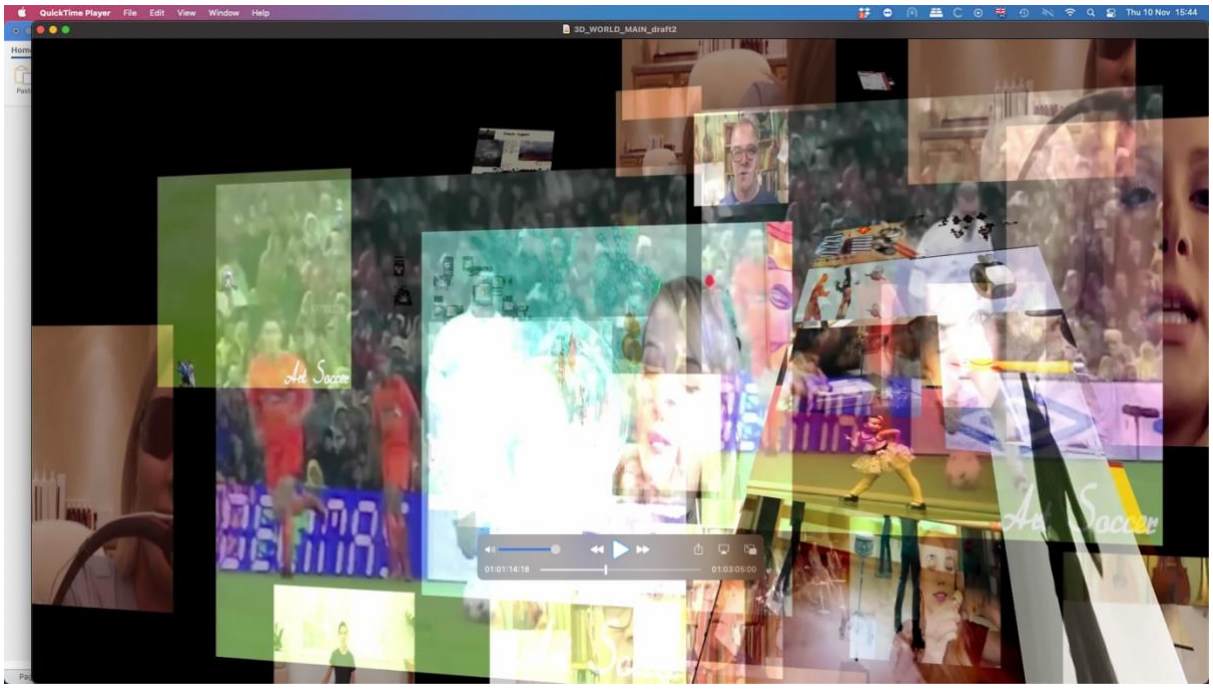
STOLEN MUSIC (Sebastian Adams)

for fixed-media multi-channel video, diffused stereo sound, printed text materials, audience members with kazoos, interactive website and live narration

written in support of a mission to end copyright law



IRCAM Cursus 2021-2022
Création: 3537, Paris, 16 Septembre 2022

Stolen Music

`for fixed-media multi-channel video, diffused stereo sound, printed text materials, audience members with kazoos, interactive website and live narration`

by Sebastian Adams

IRCAM Cursus 2021-22
3537, Paris (16 Sept 2022)
live narration: Sebastian Adams
sound engineer / live diffusion: Aria de la Celle
video technician: Jérôme Tuncer
Encadrement Pédagogique: Claudia Jane Scroccaro
Additional assistance: Sébastien Naves, Pierre Jodlowski, Jean Lochard, Murielle Ducas

All fixed media files, the Max patches used to create the materials, the QLab session used in the performance and notes on lighting etc. are held in the IRCAM library. Fixed media files are referenced by filename during the STAGING NOTES.

NOTES

Stolen Music was originally conceived for my final project as part of the IRCAM Cursus, and presented in 3537 in Paris on 16th September 2022, but my interest in stealing material (often in morally dubious ways) goes back to at least 2012, with my pieces Tweet Piece #2 and CrowdScoreSing.

There is virtually no original material in Stolen Music.

The basic aim of the project is to explore two main ideas that matter to me:

> Examining the boundaries of a "piece" of music: questioning the idea of the sole author and finding ways to subvert the linear, sectional timeline of a typical musical performance (for example by creating transitions that merge multiple pieces by different composers in a way that introduces doubt about the start/end points and both foreshadows future material and references past events.
>
> Presenting an argument that all musical material should be fair game for all people to work with, regardless of who owns it under current copyright law

The piece is composed of a web-based musical instrument with accompanying printed materials, two short transition sections, and one larger, episodic section, which draw on musical material or motifs from the pieces contributed by other composers in the concert (Aida Shirazi, Julie Zhu, Qingqing Teng) and transform them (mostly in semi-automated ways designed to allow flexibility when working with a large corpus of input material), as well as additional material stolen largely from my personal YouTube history.

In fact, I do not consider Stolen Music a piece at all, but a system: any new performance would probably need to be remade completely unless the context surrounding it was the same. This is because the piece was designed specifically to make sense when accompanied with the pieces written by the other Cursus composers, and to be presented as the final Cursus concert. New versions would make use of the same concepts and software, but would probably be fabricated from totally different sonic material.

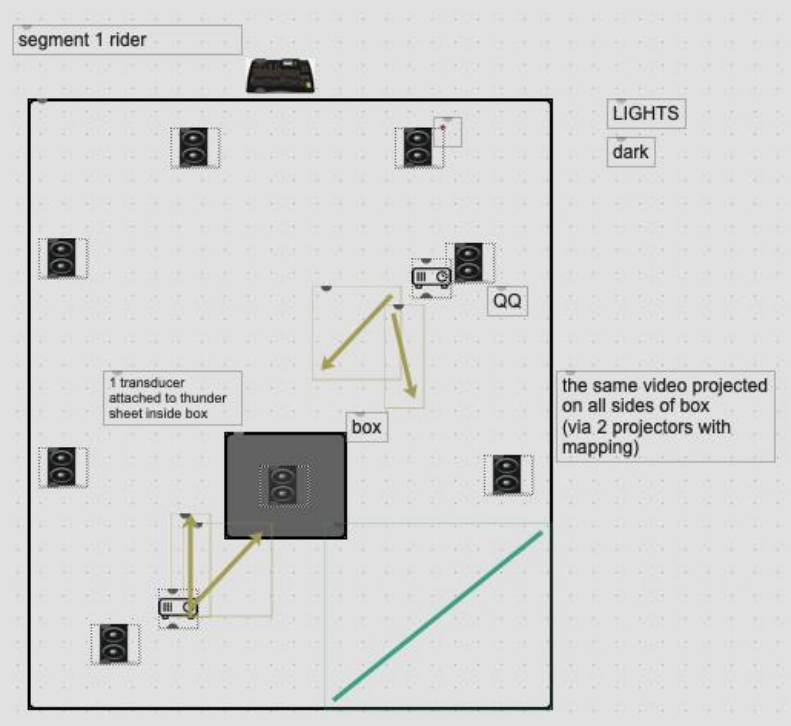
ACKNOWLEDGEMENTS:

This project owes a huge debt to Claudia Jane Scroccaro, who was my main supervisor, as well as the whole pedagogy department at IRCAM, particularly Pierre Jodlowski, Sebastién Naves and Jean Lochard - who all directly contributed to this project in important ways.

My contribution to this concert unfolded in and around the other pieces in the concert, which were by Julie Zhu, Aida Shirazi (in close collaboration with the dance artist Stefanie Inhelder), Qingqing Teng, and Filippos Sakagian. In this case, their material was taken and used with their blessing and they were consulted about my plans for it - however, this was done mainly because we are all friends and it wouldn't have been right to misuse their material in a concert which was of such importance to all of us. They are also all due a big thank you for their generosity in agreeing to let me work with their music in this context! In general, I have no qualms about going against the wishes of other composers (and I expect others to feel free to treat me in the same way)

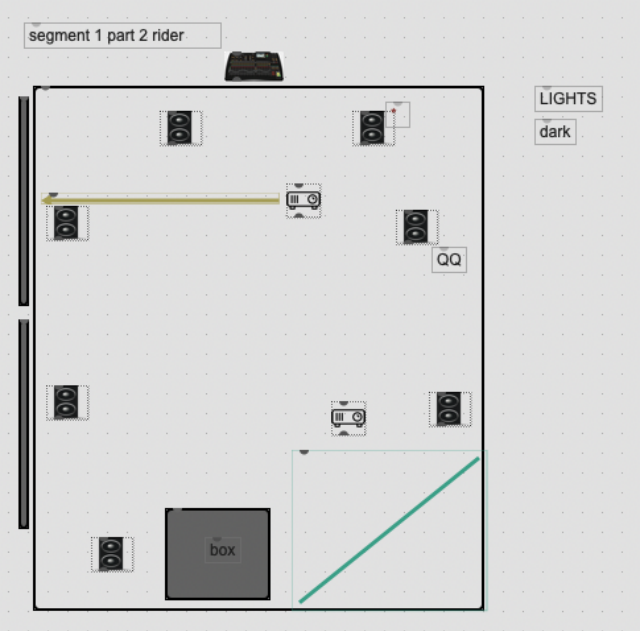
STAGE LAYOUTS

First transition: part one (DoorsIntoWorlds.mp4 + DoorsIntoWorlds.wav) is projected on all 4 sides of a large wooden box used for Julie Zhu's piece. After 30 seconds, the percussionist inside the box opens it and leaves the box.



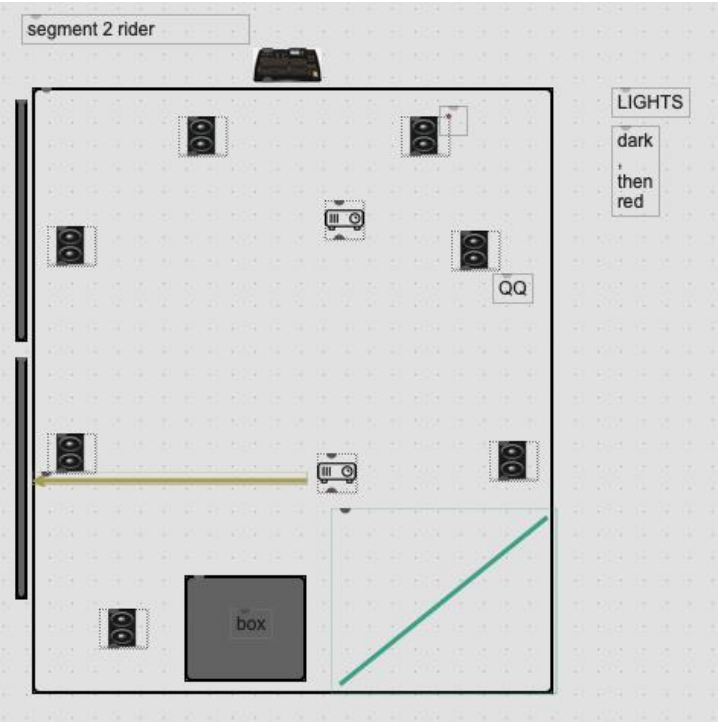
At the end of this video (c. 1 minutes), the technical team wheel the box out of the way, and the second video (Doors_PostLoop.mp4 + Doors_PostLoop.wav) is projected on a wall while

this is happening. The video is designed to loop for as long as is needed.

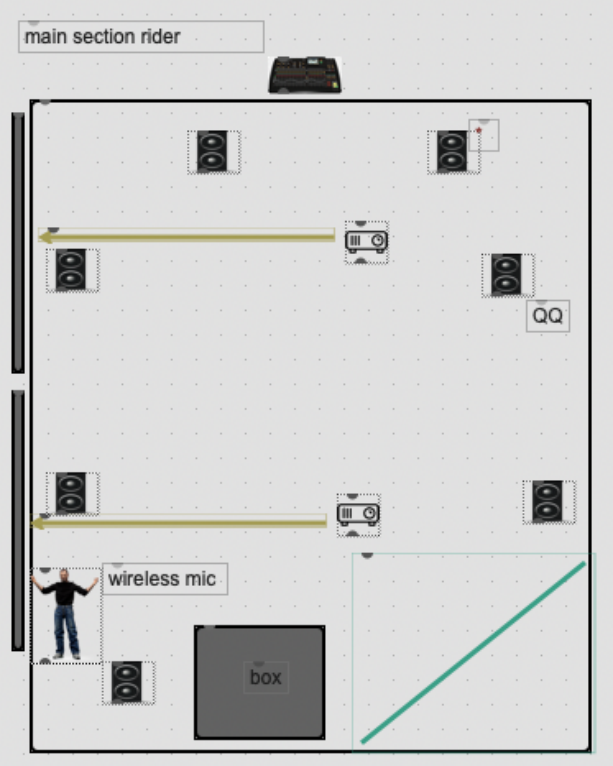


At the end of Aida Shirazi's piece, the next section (ShadowPuppets_Main.mp4, ShadowPuppets.wav) begins immediately on the projector screen closest to the performance location of Aida's piece (bottom right of diagram; the diagonal line represents an enormous canvas screen with lights and a dancer situated behind it).

During this section, the performer for Qingqing Teng's piece gets into position in front of the other screen (stop left of diagram, the one used for the previous transition). Once she is ready and the previous video is nearly over, the video file (ShadowPuppets_Sub.mp4), which is an amorphous red cloud, fades up on top of her and serves as a transition to her piece.



3D_World_Main.mp4 and 3D_World_Main_Sub.mp4 play on both screens (bottom left is Main) directly after Qingqing Teng's piece, along with the audio file 3D_World.wav. When both videos are finished, a spotlight comes up on the composer (represented by the figure of Steve Jobs in the diagram), who makes a speech explaining how the audience are supposed to perform on the kazoos which were handed to them as they arrived in the auditorium. A range of media files are triggered by the video technician during this speech (rather than listing these here, I ask that you refer to the QLab session which is available in the IRCAM library). At the end of the speech, the files Kazoo_Karaoke_Main.mp4, Kazoo_Karaoke_Sub.mp4 and Kazoo_Karaoke.wav are triggered. This is the last action in the piece.



TECHNICAL NOTES FOR SOUND ENGINEER

The stereo files provided are intended to be diffused live by the engineer or composer. They would also work fine on a stereo system.

TECHNICAL NOTES FOR PRODUCTION MANAGER

Cheap plastic kazoos must be obtained (1 for every audience member, with spares) and put in envelopes. In the first performance, the envelope said "Open me when the video says so" in large Zapfino font

These kazoo envelopes were handed to audience members as they entered the auditorium, along with an explanation to wait for further instruction.

The audience were also handed an A6 sheet of paper which contained one or two text pieces and a link and QR code to this website: https://stolenmusic.org/freesounds

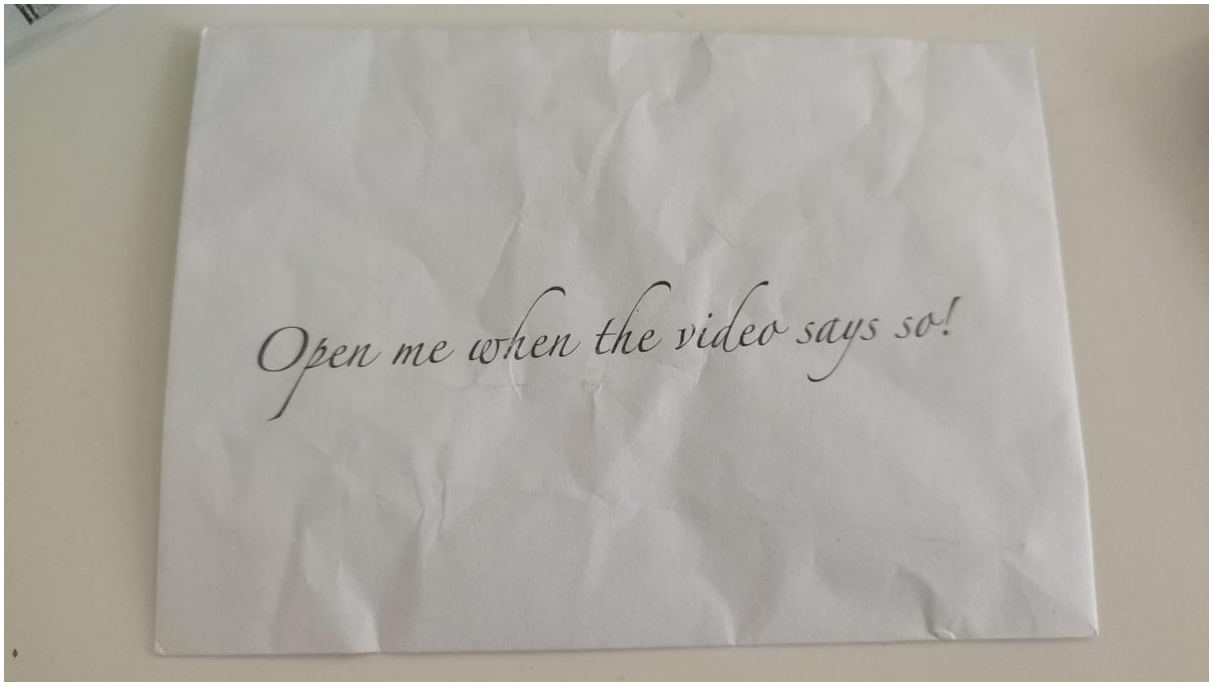
The A6 sheets were derived from the documents in the folder EVENTS_FOR_FREED_SOUND_A6_CURSUS. I have included several copies so that the most convenient version can be printed. In the Cursus concert, we printed on A4 sheets 4-up and manually guillotined them to size.

The audience were invited to use the website until the concert began, when it was deactivated remotely by the video technician using a separate webpage:
https://sebastianadams.net/freesounds-control

TECHNICAL AND CONTEXTUAL NOTES ABOUT THE CREATION OF THE FIXED MEDIA FILES

PRE-CONCERT: FREED SOUNDS INSTRUMENT

As the audience entered the concert space, they were given an envelope with mysterious contents...



They were also given a small card inserted into the programme notes which contained a QR code linking to a webpage containing an instrument for playing random sounds from freesound.org, alongside one or two event pieces from a set of 32. The instrument is also embedded in this page (click the red text to expand it).

The audience were given the option of using this webpage while they waited, and it was silenced remotely right before the concert began.

The website was written using HTML and JavaScript and making use of the FreeSound API (https://freesound.org/docs/api/). I wrote to the manager of the API to request that request limitations were removed from my account, which was done free of charge.

TRANSITION ONE: after Box, by Julie Zhu

Doors into Worlds, part one:

This piece involved a percussionist (Olivia Martin) hidden inside a large wooden box, painted black and placed in the centre of the room. The percussionist made sounds using some percussion instruments (esp. bass drum, thundersheet) that were with her inside this claustrophic space, as well as drawing on the inside surfaces of the box. The contents of the box, as well as its surfaces, were amplified and spatialised across 12 loudspeakers (and two transducers attached to the thundersheet) in the room. The effect was to place the audience partly imagining being inside the box, and partly distorting the reality of the space inside and outside the box.

Julie and the team decided to have the percussionist begin making sounds before the concert, while the Freed Sounds Improvisations were still going on, meaning that we had already weakened the clear boundaries around each piece by the time the concert began.

This video was projected on all four sides of the box used in Julie's piece. During the video, the percussionist opened the (previously invisible) door of the box and left it.

The sonic material used is an array of YouTube videos of ASMR pen scratching (as I couldn't use material that was *really* from Julie's piece because all her material was processed live). The video part (obviously) is a bunch of clips of doors, mainly from famous films and TV shows. An additional element in the video is a Coke can, which was originally going to be a larger part of the project overall but even with its reduced role it makes sense to use such an iconic trademark. It also foreshadows a red colour palette for later on the concert.

Because the box needed to move out of the centre of the room to allow space for the remaining pieces in the concert, I prepared a second video, which was projected onto the wall. This change happened seamlessly and once the audience's gaze had shifted, the production team began the process of safely moving this large box (which was on a platform with wheels) to the side of the hall, parting the audience as they went.

Doors Into Worlds, part two:

This clip was designed to hold space, and it uses a looped clip of a scene from the film Les convoyeurs attendent, with the contents behind a door chroma-keyed out and with all kinds of footage washily displayed behind it. When the production team had moved the box, the video fades down regardless of where in the video it is

The music for this section was made with MUBU library for Max (for automated audio segmentation w/ onset-detection; and for real-time concatenative synthesis), Reaper DAW with various reverb settings. The audio part was made from loading in files, auto-segmenting them and then improvising with them laid out on a graph according to audio descriptors (all using a patch derived from the MUBU help files). The resulting tracks were then layered in Reaper and processed through different reverbs, aiming to achieve different spaces every time a door opened. The video is entirely fixed media and made in DaVinci Resolve, using the Fusion part of the software for chroma-keying some of the doors.

TRANSITION TWO: after Né entre corps, by Aida Shirazi

Shadow Puppets

Looking for a visual link that could lighten the atmosphere without parodying or attacking Aida and Stefanie's work, I hit on the idea of using shadow puppets. I found a set of whimsical videos online and realised I could build a weird interspecies love story out of them

A big preoccupation for me while working on these sections was that the tone of the pieces around my transitions was mostly dark, serious and intense. I wanted to try and find a way to freshen the audience up so that they were ready for another intense piece, without seeming to make fun of any of the pieces. It's a fun challenge to try and make short, playful work that still has a kind of weight or beauty of its own (whether I succeeded or not is up to others to say!)

The dark/light contrast in the colour content of the material allowed me to play some more tricks with transparency (e.g. hiding different images in the light and shadow portions of a rabbit).

So the video here is predominantly shadow puppets, with some more "random" material creeping in which mostly foreshadows later sections. The audio is entirely derived from Aida's piece: she sent me the full audio stems (each of her sounds separately) of her piece and I was able to batch process them and use them in a kind of rudimentary musical instrument to

create some improvisations. I created the video first and tried to create long tumbling whispers tied to the gestures in the video.

The piece was projected on the wall, and at the end of the transition, a separate projection of red fog came up on another screen and revealed the position of the performer for the next piece, which starts immediately. The red fog is designed to loop and then fade down when ready.

Similar to the Doors transition, MUBU library for Max (for automated audio segmentation w/ onset-detection; and for real-time concatenative synthesis), Reaper DAW with various reverb settings: the audio part was made from loading in files, auto-segmenting them and then improvising with them laid out on a graph according to audio descriptors. I chopped parts out of the resulting files, layering them into tumbling whispers tied to the gestures in the video.

The video is entirely fixed media and made in DaVinci Resolve, using the Fusion part of the software for the fancy chroma-key effects, as well as for the particle fog at end.

TRANSITION: after Ghost shouting, Ghost screaming, by Qingqing Teng
3D-WORLD

The final sound of Qingqing's piece is this amazing jackhammerish pulse, and I used that as the start of my next transition.

The next part of the concert strings together a few short sections of my work. Each section is short and the transitions between them are abrupt and jarring. The first one takes the viewer inside a post-human 3D-world, into total immersion in my digital life, through my YouTube history: This next section is where I took over the concert for a while and stopped making small transitions between other people's work. I knew that it made sense for Filippos' piece to go last, which meant there were really only three spots for me in the programme. While it might have been more radical or cohesive for me to deal ONLY in the interstitial moments of the concert, there weren't really enough of them to allow me to make a full statement. So I began to think about other material I could steal, and my mind went back to YouTube (I had some previous unfinished work which made use of masses of YouTube clips). As prep for the

project, I downloaded my entire YouTube history and extracted a bunch of 5-second clips from all the videos, which served as part of my new material. Needless to say, none of this stuff has been taken with permission.

The effect is supposed to be an overwhelming media-saturation, with content flowing by too quickly to grasp even a significant amount of the meaning, and our brains flit between picking up on patterns of colour, movement or sound, and grabbing on to salient moments in the mess. Of course there's an obvious parallel with the way we all live our digital lives (is this really THAT much more intense than Instagram??), but by placing thousands of different copyrighted videos in this context the relevance of the specific content becomes virtually nil (a point previously made in related work Peter Ablinger, among many others; although the most direct point of comparison I can think is the TV series Chuck.

Technically, the video for this section was extremely demanding and took most of the summer to work out - described below for nerds... It's the work I am proudest of from that perspective.

The audio here is derived exclusively from the video clips used, which means there is a great degree of chance in the initial sound, and a very slow (quite sculptural) mixing process to try and coax the interesting sound out of the texture.

This section used: Max, Jitter, Python, JavaScript, OSC, Orchidea, Reaper, DaVinci Resolve

The audio in most of this section is simply the audio of the underlying videos, with a lot of post-processing in Reaper.

When you hear orchestral sounds, these have been derived by sending the main sound (from videos) through Orchidea orchestration assistant, essentially creating an approximation of this soundfile using a database of orchestral sounds. I created custom Python patches to run batch processes so that I could work more quickly with Orchidea. I found the results much better in the command line version than using the Max patch.

The videos are created through (a) a set of procedural generative video programs I designed and (b) layering in DaVinci Resolve.

The moving 3-D clouds of videos were created in Max MSP, combining elements from the new jit.gl.polymovie that comes with Max 8.2+ with a 3-D image world patch released by Federico Foderaro. Foderaro's patch only works with still images, but combining it with the polymovie patch was easy enough, although it took significant modification to get it to work. Finally, this patch was augmented with a complex file-loading system that allowed me to load in tagged videos from my library (e.g. by searching for "cat". This portion of the patch worked in combination with a separate Python file.

The 2-D video collages were created using a Python script I developed that relies on the PyMovie library. Various parameters (size of videos, position in screen, duration of clips) are controlled over time with a separate Max patch. The great disadvantage of using Python here is it precludes "improvisation" as there is no real-time element. This makes it slow and costly to experiment with. However, even with my limited programming skills, there is almost no practical limit to the number of videos I can use with this script, whereas the limits when working with live video can be hit very easily within of few minutes of beginning to play (NB: there may be some memory management tricks I am missing in Jitter, but they seem to be pretty advanced if so).

TRANSITION: TIK-TOK KAZOO LESSONS

For reasons that will become clear later, the real point of my piece was to get the whole audience playing kazoos along with me, so naturally I needed to teach everybody how to play this.

Subverting the formality of a new music context is always fun, but there's an interesting serious point in using videos generated with TikTok in the context of IRCAM. The building is a kind of mecca for people interested in making music with technology. In the early days, one of the important things about IRCAM was that it had a supercomputer: the relevance of that to most computer musicians has eroded, and centres all over the world are technologically equal or superior by now. And in fact, the laptops most normal people work on have been capable enough to create innovative computer music for a decade or two. But still it has remained the domain of the expert who can afford to spend time (and often money) learning to use arcane software. Apps like TikTok, which offer sophisticated audio effects and video filters like movement tracking driven by deep-learning, for free and with an interface designed to be intuitive and immediate enough for children to use in a spare moment.

It's still probably unwieldy to make complex multimedia art exclusively in apps like TikTok (although I want to try this...), but the reality is that we are getting close to the point where this will be practical.

Anyway, that last clip is a one-minute crash course in kazoo playing told through TikTok videos (which are also available individually on my TikTok account @kazooteacher69

The section makes use of: TikTok, DaVinci Resolve, Reaper

This is one section in the piece where original recordings were used - however, they are used in the context of viral TikTok memes, using readily available combinations of audio tracks and video filters, as well as making use of the notorious text-to-speech operation available in the app. Some of these filters are very sophisticated.

The videos were layered on top of one another in DaVinci Resolve, with some minimal additions using the same video patches mentioned in the 3D-World section.

PRESENTATION: HOW TO PLAY IRISH FOLK MUSIC
(segues into KARAOK.AI)

Immediately after the TikTok videos ended, a light came up in front of the projection position, and I walked out channeling the spirit of Steve Jobs (although it might be more accurate to say I was Elizabeth Holmes 2.0).
My mission was to sell the audience the idea that, firstly, the kazoo was an Irish folk instrument, secondly, that the music we were about to play was an ancient Irish folk tune, and thirdly that we were going to play it using a revolutionary, AI-driven karaoke machine I had created during my studies at IRCAM.

The presentation is available as QLab files or an interactive web-version is available at http://stolenmusic.org/ircam (scroll to “MY AMAZING SLIDESHOW”)

Of course, the reality was that my KARAOK.AI software (which you saw above) was just a fixed-media video put together in a video editing programme. But it would have been impossible to prove that in the concert hall, had anybody called me out!

In the live performance, the karaoke mass-participation event unexpectedly cuts into this Max Headroom clip (and I sidled out of the room, expecting the crowd to turn on me any second) which explains all the lies the audience have been fed.

The Karaok.AI audio was assembled by putting an a capella cover of the U2 song I Still Haven't Found What I'm Looking for through the Spleeter app made by Deezer (which is powered by Tensorflow machine-learning platform, and which splits vocals from backing tracks). This was transposed, processed, and then I added a recordings of myself singing the melody (processed to sound like a kazoo choir) to support the karaoke line.

FINAL PART: MAX HEADROOM INTRUSION

The context of this clip is extremely important. It's footage taken from the Max Headroom Signal Intrusion Incident, which is probably the most famous TV hi-jacking of all time. The visual language of this intrusion was a heavy influence on V for Vendetta which in turn inspired the Anonymous movement, and so this intrusion is indirectly inspiring legion hackers, activists and troublemakers 30 years later. The identity of the hacker behind the signal intrusion was never uncovered.

I was also seduced by the style of the intrusion, but there were many other compelling reasons to draw on Max Headroom for Stolen Music. Like my KARAOK.AI, Headroom was also a fake step forwards into the future, advertised as being the first CGI TV presenter: in reality, he was an actor wearing prosthetics in front of a green screen. CGI compositing in the background was genuinely groundbreaking for the time, and so (as in my project) the real technology is hidden behind layers of marketing spin.

The character was also milked hard for advertising campaigns, particularly as the face of the famously doommed New Coke. As Coke was originally intended to be a major thread in my project, I thought this was another beautiful match: the hacker even throws a Coke can at the camera during the signal intrusion, although it's very hard to make this out!

A major difference between this section and the rest of the elements in this performance is that there is very little messing around with the original footage. The sound and video are all as in the original (ripped from YouTube), although I have cut it down for snappier pacing. The only additions I made was by adding subtitles. These have very little to do with what is being said in the audio, but I tried to keep the rhythm of the speech similar and in some cases aped it in order to achieve the illusion that the subtitles are real. It seems to fool most people, which is interesting…

As seen, the very end of the show directs the audience's attention to a website. This is a real site. At the time of this concert, it was a relatively minimal site containing a notice that the entire project was dedicated to the public domain as well as some further information about the band Negativland. The site will be added to on an ongoing basis over the next year or two, and the aim is that it will be a hub linking to information about public domain music and for discourse about copyright in the arts, but that it will also contain a repository of interactive generative music software relying on a corpus of copyrighted material

The website can be found here.