Citation for published version:

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
A Collaboration between Image and Sound: Graphic Scores

Jo Ganter and Raymond MacDonald

Introduction
Our collaboration is between Art and Music: image and Sound. Multidisciplinary collaboration is a particularly topical approach and there are countless examples of practitioners from different disciplines collaborating to produce new work. This particular project involved artist and musician collaborating to produce a series of original prints that also function as musical compositions. As well as developing a deeper understanding of our own collaborative practices we are interested in the collaborative process itself: the negotiation of image and sound, and, the relationship of collaboration to improvisational methods. We aim to achieve a deeper understanding of how musicians understand and are able to utilize non-conventional notation, i.e graphic images, and ultimately how audiences engage with and understand the combined experience of music and image.

Graphic scores represent music using visual images outside the realm of traditional music notation, and have been an effective way for experimental musicians to convey musical ideas since the 1950s. However, while many graphic scores are visually interesting, few claim to be works of art in their own right. Through our collaboration, we wanted to create a series of original prints that function equally as visual art and musical score. It is essential they are able to be reproduced to fulfill both functions: sitting simultaneously on music stands, and framed on the wall. The art gallery providing space for exhibition and the set for a number of musical performances.

The project provided an opportunity to develop a body of new work where we worked experimentally, taking risks in order to test different methods and ways of working together. We aimed to move beyond the boundaries of conventional art/music collaborations and avoid a
superficial type of collaboration where the artist produced the visual and the musician took
responsibility for the music. Rather than the conventional relationship of master printer and artist,
where the printer’s role is purely technical, or, the conventional role of musician responding to an
artist’s existing images, instead, we take equal responsibility for the making of the images and the
direction of the music; immersing ourselves in each other’s practice to produce truly co-authored
work: Ganter/MacDonald compositions and MacDonald/Ganter prints; in this way, blurring the
boundaries between visual artist and musician/composer. The resulting work is as important
visually as it is musically – these two elements in complete equality. Crucially, we both attempted
to engage in the others practice at a deep level, and to make new insights into our own individual
practices in order to develop a new and original collaborative practice. This immersive approach
was more risky as it meant moving out of our respective comfort zones and also letting go of
certain aspects of our practice in order to let the other collaborator into our world of experience.

As a visual artist, Jo works slowly to carefully craft and make visual images. Raymond works in a
much more spontaneous and improvisational way to make music. It was important to develop
methods that would allow both of us to input into image and music and negotiate the difference
between our practices so that it became a positive quality in the finished work. After a short pilot
project making stone lithographs, we rejected the slow methods of traditional printing and turned
to digital printing. Digital media allowed us to collaborate quickly and spontaneously while having
any number of versions of an image to which we might return to continue editing and ultimately
craft into a finished image to print. Hand drawn ‘grids’ and photographs, provide the starting point
for intricate images that are collaboratively developed in numerous ways. Sometimes both of us
working on the images simultaneously, sometimes through a remote collaboration, scanning and
sending images to one another electronically.

Working with small groups of highly experienced professional musicians, we developed image
and music in tandem, sometimes editing the images during rehearsal in response to the
musicians’ interpretation, and our own negotiation of the instructions. The musicians we engaged
with were encouraged to take an equally experimental approach to their medium, while engaging
with the images in ways that we directed. The main realisation of the music was through the
composition of the graphic image and the realisation of the image was negotiated through the
music. The musical response to the images varied, but it was always specific to the image. We
gave a number of performances during the project and were able to explore a variety of
responses to each of the scores.

The musicians we used were accustomed to improvisation. They responded to the images, both
as we direct them, and using their own responses. Discussion of their response was an important
aspect of the project. We are investigating the relationship of collaboration and improvisation: the
individual response and the negotiation within the group. Rehearsals were recorded to facilitate
analysis and documentation of our findings.

**Methodology**

The following paragraphs give a number of examples to highlight how we worked together to
produce our new work.

Our method of making Time Points is typical: we created a matrix or grid, scanned it, added lines
to it, scanned it again, added some colour, scanned it again, added more colours in response.
These decisions may be made with the two of us sat side-by-side with a laptop or pens and
pencils, or remotely, emailing the image back and forth. Drawings are imperfectly finished but
effectively convey information to the other. Once we’re both happy with the image, the final scan
is crafted before it is printed, and we introduce it to a small group of musicians. In rehearsal, we
negotiate a series of directions that suggest to the musicians how the image should be used as a
score.
While there is a loose common aesthetic to the first suite of prints we have made, it hasn't been our purpose to create a single visual language, where, for example, a particular shape should always be translated by a particular sound. Rather, the instructions attached to each score are very different and have allowed us to investigate a number of ways in which musicians might interact with images.

Time Points, Conscious Spaces, Manuscript, Slant and Running Under Bridges, all read conventionally from top left to bottom right, but only Conscious Spaces and Manuscript have elements that are equivalent to bar lines that give time. Where each instrument is allotted a colour in Conscious Spaces, all instruments play all colours in Manuscript.

For Duets, a more holistic approach is used: as the title suggests two instruments play together. Each is allotted a colour, lemon or green but they needn't read strictly left to right; a more flowing movement down and across the page is used. Colour and tone suggest the timbre of the music and also the interaction between the two, with the ‘green’ instrument playing more at the beginning and end of the piece while the ‘lemon’ instrument plays alone, sparsely, in the middle. These are the notes taken during rehearsal that simply record our actions through a number of performances. We also collect and evaluate information through recordings we make of each session.

For the first rehearsal we had developed Conscious Spaces to this state through the process described above and illustrated here. During rehearsal we decided that the blue rectangles should denote bar lines. However, more bar lines were needed, and were added, to allow the musicians more time.

Bar lines are also denoted by the yellow rectangles in Manuscript, however the shapes here denote the type of material to be played by the musicians: pink is melodic material, orange textural, the dark blue squares, dissonant material.
Running Under Bridges had a different source as a matrix. We had both begun to see 'grids' in the structures around us. A photograph taken of the underside of Sydney Harbour Bridge was the inspiration for this final piece. To make it even more 'grid-like' we took a section and collaged it. The photographic collage was played in rehearsal and created the foundation for the music, but we felt it stood too far apart from the other images and we wanted to be able to use colour, so a digital drawing traced the structure and colour was added. This final state maintains the structure of the original photographic collage, the heavy repetition of the corrugated roof of the bridge, but expresses much better the lighter, zig-zagging melodies that we wanted in contrast.

Our musicians looked at this more complicated structure with trepidation, but our instructions for the piece were specific and sufficiently open for the musicians to respond freely to each clear section of the image and it became the title piece for our exhibition and performances.

The scores have a great potential for use by musicians for performances and educational events in addition to our own collaborative partnership. We have enabled musicians to take them to other events and venues in exchange for their recordings of how they used the images, and, how they were received, to extend our own knowledge of their use by improvisational musicians. Our activities facilitated audiences to access our creative process as our rehearsals were open to the public. We provided conventional gallery artworks, experimental visual display, improvisational musical performances of the scores, and live opportunities for audience participation.

The scores were always to be exhibited artworks, as well as having a function for the musicians. Archival inkjet printing has allowed us to produce a physical score of a high quality that spectators and musicians enjoy engaging with. Each exhibition, performance, and workshop, allowed us to engage with audiences in a way that facilitated discussion of the work. Importantly, the audience were encouraged to engage with image and sound as one, and it was clear that the people who attended the performances, did look at, discuss and ask questions about the images, in a way
that suggested a far greater engagement with the work than people visiting the exhibition who had not experienced a performance.

To assist the spectators’ understanding of the relationship between image and sound, and to test it for ourselves, some of the scores were animated by Jo, using soundtracks from the performances. In this way, working out a whole new way of relating the image and sound, by having the image move very specifically in response to the music. A different performance of the same image demands a different animation, albeit of the same image, and so hopefully, it becomes visually clear, how each score can be reinterpreted many times, always truthful to the instructions attached to it, always specific to the score, but allowing for different musicians’ improvisational readings.

**Conclusion**

In conclusion, this project attempted to facilitate a new type of collaboration between an artist and a musician. The process utilized involved artist and musician immersing themselves in each other practice so as to produce a series of co-authored prints that also function as musical compositions. The music rehearsals and performance of the new work were also a crucial part of the overall process as their input was crucial in the development of the work. In this way this project also interrogated notions of authorship within an artist product. Future research will seek to further explore the possibilities of this type of immersive collaboration to produce new work, in new locations, that involve the integration of sounds and image.