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Mobile Digital Performance Lab explores 'States of Mind'

Abstract

The aim of this paper is to explore some ideas surrounding the construction of seven interactive exhibits that were devised as part of an immersive installation called 'States of Mind'. These interactive exhibits were intended to make interventions inside our 'perceptums of flow' within the audience's lived bodies; to evoke various states of mind. Perceptum is the Latin word for doctrine; however, for the purpose of this paper, I am emphasising its meaning as learnt embodied perceptions that are phenomena in and of themselves, shared subjective reference points for communicating knowledge. In his book *Process and Reality*, Whitehead discusses the distinction between two different species of perceptum within an individual, connected by a symbolising semiotic process. The first species he calls presentational immediacy (Whitehead: 1979), which is essentially our notions of personal perceptions in the moment; the full holographic multi-dimensional present, extended, sensuous, geometrically organised and observed in the now with little reference to the past or future. The second species he calls causal efficacy (Whitehead: 1979), which is the direct visceral connections to an ambient physical environment. It is our proximal animalistic feedback that heighten our awareness of ourselves as an organic physical journal; a lived body operating in an ambiguous gnomic present, infused with a past, present and future. These two modes are matrixed with a meaning making process that creates and utilizes shared symbolic references as a way to articulate, express and communicate ideas and observations. This symbolic meaning making process has implications concerning untold stories regarding different cultures. Whitehead articulates:

If the meaning of the word be an event, then either that event is directly known, as a remembered perceptum in an earlier occasion of the percipient's life, or that event is only vaguely known by its dated spatio-temporal nexus with events which are directly known. Anyhow there is a chain of symbolic references (inherited along the historic route of the percipient's life and reinforced by the production of novel and symbolic references at various occasions along that route) whereby in the datum for the percipient occasion there is a faintly relevant nexus between the word in that occasion of utterance and event (Whitehead: 1979, 182)

Consequently the percipient's associations with either or both modes of experience, acts as a reference point. These are based on embodied models that the percipient uses to perceive, reflect and learn within the present context of an event. In order to create an environment conducive for mindful interventions, a group of academics, students and technicians, formed a mobile digital performance laboratory, MDPLab, which is a creative zone; a production space where we play and experiment, practice and conceptualise with embodied and digital processes. We wanted to play with and capture the perceptual threshold surrounding our holographic present by constructing an interactive journey and our visceral connection with an ambient physical environment, as part of our practice by facilitating interactive events that produce visceral responses. The predominant idea was to generate a space that

facilitated creative flow as an optimal state for our team when working. This was in order to efficiently construct an environment that would creatively facilitate flow for percipients within the promenading performance installation. Flow is inherently evident when we see poetry in motion. Both performers and viewers perceive this beauty. Achieving the perceptum of flow within the flux of material reality is the goal in the practice of T'ai Chi Ch'uan commonly known as Tai Chi. As a practitioner for over 25 years, it is hard to stress the importance of flow in the practice of transitions within these highly formalised postures! After a period of time critically practicing the form, the body becomes physically literate with regards to fluency in everyday movement. We learn to negotiate the forces that influence the flux in motion. Laban says,

Let us now consider the motion factor of Flow in more detail. It plays an important part in all movement expression, as through its inward and outward streaming it establishes relationship and communication [...] Previously we considered particularly one of its aspects, namely that of the control of flux. We observed the fact that this can be either intermittent or completely stopped. Now in an attempt to define the motion factor of flow with its effort elements "free" and "bound" we have also to take into consideration the movement sensation of Fluency (Laban: 1971, 80).

When considering fluency, we can experience its relaxed focus, when we are aware of the perceptums of both our presentational immediacy and causal efficacy in that we are totally embodied in the moment of each action. This is an extension of a choreological method, which revolves around my concept of the Return Beat (Taiwo: 1998); which, draws the viewer/performer/creator back to an encounter with their poetic flux; which is loosely defined here as the flow of change with respect to significant and emergent personal narratives. The aim then, is to create exhibits that use both analogue and digital biofeedback mechanisms underpinned by play throughout the above triadic process, facilitating personal narratives (Preston Dunlop & Sanchez-Colberg: 2002). The result is that creative producers can engage with and create a state of reflective contemplation in the flow of change. The idea is to facilitate an internal state of reflection and absorption to facilitate Eudaimonia. A key aspects of interactivity in this case, is the use of play. The idea being that the act of engaging and playing with these exhibits, will potentially transport each percipient, into a liminal flow state, which engages their physical journals (Taiwo: 2010). Another key purpose for engaging in the practice of play is to encounter immersive experiences of temporal flow with our personal poetic flux that both excites and contains our experience of a durational moment producing feelings of wellbeing. During an interview with Wired magazine, Mihaly Csíkszentmihályi defined flow as:

Being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you're using your skills to the utmost (Csíkszentmihályi: http://archive.wired.com).

We will examine Csíkszentmihályi's notion of flow later in this article, suffice to say with this in mind, it was important to create a team of artistic technicians and technical artists. Consequently, with this self-sufficient interdisciplinary approach, each contributor in this research project, was seen as a creative producer. This can be seen as a mirror of our time due to the increasing interdisciplinary nature of digital practice. The digital boundaries between artist, technician, producer and audience have been blurred and merged, so users can potentially be called creative producers who continually edit and perform their lives. Examples of this can be seen in the rise of celebrity YouTubers like 'Smosh' the comic duo Ian Hecox and Anthony Padilla as well as 'PewDiePie', alias Felix Arvid Ulf Kjelberg who has completely dominated YouTube in 2015 to name but a few. The MDPLab team for this project was drawn from University academic and technical staff, as well as undergraduate and postgraduate students. The vision was to create an environment where different researchers could bring their tools and develop the flow of personal ideas underpinned by a desire to facilitated wellbeing in both the devising and experiencing process. Steve Solloway, Corin Evans-Prichard and I, Olu Taiwo, are performing Arts academics; Richard Bentley and Sebastiane Brewer were at that PhD and MA students respectively; Eleanor Chownsmith and Aarul Malaviya were at that time undergraduate students with significant input from Sean Ashford and David Rolfs. whom were the technical staff on the project. Eleanor Chownsmith's contribution was significant as she was the Lab manager in her role as a WRAP apprentice. The exhibits that we created and developed during the month of June 2015, will be explicated below. This process culminated with a sharing at end of June when we presented our findings to an invited audience. We utilised the campus with a view to facilitate a contemplative journey for the audience, both inside and outside. So when we started exploring digital technology and its performance applications underpinned by play and wellbeing, some interesting themes started to emerge. We focused on 'posture', 'wellbeing' and 'mindfulness'; interrogating the relationship between our bodies, digital processes and public interaction.

The Exhibits within the performance installation 'State of Mind'



We will now reflect on the interactive exhibits that emerged from our collective experiments. We used two sets of codes as a way to transfer responsibility to the audience for entering a particular level of consciousness; as a way to move from and through a perceptum of *causal efficacy* to a perceptum of *presentational immediacy;* in other words, moving from an embodied mindful state to a perceptual awareness of the external situation.

(Fig. 1) Printed Postures: The Four Prime Positions

The first set of codes used postures that we printed in 3D called prime positions. The postures were embodied starting points for the percipient to experience in a specific context. The form of the four prime positions are: (Fig. 1)

- Standing
- Sitting adult
- Sitting child
- Lying down

The second set of codes, we used colour as a representation for the percipient to prepare a state of mind. We employed three colours loosely based on the Hindu Chakra system and the frequency rate of each colour, to indicate what state of consciousness the audience had to construct at a given location. (Fig. 2) The combination of these codes meant that there were 12 possible arrangements for each event. The representations for the colours are listed below

Violet high frequency represented alertness
 Green mid-level frequency represented a contemplative state
 Red Low frequency represented relaxation.

The printed figures choreologically demonstrating each prime positions was an attempt to create objects that have symbolic and not just artistic value, meaning the figures within the event were set in such a way as to inspire stillness and creative action as well as be a reminder of each percipient's personal impression. They attempted to bridge the gap between physical experience and perceptual impressions. There is a political point here, as an ethnic Yoruba man born in England, I am keen to explore and share a particular aspect of our traditional West African artistic practice. Historically, art would act as a symbolic cultural resource for the 'oral' and poetic' articulation of a historic event. The majority of the various West African Kingdoms elected for an oral approach for the transmission of history over the more literal methods. When we consider the cultural representation of Untold Stories, this shift of emphasis from the artistic to the symbolic can help to create a new aura by reconnecting a severed historical resource underpinned by a symbolic creative Practice. Regarding the seven zones that percipients were guided through before entering the MDPLab, each zone was a separate location. Each location was linked to a dedicated Wi-Fi network on the Universities' intranet. Sean Ashford the networks and systems manager at University of Winchester created the specific Wi-Fi system for the project which enabled us to associate various internet access points located in the seven zones with individual web pages. The network tracked the percipient's personal smart phone, iPad or laptop, which meant that once the percipient was given a temporary login Password onto the university intranet, and as soon as they came into contact with the access point in the zone's location, a webpage was displayed with instruction with what to do next. When we guided the audience through the different access points in these zones, they were invited to contemplate in the space after viewing particular videos online. In order for all these events to happen in flow and with fluency, we wanted the transition from viewing online content with different access points to the percipient's contemplation within the space to be seamless.



(Fig. 2) Poster of Zone 2

On the left is an example of the poster associated with a zone with a 3D printed figure in a sitting adult posture. The colour is green suggesting a contemplative state. Also, there are three stills from the three available videos associated with this zone with the title: Intimate, Gathering and Food for Thought (Fig. 2) The seven projects exhibited are listed below; however, before we start their explication, it is important to note that Steve Solloway, Corin Evans-Prichard, Sebastiane Brewer, Eleanor Chownsmith and I acted as performer/facilitator on the day of sharing. We each adopted characters that we developed as part of our playful practice in the devising process.

Printed Postures (Four Prime Positions)

This project was an exhibit that explored my actual physical form explicated and stylised digitally by Corin Evans-Prichard from 2D digital photographs. He then digitally extruded these photographs into 3D and was finally printed in 3D by David Rolfs into little sculpture (Fig. 1). The stances of these little sculptures symbolically illustrate the mindfulness in the prime positions like Antony Gormley life-size figures of his own body. It is important to note the difference between stance and posture. Posture is the external form that the body adopts, while stance focuses on the psychological quality of the posture. Each stance informed the posture the audience adopted through mindful observation whilst in the location. We can see in figures 3 and 5 the sculptures appear alone in the space in frozen contemplation; whereas, in figures 4 and 6 we can see the audience adopting postures respectively. This was successfully replicated in the other zones as well as within the MDPLab. In a sense the interactive journey towards the MDPLab was a preparation for being and listening within the highly digitized environment of the MDPLab. What was interesting was the audience's willingness to adopting the stances; however, I did choose stances with postures for their simplicity and there practical ubiquity, which form the basis of a practice I am developing called Urban Butoh.



(Fig. 3) Printed Postures Sitting adult



(Fig. 4) Audience contemplating sitting adult







(Fig. 6) Audience contemplating lying down

Place, Posture and Internal State

I lead the design of the overall concept in this project and as mentioned above, I employed the ability to link Internet access points with individual web pages while the network tracked personal smart phone or iPad devices. The network and website was designed by Sean Ashford. Eleanor designed the graphics and guided the audience through different zones, assisted by Sebastiane, who designed the journey and risk assessed the production. Both Sebastiane and Eleanor invited the percipients to contemplate the situation in space as well as view videos via their devices once they were in range of an access point. Richard Bentley composed specific sounds for each zone. Unfortunately circumstances meant that we could not play them in the actual zones on the day as intended; however, we used each sound for the video we prepared for the DRHA 2015 in Dublin. Each of the sounds were composed to enhance mindful listening as the percipients go from zone to zone. The videos on the website were selected and edited by Corrin Evens-Prichard. Figures 7 & 8 shows percipients connecting to the website in zone 1 and zone 3 respectively. Both were coded as standing violet representing the alert state.



(Fig. 7) Place, Posture, and Internal State; Mobile



(Fig. 8) Place, Posture and Internal State; Laptop

Lazy Reflection is a piece I have been developing for some time. It is an interactive project that mirrors and projects an illusion of the percipient's movements in video space. We had a number of effects that the audience could trigger. One was the screen would reflect back a lazy blurred image of the viewer when moving and project a gathered fixed position when the percipient stops. Eleanor Chownsmith and I virtually engage with the audience's mirror neurons as percipient's triggered our recorded sequences via Isadora. The sequences consisted of Tai Chi and Chi Gung

movements. Brightness, registered by the camera, corresponding to specific areas on the screen was the feature use in Isadora to trigger both effects and recorded videos. The recorded sequences were recorded with the same camera feed complete with its position in order for the mirror's background to remain the same. This gave the illusion of the audience's images appearing and disappearing. Figure 9 shows a percipient moving to trigger her disappearance.



(Fig. 9) Lazy Reflection coded as standing green, a contemplative state

What was interesting about the potential for this exhibit was how the careful choice of effects that intervened with the perception of their movement persuaded the audience into playful movement similar to the hall of mirrors in a fairground.

Digital Baptism was conceived by Richard Bentley, a PhD student working on sound and mindfulness and I, with an interest in how to facilitate the causal efficacy within an immersive digital environment. It was important for the percipient to experience the digital immersion of Google cardboard while suspended in a hammock and playing two sound beams pictured in figures 10 & 11. Richard composed the sound, which I then programmed to coincide with a 3D virtual grove in the immersive experience of Google cardboard. The aim of this project was for the alignment of a relaxed prime position to facilitate the percipient's presentational immediacy in virtual space.



(Fig. 10) Digital Baptism in development



(Fig. 11) Digital Baptism in the installation

Listening Maze: This project was led by Steve Solloway's sound compositions and Sebastiane Brewer's maze-like construction, whilst I programmed the sound beams and layout for the interactive pads. This piece explores and plays with trigger pads

as a way to facilitate the social interactions that can occur when we have the choice to trigger four separately phased tracks as a way to both listen and edit a collective composition. Before starting, each percipient was confronted with a potential to listen or change the sonic sequence. Fig. 12 shows the frame Sebastiane constructed with percipients adopting two sitting adult postures and one standing postures. The percipient who is standing and the percipient in the shadow, who is sitting in the back right on the structure, are triggering two of Steve Solloway's sound compositions.



(Fig. 12) Listening Maze

Physical Journal: This is Eleanor Chownsmith's exploration of sensual intimacy, with the occasional glance at anatomical and geometric information associated with mapping the body. Sound was the interactive trigger via MAX msp for this piece; percipients clapped to trigger the interactive process. They were invited to watch the piece with another person and the intimacy was underpinned with two headphones and cushions. The starting code was *sitting child* with *red* representing being relaxed. In fig. 13, we see Eleanor programming MAX msp in the MDPLab.



(Fig 13.) Physical Journal: Eleanor programing MAX msp

Integrating Fragments of Light: The starting code for this project devised by Corin Evans-Prichard was *standing violet* representing being alert. This involves percipients tracing their body with light and a small camera, while a live projection of their image, which is metaphorically and digitally distorted, is fed back to them. In this piece, Corin was playing with and extending his practice of being a VJ, where there is a three way playful relationship between VJ, technological interface and percipient. In Fig. 14, we see the resulting image with a smaller split screen image of the two percipients as members of the audience who are in causal efficacy with the camera while delighting in the presentational immediacy of the fragmented image.



(Fig. 14) Integrating Fragments of Light

A Choreological Approach

When looking back at the video we made of this project, I started to use Laban's choreological method as a way to analyse the effort-forms of the audience when interacting with the various exhibits in the interactive installation. This was to see what indicators could be revealed concerning the percipient's inner state. This however is beyond the scope of this phase of development. Using the MDPLab as a data collection point was another interesting area for development especially when considering the different types of feedback that can be evaluated. An idea maybe that in the future we could request that each percipient could make small gestural impressions as they are guided on their journey. Then, in the lab they could put their gestural impressions together, to choreograph a poetic movement phrase, which could be choreologically analysed anonymously using principles laid down by Rudolph Laban. Laban focused on the study of dance from a Western perspective; the term he coined was Choreology (Laban: 1966). It consisted of;

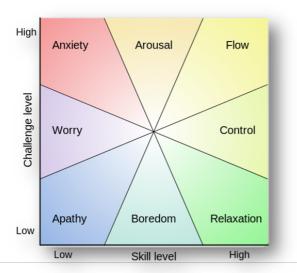
 Kinetography; a graphic system of notating movement from the perspective of the subject,

- **Choreutic**; a way to describe the moving body in space from the performer's perspective using western modernist aesthetics
- **Eukinetics**; a way to describe the quality of effort as it is manifested in the moving body.
- Choreosophy is a little more complex to describe in a few words because it
 involves the metaphysics behind space and effort harmony from the
 perspective of sacred patterns, geometry and proportions in movement
 (Laban: 1966).

His work was an attempt to improve the civic function of Eudaimonia in society; in other words, an ethical philosophy in the paradigm of social production that delineates and facilitates true balanced actions that will eventually lead to the wellbeing of an individual. There are distinct modernist assumptions in this approach, as Laban was a man of his time and culture. There is a clear distinction here between the dancer/performer, audience/critic and choreographer/ deviser with the forth wall clearly in place. Laban's work did branch out into community dance choirs with an emphasis on the wellbeing of society. Valerie Preston Dunlop's triadic perspective takes this concept and extends it to address an Artaudian perspective (Preston Dunlop, & Sanchez-Colberg: 2002). She created a theatrical analysis that blurs the distinction between dancer/performer, audience/critic and choreographer/ deviser by highlighting that at each point of the triangle, there are combinations of all three triadic activities at varying degrees. This provides a new choreological analysis for performance installations, which makes passive observation more immersive.

Flow and Flux

To re-visit to the purpose of this project, I return to the development of flow and flux within the performance installation in order to find the fluency of interactions. Let us consider Csíkszentmihályi's theories of psychological flow in conjunction with my personal experience of flow in the flux of temporal space, this being in a state of change where the rules of our perceptums are fluid and the parameters of our reality are not fixed. When researching the nature of flow, Mihaly Csíkszentmihályi's team gave participants electronic pagers that beeped ten times a day. Whenever the pager beeped, the participants stated what they were doing, how they felt, where they were and what they were thinking about.



(Fig. 15) Challenge vs skill: Mental state in terms of challenge level and skill level, according to Csíkszentmihályi's flow model

The two things that his team measured were:

- 1. The amount of challenge people experience at that moment
- 2. The amount of skill that they feel they have at that moment.

The centre of the diagram above represents an average level for each person, which would be the typical level of challenge and skill that was different for each person. As a consequence of his experiments, Csíkszentmihályi identifies and articulates the criteria for achieving the illusive flow state.

- We confront tasks we have a chance of completing;
- We must be able to concentrate on what we are doing;
- · The task has clear goals;
- The task provides immediate feedback;
- One acts with deep, but effortless involvement, that removes from awareness the worries and frustrations of everyday life;
- One exercises a sense of control over their actions;
- Concern for the self disappears, yet, paradoxically the sense of self emerges stronger after the flow experience is over; and
- · The sense of duration of time is altered

(Cskikszentmihalyi, 1990: 3)

If Csíkszentmihályi's flow state focuses on the psychological state of an individual's performance, flux then focuses on the physical torsions that the lived body negotiates through temporal space. Flux as an abstract concept has several meanings and can be described in three ways.

- Flux can be seen as an abstract property of any event describing the nature of how material substances move or the transitional state between boundaries.
- Flux can be seen as a field of influence describing the lines and directions of a magnetic or electromagnetic field.
- Flux can be seen as a substance describing a cleaning agent that joins with unwanted elements leaving the wanted element separated.

There is also a theoretical use of the term flux, which refers to Einstein's geometric concept of dynamic space-time as a flexible four-dimensional fabric of temporal space. In general however, flux means the nature of perceptive flow and transformation through change. This can be: An abstract property that defines change in a temporal event, an electromagnetic field of influence or a substance to facilitate the extraction of a material element. These ideas are profound when we consider human movement and the contemporary construction of interactive installations for a percipient by creative producers.

I have had three profound experiences with flux and flow, which set me on this course of studying the performative role of posture and alignment as a way to experience a sense of flow. They happened right after I reached a deeper physical understanding of T'ai Chi Ch'uan, even though I was only a couple of years into my practice. This is with regards to T'ai Chi Ch'uan's formal structure that rearranged the perceptums concerning my causal efficacy; the subtle activity concerning the

transitional flow between and through the postures. All three happened by unconscious control. This I understood as a paradox, in so far as I was in complete control on the one hand, whilst on the other hand I was a detached observer with only fleeting glances of the experience as it happened. What was very interesting in each case, was when I retold the experience, except for the Basketball encounter where I have all but a fragmented memory of the experience, I could recount every minute detail of the occurrence. It was as if I was watching a movie where a grandmaster had control of my body, whilst leaving my conscious witness an account of how it was done. The first experience was during a National League basketball match. At the time I was playing for Plymouth Raiders and it was the home leg against Liverpool. Their star player was a Sudanese International player called Ed Bona. We won the match due to my efforts; however, I only have fleeting recollections of the hoop seeming bigger and my hands feeling like magnets. It felt easy as I just negotiated the flux of the game. The second was forgetting my lines at the Cardiff literature festival in 1990. It was the first time I had acted Shakespeare and I experienced what can only be described as temporal space dilation, which resulted with my conscious witness going back to a moment in the text I remembered, saying them internally and then continued my line. What I thought was over five minute was to my fellow players an interesting pregnant pause. The final one was riding our bikes with a friend to Kes Tor on Dartmoor. It was bonfire night and there was a light drizzle in the air. As I freewheeled downhill on the way to Chagford, I aquaplaned after skidding. When starting to brake, I performed a dangerous uncontrolled speedway slide fast down towards a sharp turn upwards. What occurred next was a blur as my body automatically modified the T'ai Chi Ch'uan sequence, fair lady shuttles right. Unlike the previous two experiences, my conscious record of the event was clearer and more vivid. The result was that I ended up standing facing the direction of travel with only my left cycle pedal slightly damaged and with a crystal clear slow motion memory of the event.

Conclusion

The process in the MDPLab revealed a lot about the nature of creating flow in the devising process whilst considering the logistics of an interactive installation. The four prime positions worked well as stances for percipients to adopt, due to the ubiquitous nature of the postures; however, more could be done to draw attention to the alignment of each stance. Some of the informal comments that I got were revealing with regards to the seven zones. A lot of people commented on the fact that they don't get enough time just to be in one place any more. They were grateful for that time to personally reflect. The structure of the event needed to be a little longer to give people time to explore their preparations. Some of the comments within the MDPLab were of wonder, of bewildering stillness and playful exploration. What I found satisfying was that the development of the seven projects emerged from a playful process. The next phase of our project will be to review our work and seek funding to develop a number of our research pieces with a view to developing another performance installation.

Dr Olu Taiwo teaches in Street Arts, Visual Development and Performing Arts at the University of Winchester in real and virtual formats. He has a background in Fine Art, Street Dance, African percussion, physical theatre, martial arts, T'ai Chi Ch'uan and Animal spirit movement. He's performed in national and international contexts pioneering concepts surrounding practice as research. This includes how PAR can explore the relationships between 'effort', 'performance' and 'performative actions'. Consequently, his aim is to propagate issues concerning the interaction between the body, identity, audience, street and technology in the digital age. His interests include: PAR, Visual design, Movement, Theatre, Street Arts, New technology, Trans-cultural studies, Geometry, and Philosophy.

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