The Digital Score Creativity Cards

These cards have been created to help you design, develop and create digital scores. They present insights from different perspectives about the possibilities, opportunities, challenges and questions around the creation of a digital score. They have been designed to operate like a conversation between you, your creative ideas, and the wealth of experience from those who have researched and specialise in making digital scores. The hope is that they offer new ways of thinking, creating, performing and sharing your musical ideas.

https://digiscore.github.io/

What is a digital score?

Simply put a digital score is much like a traditional music score: it is a communications package of a musical idea that is sharable. However, digital scores use the creative potential of technology to expand on the types of musical ideas that can be shared and expressed as a music score.

They are the next evolutionary step of the traditional paper-based score. But instead of being limited to a piece of paper (or PDF) as the "package" with which a musical idea is shared, or being restricted by the limitations of printing press technology, a digital score benefits from the creative potential of all technologies. So if you want to explore animated scores where the notation moves about on a screen, or you want the digital score to be like a computer game where player interaction is key, or you wish to explore robotics or AI, then these digital score creativity cards can help you package your musical idea in such a way that it is communicated to other musicians, again and again.

Notation vs The Language of a Score

A traditional score is more than just the notation printed on it. Reading from Bach's original hand-written manuscript is a vastly distinct experience from ready those same notes from a version created in Sibelius: same notes, different platforms, different worlds, different meanings. With a digital score we must address our own tendencies to think of a score as being solely about the notation. Notation is an important symbol-based mechanism with which certain musical ideas can be expressed and presented to other musicians. But when we are creating digital scores we have access to all sort of media, all sorts of technology, and all sorts of senses (eyes, ears, touch etc). And crucially it allows all sorts of musicians the opportunities to express their musical ideas in a way of their choosing.

Common notation is a useful symbol-system used by millions of musicians around the world, for many, many years. But if your musical idea can't be expressed with static notes on a stave, or it is too complex to anchor onto a fixed page, or the musicians you are working with do not read common notation, or you want to express contemporary ideas in way that adopts contemporary culture and technology, or you want to explore AI agents or gaming interactivity then a new system of language will be needed --- one that allows you to express your idea in a score, and this may be a new form of notation, but equally it could be colours, shapes, sounds, pre-recorded instructions, data visualisations, dancing robots or AI improvising partners.

"*A music language defines what you can say; what you want to say defines your music language"* Cornelius Cardew.

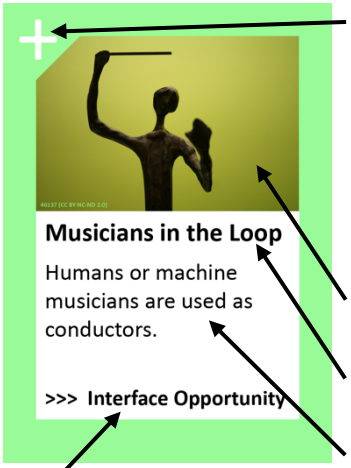
"*To Imagine a language is to imagine a form of life; the limits of my language are the limits of my world"* Ludwig Wittgenstein.

Open conversations with the cards

We would like to think that these cards encapsulate a lot of our knowledge about creativity in, with and through digital scores. Therefore, we hope that each card presents a part of our knowledge for you to use as a conversation point about your digital score. You might find that through these conversations your ideas have become enhanced or transformed. You might find that it presents a certain challenge that you hadn't considered and can now discuss with yourself or your team. You might find that the conversation is seemingly irrelevant to your idea; but do discuss it and then discard it. There is no right or wrong here, but we do ask that you enter an open conversation and that you allow your ideas to grow, transform, adapt, change and become enhanced.

About the Cards

Each card is designed in the same format:



Card Type – positioned in the top left-hand corner of the card, this signifies:

+ Opportunity cards help to expand your core ideas.

- Challenge cards present known problems and issues that are common in digital scores.

? Question cards ask you to consider how you could enhance a score or deal with a potential complication.

Card Image: A pictorial representation of the subject of the card. Includes credit info about photo owner and the open-source licence.

Card Title: A simple word or short phrase that positions the conversation. E.g. "Musicians in the Loop".

Kick-starter Text: a brief kick-starter of the conversation inspired by the card. Use this as a **starting point** for an open conversation!

Card Mode: links the type and content to one of the 7 modes of digital score theory; e.g. Interface. All modes are also identifiable by the card background colour.

Acknowledgments

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How to use the cards

There are two main ways to use the cards: *Free Play*, or *Idea Game*. Of course, they can be used in any way that you feel is right.

Free Play

Once you have an idea for a digital score, or are in the process of developing one, you can choose any card at random and use that for an open conversation. You can pick any number of cards from anywhere in the pack or read them all.

Idea Game

The *Idea Game* has been designed to guide you through the design, development and testing of a digital score. There are several phases that lead you and your team through digital score creation. The most important thing is that you arrive at a digital score concept and test it out as soon as possible. Digital scores package musical ideas, but the point of them is for those packaged ideas to be realised by other musicians. Prioritising body-storming over brainstorming is key, as the only true place to evaluate your digital score is by turning it into music.

Instagram

We would love to hear about your ideas and how they develop through using these creativity cards. Whenever you see ***INSTAGRAM*** in the instructions, please:

- Take a photo of the cards you are currently in conversation with (usually 3).
- Write a short note about the group discussion and how your digital score has developed (maximum 50 words)
- Post it to Instagram and tag *@digiscoreERC and #creativitycards*

Phase 1 - idea generation

1.1 Write down a couple of imaginative ideas for a digital score or a musical composition. Artistic vision stuff. What is your musical idea about? What bit of culture/ humanity/ news/ life are you wishing to make music about?

1.2 For each of these ideas in turn:

- take 3 opportunity cards (+) and spend 5 minutes (time it), exploring how each of the cards would change, enhance, transform, expand, deform, or diminish your idea. (See ***Open conversations with the cards*** above)
- ***INSTAGRAM***

1.2 take another 3 opportunity cards (+) and repeat the 5-minute open conversation.

- ***INSTAGRAM***

1.3 One last round of 3 opportunity cards (+) and repeat the 5-minute open conversation.

- ***INSTAGRAM***

1.4 Move on to the next idea.

Phase 2 - idea development

2.1 choose one of your ideas to explore further.

2.2 Draw 2 challenge cards (-) and 2 question cards (?). Spend 5 minutes exploring how your idea transforms because of these cards.

- ***INSTAGRAM***

2.3 Repeat 2 more times with chosen idea (another 2+2 cards, and 5 minutes)

- ***INSTAGRAM***

Phase 3 - idea realization

3.1 Make a rapid prototype version of your digital score (60-90 minutes)
This requires you to be amazingly creative and inventive. The priority is to turn your digital score into music, and in doing so test out the core communications system of your digital score.

Obviously, given the time scale, you cannot develop a new AI, or design the specific games environment in Unity, so you need to use using rapid prototyping and wizard of oz'ing to realise your idea into a quick and dirty working model. Put your musician(s) into it (don't worry about the gaffer tape and cardboard - tell them your vision and let them imagine their way through it).

Invent imaginative ways to represent your idea quickly, and effectively that are also fun and playful. For example, you could use the video function on your phone to quickly make an animated score with screen shots, or post-it notes; you could build a small-world model of your games world from toys and use a WhatsApp video-call to fly through this world; you could pretend to use an AI to generate text and images by having someone type stuff and screen share via Zoom in the next room, or control parameters of a VST sound processor (like the Wizard of Oz in the film). The priority is USER EXPERIENCE... what is their EXPERIENCE of your digital score? Was it what you expected? What exciting new stuff emerged THROUGH this experience?

- ***INSTAGRAM***

Phase 4 - idea refinement

4.1 Using the feedback from your musician's EXPERIENCE, develop your digital score to the next level. And quickly get the musician BACK INTO IT. You want them to share their experience with you QUICKLY AND OFTEN. This is the Agile way https://en.wikipedia.org/wiki/Agile_software_development

- ***INSTAGRAM***