Rehearsal of *Piano Hero #4*, Tokyo 2018 (© Stefan Prins)

INTERPRETATIVE AND PERFORMATIVE APPROACHES TO PERFORMING MUSIC WITH INTEGRATED VIDEO
Case study: *Piano Hero #1, #2, & #4*

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SCREENTIME

The pianist Haize Lizarazu told me recently that after performing *Piano Hero #1* someone from the audience came up to her and confessed that he had been confused because he didn't know whether he had to look at the screen or at her, playing the keyboard live on stage. This anecdote points to one of the central issues of performing music with integrated video. This tension is exactly what interests me in working with video in combination with a live performer.

One cannot underestimate the importance and omnipresence of visual stimuli and input in contemporary society. Screens, whether they are our smartphones, tablets, laptops, TVs, electronic billboards, or VR goggles, are ever more ubiquitous and we are spending more and more time staring at them. According to research done by Google, Android users spent on average 3 hours and 15 minutes per day on their phone in 2018 alone – and there is no reason to think this would be any different for iPhone users (MacKay 2019). It is no surprise then that, when faced with video projections in a concert hall, our first reaction is often to focus on the video rather than the performer(s). The experienced 'multi-media performer', however, is well aware of this (as is the experienced multi-media composer) and actively engages with this visual element in order to find meaningful relationships to it, carving out an autonomous performative space on stage for them.

It goes without saying that there are many compositional and artistic reasons for and approaches to using video in the context of live music and that different compositional approaches require different performative approaches.

In this essay I will talk about some possible performative strategies in regard to the *Piano Hero* cycle. Of the four pieces which I composed between 2011 and 2017, only *Piano Hero #1, #2,* and *#4* have integrated video parts, so my focus will be on these three pieces.

However, before zooming in on the performative dimension, I want to shine some light onto the compositional strategies behind the use of video in these compositions.

COMPOSITIONAL STRATEGIES

Over the course of the four pieces of the *Piano Hero* cycle, lasting about 60 minutes in total, a gradual, precomposed transformation of the relationship between the performer and their technological surroundings is laid out.

In *Piano Hero #1*, the performer is playing on a MIDI keyboard which triggers video samples via a custom-built Max patch. These video samples are prerecorded and show pianist Frederik Croene, who commissioned *Piano Hero #1*, 'playing' on the inside of a dismantled piano with his hands, arms, or the black keys of the dismantled piano. These video samples, which can be sped up, slowed down, reversed, or paused via specific keys of the MIDI keyboard, are projected on a screen behind the pianist, who is facing the audience while playing. The pianist is in full control of their 'avatar', which reacts to each and every pressed or released key. This sense of absolute control is slightly and temporarily subverted when, shortly after the middle of the composition, the video stream is interrupted by a live streaming of a webcam. This live stream is activated by the pianist and shows them from the back. While (s)he is playing this passage, only the acoustic sounds from the pressed and released keys are heard. After a while, the webcam is deactivated and the triggered video samples reappear on the screen, while the related sounds are again heard through the speakers.

In *Piano Hero #2*, the live video stream of the aforementioned webcam is now integrated into a 2x2 split screen projection and is complemented by three other video streams. One of these streams consists of similar footage as in *Piano Hero #1*, while the remaining two streams show similar musical gestures from a different perspective. Each of these four streams is triggered live, similar to *Piano Hero #1*, using either the keys of the MIDI keyboard or the two extra MIDI pedals. In

Figure 1: Stephane Ginsburgh performs *Piano Hero #2*

combination with this keyboard and the two extra pedals, the pianist also has to play a traditional grand piano, pushing the performer to the limits of their control.

In *Piano Hero #3*, only the grand piano is used, 'augmented' through a set of microphones, loudspeakers – one of them below the piano, pointing upwards – and a system of computer-controlled acoustic feedback in which the piano itself functions as a dynamic, analog filter. By manipulating the pedals and/or the strings – for example by placing objects on them, making them rattle against the vibrating strings – the pianist can, to a certain extent influence the feedback frequencies. However, it's impossible to fully control this feedback, as it is part of a chaotic system with many parameters. Whereas the pianist was already at the limits of their control in *Piano Hero #2*, (s)he has now an even more limited agency.

Piano Hero #3 is the only part of the cycle without video projection. That is not to say that there is no important visual element. The lid of the piano is fully opened, and a spotlight is projected into the piano at such an angle that the inside of the lacquered lid functions as a mirror in which one can see an (analog) projection of the pianist's manipulations inside the piano.

In *Piano Hero #4*, the pianist is again only playing the MIDI keyboard. The video projection suggests that we're looking through the eyes of the pianist, possibly via a miniature camera hidden in their glasses, filming their hands live as (s)he's playing. However, the movements of the pianist and the projected images start to diverge increasingly until they seem to insinuate the presence of another avatar, a duplicate of the pianist, through whose eyes we are looking. In a series of perspective shifts towards the end of the piece – and the cycle – a second webcam is activated, filming the audience and projecting it onto the screen: the audience is watching the pianist, who is watching the audience in return. When the pianist finally leaves the stage, we follow their gaze via the projection and as (s)he moves through a curtain, we enter an open field, framed by a clear blue sky and a bright sun.

In this last part of the cycle, the MIDI keyboard is disconnected from the computer entirely; all the pianist does is mimic as precisely as possible the gestures of playing the keyboard from the prerecorded video on the screen, so that the idea of seeing a live image is maintained while this passage lasts. (S)he is basically 'playbacking', and none of the electronic sounds we hear are directly triggered by them. The performing pianist has now lost all agency, because (s)he is now controlled by the avatar on the screen.

Figure 2: Rei Nakamura performs *Piano Hero #4*, Osaka 2018 (© Stefan Prins)

From this short description of the four parts of the *Piano Hero* cycle, it should have become clear that the physical presence of the pianist was an essential compositional element: it is related to its technologized surroundings, its role transforms and its agency diminishes throughout the cycle. Therefore, the performer has to consciously develop different strategies of relating to the video projection, so that this dimension of the work can be revealed as strongly as possible.

PERFORMATIVE APPROACHES

During the different performances of *Piano Hero #1 and #2*, I have witnessed mainly three performative approaches. The first one is to focus on the sound and let the relationship with the video be the result of it.

Stephane Ginsburgh, who so far has been the only pianist to play the entire cycle, explains: 'In *Piano Hero #1*[1] and *#2*[2], I always considered that, since the audio-visual samples presented integrated sound and image, I would direct my attention to the sound rather than the video.'[3]

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1   Recording available on Vimeo: https://vimeo.com/178920962 (accessed June 22, 2019).
2   Recording available on Vimeo: https://vimeo.com/178600277 (accessed June 22, 2019).
3   Private e-mail correspondence with the author, May 30, 2019.

Rei Nakamura, who played *Piano Hero #1*[4] and *#4*[5], describes a similar approach for *Piano Hero #1*, focusing on the sound: 'In each video sample, the pianist [Frederik Croene] makes a specific movement, and this effects the rhythm slightly. Although I play the rhythms written in the score, it has some effect on my live movements, which then also effects the played rhythm.'[6] This subtle performative 'feedback loop' is not so different from how a pianist would adapt their performances of any purely acoustic music on pianos to, for example, create different resonances.

Regarding *Piano Hero #1*[7] Antoine Françoise notes:

> I always practiced imagining the piece should work without video. If it doesn't work with sounds, it won't work with video […]. The video is of course a very important factor of the piece in the live performance, but I believe the performer has to master the audio part of it and the video will fall right into place.[8]

He adds, however: 'Yet with video, the role of the performer has to be thought even further: am I the center of attention, is the video the center of attention?'[9]

The above examples all describe an approach which connects more to traditional, sound-focused performance practices, and thus tends to accentuate the links with the canonic piano literature, or the traditional format of the piano recital.

Another approach addresses the video projection more consciously, as autonomous visual material to relate to during the live performance.

A particularly clear example can be found in Gwen Rouger's performance of *Piano Hero #1*:[10]

> In developing the interpretation of *Piano Hero #1*, I have tried to find a relation of energy and performative presence which is connected to what happens on the video, so that I could create an equilibrium between the real and the virtual. […] The instrumental gestures and its physical energy are not anymore directly related to the quality of the sound: with a very small gesture [like pressing a key on the MIDI keyboard], I can play an extremely strong and violent sound, which of course is not the case with a piano. To work with this issue, I have sometimes added gestures that are directly related to the sound, gestures which I would have made if I would have created the sounds on the piano. […] This has allowed me to create a stronger presence at the keyboard, so that it

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4   Recording available on Vimeo: https://vimeo.com/303827795 (accessed June 22, 2019).
5   Recording available on Vimeo: https://vimeo.com/304391538 (accessed June 22, 2019).
6   Private e-mail correspondence with the author, May 12, 2019.
7   Recording available on Youtube: https://www.youtube.com/watch?v=z0J_yOn8010 (accessed June 22, 2019).
8   Private e-mail correspondence with the author, May 15, 2019.
9   Ibidem.
10 Recording available on Vimeo: https://vimeo.com/83711031 (accessed June 22, 2019).

would be as strong as on the video. The audience is thus seduced to look at one and then the other instead of resting its gaze only on the video.[11]

For similar reasons, Rouger even chose to wear clothes with warm colors (a fiery red dress) when performing the piece, to contrast with the rather cold, blueish colors of the video samples. If the live performer is male, the score asks him to dress in such a way that he resembles the pianist on the video recording as much as possible. But if the performer is female, the suggestion that the person on the video is the same as the one performing live is in any case fraudulent; this opens up the possibility to think of the clothing differently.

This also points towards a subtle, related ontological shift. If the live performer resembles the video performer, the suggestion is that the video performer is his digital *doppelgänger*. If they look differently – for example because one is male and the other female – it points less to a *doppelgänger* and more to a virtual extension. Rei Nakamura mentioned in that regard: 'If the avatar is yourself, you do have more connection with it. On the other hand, controlling an avatar which is totally "fremd", is also interesting, it is as if you were controlling a robot. There is more distance to it.'[12]

In any case, even if the live performer and the virtual one are clearly different, it is possible to highlight the relationships and connections between the live part and the video part, as Rouger's approach proves. Such an approach brings the performance a step closer to music theatre or even choreography.

A third approach hovers somewhere in between the two above and is often, consciously or not, combined with them. Here, the performer lets their non-functional physical gestures be influenced by the sound, to have it convey its 'electronic' energy and the digital character of the audio-visual samples: the angularity of the loops, the abruptness of them being turned on and off, their extreme speeding up and slowing down… This is not unlike a dancer who would dance to specific music and allows the music to shape their movements. It is a non-functional gesturing: it won't change the sounding result, but it does suggest an embodiment by the live performer of the produced sounds and might even give the impression that the way the performer moves is affecting the video, or the other way around.

This is an approach which is born from the decoupling of the sound production (playing keys on a MIDI keyboard) and the sounding result (the sounds made by scraping or hitting the inside of the piano as seen on the video) in *Piano Hero #1*, as Gwen Rouger also pointed out above. In *Piano Hero #2*, this situation is more complex due to the addition of the traditional concert grand piano. The pianist is now subjected to two different playing realities. When playing on the grand piano, there is a very direct link between physical action and sounding reaction:

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11   Private e-mail correspondence with the author, May 26, 2019.
12   Private e-mail correspondence with the author, May 12, 2019.

the energy that is produced through a specific gesture is being transmitted onto the strings via the hammers, and thus has a clear impact on the sounding result. On the other hand, although in *Piano Hero #2* the MaxMSP patch is programmed so that the velocity parameter of the keyboard (how hard the keys are pressed) influences the volume of the audio-visual playback, the direct influence on the sound result is still not as strong. The performer thus has to find a way to navigate these two different playing realities in *Piano Hero #2*. At one point these two realities are literally exchanged; this is when the pianist is asked to play one particular musical phrase on the grand piano by moving their arms as slowly as possible (which could take up to two minutes), and this is as if the digital logic of the extremely slowed down video sample has leaked out into the physical world.

The role of the pianist in *Piano Hero #4* is a bit more straightforward. On an interpretative level, there are fewer open questions and performative options. The pianist has to make a video recording in advance of the performance. This recording is then edited together with the previous prerecorded video material that featured Frederik Croene performing inside the piano. During the parts in which the movements of the live pianist have to coincide with the video recording of themselves, the pianist has to mimic the gestures made during the recording as precisely as possible. The more precise the mimicry is, the more the audience will be tempted to alternate its attention between the video image and the live performance, and, at the same time, attempt to find any discrepancies between both. The more precise the mimicry, the more balanced the live and video elements will be. This also results in an interesting performative paradox: as the pianist has to 'learn' every gesture made during the video recording to reproduce it during the live performance, (s)he has to become very conscious of every movement on the video that was made unconsciously.

SCENOGRAPHIC CONSIDERATIONS

I am convinced that every concert should be conceptually, programmatically and scenographically very carefully curated, from the moment that the audience enters the performance space (or sometimes even earlier) to the moment it leaves. But concerts that include video need even more care, especially regarding their scenography. What is the material of the projection surface? Where is it positioned? How big is the projection in relation to the performer? What are the lines-of-sight for the audience? How does other stage light interfere with the projection? Is the projector bright enough? Is the space dark enough?

For *Piano Hero* these questions are of existential importance and are a crucial interpretative parameter. In *Piano Hero #1*, for example, I have participated in performances in which the video was projected on the entire back wall, so that the virtual performer was many times bigger than the live performer sitting in front of
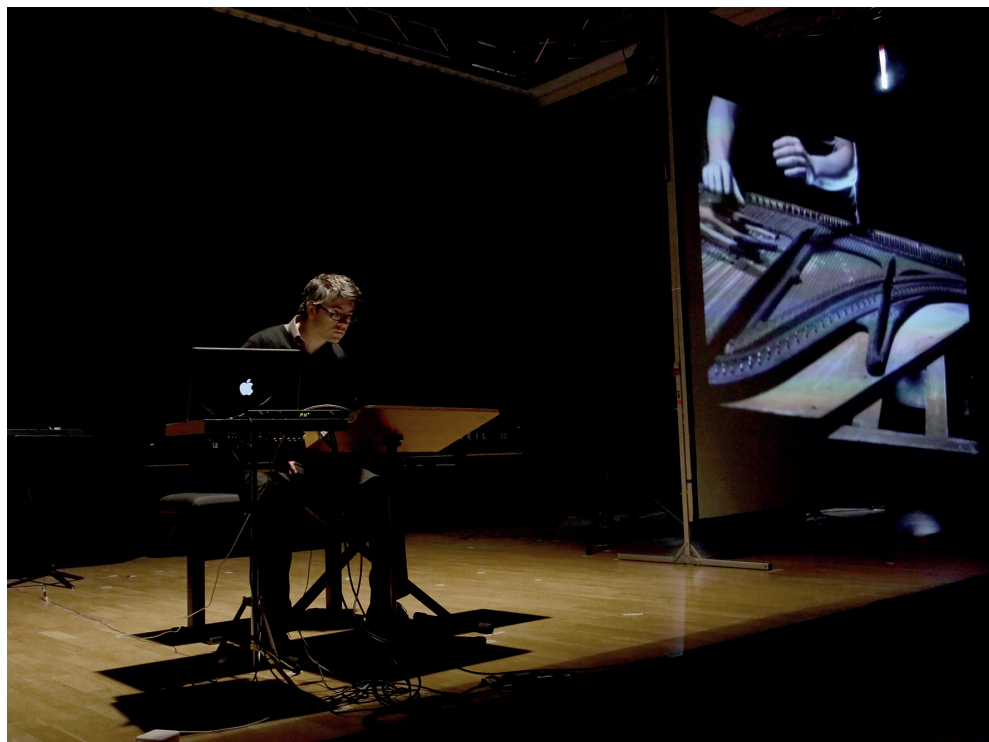
it. I have also seen performances in which the projection was life-size on a screen placed besides the live performer. Both options made sense to me but had slightly different interpretative implications. The 'life-size' version accentuates the *doppelgänger* idea and favors a dialogue between the live and the virtual aspect, whereas the version with the huge projection is more immersive and refers more to the idea of the live performer controlling a digital avatar. I'm sure other possibilities could be thought of, too. Most important is that they are not in dissonance with other interpretative decisions.

CONCLUSION

Performing a work in which music and video are integrated elements (as in *Piano Hero #1*, *2*, *& 4)*, requires the performer (and composer!) to ask: how does the physical performing body relate to the video? Is there a hierarchy? Is this relationship stable or dynamic? How can this relationship be articulated most strongly in the performance? How can I scenographically enforce my interpretative decisions? Often these questions have more than one answer and validate several approaches. The consequences of these different approaches will highlight different aspects of the work, as I hope the above case study of the *Piano Hero* cycle has shown.

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Sebastian Berwek performs *Piano Hero #1* by Stefan Prins, Bremen Festival 2012
(© Rolf Schoelkopf)

Gwen Rouger performs *Piano Hero #1*, still from video (https://vimeo.com/83711031 – accessed December 20, 2020)

Haize Lizarazu, *Piano Hero #1* by Stefan Prins, EMA Festival Madrid 2016 (© Francisco Cuéllar Santiago)
Malgorzata Walentynowicz, *Piano Hero #1* by Stefan Prins, Bukarest 2014 (© InnerSound New Arts Festival)

Final scene of *Piano Hero #4*, Osaka 2018 (© Stefan Prins)