and understand things. Though nothing in the substance of it has changed, *Bye Bye Butterfly* (so called for reasons that will become obvious) is not what it was when it was composed, more than half a century ago, in 1965. To take only the most obvious alteration, it was then at the forefront of history, whereas now it is a classic.

It is a classic partly because it stands close to the beginning of a remarkable creative life, one that wanted to elide the differences that separate composing from performing, and listening from both. Pauline Oliveros, who left us four months ago, invited us with her "deep listening" to do all three at once – and all he time. Listening with such thorough and yet unforced attention, we inwardly compose and perform the soundscape around us.

It is a classic, too, because it introduced a striking new technique, which, unsurprisingly, already brought composing, performing, and listening into a coalescence. Instead of spending weeks or months recording sounds, transforming them, and splicing them together, Oliveros created her piece in real time, with modest equipment of the sort available then at the San Francsico Tape Music Center: two tape recorders in a delay setup, two oscillators and two amplifiers, and a record turntable. (The center was the only place for electronic music on the West Coast; Steve Reich, Terry Riley, and Morton Subotnick were also working there.) The eight minutes of the work are the eight minutes it took Oliveros to perform it. The recording is at once a journey into strangeness and a document of reality.

It is a classic, finally, because it elegantly creates a space in which familiar music and new sound may coexist, and neither crowd out the other.

Chaya Czernowin (b. 1957)

String Quartet

The string quartet, of all genres, is made of memory. Yet Chaya Czernowin's, which plays

for fourteen minutes, finds a place where it can be by itself, not remembering the great repertory so much as remembering its own elements and forces.

This is partly a matter of remembering striking ideas that keep coming back, more or less transformed, all of them demanding the presence of at least three of the instruments. "In this work," the composer writes. "the quartet becomes a single composite instrument. This instrument cannot play individual sounds but rather composite gestures, of which the initial impulse linked to the production of a sound is an integral element." One of these composite gestures comes right at the start: a kind of downward skid in two large steps, involving different kinds of pizzicato. Absent from the second movement, it is there again at the beginning of the third.

Other gestures that recur include unisons or octaves buzzing with discrepant quarter-tones (quarter-tone tuning is the norm here, and itself helps the piece form its own space) and mixtures of glissandos going at diverse speeds and in diverse directions – but here it is really up to the listener to decide whether a particular gesture is the same as another or different.

Indeed, it is through the play of sameness and difference that the piece functions, and through the parallel play of fragment and whole. Further on in her note, Czernowin mentions a visit to the Wat Arun (Temple of Dawn) in Bangkok. "From a distance, it appeared as a majestic looming tower possessing a monolithic form. It was then an extreme surprise, on proceeding closer, to discover that the tower was comprised of thousands of small shards of ceramic plates, in intricate filigreed patterns. The play between the presence of the temple's totality and its fractured parts helped to provide both the material and formal conceptions for this quartet."

"The piece is," she goes on "built from three movements with two 'sonic windows' separating them. In the first movement, the composite sounds are introduced and form phrases, interjections, and a part of a song; the second movement is similar to an improvisation using these composite sounds; the last movement is a speech composed of fragments from the first two movements." The windows are probably to be understood as an episode of noise effects and another of high-register staccatos. Between these, the

second movement has all four instruments engaged almost constantly.

Czernowin wrote the work in 1995, at the end of a two-year period she spent in Japan after completing her studies at UCSD with Brian Ferneyhough. She has written other works for string quartet since – *Seed I-II* (2008) and *HIDDEN* for quartet and electronics (2014) – but her String Quartet remains alone as a contribution to the genre, and an extension.

Timothy McCormack (b. 1984)

HEAVY MATTER

Generations are unfolding here; Brian Ferneyhough taught Chaya Czernowin, who teaches Timothy McCormack. But also, generation is unfolding, the generation of sound as mass. McCormack has written several solos as extrusions of heaving, bending, living stuff: *RAW MATTER* for bass clarinet and *BODY MATTER* for bassoon (both 2015), *DRIFT MATTER* for cello (2013), and, Daddy of them all, *HEAVY MATTER* for trombone (2012), which plays for eight minutes or so and has been around long enough to win the attention of half a dozen players, each of whom has played it multiple times. (SoundCloud has recordings by three of them, showing how the piece, while strong in its own identity, can change with the identity of the performer.) The composer writes of it as follows:

"HEAVY MATTER is comprised of molten sound: dense sound with weight and mass, sound which churns itself through unsettled, shifting forms, sound which is between states of matter. The gestures are solid enough to retain the semblance of shape while constantly altering forms and blurring registral boundaries. Through the piece, the material is subjected to what can be thought of as varying degrees of formal gravity, which then affect the solidity, density, and rate of the sound. The flow of sound is constant, heavy, multi-directional, and pressurized. The sound is not within a space; it is the space."

Brian Ferneyhough (b. 1943)

Bone Alphabet

Jonathan Hepfer writes as follows:

"When one sees a program note to Brian Ferneyhough's *Bone Alphabet* (1992), the first sentence often reads: 'This piece is the most difficult work ever written for solo percussionist.' Though I admit that such a bold statement was precisely what originally enticed me to approach this work, I have found it quite deceptive.

"Ferneyhough poses a riddle disguised as a liberty to the performer, asking him/her to find 'seven instruments from high to low, sharing the qualities of short attacks and similar dynamic envelopes.' The catch is that no two instruments adjacent to one another in the chosen scale may be of the same material type (i.e. wood, metal, skin, glass). In addition, the physical properties of the instruments must allow for the performer to realize the intricacies of the techniques demanded by the composer. Following this initial challenge, one must confront the notation, which can only be described as a type of dense, fastidious forest of layers of abstract rhythmic ideas superimposed upon one another, each demanding its portion of the performer's mental space (think of an astronaut being pulled by four different fields of gravity simultaneously). Perhaps an easier way to understand this is to think of each measure of the piece as a puzzle, which needs to be deconstructed by the performer and subsequently reassembled. There are 156 measures in the piece and each measure demanded between two and twenty hours to learn.

"So after all of this crystalline and poetic travail, why does the piece sound more like a garbage truck driving down a bumpy road than Bach's Goldberg Variations? To me, this is truly the difficulty of the piece; at a certain point, one realizes that the typical pursuit of virtuosity is a cul-de-sac from which there is no return. Instead of the virtuosity of the hands and fingers (i.e. Liszt), one must possess a virtuosity of finding creative or interpretational solutions for an utterly non-idiomatic score, as well as the patience and discipline simply to stay with the piece until it is learned (this took about

nine months of constant attention for me), all the while knowing that the payoff will certainly not come in the form of a recording contract with Deutsche Grammophon.

"Of course, this is exactly when the piece starts to become interesting. 'If you don't like what is being said, then change the conversation.' Perhaps the piece isn't about rhythm at all. Perhaps it is not even about sound. Perhaps it concerns the eye and not the ear. Perhaps it is about the way energy is always in a state of becoming something new. How does a musical idea in the mind of a composer turn into the jagged dance of a percussionist? It is this translation of idea into unexpected art form that I love.

"The piece is full of paradoxes, shifts of paradigms, shattered expectations and ultimately, failures. In the end, though, it is a marvelous journey, and as Werner Herzog said of *Fitzcarraldo*, "It is a great metaphor. For what? I don't know – but it is a great metaphor."

Trevor Bača (b. 1975)

Akasha

Following the lead of a composer and a performer, perhaps now a listener should kick off with a word not usual in this kind of program note.

I first heard *Akasha* on the afternoon of Saturday February 6, 2016, at the JACK Quartet's dress rehearsal for their concert on the Harvard campus that evening. What can I say? Any word for the experience will be less than the evidence of that experience in the fact that I am here, just over a year later, writing a program note for what will be, I guess, the work's second performance. But OK, two big impressions. One, before I had looked at the score, was of this combination of immediacy with sophistication. The music spoke; its gestures had a directness and a precision and an urgency you do not expect to find outside the works of György Kurtág. But there was – as there certainly is not either in Kurtág – anything obvious about them. They were highly crafted, exactly placed. You heard slow footsteps, very slow breathing, groaning, self-stifled wails, choirs of the

maimed, and also, of course, moments of blistering radiance, but all of them belonging only to *Akasha*, not to be found anywhere else. The referent might be completely ordinary – slow footsteps, for heaven's sake – but the expression would be unique.

The second big impression was of something that took full possession of the half-hour that contained it. Nothing else in the world was happening. Only this.

Several listenings later, I have no better idea how such enclosure is achieved. The music keeps starting and stopping. That much is obvious. Every time it starts, it seems to do so in the knowledge of its coming extinction, and every time it stops, it leaves behind an expectant silence. That much is obvious, too. But how do the pieces, the fragments, fit together? And how do they fit together when there is no gap to, as it were, justify the change?

There is a place – not easy to miss – where the violins and the cello introduce a kind of sound not heard before in the piece (or anywhere else, I might add, since this is music that takes full possession of its sound as well as of its time), something like a sawtooth-wave effect, "grating," one might say, were the word not pejorative and therefore quite unsuitable for what is hard-beautiful, forceful and present, unable to be otherwise. The viola is continuing with the sound it had from the opening measure, a sound as of breath, obtained by following one of the (rather few) directions at the head of the score: "bow directly on bridge with a diagonal bow (to produce white noise only)." The others spring out with this "timbre with as much scratch (and as little pitch) as possible." Then, beginning with the cello in a quasi-canon, they turn to flurries of sixteenth notes gradually rising in register, all the time over the viola's white noise. One might want to say that the incisive attacks engender the flurries, or prompt them, or that the flurries replace the attacks, or whatever. But none of these verbs is right. There is certainly a relation. It just does not disclose itself in terms other than those of its situation, in music.

A program note might be expected to offer explanation, but I have no explanation. The music does not confer any. I do not know why it is so. It is so.

I do not even know what the tempo is. Perhaps the piece could be heard as a big

slow movement; the metronome swings between 44 and 55 a lot of the time. Yet, even when we are listening to just one instrument maintaining a sound, there seems to be always a fizz of instants racing.

What can I tell you, then? My best bits? The very start. The very end. The places where a fiery planet is spinning, on an axis of octaves – except that there is nothing as generalized as octaves in this work, which thoroughly absorbs all it entails; these are *Akasha* octaves. The point where the cello, alone, slides on down to reveal its bottom string tuned down to A (a scordatura shared by the viola). But these are best bits only because they appear in a best all.

Of course, the composer hears it a different way: "Akasha is a music of invisibility, electricity and the open expanse of the sky. The title is the Sanskrit word for the æther, a concept once understood as an unseen force present in all things in motion in the world."