Session 2: Embodiment and Improvisation in Groove

Pattern and groove in live coding

Alex McLean

Then Try This, Sheffield / Penryn, United Kingdom

Abstract

Live coding is a performing arts practice, prevalent in computer music, where people write and manipulate code to make live music (Collins et al, 2014). It is an umbrella term for a varied range of approaches, but this paper addresses improvised live coding, where performers begin with a blank page, and write code to make music 'from scratch'. This often take place in nightclub and festival contexts, where people dance to live coded music at events known as 'algoraves'.

The concept of groove (Duman et al, 2021) offers a challenging viewpoint on live coding. On one hand, groove is an unspecifiable and embodied experience, whereas code is clearly an explicit, formal specification and therefore seen as disembodied. How can groove find a place for itself in code-based music?

The concept of tacit knowledge throws light on this situation by offering the idea that we "know more than we can tell", the classic example being knowing a face of a friend so that we can spot them in a large crowd, despite not being able to describe their face in words to any level of detail (Polanyi, 1966). Groove is tacit, as something we know without being able to articulate. Accordingly in Polanyi's terms, we say that groove is *proximal* - close yet inexplicable, whereas code is *distal* - distant and therefore explainable.

A key property of tacit knowledge is that proximal knowledge can be used to structure distal knowledge. Applied to live coding, this suggests that although code generates music, from a human perspective, it is rather the close experience of music that structures our understanding of code. We can say then that code is meaningless until we run it and experience its output - only then can we read that code from the perspective of the music. To use another metaphor, the code is the map, the music is the territory, and we can't read the map until we know the territory.

Through this talk, I will explore the practicalities of this tacit relationship between computation and experience, and generalise it from live coding to heritage pattern-based craft practices.