



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Armstrong, N. (2019). The in-between of line and surface: A line alongside itself. Paper presented at the Bendigo International Festival of Exploratory Music, 6-8 September 2019, Bendigo, Australia.

This is the published version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/25433/>

**Link to published version:**

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---

---

City Research Online:

<http://openaccess.city.ac.uk/>

[publications@city.ac.uk](mailto:publications@city.ac.uk)

---

## The in-between of line and surface: *A line alongside itself*

Newton Armstrong

Bendigo International Festival of Exploratory Music

7<sup>th</sup> September, 2019

It seems that only the in-between of line and surface truly exists, all that is not Euclidean, and that the finite dimensions are just illusory stations in active zones of transition.

— Lars Spuybroek, *The Matter of Ornament*

Firstly, I'm going to say a few things about the piece you've just heard.

You'll have noticed that in addition to Séverine, sounds were emanating from four loudspeakers. But I don't think of the piece as being for Séverine and loudspeakers; I think of it as being for five Séverines: one of them live, and front and centre; and four others pre-recorded, and forming an arc around the real-life Séverine.

You'll also have noticed that there's a separate layer of electronic sounds that were added to the ensemble of Séverines at about eight minutes into the piece. (These were the descending glissando sounds.) This layer is made of four-voice canons; each of the four voices is spatially positioned in-between each of the five Séverines.

\*\*\*\*\*

Sév and I have been working together for around ten years now, on all sorts of different projects. I've come to know her playing well during that time. Sév is also a composer, of course, and the two of us regularly share work with one another, often while it's still in progress.

The piece that you heard today didn't involve a great deal of collaboration between the two of us; at least not in the way that collaboration between composers and performers is usually understood in new music. But this ten year history we have now of working together has certainly informed the way that the piece took shape.

When we first started talking about a new piece, my familiarity with Sév's playing — and with her broader compositional sensibility — presented a problem. For me, her material

was very much *her material*. Sév has developed an original and extensive repertoire of cello techniques, and for me these materials were off limits precisely because they belong to her. In effect, it would have felt colonial to adopt them and repurpose them for my music.

That said, the piece was very much written with Séverine in mind. In one of our early sessions together, we listened to 16th- and early 17th-century English music for viol consort; composers like Orlando Gibbons, William Lawes, and Christopher Tye. This is music that I've loved for a long time. We experimented with the types of bowing and phrasing that characterise this music, and it's from there that the piece was born. Suddenly I could imagine a consort of Séverines, and a spatialised texture that emerges from a very reduced material: single, sustained tones that decay with a Baroque-style bow action.

The immediate appeal of this material was that when it was layered against itself in a five-voice canon, I found that my listening didn't 'lock on' to the individual voices, but neither did I hear the composite texture as a singular block of sound. Interestingly, with four voices I heard *lines* (i.e., counterpoint), and with six voices I heard *surface* (i.e., the texture effectively congealed). But with five voices, the music gave rise to something *in-between* line and surface. It took on an ambiguous, hovering, suspended quality. It's these kinds of liminal zones that I seek out in my music, as they bring about a particularly intense kind of listening focus, drawing us towards the material actuality of the sound.

Sév said to me recently that this piece wasn't very collaborative in nature. She's right, in that once I'd found the basic material, I got to work and there was very little further communication between us. At the same time, though, I wouldn't have written a piece like this for anybody else. There's a high degree of precision and intensity that needs to be sustained over a relatively extended duration. It requires not only consistency and focus for each and every bow stroke, but also very finely detailed left-hand control, which involves the navigation of tiny spaces on the fingerboard. While there may not have been a lot of collaboration in the conventional sense, there's nobody else for whom I'd write music like this. (And this would have to include the final event in the part that Sév plays live: a harmonic on the C-string that sustains continuously for eight minutes.)

\*\*\*\*\*

You'll have noticed that the piece makes extensive use of repetition, and exhibits a relatively high degree of sameness. This is particularly true of the first seven to eight minutes, before the descending glissando sounds are added to the texture and the space of the music opens out. What interested me here was finding ways to keep the sameness 'active'; of finding difference within the sameness.

Repetition can have all sorts of interesting effects on auditory perception; particularly the more extreme forms of repetition — those that keep going, and going, and going. For

instance, in a music without regular, salient moments of change, our capacity for orienting ourselves within the flow of time can easily become distorted. It can cause the way that we perceive the passing of time to take on a kind of 'sticky' quality.

(It was interesting to hear comments on this aspect after the first performance of the piece back in July. In clock time, the piece is around twenty-one minutes long. I heard estimates that were more than ten minutes either side of this duration.)

I'm also interested in the way that repetition can distort our sense of scale. For most of the first eight minutes, the piece occupies a pitch space smaller than a semitone. What happens in a situation like this is that our listening focus becomes narrowed as time passes. We habituate to a different sense of scale — a different order of magnitude — and the repetition performs a kind of 'zooming' effect. We begin to hear details that we wouldn't hear in other circumstances; at the same time, the auditory horizon seems to contract.

We often don't notice these things as they're happening; it's only when something changes — when the repetition gives way to a new kind of event — that they become apparent. There's a moment around three minutes into the piece when, after many moves within the space of a semitone, there's three repetitions of a sustained, microtonally deformed minor third. To my ears this interval sounds a lot wider than it actually is; it seems closer to a minor sixth. This is what I mean when I talk about extended repetition performing a kind of 'zooming' effect; when a change eventually happens, that change tends to take on a much larger aspect than it otherwise would.

\*\*\*\*\*

I'd also like to make a couple of comments about space in the piece, and about how I think about space making itself present as we listen.

As you heard, the piece is obviously very spatial in nature. But it's not just a matter of sounds appearing at different points within the space, it's also that these sounds interact, forming spatial patterns, and bringing about particular forms of spatial quality, or what electroacoustic composers refer to as 'spatiality'.

After the first performance of the piece, somebody described the experience as like being inside a giant accordion. I liked that. The composer Matthew Shlomowitz said that the opening minutes made him feel dizzy and slightly ill. I liked that as well.

What I was going for — and it's there in different ways in a few of my recent pieces — is a spatialised texture that takes on a kind of oscillating or shimmering quality. The effect varies quite a lot from one acoustic space to the next, and, unsurprisingly, is more pronounced in active, resonant rooms. When the effect really takes off, the air seems to become wobbly.

Interestingly, this effect emerges entirely from the Baroque style of bowing that I spoke about earlier. When this specific type of decaying sound is overlapped with itself, in different spatial locations, offset at near-periodic intervals of time, and in unison or near-unison pitch, the effect lies somewhere in-between hearing five distinct voices and hearing one single voice that hovers, shimmers, and creates wobbly air.

\*\*\*\*\*

In a talk I gave a few years' back<sup>1</sup>, I set out some ideas about a kind of music that requires *active forms of listening* in order to be complete. I spoke about a shift in my work towards taking full account of processes of aural perception when making musical materials. This shift not only led to thinking in new ways about the materials that comprise the music, but also to thinking in new ways about the relationships between those materials, and the ways in which those relationships mutate in listening over time, constituting the emergent sensation of form.

That kind of thinking was present when experimenting with the materials for *A line alongside itself*. I wasn't interested in using extensive repetition to distort perceptions of time and scale just for the sake of it; or, for that matter, with staging some kind of empirical demonstration of interesting spatial effects. Rather, I was interested in the way that these distortions can intensify our listening focus, such that we become awake in the moment to the embodied actuality of listening.

For me, it's at moments such as these that music becomes possible; the everyday *objects* of perception present themselves in their primary *un-objectness*; in their unfamiliarity, impermanence, and contingency.

---

<sup>1</sup> Armstrong, Newton. "Listening as a material." Paper presented at the *Troisième Biennale d'Analyse Musicale 2015*. Conservatoire Royal de Mons. 27th March, 2015.

Available at: [https://openaccess.city.ac.uk/id/eprint/13533/1/listening\\_as\\_a\\_material.pdf](https://openaccess.city.ac.uk/id/eprint/13533/1/listening_as_a_material.pdf)