# **EMDM Online Concerts in the Pandemic**

[Bringing the Live to Live Streaming]

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# **ABSTRACT**

To overcome the deficit of live events in 2020 and a lack of feeling of live performance through streaming, a trio of concerts were created using the web as a medium for performance. The first concert was an attempt to infuse live event dynamics into a series of recorded pieces. The second consisted of live performances presented in novel ways to the audience such as 360 degree video and composites of browser based and live-stream media. The third was performed entirely live with 11 isolated performers located in completely separate spaces.

This talk will cover the novelty of using a website and distributed performance tools as a platform for delivering live performance and reintroducing the audience/performer connection in mediated performance.

#### 1. DISEMBODIMENT

On-demand video recordings of performance are documentary by nature. They take the performance out of time so that it can be realized at another place and time. These recordings lose almost all of the connection between performer and audience. There can be no connection felt by the performer, and the audience is left as a consumer of media instead of a participant in a moment. The production value of these videos can be as high as budget, time, and quality of performers and editors allow, but although it can encode excitement, represent the experience, and reproduce the music to a high degree, the 'live' quality of the performance is effectively gone.

You have experienced this while working through zoom or any other video chat platform. Although the stream is presented live and users can interact in real time, the personal experience has been affected and cannot exactly replace communicating face-to-face. The feel of the other person, the small mannerisms and humanisms that help guide the flow of the conversation and the understood meaning of the words (or silence) cannot yet be encoded, transmitted and re-produced.

Humans are incredibly adaptable. Even before the onset of the pandemic, cell calls, voice messaging, text messaging,



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Figure 1: Digital Hocket performing on a Live-Stream Delay Network

and video chat were already a necessity for communication. Working through the technology one is provided affects the way that you interact with another. One could imagine what it meant to someone only a few years ago, to swipe left.

This then is recognizable as a problem. In setting up our communications to be mediated, we ourselves are altered.

In a presentation at the LISA2013 conference, Sophia Brueckner discussed the loss of humanity in the coding process and a possible re-humanizing of the cyberg.<sup>1</sup>

In her work *Code that Sings Itself*<sup>2</sup> she presents a new way to animate coding through singing. Singing to re-humanize the coding process. In her words, "to re-humanize myself."

In light of this, how shall we then perform? As we have tackled the necessity for being socially distanced, we were (are) pushed onto the network to try to navigate it as a performance space. The direct translation of performances online has created a number of serious difficulties and recognizable deficiencies. No one who has attended a concert in person and then a live concert on YouTube would consider the two remotely equivalent. Anyone who has performed to a receptive crowd and then in front of a web camera understands that something essential to the performance is absent. In a very real way I am asking, now that we have a performer-cyborg and an audience-cyborg, what can be done to re-humanize online performance and imbue 'liveness' once again?

# 1.1 State of the Art

 $^{1} http://youtu.be/V0Zoaf\_XR1U$ 

<sup>2</sup>http://www.sophiabrueckner.com/codethatsingsitself.html



Figure 2: Performing Video in Browser with Live Stream Vocals

There is a long and storied history of telematic performance practices that have been explored over the years. All of the approaches boil down to the capture of performance information such as audio, video, and sensor data and transmitting it through a network to another location for re-production. This may be for another performer to collaboratively perform synchronously or asynchronously, or for re-production for the intended audience.

In terms of telematic performance, the most common approach during the pandemic of the traditional live-stream, is very simplistic, capturing video and audio and delivering it for playback on a screen for the audience. As discussed above, live-streaming of performances only slightly restores the human connection between audience and performer, if at all. Many times a live-stream just assumes the quality of being a recording of bad production quality - especially when the live performance is archived on the platform to be streamed later.

Everyone has seen the quintessential virtual choir made popular by Eric Whitacre's Virtual Choir in 2009. During the pandemic the virtual choir phenomenon exploded with school choirs, professional choirs, and even the singing of the Star Spangled Banner at the Democratic National Convention.<sup>3</sup>

Is this good? To get the voices to match requires a lot of editing, the quality of the singing is typically highly processed, taking on a vocoded and compressed tint. Traditional choral blend goes out the window and is replaced with editing. The live nature of the performance is gone not only in the presentation after being recorded, pieced together, and re-presented, but in the performances themselves where not one of the performers heard either each other or the final result - live.

Beyond the quality of the choral experience, the question remains, is it even choir when you can't see or hear anyone else in your ensemble? At best you might have a recording of other singers to sing to, but this again, is a pale facsimile of the live performance experience.

And to take it one step further, is it enough?

Beyond a simple live-stream, telematics can be all types of information, not just audio and video. What else can be done utilizing nature and capabilities inherent in the web?

Can we do performance over the internet better?

Can we re-insert the "live" aspect into performance deliv-



Figure 3: Live 360 Video Stream of a Socially Distanced Choir



Figure 4: Collaborative live coding

ered over the internet?

Can we create a new type of concert with slightly different, yet satisfactory expectations from the audience?

### 1.2 Three Concerts

At Louisiana State University in the Fall of 2020 the Experimental Music & Digital Media program presented three concerts over the internet with various attempts to make the concerts feel and act 'live' and in some way justifying their being presented as a concert event and not just a scheduled playback of video.[1] Cinema for the Ears presented fixed media works which allowed us to create the concert website using distributed performance tools such as NexusHub[2] and NexusUI.[4] The Laptop Orchestra of Louisiana Concert of Telepresence shifted all of the performances to be live and experimented with various ways of stepping beyond simple live-streamed works. The final LOL concert Telematic becomes Automatic was done with performers entirely separate locations yet performing together in some fashion or other.

Concert I – Cinema for the Ears

- Live Writing[3] announcements
- Live streamed welcome
- Simultaneous website navigation through the concert
- Composer talk videos before each piece
- End of concert live-streamed composer Q&A Session

Concert II - Concert of Telepresence

- $\bullet~360$  degree camera live-stream
- Multiple location live-stream
- Telematic Piano

<sup>&</sup>lt;sup>3</sup>https://www.youtube.com/watch?v=a8nbCcTUkHQ



Figure 5: Live-coding of the audience browser utilizing McLuhen.js  $\,$ 

- Performance in browser
- Performance in browser composited with live-stream

Concert III – Telematic becomes Automatic

- Multiple live-streams/Multiple locations
- Digital Hocket streaming feedback networks
- Performing the browser with McLuhen.js[5]

## 2. CONCLUSIONS

Many problems and difficulties arise as one moves to performing over the network, none is more detrimental to the experience of the work than losing the performer/audience connection. Performing with a screen filling in as another performer and the camera as an audience is not sufficient. Audience feedback is incredibly lacking and difficult to reclaim adequately. The sound and image presentation in a remote location rarely, if ever matches what can be achieved in a concert hall or other typical performance venue. Also you cannot ensure a uniform experience for everyone, in fact that is the one thing you can be assured of, that everyone will have their own unique experience, some better, some worse. There are some benefits to viewing the concert in your own space as you can eat or drink and have a more laid back experience.

These experiments were each successful at bringing back some measure of the live, personal quality of performance in their own way. However there is much more work to be done before the Live-Online concert experience becomes as good or better, or even very different, than a scheduled release video recording.

# 3. REFERENCES

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