PEN-Y-PASS

DEVISING CHOREOGRAPHY WITH PHYSICAL IMAGERY

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Pen-y-pass is an interactive dance piece using eight Gametrak controllers as a choreographic tool. The paper demonstrates the inspiration from the contemporary choreography methods by William Forsythe and Wayne McGregor to adopt the interface as a choreographic tool.

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1 INTRODUCTION

Pen-y-pass is an audiovisual interactive dance collaboration with two choreographers using eight hacked tethered controllers from the vintage game console, Gametrak[1]. The Gametrak's tethered controller can be pulled in and out and send data of the tether's length. Therefore, the tangible controller requires users to move in certain ways; its nature of interaction directly impacts on movement creation process. I chose this device as an interactive interface because the piece is focused on how to devise choreography with physical obstruction in particular. This paper explains my compositional approach related to contemporary dance choreography methods, how I used Gametrak as a choreographic tool and the process of the audiovisual work in *Pen-y-pass*.

1. Gametrak is invented in 2000 by Elliott Myers, the founder of In2Games. It is designed for motion games using two hands such as golf or boxing for Xbox and PlayStation.

2 MENTAL IMAGERY TO PHYSICAL IMAGERY

In a previous experiment several years ago, I asked a dancer to tether six Gametrak controllers to her waist. This condition naturally made her repeat the same movement to check how far she could move or not. It was very interesting for me to observe this behaviour because the motion tracking technology interfered with the size and shape of the dancer's kinesphere. This idea was discarded at the time, because it simply made it difficult for the dancer to move freely. However, I brought back this idea and set this condition as a task to create interesting movement and audiovisual work.

2.1 RESEARCH IN CONTEMPORARY DANCE CHOREOGRAPHY METHODS

Contemporary choreographers often provide tasks for dancers to form 'mental images' which dancers need to decide how to move in response for that imagery. (Clark and Ando 2014) In one of William Forsythe's lecture videos from *Improvisation Technologies* (William Forsythe 2008) Noah De Gelber dances with an imaginary table and dismantles its parts as choreographic process. After that he creates an imaginary chair and resizes to go underneath. Forsythe calls those imageries as "Choreographic Objects" and as dancers move along with the objects their kinesphere change.

Wayne McGregor's instructions also involve the use of one or more forms of imagery as stimuli for dancers. The tasks require either imagining geometric spatial image or visualising a three-dimensional image in mind. (DeLahunta, Clarke, and Barnard 2012) Another method McGregor uses is providing dancers a physical problem, which they have to 'solve' through movement. For example, dancers are "asked to imagine a rigid rod connected to their shoulder, which is then pushed or pulled by a partner some distance away." (Clark and Ando 2014, 187)

> Innovative movement creation can start from alternative points in mental, as well as physical, space. (May et al. 2011)

The common approaches Forsythe and McGregor have is that they both use **1)** 'mental imagery' to provide inputs for the beginning of a movement rather than on the end, **2)** set 'limitations' to seek new choreography, and **3)** discover new ways of moving in the 'process'. Inspired by those methods, I decided to set visible and tangible imagery using Gametrak's tethered controllers. It works as 'physical imagery' which dancers need to work on as either choreographic tasks or physical obstacles to solve through movement creation process.

2.2 TECHNICAL SET UP

Eight hacked Gametrak controller have placed in a square room (Fig 1). At the end of each tethered controller a small carabiner has been attached so that it can be hooked on a dancer's wrist bands as well as on a neck, waist, and ankles. I have used an Arduino micro controller as an interface to receive data from the tethered controllers and send to my computer.

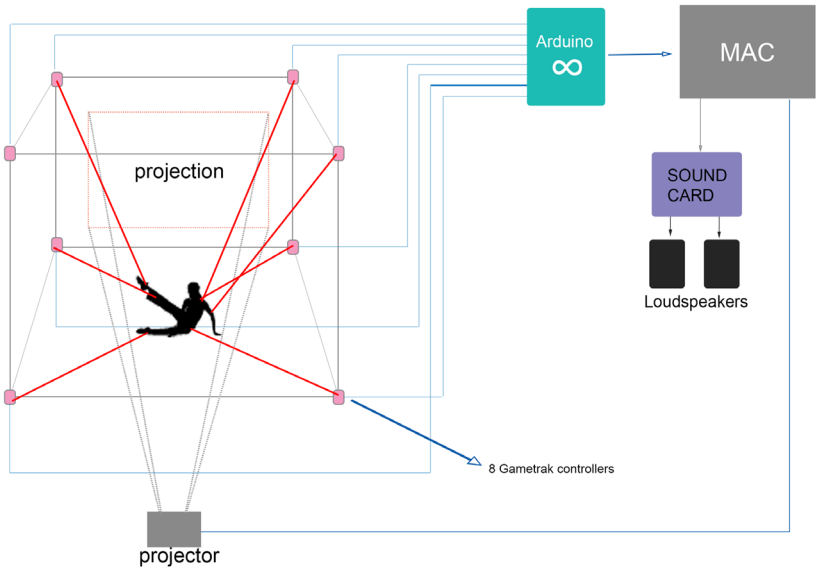

Fig. 1. Demonstration of technical set up using eight hacked tethered controllers from Gametrak.

2.3 CHOREOGRAPHIC TASKS

The tethered controllers constrain a dancer's body and limit kinesphere. The main focus in this experiment is not to demonstrate how dancers struggle with their constrained bodies but to see how this setting can impact on their improvisational process.

The two choreographers were asked to attach and detach eight Gametrak controllers on each other's different parts of bodies. When any parts of their bodies were attached to the controllers, dancers had to complete at least one or more tasks addressed here: they had to **1)** figure out how far they can move with the tethered body parts, **2)** improvise freely within the tethered space, or **3)** use the tethered controller as imagery to build choreography or think those as their extended body parts.

3 AUDIOVISUAL WORK IN *PEN-Y-PASS*

Pen-Y-Pass is a mountain pass in Snowdonia and the piece draws an epiphany of complete isolation in Snowdon in a wintertime. I used some footage I have taken in Snowdonia (Fig 2) as resources for the visual work. The visual work is created in the program, VVVV, and the tethered controllers are programmed to generate the visual work as well as the sound composition programmed in MAX.

Fig. 2. Still shots of the footage taken in Snowdonia

The performance is divided into four different parts: it starts with an encountering moment of the windy mountain. Although all eight wires are connected to the two dancers (four each), the dancers only use one of their hands to start the piece. Gradually they begin to use more wires to move freely and create more horizontal lines for the visual projection. The second part represents the pass as a maze and the

projection shows grid balls structured as a cube. The dancers detach one of the wires and leave three wires with diagonal arrangement. I asked the dancers to attach one part of their bodies as a starting position for this part and think those diagonal wires are as their extended bodies as if they are turned to the diagonals (Fig 3). The third part demonstrates the night I had in a lodge in Snowdon with dreamy and surreal mood. The night fell into complete darkness. Only the sounds of hail hitting windows faintly held my consciousness. The dancers are asked to detach two more wires from their bodies which let them to dance more freely with this dreamy narrative. The last part finally reveals a clear sight of the snow mountain after the pitch-dark night passes. The performance of *Pen-Y-Pass* is filmed and produced as a screendance video.

Fig. 3. *Pen-Y-Pass* (2016)

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