

## **<en>Coding Performance: From Analogue to Digital**

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Hannah Elizabeth Allan is an artist, writer and researcher based in North West England. Currently working as Digital Archivist at the Manchester School of Art whilst lecturing within the Media Department and across art theory modules in the School. Allan's doctoral study focused on the documentation of performance-based practices, particularly in documenting the traces of process within experimental archival forms. (Thesis titled *The archival context of contemporary practice: how might temporal artistic process function as trace within the archive?*) Following the thesis submission, her research has focused on archives of performance art and gaps or missing narratives within archives of artistic and cultural traditions.

## **<en>Coding Performance: From Analogue to Digital**

This paper explores the connection between contemporary Live Coding practice in relation to the earlier forms of text-based performance and documentation used within the Fluxus movement. Analysing these works has allowed for a connection to be made, and an argument put forward that live coding in performance is not limited to digital work alone, but rather has a lineage linked through language and the symbiotic relationship created between performer and text.

During the Fluxus movement of the early 1960s a form of performance art emerged through the text score that acted as the ultimate reduction of the scripted form. Alongside static scores artists began to use a process of live typing and recording to both document, performance and alter their own environments. This aligns with the performative work of Live Coding, which has its own specific algorithmic syntax, creating a looping response between performer and text.

Keywords: Fluxus; performance score; digital performance; Fluxshoe; analogue; Live Coding

This paper explores the connections between contemporary Live Coding practice and the Fluxus movement of the 1960s and 70s through the ways in which each employs language as a means to create, encode, and disseminate performance.<sup>1</sup> Through this comparison we might consider the practice of coding as not limited to the digital arts and observe the foreshadowing of it through the use of live writing in Fluxus performance. Alongside the shared use of text within (or as prompt to) performed works, there are further links between the two movements in terms of community, ethos, and sharing of practice. Embedded within the process is an attitude of openness and shared authorship which promotes the freedom to share these instructional texts within an audience of peers.

This comparison will focus upon the use of language as a means to provide a framework for performance and re-interpretation via the means of the text score. Further interrogation allows us to observe encoded writing as an integral element of the performances whilst behaving as a feedback loop. In these instances the text itself is a live element of the work – providing a narrative pathway for us as viewers to follow the actions. Rather than arguing for Live Coding as a straightforward evolution of Fluxus practice, these connections allow us to consider the presence of coding within an analogue setting, and echoes of each movement within the other.

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<sup>1</sup> Both Fluxus and Live Coding are being referred to within this context as at the very least creative networks with shared elements of practice and philosophy. The case for defining Live Coding as a fully developed movement is more complex debate, although it is worth noting there was initial and ongoing hesitation around grouping Fluxus practice together due to its varied forms and approaches.

## The Score

Live Coding offers up a multiplicity of forms and interpretations by distinct groups and disciplinary specialisms in the way that Fluxus has also influenced a wide range of practitioners. However, it is worth noting that both forms have been born out of musical performance and avant-garde approaches to composition. Fluxus scores were particularly influenced by the teachings of John Cage, who taught many of the emerging founders of the movement. This particular point of origin led to a shared ethos that later became recognisable as strictly enforced homogeny: publications such as the *Fluxus Performance Workbook* (1990) offer an example as to the conventions of layout which endured. The use of encoded instructions within the form of the performance score is one we can read as tracing a common language that seeks to transcribe and re-interpret standard musical notation.

Both Fluxus and Live Coding employ text as a means of instruction and marker of actions having taken place; whether the multiple printed descriptions for actions handed out to audience members, or a projected display accompanying a live musical work. This language is stripped bare, embodying the ultimate reduction of the scripted form whilst conforming to the formalised traditions (unique to each movement) of how these texts should be constructed. The Fluxus score represents a revised set of compositional standards, using pared down phrasing which allowed for extreme variations due to its lack of context, more aligned to the musical score than the theatrical script. Across analogue and digital formats these scores are arguably prescriptive in nature (just as any script may be considered to be), with the range of potential interpretations by performers and writers demonstrates the potential of these regulated forms to be a basis for interpretation and experimentation by multiple performers.

Live Coding texts are bound by the requirements of the particular programmes and languages used, the digital nature of the performed work holds an innate set of rules for encoding the given instructions and thereby its score. However, since in many cases the artists determine the syntax and algorithms themselves, these rules are often at least partially self-imposed. The ensuing similarities demonstrate a shared understanding of how these pieces should be read and conceptualised by the wider community involved in their production and dissemination.

The score offers a framework for language in its relationship to the live, but also as a means for the opening up of collaborative methods and audience interaction. Both Live Coding and Fluxus have been built upon a number of communities where the sharing of knowledge and process becomes a key element of the work itself. Live coding exists as a technique for working with multiple applications and interpretations through music, dance, live art, and interdisciplinary approaches, according to Magnusson (2014). However, it has been reflected on by both artists involved in the Fluxus scene and latterly art historians that the terminology and grouping together of practitioners such as the early score writers, performance artists, sculptors, and mail artists within the movement was something that happened only once they had already developed within their individual niche, and then also established lines of communication between one another. I would argue that in the same way that Fluxus groups together a number of connected practitioners and methods, Live Coding viewed as a movement might feel retrospective, but holds value in contextualising works for current and future art historians whilst also acknowledging the network in place within and between specialised strands. These practitioners are often connected digitally - if not physically - through conventions, performances and other events, whereas the strands of Fluxus (as outlined above) were more often separated by time and geography

with movements in the US, Europe and the UK happening in waves. For both, the development of specific approaches to making have been essential and the resulting sharing of best practice has been foregrounded amongst peers which might be recognised as the establishing of a community working towards a common purpose.

The interaction with a live audience, the secondary digital audience and collaboration between artists acts as key conventions for the shifting and difficult to define properties of both Live Coding and Fluxus. Performers might situate themselves within the audience or share their process and tools online for others to work with. This is reflected in the DIY ethos of Fluxus: ‘non-expert’ participants and audience members distributed scores with the instruction that they should go on to re-perform them.

Alex McLean takes the position that these multiple forms of collaboration are at the core of Live Coding, as a movement and offer up clues to its potential future evolution. He also states that moving beyond digital programming work is where this progression might lie, stating that it could consist of “environments aimed at creative, shared exploration through abstraction, aimed at shared experience rather than end results” (McLean 2014, 3). This remark places Live Coding in a wider context that is not necessarily digital and acknowledges that the encoding of performance might well exist in forms such as the body, printed text and live interactions.

<INSERT FIGURE 1 ABOUT HERE>

## **Live Writing**

‘Live writing’ is a term that is employed here in order to describe both analogue and digital instructional text within performance in each movement, created and used within the live moment itself. If the score remains as a lasting instruction for potential re-interpretation, live writing in performance does something different by allowing the text to exist as an integral part of the actions embodied by performers. Kate Sicchio’s

*Hacking Choreography* (2014) will be compared with David Mayor and Paul Woodrow's *Typewriter Duel* (1973), as examples using this process of transcribing and responding to text within the real time of the performance. This exploration provides a further connection to Live Coding practitioners, whose works integrate live responses to algorithmic phrases and in the performer embody an analogue form of feedback. It also allows us to consider the ways in which the genre may progress beyond the digital, as highlighted in Susanne Palzer's *Binary Transmission* works, which use the body instead of technology to think through the most basic of coded instructions, such as stepping on and off a platform (McLean 2014, 2).

Sicchio's *Hacking Choreography* also offers up potential interpretations of how bodies might respond to code and written instructions in a haptic and intuitive manner (that which performers alongside programmers might interpret in the moment). The work features two dancers positioned in front of a projection of coded text that they must respond to with instructions written live in a basic coded style. The dancers are given increasingly complex and nuanced instructions as the work continues. Terms such as 'Quality 2=indirect' are interpreted by the dancers in ways software might not – the human qualities of error and understanding occur as the performers offer us slight deviations from what is written, or we understood as the audience. Sicchio remains on stage throughout the work, and through this we can appreciate the work is live and that the dancers are responding in real time to code written in the moment. This also demonstrates that the writing/coding is being carried out in response to the movement and bodies just meters away. The piece behaves as a loop of translation between the physical fleshy body and the digital encoding of instructions for it to undertake. This text made accessible through the video recording, is rooted in a particular time and space, which we can return to with the context of the actions accompanying it. The three

performers (Sicchio's position here is also arguably that of a performer, although in a different sense from the dancers) respond to language, in turn embodying and re-interpreting the looping cycle of text – action – text.

<INSERT FIGURES 2 AND 3 ABOUT HERE>

*Typewriter Duel* offers us a document made during the performance by Mayor and Woodrow, held alongside other archival remains from the Fluxshoe movement (a British, 1970s response to Fluxus). Unlike contemporary performance archives heavily reliant on filmed recordings, many of these pieces only exist through photography, objects, and texts that were produced within the performances themselves. The typewritten document acts as an unstable guide to the performance event, purporting to voice the performers' thought process as a written dialogue. We know that they were present, in the work and responding to one another's presence, alongside that of the audience. As a piece of writing it does little to explain what specifically occurred, but remains as a record of individual experience and conversation, adding to a sense of mythology around the era's indecipherable remains. Its cryptic nature fuels a sense of narrative, in the absence of any other visual information. Instead, as readers we are left to attempt to reconstruct this work for ourselves. The work acknowledges its own specific space in time and its continued passing, demonstrated through the documentation of the work, an integral condition of its making whilst a reminder of its absence.

The written, archival remains of these works as language might be considered in light of Foucault's assertion that the action of writing is one against destruction (Foucault 1980, 54). Stating that all language breaks down he describes the moves made into abstraction and metaphor, identifying the limit point and development of a new form, of a language beyond language. This connection between the body and archival



text with reference to Foucault is one that has implications for each movement, particularly considering how Live Coding might move beyond the digital realm.

The observation of the writing process by an audience (as in the case of both *Hacking Choreography* and *Typewriter Duel*), ultimately mark a statement of place and presence by those practitioners. Live writing offers an alternative form to discursive text and allows the artists working within both movements to use encoded algorithms and further this abstraction. As Foucault writes that language offers up the potential for infinity, so these performances in their simple yet clear link to the present bodies allow the repeated image of these works to echo through their documentary remains.

### **Language Remains**

Within each movement practitioners have attempted to create syntax through either clipped phrases and algorithms or the design of language itself. In doing so they have stripped the articulation of that performative moment down to its barest and most essential components. This allows us to connect these performances, across decades, through their linguistic remains.

The scores and transcriptions of code are rooted in a particular time and space (unlike the more common script or musical score) and in viewing their remains in artistic or digital archives we are able to glimpse that moment. We are allowed the illusion of experiencing the ‘live’ nature of that work through the manifestation of text. There is a point of contrast here, in that, although instructional language is at the core of both Fluxus and Live Coding, in the case of the latter if we view the text it is usually accompanied by (or incorporated within) some other documentation of the performance such as photographs, video or audio recording. In this way our understanding of the piece and its text based component is tied to that particular version of the work, in contrast to the widely distributed documentation of the Fluxus score (within the

Workbooks) which are not recognised as having any definitive versions, if indeed it is possible to trace any documentation beyond the sparse instructions given. These documents offer multiple ways in which to interpret the instructions, yet in form can feel overly rigid at times and operating more in the manner of a script. However, the less homogenised texts of Fluxshoe performance perhaps offer the clearest point of comparison with the text acting as both an integral element of the work itself (the writing being the performance in many cases) whilst also remaining after the fact as a trace of what took place, as a distinct marker of that particular moment of practice and improvisation.

Both of the pieces described within this account are rooted in a particular moment of the performance, which we can return to through the documentary evidence, although not fully comprehend without the context of the live action. The only certainty was that at that moment, the work responded to the language used. The text that remains balances between an element, a residue of the live which remains, and the document that gives us an account of what has taken place.

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Figure 1. *Hacking Choreography*, Kate Sicchio, image credit Kamil Kurylonek (2013)

Figure 2. *Typewriter Duel*, David Mayor and Paul Woodrow, page one, Tate Archive TGA 815/2/2/5/7

Figure 3. *Typewriter Duel*, David Mayor and Paul Woodrow, page two, Tate Archive TGA 815/2/2/5/7