

## 24 Hope Street collective DCNW research project :

### *Why use technology when making dance?*

Report by Mary Pearson, Outside Eye

Introduction :

It took me a while to find interview questions that could lead us towards our central research question. I tried to ask open questions to invite the dance makers and creative technologist to describe and reveal their starting points, decision making processes, and discoveries. In particular, I pressed them to name what emerged in the process which was new or surprising to them.

I wanted the dance makers and creative technologist to make their intentions and desires more conscious by naming them. With hindsight, I can see that I was also questioning how the creative technologist can be an equal collaborator. From my perspective as a dance maker, the technologists' knowledge is so specialized that it can be daunting for dance makers to find agency within the process. Everyone on the project is an experienced artist; yet the technologists' tools are powerful in ways that are less widely understood and can feel dominating.

Through listening to the creative technologists' reflections, I learnt about the different ways in which he too can become overwhelmed by technology. The most obvious example being that it is always possible the technology will not work as expected - or at all!

To uncover knowledge about how the 3<sup>rd</sup> space, or synergy formed between the dance makers and the creative technologist, I asked these questions:

*How did you make decisions about what you were going to do?*

*What is happening?*

*What is the tech 'doing to you'?*

*What are you getting curious about?*

*What did you find out that was unexpected?*

*Were there any meanings, or results that were surprising to you?*

*With more time, what would you like to explore further?*

*What are you excited about carrying forward?*

*What are you left with, in terms of your creative desire or appetite?*

Here is a summary of the 5 different starting points and approaches of the dance makers in collaboration with creative technologist, Noel Jones:

## **Rowena Gander with Stephanie Greer**

Rowena Gander invited fellow aerialist Steph Greer to try out a different kind of 'new technology' - which was their first-time use of the combination of pole and silks. Rowena's chosen starting point meant she would be physically tracking many things; above all, their safety in a new and precarious situation. For that reason, (and because the aerial rig is in studio 1 and not digital dance studio 2), they opted to use tech that concentrates on only one element: sound.

They built an environment using the pole and silks, with IR sound sensors that would track the aerialists' bodies in space. The movements controlled the sound levels and the intensity of two independent sound scores. The aim of the sound was to create 'states' or 'atmospheres'.

Key words :

Environment, atmosphere

Responsive

Manipulate

Intensity

Control

Intention

Decisions

Interference

Amplifying, dictating, enhancing

Overwhelming

Precarious, not knowing

Loads of material

Relevant, aligned

New pathways, inspiration, directions

## **Taciturn: Jen Hale Smith, Jenna Jungbluth, and Jen Rees**

Taciturn had created some material beforehand in the studio. They were working with falling, and ready to dance with a crash mat.

Having worked with Taciturn before, Noel knew their work is full of references to windows and voyeurism. They decided to project onto the studio windows in 4 panels. He selected an old black and white movie technique, which entails filming against a black background, overexposing the action in the foreground with light, and removing the background. When used as projections, the bodies are in a 'void space' and can be presented on different planes.

The dance makers worked in an intuitive way, organically integrating the camera and technology into their choreographic choices in live performance (improvisation) and reaching a flow state.

Key words :

Intuition

Trusting the process

Flow state

Experiment

Restrictions

Limitations, possibilities

Clarity

Openness

Impact (of camera)

Enhance, magnify, perspective

### **Vicci Riley**

Vicci wanted to show up in the creative process as authentically as possible. Her recent challenges with vestibular neuritis have meant that she has experienced very different states of being - including needing to be very still and having vertigo. She brought imagery and movement ideas and wanted to use technology to simulate visual and sensory representations of these states. She hoped that through this technical exploration, she might also make new connections or find new interest in the mystery of her health condition.

Noel proposed to experiment with triggering areas within a limited space, which Vicci could control with her movements, to create visual and auditory states she experienced.

Key words

Interpret

Externalising internal states

Orientation and balance

Perspective – using tech to share someone’s perspective

Environments

Magnify, intensify

Trajectory, puzzle

States of being

Restrictions, predictions, variables

Loads of material, sources

Translation

Aesthetic

Responsive

Live

### **Pei Yee Tong**

Pei sent Noel examples of visual effects she wanted to try in the studio. She was interested in how the technology could be used to reveal the energy (qi), or an internal or emotional aspect of her dancing that was perhaps less visible with just movement. She was interested in how the technology might enhance her storytelling and the intensity of her dancing solo, by leaving visual traces on the screen.

Noel was familiar with the technology used in the examples Pei shared. He wanted to know more about why she wished for that visual effect. Together they decided Pei would create a music score as a base for her dance, which set an emotional atmosphere or tone that could support her dancing, and in turn, the visuals. Visuals were then created with body mapping, tracking with IR sensors, and projections onto hollow gauze.

Key words :

Visual effects

Rotation, trailing movement

Projections

IR cameras, sensors

Simulate

Enhance

Translate, offset, alter

Intensity, Vibrant

Solo, Storytelling

Complementary

Control

Limitation

Ownership, authorship

### **Arianna Sansonne**

Ariana is pursuing artistic concepts on body image, body limits, and body as object through multiple iterations of her work called 'Body'. Her starting point for this creation process was to select different technical possibilities to create a new variation on these themes, in what is already a longstanding digital collaboration between Noel and Arianna.

Noel came with multiple ideas (including projection, filming, using old footage, and a TV). They used the augmented reality (AR) technology Gaussian Splat. Noel uses a phone to rotate around Arianna, scanning her still body positions. The app then uses AI to convert the information into 3D models or digital 'objects'. Arianna describes the movement process as posing, rather than dancing.

Arianna wanted to create a body double or duplicate. This 'double me' as she calls it enables her to have a conversation with herself. The end result of this variation used games engine technology, enhanced 3D modelling, and Gaussian Splat so that the audience can see Arianna's

present self, the live performer, dancing in relation to her past self, her 'digital ghost' projected onto hollow gauze.

Key words :

Realistic  
Reflection  
Judgment  
Potential / Limit  
Variables  
Refining  
Testing  
Scanning principles, lidar scanning  
Posing  
Rebuilding  
Navigating  
Models, objects  
Duplicate  
Instruments, Equipment  
Photogrammetry  
New aesthetic  
Control  
Rotate in space  
Position, Orbit  
Future, past  
Interacting  
Manoeuvring  
Digital Ghost

Conclusion :

### **So why use technology when making dance?**

Witnessing the 5 collaborations and listening to the artists speak about their experiences, I noticed key themes emerge repeatedly. Below in italics are quotes I've used from the creative technologist, Noel Jones, who has an ability to sum up the wonders and perils of technology with few words.

The live body is integral to the responsive technologies explored in this project. Although dance makers may have previous experience with dance for camera or using isolated video elements within their live performance works, responsive technologies ask the dance makers to adapt to limited or restricted ways of moving in real time.

A fascinating feedback loop arises through the dance maker's adaptations to the technologies. They are changed; they learn new behaviors in response to the technologies' behaviors. This extends the reach of the dance makers' bodies; they can achieve new possibilities that their bodies in movement alone cannot. The dance makers referred to the synergy between their movement and the technologies as 'magic' and to the technology 'coming alive'.

Yet the responsiveness of the situation can be both inspiring and overwhelming. The seemingly endless possibilities of the technologies can also cause a creative freeze. The technology enables the artists to accumulate and layer ideas so quickly they can get seduced by a myriad of options and material. The dance makers spoke of the need to remind themselves to ask which possibilities are aligned with what they want to create, aesthetically and conceptually, and to get rid of what is not relevant.

*'The trouble is with technology (...) the beauty and the trouble with it is that it has so many variables.'*

One of the technologists' strategies?

*'Throw it all out the window and start again'.*

A key to finding the synergy seems to be willingness on both sides to enter a space of not knowing. Improvisation was named as central to the process of every collaboration, in different ways. The dance makers' ability to improvise serves the technology; however, what many people don't realise or take into consideration is that the improvisation goes both ways. Unlike a technician, who sets and operates different states, a creative technologist is also improvising in response to both the dance makers and the technologies.

Without living, moving bodies, and people who are engaged in a conscious creative process, the technologies are *'just things you plug in'*.

It is not just the dance makers who forget or need to fight for their agency.

*'I think there's always a battle that you've got to fight back'*

The technologist builds processes which make creative decisions. Within that, he sometimes regarded his own conscious decisions as interference.

Some decisions are made by external forces beyond anyone's control: time, access to equipment, and technical malfunctions.

All the dance makers were surprised by how much material they were able to create in only 2 days. Technology increases the speed of creation in many ways: not just in finding the concept, but also in producing a lot of material, and reaching performance-level focus and production-level output.

Many of the dance makers spoke about a different relationship with time. With some technologies, they created recordings on the first day that required them to think forward to how they would connect with that material on the second creation day. Other technologies enhanced the choreographic decision making happening in real time, requiring them to mentally track not just their own performances, but also the accumulation of the digital effects over time.

All the dance makers expressed their desire to see the visual effects at different points, either by watching video recordings or asking me to put my body into the situation. As an outside eye, it struck me that the creative technologist can become a kind of 'false outside eye'. The dance makers must of course rely on the technologists' ability to see their dancing and understand the technologies. It is a situation where one collaborator's specialist role is particularly demanding, in terms of both power and responsibility. In answer to my initial question about how the creative technologist can be an equal collaborator, I realised one strategy could be having the support of an external outside eye to offer another perspective on what is happening.

### **Recurring themes, from selected interview segments with dance makers and creative technologist:**

**Why use technology when making dance?**

**On the synergy between tech and dance making**

**On trust**

**On decision making**

**On not knowing**

**On technology**

**On dancers adapting to tech**