

The Use of New Media and Interactive Media in South-African Contemporary Dance: The Work of Athena Mazarakis

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**A Research Report submitted in partial fulfillment of the
requirements for the degree of MA Digital Arts
(In the field of Interactive Media)**

Abstract

The aim of this research is the examination of two select dance pieces as case studies, focusing on the use of particular technological elements employed in the respective pieces. This examination will be enabled through the use of theories on new media, interactive media and performance.

This research will examine the considered use of both new media and interactive media within the context of South African contemporary dance. Particular attention will be paid to the manner in which technological aspects, such as projection and projection surface as well as various kinds of interactive media technologies are employed and whether they further develop and enhance the content and intention of the performance.

The collaborative process will also be addressed within this research. This includes collaboration between the choreographer and the media artist as well as collaboration between the two mediums, namely the choreographic and the technological. This will be done in order to address the question: how are the various and respective technological and choreographic forms used in order to achieve a state of cohesion between them within the performance as a whole so that one is not overshadowed by the other?

Declaration

I declare that this Research Report is my own unaided work. It is submitted in partial fulfillment of the requirements for the degree of Master of Digital Arts (In the field of Interactive Media) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination at any other university.



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Introduction

Within the context of South African contemporary dance, the focus of this research is on the considered use of the technological forms of new and interactive media respectively, and the manner in which these technological forms manifest themselves within a contemporary dance work. Central to this research is not only the collaborative process but also the manner in which the collaborative process is able to shape and inform the development of a performance work.

This research argues for a collaborative process in which both the technology as well as the choreography are given equal attention, in order that both mediums are able to inform each other throughout the developmental process.

Through an examination of two examples of the work of Athena Mazarakis (works which will be considered as case studies), namely *Coming To* (2007) and *Flicker* (2011), this paper argues for a developmental process in which a conceptual thread¹ runs through all the elements of the contemporary dance work, from the preparation, leading up to the performance, so that the technology and the choreography are seamlessly and cohesively intertwined in order to guard against the technology becoming what Salter (264) refers to as “superficial digital icing”.

¹ Within the context of this research, the term ‘conceptual thread’ refers to the choreographic or gestural language; the set and costume design as well as the music, working in tandem with the technological aspects.

This research calls for a symbiotic relationship in which the collaborators learn from one another and develop new ways of working as opposed to a relationship in which the choreographer merely dictates what the technological artist should do. Negotiating this kind of collaboration is a tricky process, which requires patience and constant dialogue between the choreographer and the technological artist.

In terms of the implementation and the role of new media in dance performance, this research focuses on the use of projection and projection surface as well as the manner in which projection surface is used. Through my observation of dance performance works, it has come to my attention that works which make use of new media appear to be pre-occupied with the use of back projection. By back projection I refer to instances in which the projection takes place on a large flat surface behind the dancers. The dancers perform in front of the projection, as if oblivious to it. In light of this observation this research calls for the use of a projection surface which deviates from the commonly used flat backdrop surface. Attention needs to be paid to the relationship between the physical body and the projection surface. This could potentially be achieved through the integrated collaborative process as favoured, for example, in and by this research.

The interactive media component of this paper seeks to uncover and illustrate the potential that this particular medium holds for contemporary dance works within the context of South African contemporary dance, principally because it is a medium which is very rarely used. The mechanics and outline of both new media as well as interactive media will be explained in greater detail in Chapter One.

This research resonates with me because of my personal background in dance. Thanks to this background I have not only been able to observe a number of productions but have also been involved in productions in which the use of new media had not been carefully considered. For example, in some of the works I have observed there had been no clear relationship between the dancers onstage and the projected image behind them. In addition, in some works in which I have been involved, we as performers only came into contact with the projected image at the final dress rehearsal, and even at that stage, we simply performed, largely unaffected by the projection. Therefore, as a performer, I felt that it would not have made a difference to the work had projection not been used, due essentially to the fact that no relationship had been established and maintained between the performers and the projected image. As performers, the interaction with the projected image had been largely from the perspective of the projected image as a coincidental backdrop, and not as an integral component of the work.

This research is significant, particularly within the context of South African dance because there are only a few examples of works which adequately use new and interactive media. 'Carefully considered' in this case, refers to the capacity of these elements to become part of the content and enhance its development; and thus not simply remaining elements in the background. Within the context of dance in South Africa, it appears that there are merely a few choreographers, if any, who have the knowledge and skills required to program interactive media elements at both a theoretical as well as a practical level. I will be writing from the perspective of both fields, namely the choreographic as well as the technological.

The report will be structured in the following way: Chapter One provides a brief historical overview of the developments in new and interactive media, using selected examples from performances in both theatre as well as dance. The characteristics and mechanics of these forms are explained using

(historical) developments within an international context in order to establish a theoretical framework for this study. International examples are employed because it had become clear during the course of this research that while an extensive discourse surrounding interactivity, new media and performance exists within an international context, a discourse surrounding interactive performance has yet to be developed within a South African context, particularly within the context of dance performance. Furthermore, a chronological documentation of the use of these mediums has yet to be established in a South African contemporary dance context. However, there are some examples of South African contemporary dance works that have made use of new media and significantly fewer examples of works that have made use of interactive media. Therefore Chapter One explores examples of works of South African dance which were considered relevant to the approach of this study.

The objective of Chapter One is to establish the difference between new and interactive media. This is important because the two forms operate under different mechanisms, creating different possibilities for the generation of meaning. This ultimately affects the desired reading of a work as well as the audience's expectation of and from a work. By unpacking the difference between the two forms this paper hopes to expose where the gaps and potential for innovation and new development lie within these forms. This is exemplified through the examination of the case studies, which are used in order to highlight both the kind of approach to the collaborative process as well as the seamless integration between technology and choreography recommended by this research. The aim of this research is not to obtain a list of properties which would qualify a work as successful, but rather to uncover the manner in which the technological and choreographic processes inform one another through the element of collaboration. I would therefore like to suggest a considered approach to integrating these elements into works, using the two case studies.

The case studies examined in this research are works by choreographer-performer, Athena Mazarakis. The first case study, *Coming To*, examines interactive media as well as elements used to directly affect the performer's interaction with the performance environment. The second case study, *Flicker*, considers the use of new media, particularly projection and projection surface. Through an examination of these case studies, the techniques employed in the respective works are uncovered in order to establish the process involved in creating the works themselves, as well as the process involved in creating other works which similarly use these mediums.

These case studies form Chapters Two and Three of this research respectively. The analysis of *Coming To* (2007) makes use of video documentation of the live performance as well as Athena Mazarakis' thesis, *Body of Knowledge: Interrogating Physical Intelligence and the translation of memory into motion in Coming To*. The discussion and analysis of *Flicker* (2011) is based on the live performance of the work, which I was able to view. For both these case studies the collaborative team involved in the creation of the work was interviewed. For *Coming To* interviews were conducted with Athena Mazarakis in her capacity as choreographer-performer as well as with the designer, Naomi van Niekerk as well as the interactive artist Tegan Bristow. Gerard Bester, the director of *Flicker*, was interviewed as was Mazarakis for her role as one of the co-creators of this work. Jenni-Lee Crewe was interviewed for her role as designer of *Flicker*. The interviews were qualitative in order to uncover the particular thought processes and methodologies used in the creation of the two works.

Within the questionnaire for the interviews the following themes were addressed:

- The reason behind the technological choice of new or interactive media.
- The technological choices and their relation to the vocabulary of movement.
- The development of the content together with the various corresponding technological aspects.
- The advantages and challenges of each medium.
- Collaboration and the creative process.

These case studies were selected because the manner in which the creative team approached the collaborative process is illustrative of the kind of integrated approach between technology and choreography favoured by this research. The case studies provide further insight into the manner in which the collaborative process aids in extending and pushing the boundaries within each form (the technological and the choreographic). These boundaries are the limitation of the technological form and the choreographic limitation of the physical body respectively. Negotiating one's way between two intrinsically different mediums and trying to find the middle ground between the two poses its own difficulties. These difficulties are namely, the choreographic difficulties which are based in a history of immediacy and physical contact and the technological difficulties, which although programmed by a human being, still remain a non-living machine able to exhibit a certain response. This will be explained in greater detail later in this chapter.

An analysis and discussion of the two case studies uncovers and reveals the manner in which the choreographic structure as well as aesthetics, work with the new and interactive media elements. The relationship between technological components, such as elements of new and interactive media, and

choreographic components, such as structure and aesthetics, is also examined. The function of these case studies is to enable an understanding and in-depth examination of the dynamics of the collaborative process itself. Furthermore, it is intended to provide insight into this process for individuals interested in undertaking collaboration between choreography and technology.

This research also serves as an attempt at locating the balance between the technological and performance components. This is done in order to determine the value or significance of each within the collaboration² and the collaborative process and whether a cohesive relationship is present between the two forms. Through an examination of the case studies this research will investigate the nature of the relationship that occurs between the two mediums as well as the relationship between the collaborators. In this way I hope to uncover the extent to which a collaborator's personal interest could be said to shape the direction of the work. Mazarakis' style of working with new media has been actively evolving and shifting over time. The question which arises is therefore, whether collaborators end up creating the same kind of work. In addition, how are they able to remove themselves from their already-established working process in order to grow and evolve?

The research concludes by providing a summary of the research findings and the relevant closing points. Recommendations based on the findings gathered from the examination of the case studies are also included as part of the conclusion.

² To clarify the use of the terms collaboration and collaborative process. Collaboration refers to the collaboration between the choreography and the technology. The collaborative process refers to the collaborative process between the choreographer and the technological artist

Chapter One

Introduction:

This chapter is divided into two subsections:

1.1 New Media

1.2 Interactive Media

The intention of this chapter is to provide an introduction into the characteristics of new and interactive media through the use of select examples. This chapter is structured as an overview of these forms and consequently forms the foundation of this research as it introduces key concepts as well as the operational mechanisms required for both new and interactive media. It is these concepts and operational mechanisms that will be expanded upon through the analysis and discussion of the case studies of Mazarakis' work. Due to the brief discussion of the historical examples mentioned in this chapter, the examination of the case studies in Chapters Two and Three allow for a greater engagement with the concepts introduced in this chapter.

I have approached the theoretical framework of this chapter by examining historical developments within these mediums with reference to key dance practitioners within the fields of new and interactive media. This has been done in order to identify trends and developments within these technological forms. By briefly identifying historical developments and their respective predecessors in these fields, this research aims to provide insight into the ways in which these technologies are currently used. Key practitioners from an international context are discussed first, particularly those from the United States, because, "during the sixties and seventies the most important

developments in the conjunction of technology with theatre, dance and performance took place in the United States” (Dixon, *Digital Performance* 98).

Historical developments and examples of specific works by these key practitioners are used in order to establish an idea of the mechanisms involved in the use of new and interactive media. These examples are used in order to provide an introduction to the development and working process of new and interactive media. The work of selected South African practitioners who have explored these mediums and who continue to do so will also be discussed.

It is important to note that the theoretical readings to which I refer in this chapter were themselves the source of the examples used to illustrate the mechanism of new and interactive media. The theoretical readings also enabled a comprehensive overview of technological developments in theatre and performance. This chapter decreases the number of examples presented in the theoretical readings, focusing on those which are relevant to the development of this paper. The readings are also used to support approaches to working with new media in contemporary dance works. These approaches are presented and discussed at length in this chapter.

Given the limited scope of this research, it is not possible to conduct an in-depth study of every single development in new and interactive media. It is for this reason that only key and influential practitioners relevant to each medium have been selected for examination.

New and interactive media are discussed separately in order to create an understanding of the two forms respectively in an attempt to avoid distinguishing one as superior to the other. Both forms have implications which are conceptual as well as those which are related to the execution of a work. New and interactive media allow the performer to engage with the technology

in different ways. They both create different kinds of performance environments, thus influencing the manner in which the relationship between choreography and technology develops. This will be explained in greater detail throughout this chapter.

1.1 New Media

New media, within the context of a performance, makes use of pre-recorded data mostly in the form of video or film which is projected onto a surface.

In contrast to new media based works, interactive media based works do not use the projector in order to display pre-recorded data. Projection in the case of interactive media based works is employed in order to display the effects of the interactive technology with which the performer is engaging as it happens (that is, in *real time*). The mechanics of interactive media works require specialized equipment such as programming software, sensors, Apple Mac computers and various types of specialized electronic equipment such as sensors programmed to exhibit visual responses to the movement of the body. This will be explained in greater detail in the section dealing with interactive media.

The technical components necessary for the new media element of the work to be realized are the projector, the film or video to be projected and the projection surface. The projector and the use of projection surface, provide the potential for experimentation within the performance space. This is ultimately why practitioners in both dance and theatre, particularly those whose work relates to the subject of projection as a form of and a vehicle for experimentation, have been selected for this research.

As mentioned in the introduction of this chapter, given the limiting parameters of a research paper it is not possible to chronologically trace every

practitioner and their respective roles in the evolution of new media in dance³. While the two examples of Mazarakis' works will be regarded as case studies and will be examined in depth, the historical examples are used in order to provide a brief but comprehensive overview of new media as a medium, and in so doing to enable an understanding of the use of this technological form in Mazarakis' works.

1.1.1 Early Developments: New Media in Performance

The use of new media in performance dates back to its use in theatre during the 1900s (Dixon, *Digital Performance* 89). It is important to note that the developments in the use of new media in dance did not occur solely within the genre of dance. Developments and experiments were taking place in the arts as a whole; that is, in theatre, film, visual arts and performance art as early as the 1900s and filtered into dance (Dixon, *Digital Performance* 89).

The initial development of the use of light and film projection on different surfaces, within a choreographic context, dates back to dancer-choreographer Loïe Fuller's work as early as 1911 (Dixon, *Digital Performance* 73). Loïe Fuller created works in which she experimented with the projection of light and film onto long sheets of fabric. Dixon credits Fuller as being the first to integrate film within theatre performance (*Digital Performance* 73). With regards to dance, her most significant contribution was an innovative approach to projection surface and scenic elements, particularly in terms of the use of fabric as a projection surface which was characteristic of her work. In this

³ For many of the international works discussed in this research video footage was not easily accessible; descriptions of these examples are therefore based on and sourced from literary accounts. It is for this reason that in some instances it was not possible to give a detailed description of the way in which the work unfolded.

instance, Fuller is used as a prime example to locate the dancer-choreographer within the use of film projection.

In light of Loïe Fuller's experiments with fabric as projection surface, of significance is the use of film projection within the genres of cabaret and music hall performance during the twenties (Dixon, *Digital Performance* 74). Whereas Fuller's concern was centered on experimentation with the aesthetic possibilities and capabilities of projection, within the genres of cabaret and music hall projection was used in order to explore the idea of illusion and time. Onstage action was combined with projection in order to create illusory effects (Dixon, *Performance Technology* 74). The French magician Horace Goldin, for example, performed a juggling act in which he juggled a combination of filmed and real objects (Dixon, *Digital Performance* 74).

One of the key influences on the use of projection as a medium in theatre during this time was Erwin Piscator. Piscator experimented with the use of documentary style video within performance (Dixon, *Digital Performance* 77). Piscator's work *Hoppla Wir Leben!* (1927) (Hurrah We're Alive!) used a multi-storied scaffolding structure, designed by Traugott Müller, as its set (see fig. 1). This structure consisted of a large central area for projection, on either side of which were six rooms, with transparent screens onto which various locations were projected (Dixon, *Digital Performance* 78). In this work, the onstage action of the actors was interspersed with films. These films included documentary footage from World War I spliced with images of the actors' characters. In one onstage scene the play's main character Kurt Thomas was imprisoned for a period of eight years and a seven minute film projection was used to provide a visual history of events that happened during the twenties, (Gieseckam 44). On the central screen political events such as Mussolini's rise to power was juxtaposed with footage of boxing matches, parties and dancing (Gieseckam 44). The onstage action was directly related to the content of the

film projections. Piscator introduced the idea of using projection to replace traditional set items, as seen in *Hoppla Wir Leben!* in which locations of the onstage action were projected onto various screens (Dixon, *Digital Performance* 78). This then contributed to the idea of the projected image being used in order to represent a physical space in theatre.

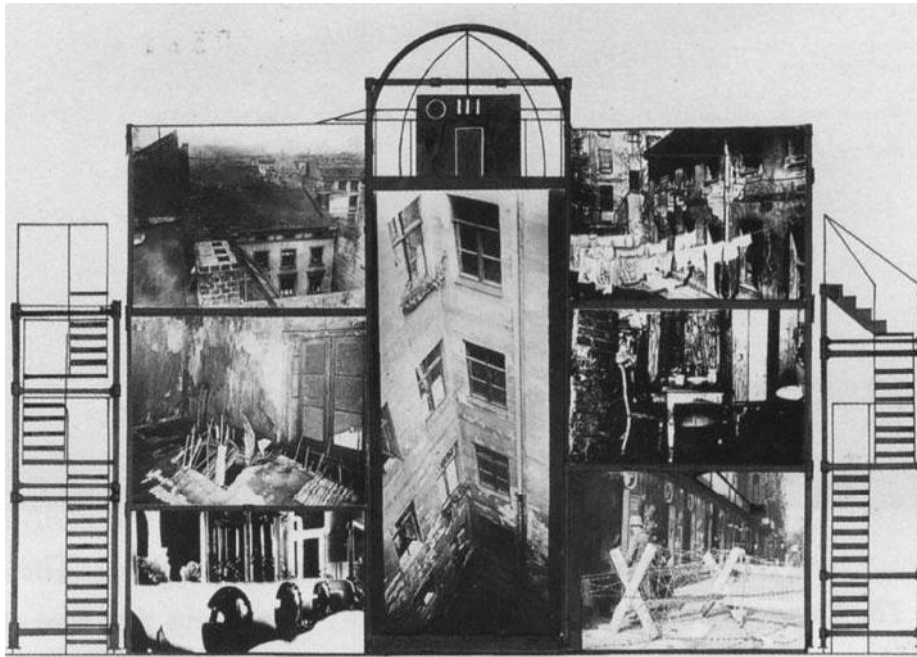


Fig. 1. Set design by Tragott Müller for Erwin Piscator's *Hoppla We're Alive*, 1927. Photo Credit: Author Unknown

The relationship that Piscator created between the onstage action and the film projections is of significance as this aspect directly informed the development of his work. What is particularly interesting to note is that the inclusion of new media elements in his work as a whole had attracted a range of negative responses. Critics accused Piscator of focusing too much on the film aspect rather than on the acting component of his works (Giesekam 46). However Piscator dismissed critics and continued his experimentation with film and theatre. Techniques he used in his own work continue to be used in film

today. These include his categories for the use of film in theatre (Giesekeam 47-48):

- 1) Didactic: in this instance film is used to enhance the onstage action by providing additional information and facts (this method is most characteristic of Piscator's work)
- 2) Dramatic: in this instance film facilitates the development of the onstage action. Film is used in place of a live scene.
- 3) Choric: in this instance the film bears the same function as that of the chorus. Similar to the chorus found in Greek tragedy, whose role is to contextualize the narrative from both a moral and public perspective.

According to Giesekeam (47) "...Piscator's experiments advanced the use of film in theatre considerably, and anticipated many of the current ways practitioners work with video."

Although these developments in Piscator's work as well as in the genres of cabaret and music hall do not originate specifically from the field of dance, their influence in the area of film and video use in theatre and performance is of significance. This is particularly relevant in terms of the manipulation of content and representation, as well as the relationship between the onstage action and the projected image. This was illustrated through Piscator's integration of documentary style video into performance and his use of projection as a scenic device as well as the reference made to cabaret and music hall and their respective uses of the illusory quality of film projection.

When early experiments with new media in performance began, the allure of incorporating film into performance at the time was located in the fact that it allowed for the introduction of multiple locations. Film and video also allowed for the representation of manifestations of a character's sub-conscious

such as their dreams, fantasies and flashbacks. The use of new media elements of video and film allowed for the juxtaposition between reality and fantasy (Gieseckam 24). In other words, it allowed for the play/interaction with time that made it possible for the current stage action to be juxtaposed with older/prior events, for example.

The trend involving back projection in dance may be attributed to its use in theatre and straight drama as is demonstrated in Piscator's work. The use of back projection may well work in dramatic theatre in that this form of theatre is shaped by changing environments and states. However, dramatic theatre and dance differ in that dramatic theatre is driven by text and dance by the movement of the body. In dance, the site at which change occurs is the body. It is for this reason that the manner in which projection is used in dance needs to be reviewed and experimented with. It is this aspect that represents the principal concern of this research, namely that attention needs to be paid to the relationship between the physical body and the projection surface. This refers to the need for adequately considered collaboration which was mentioned earlier. Part of the collaborative process with dance works using new media, is not solely reliant on the appearance of the film or video within the work. The relationship that the new media component forms with the dancer's body is crucial to the formation of a cohesive relationship between the technological and choreographic. This is informed by the type of collaborative relationship between the choreographer and technological artist.

Through the analysis of each case study of Mazarakis' work, I hope to highlight the possibilities that projection holds as both a medium as well as a collaborator of sorts during the creative process; as opposed to merely being used as a trick or gimmick for showcasing the video element. This will be discussed and developed further in Chapter Three.

1.1.2 New Media Developments in the United States

Significant influential developments in the field of new media took place in the United States. These new developments were an extension of the early experiments and developments by practitioners such as Fuller and Piscator. Experiments with new media became more widespread during the late fifties and sixties (Salter 115).

Abstract experiments with projection as a medium took place most notably in the United States (Dixon, *Digital performance* 98), which can be attributed to the release of the Sony Portable Camera, the *Portapak*, in 1965. The *Portapak* was the first model of the portable camera (Salter 115). This development made video more accessible and the use of it more prevalent, which encouraged artists from all fields to begin experimenting with this medium (Salter 115). It was these experiments that pushed the boundaries of new media as a technological form encouraging artists from all fields to begin to use video in ways and contexts that had not been seen before.

The experimentation with new media as a technological form was influenced by early experiments conducted by artists such as Nam June Paik. Nam June Paik was influential in the realm of new media and video art; he experimented with the medium of video by staging works such as *TV-Buddha* (1974). This work consisted of an antique statue of Buddha viewing its reflection through a videotaped image on a television set ("Nam June Paik"). This video reflection was created via a live camera feed to the television set ("Nam June Paik"). This work addresses the idea of video being used as both a reflexive medium and as a medium that has the ability to alter time.

The development of video as a medium, by artists such as Nam June Paik, had a significant influence on the way in which dancers and choreographers worked. The appeal of video was located in its ability to

capture a specific moment in time, which could be replayed and “accessed at any time” (Salter 116). Within the context of dance performance, this meant that the action of the live body could be juxtaposed against projected video, which ultimately echoes the early experimentations of both Piscator and Fuller. Video allows for the manipulation of time in that sections can be paused, rewind and stopped in relation to the movements of the live performer (Maletic 3). In relation to the choreographic form this opened up possibilities for the manner in which video could be used within performance. At this juncture, I would like to deviate from this chronological history and use the work of choreographer Wim Vanderkybus entitled *Blush* (touring since 2002), in order to illustrate this point. In this work high energy choreography was used in conjunction with a projection screen in order to create a relationship between the physical body and the projected image.

Giesekeam provides a description of the manner in which projection was used in this work:

...striking effects were achieved through using the screen to project an underwater scene, into and out of which dancers leap – with stunningly precise synchronization between their physical disappearance from the stage and their onscreen reappearance swimming underwater. (3)

The use of video in performance became widespread during the sixties. The novelty of this was to merely include video in a work because it was new. Today, the mere inclusion of new media in performance is not enough and for this reason the approach to the inclusion of these works in choreographic performance needs to change as the novelty no longer lies in the newness of the form. A relationship needs to be established between the new media, the performers and the choreography in order that these different

aspects become cohesively integrated. This will be illustrated in greater detail through the analysis of Mazarakis' work in the case study chapters.

Despite the increase of the availability and accessibility of video with developments such as the *Portapak*, editing software and programmes remained unaffordable for non-professionals during this time (Dixon, *Digital Performance* 88). Editing software only became more affordable during the seventies (Dixon, *Digital Performance* 88).

Today, developments in film and editing techniques as well as the accessibility of editing software have opened up possibilities for the various ways in which video content can be arranged and altered. Works making use of new media rely heavily on editing software in order to enhance the video component of the work. This can potentially add an additional dynamic to the relationship between technology and choreography. This is demonstrated, for example, in the work of *Dumb Type*, a Japanese artistic collective, whose work focuses on combining aspects of performance in relation to technology. They are known for their innovative approach to the incorporation of technology in their works (Dixon, *Digital Performance* 227). Their work entitled *S/N* (1992-96), combined dance and projection and addressed the themes of mortality, homosexuality and AIDS (Dixon, *Digital Performance* 227). The stage was set up to consist of two tiers; a lower level where the projection occurred and an upper level where the performers danced and moved (see fig. 2).



Fig. 2. Dumb Type, *S/N.* 1996. Photo Credit: Emmanuel Valette.

The work made use of four separate screen projections on the lower wall of the performance space. In one projection the words 'MONEY, LIFE, SEX, DEATH' were animated on screen. In another projection, subtitles were inserted into images of couples embracing. These subtitles read, 'Can you see which one has AIDS?' Above the screen projections was a space in which the performers enacted their agitated movements. Throughout this work the content of the projections assisted in the development of the work itself. Developments in editing software allowed *Dumb Type* to incorporate text and animation in their work. *Dumb Type* continues to produce work today.

Returning to the chronological exploration and structure of this section, it is important to mention that political and social events which occurred during the sixties sparked a break away from traditional means of representation

within the arts as a whole. Movements such as the gay liberation and the feminist movement occurred in the United States during this time (Dixon, *Digital Performance* 89). Theatre was marked by a shift away from text driven works to interdisciplinary performances, while dance demonstrated a shift from classical technique driven choreography. The shift away from traditional technique driven works provided the impetus for choreographers and dance practitioners to begin experimenting not only with variations of movement vocabulary, but also with representation of the physical body (Banes 99).

Experiments that were conducted at the Judson Church during the sixties played an important role in the direction and development of new media as a technological form, particularly within the context of performance. Concerts were held at the Judson Church in Washington, and here artists including performers, musicians, and visual artists presented works that combined a number of unconventional elements (Banes 99). Keeping within the framework of this research, influential works that made use of video, film and projection with reference to the Judson Dance Theatre will be mentioned. It was here that various experimentations with projection in tandem with the moving body took place (Birringer, *Performance Technology* 6). In addition, there was also a movement away from conventional technique driven choreography to choreography incorporating everyday pedestrian⁴ movement (Banes 99).

The work of Trisha Brown, who was a member of the Judson Dance Theatre, is of significance due to her treatment of the projector and projection surface. For her work entitled *Homemade* (1966), she strapped a projector to her back and danced around the room with it, resulting in images which flashed and darted around the room (Birringer, "After Choreography" 6). The content of

⁴ Everyday actions such as walking, running, scratching one's head et cetera (Banes 99).

the film projection was of Brown herself. Brown not only experimented with the functional capabilities of the projector, to display images, but she also treated the projector as a physical object by strapping it to her back. With this work the projector is released from its usual stationary position. The significance of the experimentation with the projector in this work is that it could be said to be one of the first instances in which the projector was positioned in this way within the context of a dance work.

A work by Al Hansen making use of projection also took place at the Judson Church during this time. In this work, performers “moved around the space at different speeds with handheld film projectors, directing projections of airplanes and parachutists around the walls and the ceiling” (Dixon, *Digital Performance* 89). With this work the content of the films influenced the manner in which the film projections were manipulated. Airplanes and parachutes are objects traditionally in the air, and in order to create that illusion, the movement of the body was offset against the footage of the parachutists and the airplanes. The movement of the body directly affected how the projected images were displayed on the walls. This directly refers to integrated relationship between choreography, projection and video content proposed by this research.

Trisha Brown’s *Homemade* and Al Hansen’s work both consider the nature of projection, although they express this in different ways. In both works a link is evident between the content and the projected images. This was created by the way the projector was manipulated in the space in order to create moving images, which ultimately contributed to the meaning of both works. The significance of both these works was that they formed some of the first experimentations with the projected image in relation to the moving body. The projection was not confined to a single space; instead the projected image itself was mobile in the performance space.

The importance of these works is that the developments and experimentations that the respective artists were making in their disciplines had never been seen before. What these two works illustrate is that projection can be used in order to create meaning through the content of the video, as well as through manipulation of the projector itself. This is the kind of relationship between the projector and the projected image called for and encouraged by this research; a relationship in which both these elements are used to create meaning related to the content and intention of a dance work.

The sixties saw the formation of collectives and spaces for experimentation in the United States. The element of collaboration allowed for greater creative possibilities with the creation of works. These experimental collaborations highlighted the fact that artists from different disciplines could work together in order to create a different and often unexpected product. These collaborations will be explained in the discussions that follow.

Valsuka's Kitchen was a collective of artists that created a space for experimental video at the Mercer Arts Centre in New York in the early seventies (Salter 120-121). Valsuka's Kitchen and the Judson Dance Theatre are similar in that they both provided spaces for artists to experiment. Artists from all disciplines experimented with creating a "theater utilizing an audio, video and electronic interface between performers" (Salter 120). This provided a space for experimentation in what was then regarded as unconventional. This paper is calling for a re-introduction of greater experimentation with new media within dance performances that intend to use this medium.

The ONCE Group was a collaborative theatre project that experimented with the projection surface. For their work entitled *Unmarked Interchange* (1965), the projection surface was a large film screen that consisted of portions that could slide open and close, similar to sliding doors (Dixon, *Digital Performance* 90). During the performance of this work the live action of the performers was contrasted with the film projection of the Fred Astaire and Ginger Rodgers' film, *Top Hat* (1935). As parts of the film played on the screens, sections of the film screen would be slid open, by the performers, to reveal the live performers enacting a scene from the film itself (see fig. 3). In this way the live action of the performer was juxtaposed against the content of the film. Gene Youngblood ("Intermedia theatre") describes the way the work unfolded as follows:

While a couple dined by candlelight at a table in one corner of the screen, a man read into a microphone from the pornographic novel, *Story of O*, at the opposite end of the projection surface; periodically a girl walked across a catwalk in the center of the screen and hurled custard pies in his face. In another opening, a man played a piano. And over all of this Fred and Ginger danced their way through 1930's Hollywood romantic escapism.

This work illustrates the use of the live performing body performing in tandem with the shifting projection surface and the content of the film projection.



Fig. 3. ONCE Group, *Umarked Interchange*, 1965. Photo Credit: Peter Moore

Robert Whitman was a key figure in the sixties thanks to his developments in multimedia happenings, particularly his use of projection. Whitman juxtaposed the real with the projected image. In his work entitled *Shower* (1965), "...he projected film footage of a life-size woman taking a shower onto the water-sprayed billowing curtain of a working shower" (Dixon, *Digital Performance* 90). The projection surface and the projected image of the woman create the illusion of the physical presence of a human body (see fig. 4). Whitman was amongst the artists who utilized the illusory quality of film in conjunction with the projection surface, to create seemingly realistic effects (Dixon, *Digital Performance* 90). This work illustrates the impact that a new media work could have when the projection surface and video content are carefully considered in order that they complement one another.

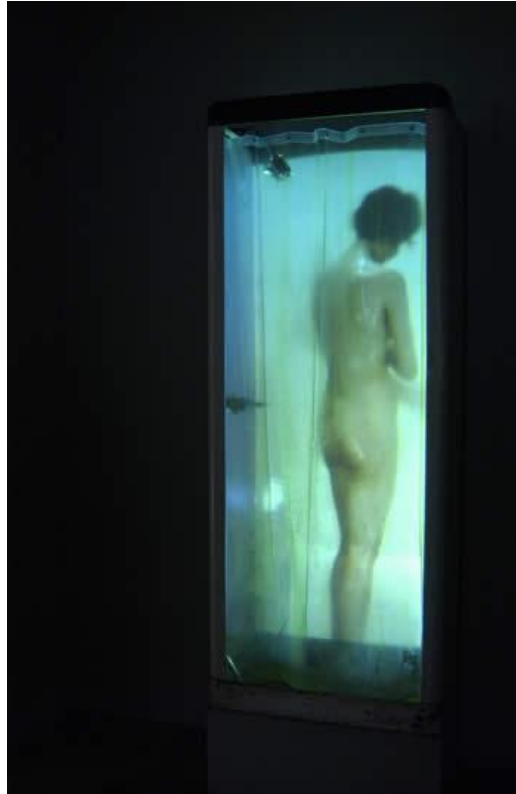


Fig. 4. Robert Whitman. *Shower*, 1964. Photo Credit: Howard Agliesti.

This section highlighted the necessity of experimentation in developing different ways of using new media. The examples discussed illustrate that experimentation is crucial to the discovery of new methods of working. The works that were mentioned in this section indicate a history of experimentation with new media. They demonstrate the manner in which projection could be used in order to convey meaning within the performance space - as opposed to projection being solely a utilitarian tool. Just as early practitioners were seen as bold in their explorations with new media, that same attitude should be rekindled by current dance practitioners. By highlighting these selected examples, this research proposes that current dance practitioners approach experimentation with new media in a similar vein and with the same attitude of discovery demonstrated by the early practitioners. A return to this kind of

experimentation could lead to the movement away from large flat backdrop surfaces being used for projection in contemporary dance works.

1.1.3 New Media in South African Dance:

In a South African context it appears that video and projection are the predominant forms of technological engagement that occur within dance performance works. This could possibly be attributed to the availability and accessibility of tools needed to create new media works such as projectors and video cameras. Interactive media works on the other hand, present greater financial demands as they require specialized (and therefore often expensive) technology in their creation.

There exists a history of South African dance practitioners who work with and explore the element of projection. Some of the South African choreographers who have created works using new media include Jeannette Ginslov, Jay Pather, Mlu Zondi and the collaborative team of film maker Mocke van Veuren and dancer/choreographer Nelisiwe Xaba. These choreographers are well-known and visible within South Africa and their work is also performed internationally. It is important to mention that the observations made regarding the work of these practitioners are based on video footage of the works and are therefore directed from a visual perspective rather than the experience of the live performance.

Jeannette Ginslov is a choreographer as well as screendance maker⁵. Her early work with projection includes *Written in Blood* (1998), which was performed by the State Theatre. In this work the stage is divided in half; firstly the area where the projection takes place and secondly the area where the dancers move. This work projects text and incorporates animated elements

⁵ A screendance maker choreographs and creates dance, specifically for the medium of film. The end product is a dance film.

together with the six dancers, in order to portray a work that was inspired by a farm killing that took place in a town called Bosrus that year.

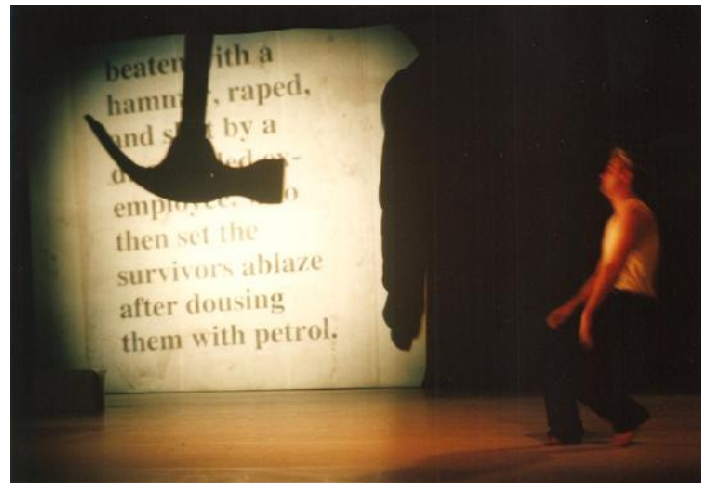


Fig. 5. *Written in Blood*, 1998. Photo Credit: Author Unknown.

The shape that this work took could be attributed to the period during which it was produced. This work made use of an overhead projector and transparency sheets because advanced projectors, such as those available today, were not available at the time of the production of the work, so this work made use of an overhead projector and transparency sheets. The images used

in the projections possessed a narrative quality in that they visually depicted elements of the narrative (see fig. 5), while the projection surface took the form of a screen that occupied one half of the stage. Similar instances of projection include those mentioned in *New Media Developments in the United States*, such as the work of Piscator, specifically his use of documentary footage alongside the live performers, as well as the ONCE Group who used projection to offset the content of the film projection. *Written in Blood* is an example of the early use of projection within a South African context.

An example of Ginslov's work which makes use of a live camera feed is her work with First Physical Theatre Company entitled *Fear and Laughter* (2005). In this work the performers spoke into a microphone recalling either a happy, sad or traumatic event. This was done in front of a live camera feed, and projected onto a screen behind them. All this took place as the rest of the dancers danced in the space, providing a physical response and interpretation or enactment of what was being projected, with elements of the projection reflected on their white costumes.

The use of the live feed zooming in on the faces of the performers magnifies their retelling of a traumatic event. Dual focus is created between the large screen and the performers in front. In this work the emphasis appears to be on the content and the stories being told. These then take a form similar in style to a documentary. Visually, as a scenic device, the large back projection appears to overpower the movement. Although back projection was used for this work, the stories told by the performers are magnified by the live camera feed and the zooming in on the faces of the performers. In this work, the central

focus was on the content of the live camera feed, and the physical process of alba emoting⁶ in terms of the performers recalling the traumatic memories.

The two works serve as examples of instances in which content was the driving force behind the works. In *Fear and Laughter* this was the performers' recollection of traumatic events and in *Written in Blood*, it was the story of a farm murder.

Ginslov has also collaborated with interactive media artist Nathaniel Stern. These works, which make use of interactive media elements, will be discussed in the section entitled Interactive Media.

Choreographer, dancer and 2010 Standard Bank Young Artist Award Winner, Mlu Zondi works with multimedia including video, text and projection. His work entitled *Despotica* (2009) was a performance installation in which he was clothed completely in white, including a white face mask. A text which he had written regarding the process of the Zimbabwe elections and autocratic leadership was projected onto his body and onto a square surface area extending slightly past the area of his body ("*Despotica*"). The square created by the projector itself framed his body as well ("*Despotica*"). Visually the manner in which the text was displayed on his body shifted and changed all the time (see fig. 6). At times a section of the text would expand and contract at other times the projection surface would 'flip over' like a page being turned in a book. Zondi's body along with the rectangular area around him formed the area for projection.

⁶ Alba emoting refers to a somatic approach pattern of triggering emotion, developed by Susan Bloch. Alba emoting uses systematic breathing, body language and facial patterns in order to trigger certain emotions via the body ("Alba emoting").

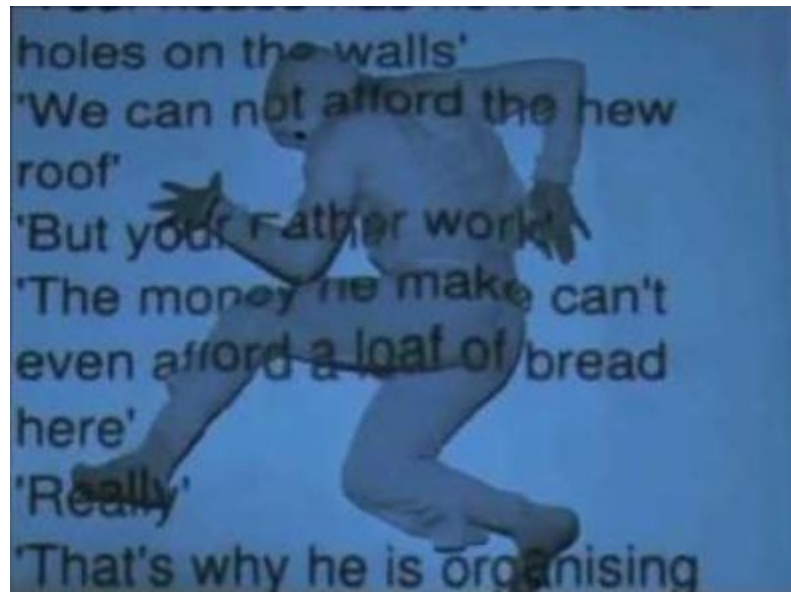


Fig. 6. Zondi, Mlu. *Despotica*, 2009. Photo Credit: Still from MoveSteam Interview with Jeanette Ginslov.

The manipulation of the video content also played a role in the visual nature of this work. What was interesting about this work was not so much the narrative and the text, but rather the manner in which the projected words interplayed with his moving body. What becomes more interesting with this work is the form of projection itself which takes the form of a choreographic installation. Zondi's work could be compared to the experimentations conducted at the Judson Church as well as to the work of Nam June Paik. In an interview conducted with Jeannette Ginslov, Zondi provided his reason for experimenting with new technology [new media] indicating the following: "The body has its limits and technology is an extension of this." (Zondi, Interview).

Mocke van Veuren and Nelisiwe Xaba began their collaboration in 2006 with *They Look at Me and That's All They Think*, with van Veuren compiling the sound for this production (van Veuren). van Veuren initially

began by composing and formatting the sound for Xaba's performances such as *Black!...White?* (2008) and *Sakhozi says "NON" to the Venus* (2008) ("Xaba Brings"). Their early works together provide an illustration of a working history between them as collaborators. Often collaborators maintain their working relationships and continue to work together as long as the conditions and the environment within the collaboration remain favourable. Xaba and van Veuren collaborated on *Uncles and Angels* for the 2012 Dance Umbrella in Johannesburg. This work explores the relationship between the performer and projected body. van Veuren was responsible for the technological component of the work while Xaba was responsible for the dance and choreography. The work produced by Xaba and van Veuren demonstrates a successful collaboration between technology and choreography. I was able to view documentation of this work at the Film and New Media Conference which took place from 26-28 August 2011 in Cape Town. In this work, Xaba's projected self acts as her co-performer (see fig. 7.1 and 7.2). She interacts with her 'video self', exploring the notions of tradition and ritual, as well as the controversial issue of virginity testing.

The use of new media in her work further enhances the theme of her works which is the politics of the representation of the black female body (Sichel, "Moving Into"). The focus is not so much on the projection surface but on her interaction with her physical self in order to portray a narrative.

One of the reasons why performers and dancers work with technological elements such as video and projection is to add a new and different dimension to their works. In the case of *Uncles and Angels*, the technology allowed Xaba to perform with a projected version of herself. Similarly, Xaba's presence activated the technology. This work should be seen as an example of the kind of symbiotic relationship between the choreographic and technological called for in this research.



Fig. 7.1. Nelisiwe Xaba, *Uncles and Angels*: 2012 Dance Umbrella.

Photo Credit: Mack Magane.



Fig 7.2. Nelisiwe Xaba. *Uncles and Angels*: *Dance Umbrella* 2012.

Photo Credit: John Hogg.

All the works mentioned in this section highlight South African practitioners who utilize the capabilities of video in order to create a relationship between the live performer and the projected image in the form of pre-recorded video. This relationship can either be contrasting or complimentary and could be used to highlight the content of a work. As explained in the introduction, content refers to the conceptual thread that runs through the work. The examples of works by South African choreographers illustrate the potential that the use of new media, when carefully considered, holds within a local context. These works are examples of works in which there was a direct relationship between the projected image and the physical body.

1.1.4 New Media, Collaboration and the Collaborative Process

The concept of collaboration and the *devised* approach to the collaborative process will be introduced in this section. This section will provide a brief explanation as to what the devised approach entails. This will then be discussed further in the section entitled Interactive Media. The case studies of Mazarakis' works, in Chapters Two and Three will be used to expand on the notion of the collaborative process and illustrate how the devised approach could be regarded as advantageous in facilitating the simultaneous development of the technological and the choreographic.

Collaboration refers to more than merely placing individuals with different skills together. In terms of the collaborative process it is also important to bear in mind that the manner in which the creative process unfolds plays an important role in the shape that a particular work will take. According to Richard Povall ("A Little Technology"), working with technology in dance calls for a shift in the creative process. Povall states that dance works intending to use technology cannot rely on steps alone. In other words, the dance works cannot rely on the choreography (the steps) to make up for a lack of engagement with the technology.

Povall (“A Little Technology”) further explains that often dance works using technology need to be devised, a sentiment which is shared in this research. Here, it is necessary to elaborate on his statement by arguing that in terms of collaboration, the *devised* approach to working lends itself more to the incorporation of technological elements.

The difference between a scripted work and a devised work lies in the fact that a devised work does not have a “baseline of common knowledge of the script to use as a jumping off point” (Bicât and Baldwin 7). With this in mind it is important to note that although no script per se exists in the context of dance, the choreography can be thought of as a type of script - a physical script.

In a devised work the overriding concept of the work is clear from the beginning while the manner in which this concept manifests itself develops through a process of trial and error as well as improvisation (Bicât and Baldwin 7). In terms of dance this means that while the choreographer may have the idea of exploring a concept such as a particular memory for example, the shape the choreography will take in the interpretation of this idea is not clear from the outset. Free from the constraints of a pre-determined outcome, the members of the collaborative team have to engage in constant conversation with each other in order to discover the direction a work will take. This initial uncertainty is advantageous to the formation of a collaborative relationship between the technology and the choreography of a work. Contrary to the choreographer-director dictating what the technological artist should do, the devised approach to working allows the technological element to emerge through the creative process.

The devised approach to work entails collaboration between all people involved in the creation of a work, namely the director, choreographer, performers, set designer and others (Bicât and Baldwin 6). This way of working allows for the input and creativity of the members of the collaboration to influence the direction of the work (Bicât and Baldwin 6).

The devised approach to work creates a space for experimentation, in which the ideas and discoveries made during rehearsals become essential to the formation of the work (Bicât and Baldwin 9). This environment of experimentation relates to what has been mentioned earlier regarding new media developments in the United States, referring to the necessity to re-visit the attitude to experimentation as demonstrated in the work of practitioners such as Piscator, Judson Dance Theatre and Robert Whitman. The devised approach to collaboration creates a working environment which is already pre-disposed to experimentation. This creates a way of working which is ideal for the incorporation of choreography and technology.

The case study *Flicker* will be analyzed in order to indicate the pivotal role which the devised process plays in shaping the direction of a work. *Flicker* will also be used to demonstrate the possibilities that this approach to working creates in terms of the use of new media.

Conclusion

In the South African dance works mentioned, a large flat surface behind the performers is what is commonly used as the projection surface, which mimics the square screen or frame (Salter 160). Back projection, as discussed in the previous section, was an early way of using projection which had its origins in the replacement of scenic devices in theatre.

Today, in terms of the projection surface, it is common that the performers are positioned in the front with the projection surface behind them, thus mimicking the early use of projection as a scenic device. Within the context of South African dance, one could argue that care and attention are paid to the content and execution of the video in dance works making use of new media. However, it would seem that little attention is paid to the projection surface. The projection surface appears to be neglected in favour of video content. What is important to realize is that the projection surface is able to contribute to the performance and the way in which it is read. Factors such as the size of the projection area, the kind of surface and its texture could all be used as elements which could potentially enhance the reading of a work and its content as well as evoke particular imagery and feelings in the mind of the viewer. This research calls for precisely this kind of experimentation with projection and projection surface. The argument this research seeks to raise is that attention should not only be paid to the content of the video, but also to the way in which it manifests itself on a projection surface.

The potential effect that the use of varying projection surfaces could have when thoughtfully integrated with the content of a dance work, will be illustrated through the analysis of the case study *Flicker*.

1.2 Interactive Media

This section will provide an explanation regarding what constitutes interactive media. The various types of interactivity as classified by Birringer will be explained, in addition to developments by key practitioners within interactivity and dance performance from an international context. These include Merce Cunningham, William Forsythe, Bill T. Jones and their work with The OpenEnded Group. South African dance practitioners who have worked with interactive media will be discussed as well. These include choreographers such as PJ Sabbagha, Jeanette Ginslov as well as their collaborations with interactive artist Nathaniel Stern. The examples cited in this chapter should not be regarded as case studies, and are discussed in order to identify trends and developments within this medium and to create a framework from which the use and characteristics of interactive media can be understood. It is important to understand that there is a vast range of interactive technologies which could be used in a number of ways. This section however, addresses a selection of some types of interactive technologies.

According to Birringer (*Performance Technology* 119), the various types of interactivity can be classified into the following groups:

- 1) Interactive Environments: make use of sensors or motion tracking as well as real-time outputs. Real-time outputs mean that the performer's actions act as a trigger for particular actions within the interactive environment.
- 2) Derived Environments: make use of motion capture, where the information from the dancer's bodies is captured as data and then re-represented in another form such as an animation.
- 3) Immersive Environments: are virtual reality based and incorporate the user by making use of devices in order to create the illusion of the user moving through a particular space.

- 4) Networked Environments: operate over long distances through telepresence⁷, telerobotics or online environments. These allow users to experience and interact with work via avatars, remote networks and remote bodies.
- 5) Mixed Reality Environments: environments in which both live and pre-recorded audio or video material are used together with the above forms.

This research will be focusing on interactive environments, derived environments, networked environments and mixed reality environments.

As mentioned in the section entitled New Media, both new and interactive media make use of projection. However, the manner in which projection is used in each respective form is different. The examples cited illustrated just how new media based works make use of pre-recorded video or film that is projected onto another surface. With interactive media based works projection is used to display the real-time effects of the interactive technology on the physical body. The path from the input of the physical body is mediated via digital means or computational processes which results in what Birringer terms a “digital output” (“After Choreography” 119). The main difference between these two forms in terms of projection is located in the aspect of time. Interactive media uses projection in order to display the effects of the technology in real-time, while new media uses projection in order to display pre-recorded video or film in relation to the performance.

As mentioned in the section entitled New Media, increased experimentation and developments between technology and choreography have been evident from the mid-sixties. The element of collaboration emerged

⁷ “Telepresence, or presence at a distance, is a term used in descriptions of the virtual-environment technology to indicate the presence of a subject being in two places simultaneously” (Causey 38).

during this period, particularly the collaboration between performance and technology. One of the earliest experiments with performance and technology was entitled *Nine Evenings: Theater and Engineering*, and was staged by scientist Billy Kluver and artist Robert Rauschenburg in 1966 in New York (Birringer, *Performance Technology* 6). The significance of this event was that it brought together scientists, engineers and artists such as dancers, performers and musicians (Dixon, *Digital Performance* 97).

These experiments with performance and technology allowed for a direct relationship between the bodies of the dancers and the interactive technology in the form of real-time interactions⁸. Two works from *Nine Evenings* that made use of choreography and interactive technology are discussed below; these are *Variations VII* and *Open Score*. *Variations VII* was a collaboration between Kluver, David Tudor, Merce Cunningham and John Cage. For this work compositions by John Cage were triggered by the interactions of dancers with the technology. The interactive technology employed in the work took the form of photo-electric⁹ cells which were used to trigger sounds (“Variations VII”). This worked in the following way: beams of light were shone in the direction of the photo-electric cells, and when the path between the photo-electric cell and the light beam was broken by movement the compositions by Cage were triggered (“Variations VII”). There were other sensors around the stage in the form of radio antennas. When the dancers came into close proximity with the radio antennas, the compositions were triggered.

⁸ Real-time interactions are interactions where the effects of the performer’s actions on the interactive performance environment can be seen immediately as they occur.

⁹ Photo-electric cells refer to a type of light sensor. They can be programmed to trigger a certain reaction either to the presence of light or to darkness (“Photoelectric cell”).

The technology detected movements in the space, which in turn triggered the compositions by Cage, thereby creating an audio score for the dance (Dixon, *Digital Performance* 96). In contrast to new media, one of the key factors related to interactive technologies is the creation of an environment that is directly affected by the actions of the body in real-time. This results in the creation of an interface between the body and the technology (Mazarakis, Interview app. E p.181-182).

Robert Rauschenberg's performance entitled *Open Score* is another example of a work from *Nine Evenings* which made use of interactive media elements. *Open Score* took place in a partially darkened space, with five-hundred volunteers involved. The basis of this work was a tennis match, which was turned into dance ("Open Score"). The gestures made by the dancers were tracked by infrared cameras and projected onto screens. As part of the performance this work included a full size tennis court in which visual artist Frank Stella played a tennis match with professional tennis player Mimi Karanek. The tennis rackets they played with were designed by Kluver and wired so that they emitted sounds as the players played. These sounds controlled the lighting and the video images of the projections (Dixon, *Digital Performance* 97). In comparison to new media, the use of projection here is a reflection of the mediated content; that is, content that is controlled by the physical action of the body.

These examples from *Nine Evenings* demonstrate the mechanism of interactive technologies as well as the possibilities which they can create within the performance environment. The significance of *Nine Evenings* was that it opened up avenues for communication and collaboration between artists and engineers - individuals from both scientific and artistic backgrounds.

Unpredictability is a characteristic of interactive media based works. Even though a certain number of digital reactions can be programmed, one cannot predict at any given time the digital reaction which will occur. Birringer addresses this unpredictability when he refers to the way in which “bodily movement produces data” and the way in which engagement with an interface environment is “open to unpredictable and emergent states” (“After Choreography” 118). The unpredictability in the context of interactive media is in the manifestation of the work. Though an initial idea regarding how to use the technology may exist from the beginning, new perspectives emerge through the development of the technology in relation to the physical body. It is not until the interactive artist, the choreographer and performers begin to work with one another that a relationship between the body and the technology can be developed and established. Unpredictability within the context of interactive media influences the nature of the collaboration between technology and choreography. It is for this reason that this factor has to be strongly considered in the creation of interactive media based works. There will be further discussions related to the issue of unpredictability through the analysis of the case studies in Chapters Two and Three.

In order to elaborate on the concept of unpredictability, Sarah Rubidge’s Work entitled *Sensuous Geographies* (2003) will be used as an example. For *Sensuous Geographies* a choreographic environment was created in which the viewer was placed in the role of the performer. This choreographic installation used colour tracking and sound. The resultant choreography was created by the movements of the viewer-participant as they engaged with the work. There were four different colour robes which the user could wear and colour tracking was used to trigger different musical compositions (Rubidge 373). The composer, who was present in the space, shifted and altered the compositions in real-time in order that each person who entered the space had a different experience. At any given time during this work it was not possible to pre-determine the result that the viewers’ actions

would have. As a result, new compositions constantly emerged due to the participants' pace and direction. The only certainty was that digital output would be in the form of sound (Rubidge 373).

Sensuous Geographies illustrates the manner in which the concept of unpredictability is able to manifest itself. The interactive environment in this example is unpredictable because the audience's entry into the space triggered various compositions which differed each time.

In terms of Birringer's notion of unpredictability ("After Choreography" 118) this research argues that while interactive technology allows for the extension of possibilities, the performers to a certain extent are dependent on the technology. Interactive technology has specific parameters under which it can operate (Coniglio 4). The performers have to move in a certain path or direction or within specific parameters in order to trigger a particular output from the technology. This was demonstrated through the descriptions of *Variations VII* and *Open Score*, in which the performers moved in a specific path in order to trigger the interactive technology. This research does not suggest that the interactive technology be viewed as a hindrance, but rather that performers understand the uses and implications of the technology. The integration of interactive technology into performance calls for the performer to have a dual focus on the physical body and the technology. The relationship between the choreographic elements and the interactive technology is complex in that a balance needs to be reached between activating the technology and the choreography, in order that these aspects work collectively to shape the content and intention of a work. Complexities involved in the integration of choreography and interactive technology are addressed and explained in greater detail through the examination of the case study entitled *Coming To*.

Although technology can be programmed to exhibit a particular type of reaction, the aspect of unpredictability is located in finding the relationship between the interactive technology and the choreographic-performance body. As explained through the theories of Bicat and Baldwin in section 1.1 New Media, the process of improvisation involved in the devised approach to creating work provides a way of negotiating between these parameters, simply because improvisation provides a space for experimentation. According to Richard Povall, the creative process involving the collaboration of choreography and technology requires “an experimental approach” (“A Little Technology”). In section 1.1, the devised approach to work was proposed as an approach to negotiating the parameters of the technology. This section drew attention to the fact that the devised approach to creating work lends itself to experimentation through the process of improvisation.

The objective of this research is to emphasize the significance of experimentation as a process which is crucial to the development of interactive media based works. Povall further explains that during the creative process the technology and the choreography need to be developing alongside one another in order to enable an ongoing conversation between the two forms (“A Little Technology”).

The technological parameters influence and shape the form that the movement gesture or choreographic language will take. It is highly possible that the performer who has to work within technological parameters would yield positive results in terms of his/her performance. The dependency of the choreographic on the technological could lead to new movement possibilities. Evidence of this is located in the work of Sita Poppat and Scott Palmer. The authors examine the interactive object in relation to choreography using case studies. The first case study refers to the collaborative research between the Performance Robotics Research Group in Leeds and a dancer named Liz

which took place in December 2003. At the start of the improvisational process the dancer was asked to interpret the movement of the robot through an embodiment exercise (Poppat and Palmer, “Common Ground” 53). Her range of movements was limited to those of the robot. The end result of this collaboration was the creation of new movement possibilities for the robot while the dancer was also able to extend her movement capabilities. According to the authors, collaboration holds the “possibility of producing something different that neither of them could’ve done alone” (Poppat and Palmer, “Dancing with Sprites” 417).

Due to the unpredictability of technology a close relationship between the choreographer, performers and the technology has to be established. The interactive artist and the choreographer need to establish a collaborative relationship in which an understanding of the mechanisms of each collaborator’s working processes is developed.

1.2.1 The Development of User-Friendly Interactive Media Technologies

The release of *Max/MSP* during the nineties made real-time software use easily accessible and user-friendly. *Max/MSP* is user-friendly because it does not require the expertise of a computer programmer. *Max/MSP* is a programme which allows for the control of video and audio data within interactive environments by means of symbols called objects (Dixon, *Digital Performance* 195). This allows for greater manipulation of elements such as video in relation to the physical body.

Pioneers in the field of real-time software developments are Mark Coniglio and Dawn Stoppielo, founders of *Troika Ranch Dance Company*. What is significant about these collaborators is that they work from both a

dance as well as a technological perspective; with Stoppielo as a choreographer and Coniglio as the interactive developer. It is their collaborative working processes that led to the creation of interactive software such as *MidiDancer* and *Isadora*.

Coniglio developed *MidiDancer* in 1989. This is a wearable hardware sensing system that uses flex sensors which are powered by a small microcomputer worn on the dancer's body (Dixon, *Digital Performance* 197). This enables signals, based on the degree of flexion, to be sent and interpreted via computer. This data is able to trigger various outputs such as live video, sound or light (Dixon, *Digital Performance* 197). Troika Ranch's work entitled *The Chemical Wedding of Rosenkreutz* (2001) explores the idea of the union between computers and human beings using *MidiDancer*, "to activate and mutate video projections" (Dixon, *Digital Performance* 256-257).

Coniglio, in collaboration with Stoppielo, developed *Isadora* Software. *Isadora* is a programme similar in functionality to *Max*. In comparison to *Max* though, *Isadora* is affordable and more user-friendly for choreographers due to the fact that it has evolved over time and that its BETA testers were choreographers (Dixon, *Digital Performance* 196). Troika Ranch's *16[R]evolutions* (2006) used *Isadora* to 'control and manipulate graphical projections' (Dixon, *Digital Performance* 198) (see fig. 8).

Troika Ranch Dance Company is still active today. They create works which incorporate a wide variety of digital and interactive technologies, ranging from the manipulation of projection to the use of interactive surfaces (Dixon, *Digital Performance* 197-198).



Fig. 8. Troika Ranch, 16 [R]evolutions, 2006. Photo Credit: Author Unknown.

Isadora and *Max/MSP* programmes continue to be used in interactive media works today. The development of user-friendly interactive media software in the United States has made this medium more accessible to choreographers. This has, by extension, enabled choreographers to be actively involved with the technology.

1.2.2 Collaboration

The process of collaboration is particularly important with works which make use of interactive media. Choreographers and the performers need to develop an understanding of and a familiarity with the interactive technology, as well as the conditions under which the technology is able to operate (Povall, “A Little Technology”). Since technology has parameters under which it is able to operate, there may be a specific path or part of the performance space in which the dancers need to move in order to activate the interactive technology.

These parameters, in conjunction with the unpredictable nature of interactive media, make experimentation and improvisation key to the emergence of the final work.

Similarly, the interactive artist needs to be sensitive to the dancer's body and its relationship to the performance area. There needs to be constant conversation between the two forms, the choreographic structure and the interactive technology, in order to establish a link between the dancer's body and the performance area. According to Mark Coniglio (4):

...While the number of parameters that a performer can manipulate might be limited, the range of those manipulations must be profound enough to allow the performer to place his or her personal interpretive stamp on the material.

In light of what was mentioned above on collaboration, Coniglio's statement implies that the parameters of the technology should be such that they do not restrict the performer's mobility. The parameters of the interactive technology should also provide room for the performers to experiment. This highlights and supports what was said in section 1.1 New Media about experimentation and improvisation being necessary in the creation of works using interactive technology.

Technology could also be regarded as a partner with whom the performer is engaged in a process of discovery. Broadhurst (138) refers to technology as an instrument to which the body adapts and extends itself. The relationship between the interactive technology and the choreography can be

likened to a contact improvisation¹⁰. The technological element and the physical body could be thought of as bouncing off one another and engaging in contact improvisation. One element presents itself and the other party responds, creating a mutually beneficial relationship. This is one of the key characteristics of contact improvisation. In light of this the choreographer-dancer's relationship with the interactive technology should be approached like contact improvisation. Though it is possible, with interactive media, for one to have a particular intention, it is generally only through improvisation and working with technology that one is made aware of the possibilities and constraints of one's intention.

Technology as well as its parameters are able to influence choreographic language. This is relevant to this research and will be demonstrated in the analysis of the case studies, which will indicate the manner in which technology is able to influence the direction of the collaborative process, thus playing a significant role in the way the work emerges (Birringer, "After Choreography" 118).

The quality of the relationship between the technological and the choreographic needs to be of such a nature that neither one overpowers the other. Richard Povall describes this as follows: "The audience should be absorbed in the performance, not in the technology or the tricks, or the gee-whiz effects..." ("A Little Technology") The collaboration between the two respective forms needs to take the united form of an alliance, in order that the integration of the two forms brings strength to the collaboration.

¹⁰ "Contact improvisation is a framework for an improvised duet dance. Since it is essentially a dance of investigation of weight, touch, and communication, it adheres to no single definition or pedagogical certification program" ("CQ Contact").

Richard Povall stresses the necessity of time within collaboration between choreographic and technological forms. Time is required for the work to develop, and for the choreographers to become familiar with the technology ("A Little Technology").

Time also needs to be provided for the successful integration of these aspects with the essence or content of the choreographic work. Coniglio (3) stresses the importance of providing the performers with room to improvise with interactive systems and technologies. This is necessary because works making use of interactive media in contrast to new media works are susceptible to technical challenges and difficulties such as the structure of the performance venue. For example, it is possible that the placement of the technology may be affected by the shape of the performance venue or the acoustics, depending on the type of interactive technology being used. It is therefore highly important that rehearsals take place in the performance venue with the interactive technology. Of course, it is also essential that allowances are made for enough rehearsal time with the technology as a prototype and, more importantly, in its complete stage (Povall, "A Little Technology").

Time within the collaborative process allows for the development of a cohesive relationship between the collaborators, thereby influencing the relationship between the technology and the choreography. For this relationship to occur and flourish, it is important that there exists an openness to learning, growth and development amongst the collaborators (Povall, "A Little Technology").

In section 1.1, New Media, it was proposed that the devised approach to working lends itself to the creation of dance works making use of technology. Reference is made to the devised approach to working because it refers to a

particular creative process which lends itself to exploration and therefore allows for conversation and improvisation between the collaborators (Bicât and Baldwin 9). Within the devised approach to working, the concept provided by the director-choreographer provides the starting point and impetus from which the collaborators are able to work (Baldwin and Bicât 7). Within this creative process there are no pre-conceived ideas regarding what shape the work should take. Rather, the development of the work depends on what Baldwin and Bicât (9) describe as “the ideas and chance discoveries that occur in rehearsal.” It is for this reason that working in a devised way is unpredictable at first. However, once the direction of the work has been established there is also a degree of control in the possibilities which that can be created (Baldwin and Bicât 9).

1.2.3 Collaboration and the Performance Environment

Interactive technology creates an environment to which the performer's body responds. Likewise, the technology responds to the body. Birringer (“After Choreography” 118) views the body as a site carrying ‘data’, which is released through the actions of the body. For choreographic works this ‘data’ is taken and mediated using interactive technologies. Experimentations involving the mediation of bodily ‘data’ are evident in the collaborative work between The OpenEnded Group and early dance practitioners such as Merce Cunningham, Bill T. Jones and William Forsythe. These experimentations involved the re-representation of the body through animation, thus creating a derived environment. The effect of the derived environment was located in the way that the movement (data) from the performer's bodies was captured and re-represented onscreen in the form of animated lines that alluded to the human form. This will be discussed in greater detail below.

The OpenEnded Group refers to a collective of media artists consisting of Paul Kaiser, Marc Downie and Shelley Eshkar. The founders, Eshkar and Kaiser, began experimenting with computer animation techniques in the early nineties (“The OpenEnded Group”). They experimented with using line as representative of the body. For this process, Eshkar and Kaiser worked and collaborated with choreographers such as Robert Wilson, William Forsythe, Bill T. Jones and Merce Cunningham (“The OpenEnded Group”). Eshkar and Kaiser’s collaborations with Merce Cunningham on *Biped* (1999) and Bill T. Jones on *Ghostcatching* will be discussed in detail below.

In *Biped* and *Ghostcatching*, sensors were attached to key parts of the body and used to capture the momentum of the dancing body, which was stored on a computer. Extensive experimentation was conducted by Kaiser and Eshkar in order to determine the form that the re-represented body should take. This resulted in a line-based or a “scribbled aesthetic” which was characteristic of these two works (“The OpenEnded Group”).

In *Biped*, the digitally mediated bodies of the dancers were projected onto a translucent screen which contrasted and enhanced the on-stage presence of the live dancers (Broadhurst 139).

Ghostcatching re-represented Jones’ dancing body using the scribbled aesthetic, which abstracted the human form (see fig. 9). The abstraction was of such a nature that one was able to distinguish the animation as representative of the human form. A poem written and recited by Jones formed the soundtrack of the work (“The OpenEnded Group”). In comparison to *Biped*, Jones’ body in *Ghostcatching* was re-represented solely through the interactive digital technology; he was not present on stage. What this means is that the movement of Jones’ body was represented digitally and performed through the medium of the technology.

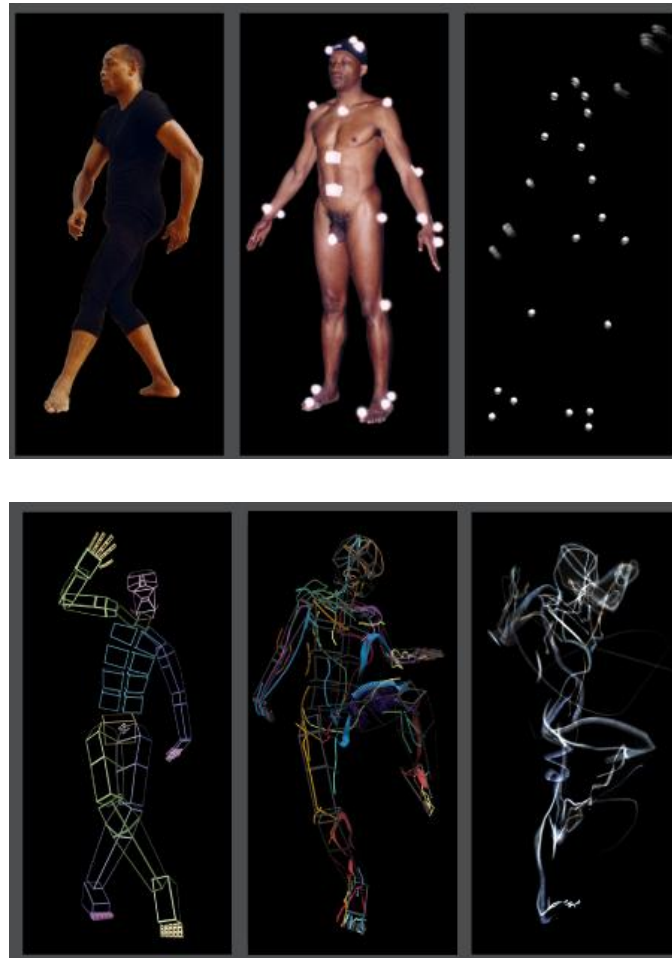


Fig. 9. Bill T. Jones, *Ghostcatching*, 1999. Photo credit: Author Unknown. Top to Bottom: The transition from sensors on the body to the re-representation of the human form using line.

The two works demonstrate the manner in which interactive technology could be used to re-represent the human form. They also provide examples of the manner in which information from the body could be represented through the technology.

The unpredictability of these works is located in the shape that the re-representation of the physical body would take. Eshkar and Kaiser created a

form which alluded to the human body without directly replicating the human form. This point is significant because it illustrates not only the commitment of the technological artists to the technology, but also their sensitivity to the representation of the human form.

The impact of the collaborations between The OpenEnded Group and these practitioners was that they presented new ways for the representation of the dancing and performing body during the nineties. The momentum from the body could be captured and re-represented in another form.

The Bill T. Jones /Arnie Zane Dance Company which Jones formed with Zane in 1984 continues to make work that experiments with interactive and digital technology. William Forsythe also continues his experimentation with interactive and digital media as has been demonstrated, for example, since 2006, in his collaboration with Ohio State University's Advanced Centre for Arts and Design. A program was created which allows for the visualization of dance from various perspectives (deLahunta and Shaw 132). Data from the dancers' bodies was used to explore new ways of interpreting and representing the structure of the choreography. The shapes made by the dancers' bodies as they moved in the performance were interpreted by geologists and architects and re-represented visually. For example, the geologist interpreted the shapes made by the dancers as they moved and re-represented them as a moving geographical landscape. This clearly relates to Birringer's concept of 'data' which is captured from the body and represented in another form. Through the collaboration of experts from different disciplines, it was possible for the data from the dancers' bodies to be represented in ways which extended beyond the realm of dance performance. This work points to a new understanding of dance and the manner in which it is able to relate to what appear to be unrelated forms such as architecture and geology.

A mind shift and a new perspective are what are needed in approaching the collaboration between dance and technology. It is necessary that there exists an openness to experimenting with possibilities. This was illustrated through the example of William Forsythe's work, in which data from the bodies of performers was interpreted and represented through forms such as geology and architecture; forms which one would not usually associate with dance. It is also important that the technology be viewed as a co-collaborator, and that the relationship between the technological artist, the choreographer and performers is one of equality in which each element is given equal attention within the collaboration.

1.2.4 Interactive Media in South African Dance

A history of the use of interactive media in South Africa is unfortunately not as developed as it is in the United States, and experimentation with this form is not as prevalent either. Currently, developments have extended to other countries such as China, Japan, Germany and Europe.

To date, there have been South African dance practitioners prior to Mazarakis who have worked with interactivity. The main interactive collaborator in the area of early South African dance works is interactive artist Nathaniel Stern, who was trained in New York. He was one of the first people to bring the use of interactive media to dance performance in South Africa (Mazarakis, Interview app. E p. 181). Stern's first collaborations were with choreographer PJ Sabbagha and The Forgotten Theatre Collaborative. This was followed by his work with Jeanette Ginslov. These South African choreographers use interactive media and, in some cases, interactive media in combination with new media.

The analysis of these works was based on written reviews and descriptions sourced from Stern's website, which were then used for the discussions of his collaboration with the Forgotten Angle Theatre Collaborative. For Stern's collaboration with Ginslov, I was able to access a video excerpt of this work from her website, which enabled me to discuss their collaboration and aspects of the work in greater detail.

An in-depth interrogation of the possibilities that working with interactive technology holds will be conducted through an analysis of Mazarakis' work entitled *Coming To*, which makes use of interactive media elements.

Sabbagha and Stern collaborated from 2001 to 2005. This collaboration saw the production of *Double Room* (2001), *There's no Room in this Bed* (2003) and *Petra* (2005). *Double Room* (2001) was a work created by PJ Sabbagha and The Forgotten Angle Theatre Collaborative which incorporated animation and interactive video by Stern as well as slam poetry. This was used in order to explore the subject of approaching death due to HIV/Aids and the emotions experienced by the protagonist (Sichel, "Dance Circles").

Petra (2005) made use of a textured and animated background together with a live video feed. These elements, in combination with the choreography and design, were used to explore HIV/Aids and its effect on relationships (Muller, "Petra Multimedia").

No comprehensive description of these works was available and I therefore relied on the online reviews which indicated that the technology and choreography were sensitive to the movements of the performers and the

performance space itself, thus demonstrating the relationship between the technological and the choreographic.

Ginslov and Stern collaborated on a work entitled *Entraced* (2001). This work was an extension of Stern's work entitled *Elicit* (2001). The interaction in *Elicit* involved a responsive screen creating text which emerged in response to the pace of a person passing by the work. The text reacted according to the pace of the body movement, that is, the movement of the passerby. The text is actually part of a passage from a specific text. When a person passed by quickly the text moved quickly, making it difficult for it to be deciphered (Stern, "Elicit and En/Traced"). This encouraged viewers to enter the space, and in so doing added to the work by creating their own patterns of stuttering text (Stern, "Elicit and En/Traced"). This work addresses the notion of unpredictability and control as mentioned earlier in this chapter. The control of this work is located in the fact that the conditions of the interaction were set up by Stern. The unpredictability of the work is located in the experience of the viewer as their engagement of the work triggers varied responses from the technology.



Fig. 10. Jeanette Ginslov, *Elicit/Entraced*, 2001. Photo Credit: Author Unknown

The collaborative aspect of this work lies in allowing a trained body to move in the space in the form of Ginslov (Stern, “Elicit and En/Traced”). The pace and nature of Ginslov’s movements influenced the manner in which the text moved (see fig. 10). An intriguing aspect of this work was the manner in which the interactive technology allowed the text to be personified; it was almost as if the text was reacting to Ginslov’s movements (Stern, “Elicit and En/Traced”). A dynamic relationship was evident between the physical body and the interactive component of the text. This demonstrates the kind of relationship with technology called for in this research; an interaction in which there is interplay between the technology and the choreography.

Conclusion

The use of interactive media technology in performance works creates a new performance space and environment which calls for a new approach to the creative process. Discussions regarding collaboration highlight the manner in which the devised approach to working could be used to approach and navigate the complexities of using interactive media in dance performance. The attitude of the choreographer, performers and the interactive artist needs to be one of openness and a willingness to experiment. This is vital in negotiating this new collaborative environment which they are aiming to create.

Merely grouping technology and choreography together in a work does not qualify the work as a collaboration, and it is crucial that the two mediums are involved in a dialogue with one another in the performance space. It is necessary that there exists a holistic relationship between the technology and the choreography in order that neither element overpowers the other. This kind of collaborative relationship will be described in relation to the case studies in the upcoming chapters.

Case Studies: Chapters Two and Three

The case studies will be prefaced by a brief description of Mazarakis' work with new and interactive media in order to highlight the development in Mazarakis' style of working with technology. This has allowed her creative process and collaborative relationships to evolve.

Mazarakis' exposure to technology in dance performance dates back to her involvement in PJ Sabbagha's productions which involved collaborations with interactive artist Nathaniel Stern (Mazarakis, Interview app. E p. 181). These works were discussed in section 1.2 Interactive Media. It was Mazarakis' involvement in these works that sparked her interest in interactive and new media (Mazarakis, Interview app. E p. 181). Mazarakis' first experience of working with interactive media was to be found in *Coming To*, which is the first case study to be analyzed in this research (Mazarakis, Interview app. E p. 181). Thereafter, Mazarakis created another interactive work entitled *Elev(i)ate* (2010), in collaboration with interactive artist Tegan Bristow, with whom she collaborated on *Coming To*.

The works produced by Mazarakis which made use of new media prior to *Flicker* (2011), the second case study, include *Elev(i)ate 2* (2010) and *Smoke and Mirrors* (2011). When dealing with the second case study, it is important to bear in mind that *Flicker* is a result of Mazarakis' prior experience in working with new and interactive media. Therefore, *Flicker* should be seen as a reflection of Mazarakis' growth and development with new media as a form.

Chapter Two

Case Study One: *Coming To*

This section provides an in-depth examination of Athena Mazarakis' work entitled *Coming To* (2007). This work was selected because it makes use of interactive media elements. A brief overview and description of the work will be provided followed by a discussion of specific instances of the use of interactive media in relation to the content of the work and its integration with the interactive media elements. The creative process will also be discussed, particularly the nature of the collaborative process. An examination of this case study will aim to shed light on the creative process and indicate the manner in which this has influenced the integration of technology, choreography and content. This study seeks to uncover the dynamics involved within the collaborative process and the manner in which this influences the relationship between the technological and the choreographic. The question which the study seeks to address and answer is related to how a cohesive relationship is created between these elements.

Coming To: Overview and Description

Coming To was created as a performance which formed the practical component of Mazarakis' Master's Degree in Dramatic Arts (Mazarakis, Interview app. E p. 182). This is significant and worth mentioning because the creative vision for this work was guided by Mazarakis. Mazarakis collaborated with interactive artist Tegan Bristow and designer Naomi van Niekerk. The discussions regarding *Coming To* that follow are based on a video recording of the performance which I viewed. A brief description of the work will be provided

as an introduction, and an in-depth discussion will follow in the section entitled, Interactive Elements.

Coming To makes use of elements of both new and interactive media. The focus of this research however, will be on the interactive elements used in the work. These are combined with projected text as well as text spoken by Mazarakis.

The work begins on an empty stage on which there is only the mannequin-like figure which embodies the physicality of Mazarakis' grandmother. Adjacent to this figure is the projected text, briefly contextualising the work and explaining that the work about to be viewed is a reconstruction of her grandmother's narrative.

Mazarakis appears on stage and gestures that she is unable to speak. However, as soon as she begins slapping parts of her body, sounds of a bouzouki¹¹ are triggered, through a real-time sound activation. The work continues with excerpts of Mazarakis' grandmother's narrative interlinked by movement and spoken text which is performed by Mazarakis. This effectively enables Mazarakis to express a dialogue between her grandmother's narrative and her own (Mazarakis, *Body* 99). The work continues to its portrayal of the meeting between Mazarakis' grandmother and grandfather which is represented by a duet between two miniature puppet heads on sticks (van Niekerk, Interview app. G p.207). The movement of the puppets is controlled by Mazarakis, and through her movements she is able to give the puppets meaning. Mazarakis' movement with the puppets combined with spoken text assisted in the portrayal of the narrative.

¹¹ A stringed Greek instrument, similar to a small guitar. (Mazarakis, Interview app. E p. 184).

This continues and reaches a section which uses the motif of mapping. Mapping is a concept that runs through this work both choreographically and visually. In this section of the work, mapping is used in order to depict the journey of Mazarakis' grandmother, Erifili, to South Africa. Mazarakis maps points on her body through movement and gesture and this is extended into a projection of a moving map which alludes to distance and travelling. This idea of mapping continues to Mazarakis' body via motion tracking. As she continues to map and trace parts of her grandmother's journey to South Africa, Mazarakis' silhouette¹² becomes filled with imagery from the clip of the moving map.

This continues to a section of the work in which Mazarakis reminisces about qualities of her grandmother, through physical action and spoken text. Her grandmother's actions and scent are represented through the action of Mazarakis kneading bread dough and in so doing, recalling her grandmother's baking and recipes. The memory is magnified through a live camera feed of her performing this action. The Syrtos¹³ is depicted through the use of props and through Mazarakis' body. The significance of the Syrtos is that it forms a main component of Greek culture, and thus enabled Mazarakis to explore both cultural and personal memory. The miniature puppet heads, the mannequin, as well as the bread dough are therefore props which play a role in the progression of the narrative.

Mazarakis' silhouette then appears once again, but this time it is filled with old cine footage of her with her grandmother. This allows Mazarakis' body to contain parts of the narrative through her silhouette. Mazarakis then

¹² Mazarakis' silhouette was created through a motion tracking device and projection was used to display the real-time effects of this interaction.

¹³ A traditional Greek dance, historically performed at weddings and celebratory events, which involves dancing in a circle and moving backwards and forwards (Mazarakis, *Body* 90-91). This dance was also "the last dance, that the women of Souli danced before flinging themselves off a cliff-face to escape their advancing Ottoman enemies, who had slain all the men of the villages" (Mazarakis, *Body* 90-91)

physically maps the performance space with potatoes which fall onto the stage from above stage level. The potatoes represent a ritual performed by Mazarakis' grandmother to remove warts (Mazarakis, Interview app. E p.190). Mazarakis also uses these potatoes to map her own narrative in the performance space.

Footage of Mazarakis' grandmother is projected onto the wall of the performance space. Mazarakis is then able to insert herself into this footage via her white silhouette, created using motion tracking. This allows Mazarakis to re-visit a moment in history through her appearance as a white silhouette in video footage of herself and her grandmother. In this way, Mazarakis tells her grandmother's story through the eyes of her adult self.

The work ends with Mazarakis triggering a combination of her own images as well as the images of her grandmother via a sound activation using short claps.

The final image is that of Mazarakis' sole silhouette with projected text consisting of comments that conclude the narrative. This is the only time that Mazarakis' silhouette occupies the space on its own.

The structure of this work and the progression of the narrative in the performance space are described with the aim of gleaning the use of interactive media elements to enhance narrative. Specific instances of the use of interactive media related to this case study include the use of sound, projected texts, mapping, film and the silhouette.

Interactive Elements: Intention in Relation to Content

In dance works which use interactive media, the key focus is on the creation of an environment, the way in which the body responds to that environment as well as the way in which the interactive environment responds to the body. Interactive environments as defined by Birringer were discussed in section 1.2. Interactive Media. In light of this, *Coming To* could be categorized as a work which makes use of derived, interactive and mixed reality environments.

Interactive environments make use of motion sensing or motion tracking, in order to trigger real-time outputs (Birringer, *Performance Technology* 119). This means that the performer's movements trigger particular actions or reactions in the interactive environment, the effects of which are seen immediately (in real-time). The sound activation used at the beginning of *Coming To* provides an example of a real-time interaction. Mazarakis stands in front of a microphone and slaps parts of her face and body; the clapping and slapping sounds trigger the sound of a bouzouki. The effect of this is to make it appear as if Mazarakis is making music with her body (Mazarakis, Interview app. E p. 184). Technically this was achieved in a computer programme called *Max/MSP*, using a technique which involved frequency analysis (Bristow, Interview app. F p. 197-198). Bristow assigned each frequency which resulted from the slaps on specific body parts, to a sound from the bouzouki (Bristow, Interview app. F p. 198).

Physically engaging the body through the technology refers to the body as a site where information is stored, which alludes to Birringer's concept of the body holding "data" ("After Choreography" 118). Mazarakis' choreographic intention was to explore the relationship between body and

memory (Mazarakis, *Body* 81). The sound activation allows the body to communicate through the medium of the interactive technology. The physical action of hitting the body serves as an introduction to the motif of parts of the body carrying and storing archival information (Mazarakis, *Body* 83).

Throughout this work the interactive technology and the choreography come together and enhance the portrayal of the narrative.

In this work a recurring motif is that of “likening the body to a map” (Mazarakis, *Body* 83-82). Mazarakis also uses gestural¹⁴ movement vocabulary which identifies parts of her body as landmark destinations, particular to her story (Mazarakis, *Body* 83). This continues into a video projection of a moving map behind her with Mazarakis’ physical body positioned directly in front (see fig.11). The projection of the moving map reflects onto Mazarakis’ clothes; this unifies her body with the projected image. The movement of the video of the map in conjunction with the movement of Mazarakis’ body in front creates the feeling of being on a journey. The unification of Mazarakis’ body with the projected image of the map alludes to Mazarakis’ grandmother’s physical/personal journey which is to be interwoven with Mazarakis’ personal journey/story.

All the elements are used in order to excavate the grandmother’s story through the body.

¹⁴ Movement that makes use of everyday gestures and stylizes them, to create a new choreographic language that differs from movement that is rooted in technical steps (Banes 99).

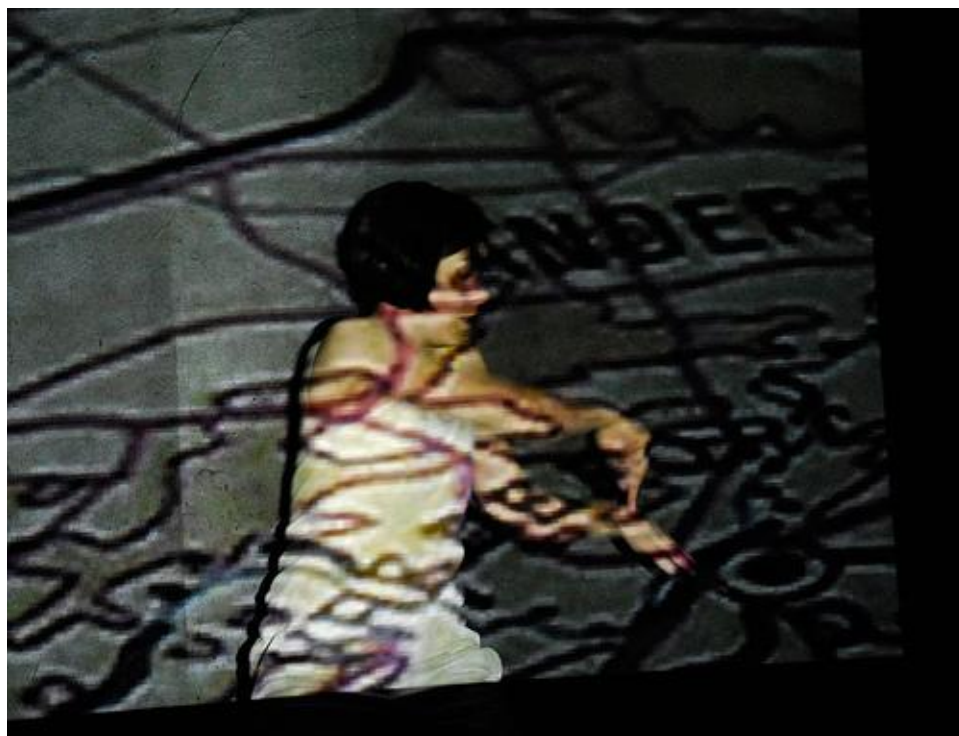


Fig. 11. Athena Mazarakis, *Coming To*, June 2007-Nov. 2007.

Photo credit: Christo Doherty

Mazarakis uses potatoes to map the performance space as well as the trajectory of a journey (Mazarakis, Interview app. E p. 190-191). The potatoes are representative of significant events in Mazarakis' life (Mazarakis, *Body* 117-118). As each potato is placed on the ground, Bristow triggers individual components of a Flash animation, which correspond to each potato (Bristow, Interview app. F p. 203). Each potato is represented by a yellow circle in the animation, which appears as each potato is placed in the stage space (see fig. 12).

The animation is completed with all the circles forming one large circle. In the animation, these circles begin to join one another by means of lines, until the space is filled with lines. These instances of mapping illustrate the presence of a visual and conceptual motif which extends through the whole work. This conceptual motif forms the framework for the content and the technology as well. The concept of mapping allows links to be formed between the content, choreography and technology of the work and it is this example of the integrated approach to working with technology which is encouraged in this research.

In terms of the various examples of interactive environments discussed in Chapter One, it is clear that *Coming To* could be categorized as an example of a derived environment. Derived environments use motion capture in order to capture information from the bodies of dancers which is then re-represented in another form such as an animation (Birringer, *Performance Technology* 119). In *Coming To*, this was achieved through the use of motion tracking by Bristow in order to create Mazarakis' silhouette.

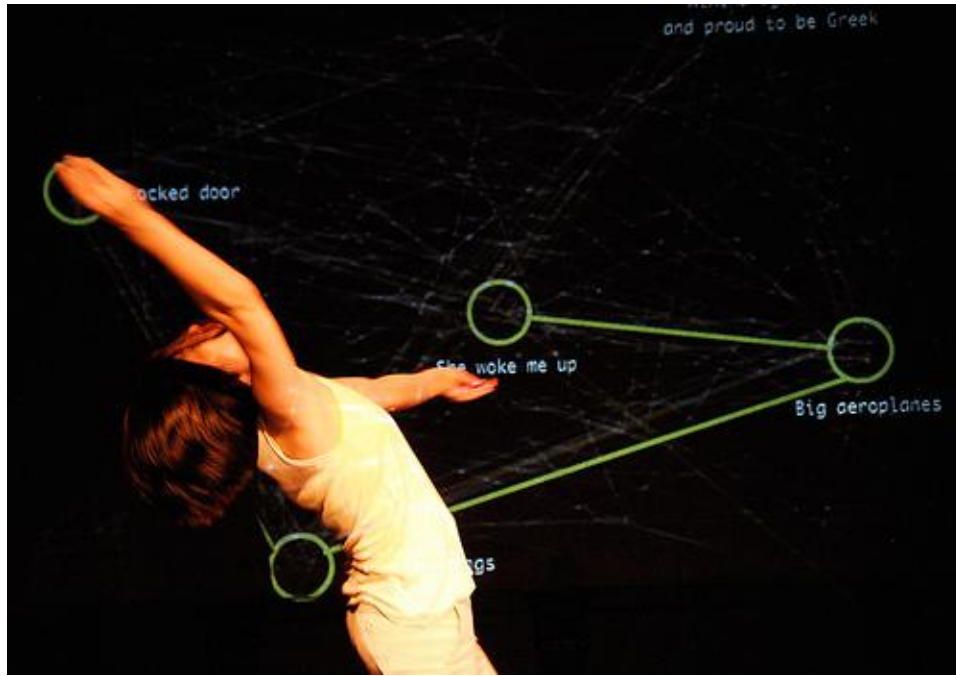


Fig. 12. Athena Mazarakis, *Coming To*, June 2007-Nov. 2007.

Photo credit: Christo Doherty

Mazarakis' silhouette becomes an important image and metaphor. The silhouette is used in various ways and its significance will be explained in the discussions that follow.

Bristow uses the technique of motion capture and motion tracking to capture Mazarakis' body as a silhouette (Bristow, Interview app. F p. 202). This is achieved by means of *Max/MSP*, which works due to the fact that "the camera acts as a sensor to feed information about the body into the programme..." (Bristow, Interview app. F p.202). This information from the body or "data" according to Birringer ("After Choreography" 118) is used to represent Mazarakis' silhouette in various ways. The silhouette is used to create both visual and conceptual relationships. The manner in which Bristow links Mazarakis' silhouette to the video footage, adds an additional layer to the meaning of the work. Bristow draws attention to Mazarakis' silhouette by blacking out the area around her silhouette.

A relationship is created between Mazarakis' moving body and her silhouette which is embedded with imagery of the moving map. It appears as if the motion tracking is intentionally delayed so that traces of Mazarakis' moving body and the map remain after she has completed a movement.

This serves to highlight the idea of memory which is carried through the body. Mazarakis' silhouette is also used in a similar way at a later point in the performance, with the only difference being that her silhouette is then embedded with an event from the past, namely video footage from her childhood featuring her with her grandmother. This depicts the concept of memory leaving traces in the body (Mazarakis, *Body* 81). Similarly, traces of Mazarakis' silhouette movement remain on the projection surface. In this way the interactive technology allows for information to be embedded in her body.

Bristow then subverts the silhouette and makes it white. The white silhouette is embedded into the video footage of Mazarakis and her grandmother (see fig. 13). This enables Mazarakis to digitally interact with her grandmother as well as with events from her childhood. According to Bristow, this was done “because it was more of a nostalgic thing ... we put her white silhouette into a historical form, she’s not really there and she never really will be there but the play was about connecting...” (Bristow, Interview app. F p. 203).

Mazarakis’ white silhouette provides a strong contrast to the rest of the video footage, which further emphasises that Mazarakis is re-placing herself in history; re-inserting herself into an interaction that has already passed. Mazarakis places herself in her grandmother’s narrative and is able to travel back in time through the medium of the interactive technology. This allows Mazarakis to re-view her story from a different perspective, reflect on that period and to interact with her grandmother through the eyes of her adult self.

It is the interactive technology which creates the possibilities to re-enact the past. Mazarakis’ body and movement also activate the technology in the space. Mazarakis states that the choreography should, “not only be held by the technology but actually have a dynamic relationship with it” (Mazarakis, Interview app. E p. 192). Her focus is on the excavation of embodied memory (Mazarakis, *Body* 78). The interactive technology together with Mazarakis’ movement vocabulary enables her to have a deeper engagement with her grandmother’s story as well as with her own. This enables a layered reading of this work.



Fig.13. Athena Mazarakis, *Coming To*, June 2007-Nov. 2007.
Photo credit: Christo Doherty.

Coming To takes the idea of motion capture and uses it in two different ways. These include the use of a webcam as well as the re-representation of the action of mapping. The re-representation of movement is identified in the manner in which Bristow uses a Flash animation to represent Mazarakis' live, on stage action of mapping the performance space with the potatoes.

The webcam is used by Bristow to capture Mazarakis' silhouette which is used in conjunction with pre-recorded video material from Mazarakis' childhood. The pre-recorded audio and visual material in this work is the sound of the bouzouki and the video footage from Mazarakis' childhood respectively. In terms of Birringer's definitions of the types of interactive environments *Coming To* could therefore also be categorized as an example of a mixed reality environment. This is because elements of both interactive as well as derived environments are present in this work and are used together with live and pre-recorded audio and visual material.

The interactive technology could not have worked without the presence of Mazarakis' body. Similarly, the threads of the work could not have been expressed had it not been for the presence of the technological interactions, created by Bristow. This case study thus illustrates the necessity of a link between the technology and the choreography. It further illustrates the manner in which synergy could be created through the close relationship between choreography and technology. The interactive technology allows Mazarakis to have a mediated version of herself to play with; another collaborator or co-performer through the technology (Mazarakis, Interview app. E p. 182).

This is a demonstration of the kind of approach to working with technology called for in this research. That is, an approach in which the technology is not used merely for effect, but is rather one in which both the

technology and the choreography complement each other and enhance the content and intention of the work.

Although this section does not specifically deal with the projected image, interactive environments inherently make use of projection in order to display the real time effects of the technology. Therefore, a relationship exists between the live body and the projected image. It is therefore necessary to briefly discuss some authors who deal with the subject of the live body in relation to the projected image as their readings could be applied to certain sections of *Coming To*. The principal examples of these authors and their respective theories are Matthew Causey and his concept of technology and the theatre, Steve Dixon (*Digital Performance* 241-244) and his concept of the *digital double* as well as segments of Greg Gieseckam's work entitled *Staging the Screen* (2007).

Causey (17) addresses what he refers to as the *double*, which he describes as the instance in which “a live actor [performer] confronts her mediated other through the technologies of reproduction” through the use of examples of particular works. In *Coming To*, the presence of Mazarakis' double is essential to the development of the narrative of the work. The use of Mazarakis' silhouette could be viewed as essential to both the conceptual and visual development of the work.

Dixon (*Digital Performance* 244) elaborates on this and divides his concept of the *digital double* into four categories; the reflection, the alter-ego, spiritual emanation and the manipulable mannequin. Dixon elaborates on these terms by referring extensively to Artaud's *Theatre and it's Double* (1938) as well as writings related to the psyche. This research focuses on his categories of the digital double, without discussing his work regarding the psyche as this is

not relevant to the context and structure of this research paper. The reflection refers to the reflection of the performer being present in the work. The alter-ego refers to a dark side of a character or a portrayal of their innermost feelings. Spiritual emanation refers to the portrayal of the digital double as a spiritual or supernatural being such as ghosts, astral beings, out-of-body experiences and soul projections for example. The manipulable mannequin refers to the idea of the puppet leading to the online avatar, which can be controlled through the actions of the user. In terms of *Coming To* it is possible to identify the reflection, the spiritual being as well as the manipulable mannequin. The reflection presents itself through the childhood footage of Mazarakis as well as through her silhouette created through motion capture technology. Mazarakis' silhouette could also be regarded as a spiritual emanation because, as mentioned earlier, the interactive technology allows her silhouette to travel back in time and insert herself back into the film footage of her childhood. Dixon's categories are however, limiting as they are somewhat subject to the interpretation of the viewer. The categories which Dixon defines have certain characteristics, particularly the alter-ego and the spiritual emanation, and a work may not clearly fit into Dixon's descriptions. In light of this, Dixon's concept of the digital double does provide an entry point into the understanding of the relationship between the live body and the projected image.

Greg Gieseckam's assessment of the relationship between the live body and film within a theatrical context is also applicable in relation to *Coming To*. In his description of the use of film in theatre, Gieseckam (24) argues that film was used for the following reasons: to expand the range of theatre spatially and temporally, to indicate a passage of time, to portray the subjective experience of the onstage characters and to bring the outside world into the world of the theatre. All of these elements are applicable to the use of film in *Coming To*. In *Coming To*, the film allows Mazarakis to interact with her childhood self. Her mediated live body interacts with the film of her childhood self. In relation to the passage of time it allows her to communicate with events of another time

through her silhouette. In addition, the film of the moving map was used to indicate the passage of time at the onset of the work. The film also allows her to recall her memory of her grandmother; her subjective experience intermingled with her own story. Furthermore in *Coming To*, the element of film is not merely displayed on stage; it is mediated through the interactive technology.

In light of this discussion of the relationship between the live body and the projected image, the area used for projection in interactive media works is also important, particularly the size of the projection area and its relationship to the physical body. With *Coming To* the projection area is such that it does not overpower Mazarakis' body. This can be seen in the instances when Mazarakis maps the stage area with potatoes as well as the instance of her white silhouette in the cine footage of her with her grandmother. As emphasized earlier, this aspect of projection surface is specific to new media works. The size of the projection area also plays a role in the representation and reading of the real-time effects of the interactive technology.

Collaboration and the Collaborative Process in *Coming To*:

The creative process involved in *Coming To* employed the devised methodology of working. As explained in Chapter One, the devised approach to working involves no set script as the creative process is driven by an initial concept which develops over time (Bicât and Baldwin 7). In *Coming To*, the overall concept of the work from the outset was to uncover the narrative of Mazarakis' grandmother. It was through experimentation and improvisation that the connection between the choreography and the interactive technology emerged.

Due to the unpredictable nature of the devised approach in the creative process the choreographer, performers and collaborators are in a constant process of discovery which leaves the work open to a number of possibilities.

Improvisation was important in the creation and development of *Coming To*; it allowed for discoveries to be made during the rehearsal process. Prior to the improvisation sessions Mazarakis discussed the overall concept, the theme of her work and possibilities with Bristow and van Niekerk. Separate improvisation sessions were held with each of them respectively and these were structured differently (Mazarakis, Interview app. E p. 183). The improvisations with van Niekerk were essentially design improvisations in which the rehearsal space is mapped or sculpted through objects. According to Mazarakis, "...one starts to look at the relationship between objects and try to understand what is emerging through that..." (Mazarakis, Interview app. E p. 183). Commenting on the continued conversation between them, van Niekerk indicates, "...I think she would kind of give an idea and I would give an idea and then I would also like quickly cut up objects and then she would experiment and then see how she could use it. She was very open in letting me try things..." (van Niekerk, Interview app. G p. 206).

Mazarakis was open and willing to allow possibilities to emerge through experimentation as this involved "a kind of balance between play and improvisation together" which also involved Mazarakis giving van Niekerk particular images that she wanted her to try and create. (Mazarakis, Interview app. E p. 184). The nature of the relationship between Mazarakis and van Niekerk was one in which constant conversation and improvisation led to the emergence of creative solutions. This relationship supports the point regarding the importance of improvisation to the creative process as it was this process that allowed possibilities to emerge.

The collaborative relationship between Mazarakis and Bristow differed in that Mazarakis was unaware of the possibilities of interactive technology at the time (Mazarakis, Interview app. E p. 185). Mazarakis describes Bristow's input as "hugely significant" (Mazarakis, Interview app. E p. 185). Their working relationship involved discussions during which Mazarakis would explain the kind of imagery she was interested in, indicating "...I would love to play with the idea of making music out of my body..." (Mazarakis, Interview app. E p. 184). This is ultimately how the sound activation with the sounds of the bouzouki came about. Bristow was able to take Mazarakis' ideas and translate them into the medium of interactive technology. Bristow also created applications in the form of prototypes for Mazarakis to try out, and improvise with (Bristow, Interview app. F p. 194). These prototypes allowed Mazarakis to simultaneously work with the choreography as well as the interactive technology. This is an example of the kind of experimental approach to dance and technology discussed by Richard Povall ("A Little Technology"); an approach in which the technology develops alongside the elements of the work. Collaboration between Mazarakis and Bristow was a learning process for both of them. This collaboration allowed them to produce, "something different that neither of them could've done alone" (Poppat and Palmer, "Dancing with Sprites" 417).

This experience provided Bristow with insight into the working environment of performance and alternately, allowed Mazarakis to gain insight into interactive technology and its potential in relation to the physical body. This collaboration did not only result in a successful end product, it was also a learning experience for both of them.

The experience allowed Mazarakis to create meaning, not only through the choreography, but also "theatrically in other ways [by] engaging with the technology..." (Mazarakis, Interview app. E p. 191). For Mazarakis, the

technology became another player, a co-collaborator in the improvisations (Mazarakis, Interview app. E p.192).

It is also worth mentioning that Mazarakis had a keen interest in the interactive technology and subsequently allowed it to influence the development of the work as a whole. This reflects Mazarakis' view of the technology as a co-collaborator (Mazarakis, Interview app. E p.192). She describes her experience of working with interactive technology as follows:

... what's always kind of enlightening is to see how other people take an idea and an image that you have and translate it through their medium and then to come back to your own medium and then to see how that then resonates and what kind of relationship can that find...I found that that constantly pushed my own excavation, my own interrogation of what I was doing by having to engage through their medium. (Mazarakis, Interview app. E p.191).

In Chapter One, a need was expressed for a new approach in choreographic work conceived with the intention of incorporating technological elements. *Coming To* presents a mutually beneficial collaboration in which the collaborators were able to learn from one another, allowing discoveries to be made regarding processes, possibilities and new ways of working. Following the success of their initial collaborative experience, Mazarakis and Bristow continue to collaborate with one another.

Coming To illustrates a successful integration of the technological and the choreographic. The movement of Mazarakis' body triggered the interactive technology which ultimately enhanced the content and the reading of this work. The concept of mapping also extended to the way in which the technology inhabited the performance space. The spatial orientation as well

as the mapping was both functional and related to the reading of the work. The technology, through its placement, mapped areas of movement for Mazarakis in the same way that Mazarakis mapped her own body through movement and gesture. Similarly, the stage in which the technological components were to be placed was demarcated and mapped by yellow tape (Bristow, Interview app. F p.200). In order to trigger the motion tracking devices and the sound activation, Mazarakis had to be positioned or had to move within a certain radius of the technology. This then influenced Mazarakis' movement vocabulary, as "the interfaces started defining the organisation of movement and space" (Mazarakis, Interview app. E p. 187). Mazarakis' movement and spatial orientation had to be in constant relationship with the technology, and this allowed for a true collaboration between the technological and the choreographic.

The mobility of the technology in the space also addresses the nature of choreography itself. The interactive technology in *Coming To* was made mobile through its placement on wheels and movable stands. Just as the dancing body is in a state of constant change, the mobility of the technology in the space creates a constantly shifting environment, an environment in motion. In this way the interactive technology could be seen as being in conversation with the performer's body. This was made possible by Bristow's visible presence on stage. Bristow was not only in control of the interactive technology, but also acted as a partner and a co-performer with Mazarakis, through her control of the interactive technology in the performance space. Thus a performative relationship was created in that both Bristow and Mazarakis had to have an awareness of one another in the performance space.

The nature of the collaborative environment ¹⁵ affects the way in which a work emerges. The director's attitude to the collaboration also affects the working conditions of the collaborative environment. Mazarakis was open to uncovering possibilities with the interactive technology (Mazarakis, Interview app. E p. 185). This created an environment in which Bristow could actively contribute to the emergence of the work through the use of interactive technology. According to Bristow, "I was also incredibly spoilt working with Athena because she was so open to potential ... I think if I had got involved with somebody and it had just been 'we're the choreographers, we're the directors this is what we need you to do' it would have been a completely different piece" (Bristow, Interview app. F p. 204-205).

It is important to note that none of the collaborators felt unhappy within the collaboration. Although Mazarakis had formulated the intention of the work, the designer and interactive artist did not feel restricted at all, even in light of the fact that this work was created under the conditions of a Master's performance. Mazarakis' concept of the exploration and excavation of her grandmother's story provided a framework and a space in which the collaborators could work. In a similar way parameters are set for an improvisation. Set parameters shape the conditions under which the collaborators operate. It was Mazarakis' clear starting point that guided the creativity of the collaborators. The work was ultimately able to emerge in the manner in which it did, thanks to the openness and conversational approach that existed between Mazarakis and the collaborators. Openness and freedom within the collaboration enables collaborators to work in a space in which they feel uninhibited.

¹⁵ Within the context of this research, the "Collaborative Environment" can be understood as the conditions under which the technological artist and the choreographer operate. This is shaped by the choreographer's attitude to the process of improvisation and whether he/she gives the collaborators the freedom to creatively express themselves.

As mentioned, the creative process in *Coming To* could be likened to a contact improvisation. Points of contact were initiated by Mazarakis, the interactive artist and the designer. These sparked moments of creativity, which Mazarakis refers to as “gem moments of discovery” (Mazarakis, Interview app. E p. 185). The more comfortable the improvisers become with one another, the more liberated they become in the space. In terms of *Coming To*, what had been uncertain at first ultimately resulted in the creation of a show in which there was an obvious and cohesive relationship between the technology and the choreography. Neither form overpowered the other; equal attention was paid to both the technology and the choreography in the creative process.

Challenges Faced in the Creation of *Coming To* using Interactive Media

Although interactive media allows for several possibilities in the form of an environment with which the physical body is able to interact, Bristow and Mazarakis both experienced challenges while working with this form.

With Interactive media based works, the conditions of the performance space need to be kept constant. In *Coming To* the motion tracking element in *Max/MSP* was light sensitive, and it was therefore a struggle to negotiate the light which was emitted from the projector as well as the lighting of the performance space so that it did not affect the motion tracking applications (Bristow, Interview app. F p. 199). According to Mazarakis, “What was very difficult was the relationship between the camera and the projector, keeping spaces dark enough to project on without spilling and dissolving the image and keeping spaces lit enough for the camera to capture me, that was the tricky thing...” (Mazarakis, Interview app. E p. 187-8). In addition, further

complications were involved in negotiating the stage space to include the technological elements of the projector, the microphone and the webcam.

This problem was ultimately solved by the decision to allow these components to be mobile in the space; both the microphone for the sound activation and the webcam were on movable stands and the projector was placed on a stand with wheels. This enabled direct control and positioning of the technological components. The mobility of the projector on wheels allowed Bristow to “focus the projection in and out,” according to Mazarakis’ position on the stage (Bristow, Interview app. F p. 201). Although Mazarakis had initial concerns involving technology being hidden and manoeuvred by a backstage crew, this was addressed and solved by visibly moving and manipulating the technology (Mazarakis, Interview app. A p. 151). This action creates a closer relationship between the performer and technology, thus allowing more engagement between the two forms.

As discussed in Chapter One, the challenge regarding interactive technology for a dancer or performer lies in familiarising oneself with the mechanism of the technology (Povall, “A Little Technology”). In *Coming To*, for example, the performance space was mapped by areas in which the technology was positioned. Mazarakis therefore had to keep her movements within the radius of that technology in order to activate the interactive technology. The sound activations using the microphone, and the motion tracking using Mazarakis’ silhouette were triggered and activated by Mazarakis’ proximity to these devices. Mazarakis describes the restrictions as, “...interesting...because they open up possibilities and they open up choreographic possibilities...” (Mazarakis, Interview app. E p. 187). Similarly, the parameters of the technology, although a restriction, influenced the choreography and the manner in which Mazarakis was ultimately able to occupy the performance space.

When making use of interactive media, it is important to control the conditions of the performance space. Interactive media based works need to be tested extensively in the performance space, in order to determine whether the nature of the space such as the lighting or the acoustics interfere with the technology. This addresses Richard Povall's ("A Little Technology") assertion regarding the necessity of time for collaborations between dance and technology. Regarding *Coming To*, the work had time to emerge and its development was not rushed (Bristow, Interview app. F p. 196). Development of the work was facilitated by its initial performance at the Grahamstown National Arts Festival, which allowed the work time to overcome technical challenges (Mazarakis, Interview app. E p. 187) and for Mazarakis to become familiar with the technology.

The use of interactive technology calls for a constant awareness of technological developments and advancements which are taking place. These developments often bring new ways of working with technology which makes the creative process easier. *Coming To* was created in 2007 and since then several significant technological advancements have been made. For example, if this work were to be restaged today, technology such as the *Kinect*¹⁶ would be used, because it makes use of infrared technology, making it suitable for a performance work in which variable lighting is used.

Awareness of new technological developments should not solely be the responsibility of the interactive artist; the choreographer also needs to take an interest through research regarding the manner in which other choreographers and performers are experimenting with the form. This could potentially enhance collaborative relationships between interactive artists and choreographers once

¹⁶ The Kinect is a motion sensor add-on for the Xbox 360 gaming console. It operates using a depth camera which "sees" in 3-D and creates a skeleton image of the player ("What is Kinect"). The Kinect can be used in conjunction with interactive software to enhance capabilities of motion sensing.

they begin to develop an understanding of one another's forms and creative processes.

Concluding Points:

The experimentation involved in the creative process of *Coming To* as well as the nature of the collaborative relationships led to the discovery of new ways of creating meaning within performance.

The interactive technology enabled Mazarakis to make connections between herself and her grandmother through the physical nature of the interactive technology as well as the visuals which were created in the form of her various silhouettes. In this way it was possible to integrate the content and the technology due to the fact that Mazarakis engaged in constant conversation with the interactive artist. This allowed the technology to develop alongside the choreography, with Mazarakis initially experimenting with prototypes created by Bristow. The outcome of the work would not have been the same had it not been for the expertise of the collaborators combined with their willingness to experiment and play in the creation of this work.

This case study highlights the importance of the collaborative environment itself. The expertise of the collaborators is just as important as the collaborative and creative environment in which they work. As illustrated through the nature of the collaborative relationships in *Coming To*, collaboration is a constant negotiation, between letting go of pre-conceptions and openness to possibilities. This was the direction demonstrated by the collaborative relationships in *Coming To*.

Collaboration with technology in the initial creation phases involves a volatile environment. Working with interactive technology has parameters, but it is the attitude of the choreographer and performers which determines whether these parameters are able to open up new choreographic and spatial possibilities.

The careful integration of technology and choreography in *Coming To* could be attributed to Mazarakis' attitude and approach to the creative process, particularly regarding her willingness to experiment with interactive technology. In this way, this work demonstrates the collaboration between technology, choreography and content. Throughout its development, the main intention behind the work was never lost. The content of Mazarakis' grandmother's narrative, provided the conceptual thread which ran through the entire work, allowing the technological and the choreographic to form a cohesive and integrated relationship with one another.

Chapter Three

Case Study Two: *Flicker*

This chapter deals with the second case study entitled *Flicker* (2011). This work was selected as a case study because it makes use of new media in the form of projection as well as various projection surfaces. The projection, projection surfaces and the movements of the performers are informed by the concept and content of the work. The relationship between medium and content present in this work supplements the argument of this paper for greater experimentation with new media in dance works. Mazarakis' work *Smoke and Mirrors* (2011) which was a precedent to *Flicker* will be mentioned briefly, due to the fact that concepts and ideas of projection and surface explored in *Smoke and Mirrors* were developed further in *Flicker*.

Regarding *Flicker* itself, an overview of the work will be provided, followed by a discussion of the content of the work and the manner in which the work unfolded. This will be followed by a detailed explanation of the specific instances in which projection and projection surface are used, particularly as it relates to the theory discussed in Chapter One, in the section entitled New Media. The examination of this case study will illustrate the use of projection as a medium as well as the use of varying projection surfaces as demonstrated in the work.

In a dance work which makes use of projection, the focus does at times appear to be on movement to such an extent that the projection is added on later, almost as an afterthought. *Flicker* is an example of a dance work which pushes the boundaries of projection as a medium through its innovative use of projection surface and design, which deviates from the norm. The norm in this

case refers to the use of back projection in dance performance, in which the performers are unaware of the projection occupying the performance space with them, to such an extent that if the projection were to be removed, the reading of the work would not be affected in any way. Within a South African context, it appears as if dance practitioners have become complacent in terms of utilising back projection in their works. For example, in light of the proposals presented in this research, one could argue that Tshwane Dance Theatre's use of projection in *15 Minutes of Fame Continued* (2011) seemed out of place in that it made use of a large animation of an animal projected behind the performers which they did not seem to interact with at all. Visually, there appeared to be no relationship between the video projection and the movement of the dancers. In light of the findings of this research it is clear that this performance would have benefitted greatly from utilizing a smaller projection area or having the dancer's interact with the projection in some way. Several dance works, within a local context, use back projection in their works. Is this manner of projection a conscious decision or is projection used in this way because choreographers are emulating the way projection has been always been used? The problem with back projection is that it separates the performer from the projected video to such an extent that the projection seems out of place. This research supports the use of new media in which every element of the projection, including the projection surface, should be intentional and carefully considered.

The use of the term the norm also refers to the handling of both the projector as well as the projection surface. Usually in performance, specifically dance performances which I have encountered, the projector remains stationary in relation to the projection surface. The relationship between the projector, projection surface and the physical body created by the performers in *Flicker* deviates from this norm. This will be explained in greater detail in this chapter.

Smoke and Mirrors as a Precedent to Flicker

Smoke and Mirrors was performed in May 2011 with *Flicker* following in September 2011. *Smoke and Mirrors* was conceived by Mazarakis and performed by The Forgotten Angle Theatre Collaborative. I was able to view the live performance of this work. The theme of *Smoke and Mirrors* was that of magic and illusion. Projection and projection surfaces were used in a way which enhanced the overall theme of magic.

In this work, projection was used in a manner which differed from the trend of back projection, which is characteristic of many dance works within a local context, using new media. It was this engagement with projection surfaces which made this work exciting to watch. The projection surfaces took the form of circular screens which could be opened and closed. These screens were created from windscreen visors which were cut and modified, and operate via a spring system which allows them to open and close (Mazarakis, Interview app. A p. 144). These surfaces also expanded and contracted when manipulated by the performers. This was partially inspired by Mazarakis' "...pet hatred...of people just being boring and using the back, the cyc¹⁷ as a projection screen" (Mazarakis, Interview app. A p.144). Mazarakis also described the use of back projection as dwarfing the performance, thus creating an "imbalance between the live performing body and the projected body" (Mazarakis, Interview app. A p. 144).

In *Smoke and Mirrors*, the movement of the projection surfaces creates a sense of momentum within the performance space, thus creating a

¹⁷ Short for cyclorama. In theater this term refers to the wall or drop at the back of a stage, used for background lighting effects ("Cyclorama Define").

relationship between the movement of the body and the movement of the projector.

In the work, the choreography, the projection surfaces and the video content inform one other, enabling the idea of magic and illusion to be explored through all facets of the work. The video content of the projections takes the form of a fake documentary in which the performers describe instances in which they had supposedly performed this work before (which is actually not true). This is meant to serve as a commentary on what the audience views as the truth (Mazarakis, Interview app. A p. 145). This contributes an additional dimension to the concept of illusion because the performance space and the orchestration of choreography is an illusion within itself. To expand on this point, an audience who attends a dance performance allows themselves to become swept into the seemingly effortless appearance of the choreography and the performance space. This work purposely highlights the façade behind the performance space through the medium of performance itself (Mazarakis, Interview app. A p. 145-146).

The choreography also involves integration of magic tricks, and the use of appearance and disappearance acts using screens. The choice of movement vocabulary is also informed by the theme and the content of magic and illusion. One of the elements of the movement vocabulary includes the use of the *bourrée*, which is a term used in classical ballet. Referring to the use of the classical *bourrée* in the work, Mazarakis states that, “Using the classical *bourrée* and looking at it balletically, the *bourrée* was about illusion. It was trying to create the illusion of gliding ... people don’t glide across the stage, yet we find a technique or technical capacity to create that illusion” (Mazarakis, Interview app. A p.148-149). This ultimately highlights the extent to which careful attention was paid to the work, down to the style of the choreography.

This description of *Smoke and Mirrors* demonstrates the manner in which choreography and technology consistently inform one another, particularly in terms of the theme of this work.

A key element of this work is that of the mobility of the projector and the projection surface. The mobility of the projector allows for various relationships between the projected image and projection surface to be created. This is illustrated in the manner in which the projected image seems to expand to fit the expanding and contracting screens, which were described earlier. Mazarakis comments on this effect stating that, “ I think in *Smoke and Mirrors* I really started freeing up the projector ... I really started moving it in the space and allowing that projection to happen elsewhere and so that was a development” (Mazarakis, Interview app. A p.150). The trend of the mobile projector is developed and taken further in *Flicker*.

The varying projection surfaces are also a significant development in this work. According to Mazarakis, it allows for the performers to be in control of both the projection surface and the projector (Mazarakis, Interview app. A p. 151). This allows the performer to be in total control of the space, which is significant given that this is not always feasible with the use of projection. Often it is the stage manager or backstage crew in control of the projector. By allowing the performers to be in control of the technical elements, Mazarakis enables them to have a greater connection to the technology. In this way she is able to integrate technology into the performance, enabling a direct physical relationship between the performers and the technology.

Having backstage crew members manoeuvre the technology creates a sense of dissociation between the new media element and the performer, which could cause a disjuncture between the two. Mazarakis’ approach to the use of new media in this work allows projection to be an active partner in the creation and execution of the work, with both forms having a direct effect on

one another. Mazarakis' approach to new media and the discoveries made in *Smoke and Mirrors* were explored and taken further in *Flicker*.

Flicker: Overview and Brief Description

This description of *Flicker* provides a sequential overview of the performance in order to establish a sense of the manner in which the performance was able to unfold. An in-depth explanation of the instances of projection will be provided later in this chapter. Images will also be provided and discussed later. Although the use of projection in this description has been divided into specific instances, it is important to note that during the performance the use of projection is not compartmentalised as it was intended to form part of the performance as a whole. While reading this description, it is also important to remember that a written description of a performance could never truly capture the essence and the experience of the live performance.

Flicker was conceived by Athena Mazarakis and directed by Gerard Bester (Mazarakis, Interview app. B p. 153-155). This work was also co-created by the cast members including Andrew Buckland, Athena Mazarakis and Craig Morris. Jenni-lee Crewe was the designer for the piece.

Before commencing with the description of the performance, it is necessary to provide a brief introduction to the relationship the collaborators have with one another. Morris and Mazarakis have history of working together since their studies at Rhodes University in Grahamstown, South Africa. Prior to *Flicker*, Mazarakis, Bester and Morris collaborated on a work entitled *Attachments 1-7* which was directed by Bester. Although Crewe had worked with Mazarakis prior to *Flicker*, it was her first experience working with Bester and Morris.

Flicker was originally performed at the 2011 National Arts Festival in Grahamstown, South Africa as part of The Arena Program (Mazarakis, Interview app. B p. 153.). The examination of this case study (of *Flicker*) is based on the live performances which I was able to view, which took place at the Wits 969 Festival in September 2011, at the Downstairs Theatre at the University of the Witwatersrand, Johannesburg.

This work makes use of spoken text and movement vocabulary, both of which are integrated with the new media element of projection. This work consists of a series of video blog entries which form the content of the video projections. The transitions between these video blog entries are interspersed with text spoken by the performers as well as movement.

Prior to the start of the performance, almost as a pre-set, the only objects on the stage are two sheets of paper which hang from the ceiling, as well as a large box. The projected video of a close-up shot of Buckland's eye is projected onto the box. Buckland begins speaking about the beginnings of performance and the idea of peeping through a hole. As the stage lights rise, Mazarakis and Morris collapse the box, fold and unfold it to reveal that the box with which they are performing is indeed no ordinary box, but one which can be manipulated and folded in a number of ways. Mazarakis and Morris finally fold the box into a flat surface on which they perform a duet.

During the duet the performers vocalise and physically express the insecurities and challenges associated with partner work, particularly the relationship which needs to be created between the two people. They experiment with a range of lifts and counter balances, while expressing their discomfort and initial distrust as to whether the other is able to provide sufficient support and hold them in a lift. Following this, they transition into the

first instance of the use of projection, through a combination of lighting changes and subtle movement of the performers. Mazarakis controls the projection surface (the box), which has now been folded to resemble the two pages of a book, side by side. Morris controls the projector by positioning it in such a way that the projected image of Buckland appears on the surface of the box. The content of this video projection involves Buckland introducing his role in the performance as a remote performer. Buckland's performance throughout the show is delivered through a series of video blog entries, without him ever being physically present for the duration of the show.

When Buckland's video ends, Mazarakis and Bester begin a dance sequence with the box, which involves them folding and unfolding parts of the box while engaged in a game of hide and seek, using the box to conceal and reveal themselves. This dance sequence ends with them standing in the box, which they have at this stage folded into the shape of a box. Then, just like a married couple would, Mazarakis and Morris begin arguing over petty household items. The argument then becomes one regarding keys, which Mazarakis' character has presumably misplaced.

The box again morphs into surfaces which the performers manipulate in order to look for the lost keys. For example, the performers fold the box in such a way that it represents a table and then look on top of it and under it for the misplaced keys. Facilitated by a lighting change, the second instance of projection involves Mazarakis controlling the projector. The content of this video projection is that of Buckland continuing his discussion of what being a remote performer entails. He speaks about his virtual presence in relation to the audience's experience of his presence at that moment. This video is projected onto Morris' upper body. Morris then shifts out of the path of the projection and allows the palm of his hands to act as a projection surface for the video. Morris once again shifts out of the path of the projection, and reveals

the projected image of Buckland by moving his arms up and down slowly at first, and then rapidly. Buckland's video is revealed through Morris' movements.

Through a seamless transition of lighting and the performer's movements Morris now holds the projector and Mazarakis controls the projection surface of the box. The content of the projected video is that of Mazarakis reflecting on things which she wanted in life. While this video plays, Mazarakis manipulates the box, like the pages of a book, unfolding and turning its pages. This is followed by a lighting change and Mazarakis and Morris return to their sequence involving the search for the lost keys. This moves into the next projection in which Mazarakis controls the projector and Morris uses a long sheet of paper as the projection surface. This is a projection of Buckland in which he discusses the things that he has lost in life. This then moves into another projection where the video content is that of Morris, like Mazarakis, discussing the things he had once thought he wanted in life. While this video projection takes place, Morris folds the projection surface of the paper smaller and smaller, until the projected video falls onto his clothes. The lighting changes and Morris and Mazarakis return to their argument regarding the lost keys. Mazarakis starts retracing her actions in order to find the lost keys.

This then moves into the next occurrence of projection, in which Mazarakis controls the projector and Morris' body acts as the projection surface. The video content of this projection is that of Morris recalling the things in life that he does not have time for. While this takes place Morris shifts his head, which acts the projection surface, subtly to the side and then to face forward. This then shifts into a projection of Buckland, with Morris controlling the projection surface of paper and Mazarakis controlling the projector. The content of Buckland's video blog centers on the role of the performer and the control which the video offers of being able to capture, store or redo any particular moment as one pleases. The performers return to the sequence

involving the misplaced keys, which then moves into the next projection in which Morris controls the projector and Mazarakis holds a large sheet of paper which is the projection surface. This video projection is a video of Buckland which emerges from a pixilated image of him. This then moves into a video of Mazarakis in which she recalls all the things that she has lost. While this video plays she begins tearing at the sheet of paper which forms the projection surface, and later Morris begins tearing at the projection surface as well. At the end of this video the performers return to the sequence involving the lost keys. This then moves onto the last projection, in which Morris controls the projector and Mazarakis manoeuvres the box as the projection surface. The content of this last video projection is that of Buckland discussing the ephemerality of performance, and letting go of the need to video a particular moment in time. The lighting then changes and the performers return to the sequence of balances and lifts, performed at the beginning of the work.

New Media Elements: In Relation to Intention and Content

This work developed through the devised approach to working. This creative process is driven by a strong concept, and the manner in which that concept manifests itself is initiated and found through a process of improvisation and play (Bicât and Baldwin 7). According to designer Jenni-lee Crewe, "...working particularly with these people it's not choreographed its devised...it's not about making a series of movements, but rather about a concept and how you unpack that concept physically" (Crewe, Interview app. C p. 167-168).

Mazarakis' concept was clear from the beginning; she wanted to work with new media, specifically the projector (Mazarakis, Interview app. B p.153-155). Mazarakis admits that new and interactive media elements are a stylistic

component of her works and that her working process is driven by the need to find new ways to work with these media in order to add different layers and a new dimension to a work (Mazarakis, Interview app. B p. 153). This indicates her awareness as a choreographer and performer of the implications of the form.

The starting point for this work was the concept of the shifting of time and “time running out” (Mazarakis, Interview app. B p.153). Mazarakis’ concept was that of the exploration of new media and projection and “...manipulating...projections, playing with the body and projected images” (Mazarakis, Interview app. B p. 153-154). Regarding the medium of projection Mazarakis states, “... that’s something that I knew that I wanted to work with, and really explore the idea of surface more and take it a step further from what I had done with *Smoke and Mirrors*” (Mazarakis, Interview app. B p. 154). Mazarakis’ drive was to work with projection and images in relation to the body and its form. Mazarakis had a clear intention to work with projection, and the decision to make use of new media was deliberate and well-executed. This intention was constantly present in the creative process, guiding the designer, Jenni-lee Crewe, informing the choreography and the direction of the work. Regarding this Crewe remarks, “... that was part of the brief that we needed projection surfaces...” (Crewe, Interview app. C p. 169). Based on discussions with Bester, Mazarakis and Crewe, it is evident that the intention to use new media was not only made clear and emphasized from the beginning of the working process, but also that it continued throughout their working process. It is this engagement with new media which is evident from the beginning of the creative process which is called for in this research.

Mazarakis’ decision to use video projection in this work allowed the technology to develop with the choreography. In *Flicker*, the experimentation and varying projection surfaces shaped the direction of the choreography, as

well as the content of the work. The video projections in this work engaged with the concept of “time running out” (Mazarakis, Interview app. B p.153). The projection surface in relation to the content of the projected image in this work enhanced and expanded on the concept of time.

The projection in *Flicker* is used as a layer with which to further enhance the development of the work. The decision to have Andrew Buckland as a remote performer, a projected presence, was borne out of Mazarakis’ desire to work with him. Buckland was physically unable to take part in the production however, and this was solved by having him perform in the form of a projected presence (Mazarakis, Interview app. B p. 157-158). One of the complications in this work was located in trying to find a link between the remote presence of Buckland and Mazarakis’ and Morris’ live presence on stage (Mazarakis, Interview app. B p. 154-155).

Buckland is introduced to the audience as a remote performer at the beginning of the show, through the medium of projection. This introduction is made in the form of a close up of Buckland’s eye which is projected onto the projection surface of the multifunctional box. The content of this video relates to the idea of peeping through a hole, in anticipation of a performance, in order to establish the size of the audience. This video entry also relates to pre-performance jitters, as well as the feelings and experience associated with it.

The performance starting with this video projection is noteworthy, because Buckland’s words can be viewed as a reflection of the feelings which Mazarakis and Morris are about to experience as the show begins. The presence of Buckland’s video as well as the content of his video blog entries allude to what is physically happening in the live performance space with Mazarakis and Morris. This is a thread which runs through the entire show and

is important because a relationship is created between Buckland's remote presence and the live performers onstage.

The thread of the video blog which is introduced through Buckland's character is carried through to the video blog entries of Mazarakis and Morris. The content of the video projections all deal with the element of time. This establishes a link between the content of the projections in that they are able to act as components which enhance the work as a whole. Although *Flicker* is not an interactive media based work, it makes use of a networked environment as demonstrated in the form of Buckland's presence as a remote performer.

The physical, stylistic and choreographic choices in this work were informed and driven by the element of new media. Mazarakis and Morris initiated the creative process through a physical exploration using the body. This then means that they were physically able to establish the framework for the choreographic movement. Following this, the projector and the camera were introduced into the rehearsal space. According to Mazarakis, "... we tried to find the work, the physicality of the work ... and once we started understanding what it was we started to introduce those devices..." (Mazarakis, Interview app. B p. 155). Due to the fact that this work is intended as a collaboration between movement and technology, the approach to the choreography in *Flicker* was clear from the beginning and guided the direction of the work.

The design elements in *Flicker* also informed the conceptual development and the choreographic movement. The element of paper was a key stylistic and functional element which was guided by the brief given to Crewe; that the set had to be suitable for projection as well (Crewe, Interview app. C p. 166-169). It was through the devised approach to working that the medium of paper and the projection surface of the box emerged as the set. It is important to take into account that the idea of the box and the paper as creative

solutions did not emerge immediately; the idea emerged from brainstorming sessions and improvisations with prototypes created by Crewe (Crewe, Interview app. C p. 165).

The multiple possibilities of paper were made through improvisation and discovery. This relates to the assertion made by Bicât and Baldwin (9) regarding devised work that “discoveries made in rehearsal can lead to unexpected outcomes.” The creative process in this work involved Mazarakis and Morris projecting unrelated content onto paper (Mazarakis, Interview app. B p.155-156). This process in the initial experimental phase led to various discoveries. This willingness of Morris and Mazarakis to push the boundaries of the projected form by allowing the projection surfaces to shift and change was key to the development of this work. Crewe describes this process in the following way: “... we would be in rehearsal and we would have this material with us; paper and cardboard and then a projector and the dancers’ bodies and so then we would try things. “What happens if?” or “You know that question.” So we would just keep trying different things and so some things worked and some things didn’t” (Crewe, Interview app. C p. 166).

Regarding the element of paper Mazarakis states, “ ... just taking the idea of paper, we then played with projecting different things on paper. And we started to think, ‘Well what would work? What would the content be?’ It was really the other way around with this piece to really play with the idea of trying to engage with set and projection ... ” (Mazarakis, Interview app. B p.156). This statement indicates that projection as a form provided a starting point for this work, as well as an impetus for play and experimentation. What Mazarakis’ statement also indicates is that the projection was not forced to fit the structure and content of an already existing choreographic work. The possibilities of the projection were allowed to inform the content of the work. This demonstrated an interesting approach to working because it grounds the experimentation of

the technology in the body. This is ultimately on par with the manner in which a dance performer's mind works, in that they approach work from a place of physical exploration. Hands-on experimentation with the projector allowed the performers to find the physicality of the projector and the projection surface, thus making these elements their co-performers, as it were.

Based on the statements made by Crewe and Mazarakis, it is evident that improvisation and play were pertinent to the creative development of this work and the creative solutions which were discovered. This addresses Richard Povall's ("A Little Technology") statement regarding the necessity of an "experimental approach" in collaborations between dance and technology. This case study further supports the proposition of this research for experimentation and improvisation to be viewed as crucial to the creative process.

It would appear that this initial experimentation with the form, free from the initial constraints of content, freed up the projector and allowed for the performers to really play and improvise with the medium itself. It could also be argued that this allowed for the emergence of possibilities, in that during the initial stages of the development of the work "...the technology was another player in the improv. room" (Mazarakis, Interview app B. p. 159), and as the work developed, so did the projection and its possibilities. There was therefore a "parallel development" between the technology and the choreography during the creative process (Mazarakis, Interview app. B p. 156).

Regarding *Flicker*, the parallel development of the projection and the choreography allowed for the projection and the projection surfaces to be used in such a manner that they did not overpower the movement. This successfully illustrates the manner in which new media and choreography should develop in a work.

What this research aims to highlight is that the projector needs to be treated not only as a functional device but as another active component in the creative process; an active component which operates in conjunction with the projection surface. In this manner a connection is formed between the dancer and the medium.

Flicker makes use of pre-recorded video for the content of the video projections, and in this way comments on video as a form and uses it to address the main concept of time and the shifting of time. Pre-recorded video as a medium allows for moments to be captured and replayed. The medium of video also allows for the manipulation of time, in that certain sections and aspects can be created and formatted in order to create a desired effect (Maletic 3). Morris and Mazarakis deal with the notion of time in their video blog entries in which they address the things in life for which they do not have time as well as the things they thought they wanted in life. The content of Buckland's video, in contrast to the video entries of the performers, addresses the idea of time within the performance space itself. He discusses the absurdity of performers wanting to replicate moments of a performance which had occurred previously. The contrast between the loss of the present moment and the capturing of a moment in time in the video is also expressed through the bodies and actions of the live performers. The live enactment of losing keys expresses the sense of loss. In *Flicker*, video is not only used to house content, but the form and mechanism of the pre-recorded nature of video is used to enhance and strengthen the concept and content of the work.

What this case study demonstrates is not only a link between projection and projection surface, but it also addresses the need for attention to be paid to the nature of video as a medium.

Mobility of the Projector: In Relation to Content and Projection Surface

Throughout this work the projector was not a stationary object; it was moved and manipulated in conjunction with the projection surface. Mazarakis was clear regarding her intentions in that she wanted the action and stage illusions to be created by the performers in order that they were always in control (Mazarakis, Interview app. B p.156). The projector served as an active element throughout the creative process of the work as it informed the choreography and movement of the performers.

The two key design elements in this work are the flexible multifunctional cardboard box and the sheets of paper that were hung from the ceiling. During the production these are used as both props and projection surfaces. Throughout *Flicker*, Mazarakis and Morris alternate between controlling the projector and controlling the projection surfaces of the box and the paper in order to create a unified image. The mobility of the projector in this work allowed for greater control over the projected image. According to Mazarakis, it is the mobility of the projector in conjunction with the movement of the body which creates the relationship between body, image and projection (Mazarakis, Interview app. B p. 164). Each element begins to interlink, to such an extent that one cannot exist without the other.

This is demonstrated by the manner in which Mazarakis controlled the projector and the projected image, in relation to the projection surface of Morris' body. In this instance, Morris' physical movement appeared to be in dialogue with the content of the video projection. The content of the video projection is that of Buckland discussing the characteristics of himself as a remote performer and the conundrum present in being present through his absence. The link between body, image and projection is demonstrated by the way in which this projection unfolds. Mazarakis positions the projector in such a way that the image of Buckland is reflected on Morris' body and on his clothing.

This is followed by a moment in which Morris steps out of the pathway of the projection, so that the image of Buckland ceases to be visible. Morris then makes the image of Buckland appear in the palm of his hands as a result of both his and Mazarakis' movements. It appears as though he catches Buckland's image in the palm of both hands. In this way, Morris is able to create and form the image through the movement of his body in relation to Mazarakis' movement of the projector and the projected image.

Morris then drops his arm and the image disappears again. As Morris slowly begins to move his arm up and down in the pathway of the projected beam, the speed of his movements increases and as he does this the image of Buckland begins to appear through his arm movements (see fig. 14). The movement of Morris' arm causes the projected beam to flicker and it is this combination of movement as well as the flicker of the projected image which enables the image of Buckland to appear. According to Mazarakis, "... it is the movement of the performer that allows the image to become, to manifest" (Mazarakis, Interview app. B p. 159). This also resonates with the idea of time and timing which runs through the show, because Morris has to move his arm at a specific speed. Mazarakis expands on this when she indicates that, "The image is not there if his arm is not there, his whole arm can't contain the image and yet, if he moves his arm rapidly enough it creates a surface which becomes a projection surface" (Mazarakis, Interview app. B. p. 159). It is therefore possible for one to begin to identify the link between the timing of the moving body and the timing of the pre-recorded video as well as the manner in which these concepts are able to begin to connect with one another

Morris' body was also used as a projection surface for his video blog entry in which he describes the things in life for which he does not have time. Mazarakis controls the projector and the projected image onto the projection surface of Morris' bald head. Throughout this section, Morris slowly moves and rotates his head to the side and in doing so the projected image of himself is

projected onto his bald head and face (see fig. 15). What is demonstrated in this use of projection is a continuous negotiation between Mazarakis, who is controlling the projector and Morris, whose head acts as the projection surface. The moving body then becomes the projection surface.



Fig. 14. Craig Morris, *Flicker*, Sep. 2012. Photo Credit: Christo Doherty.



Fig. 15. Craig Morris, *Flicker*, Sep. 2012. Photo Credit: Christo Doherty

The significance of all these instances lies in the manner in which the moving body is able to become a projection surface, and a site which activates the projected image. The use of projection on the moving body in *Flicker* pushed the boundaries of the form of projection in that there was a dual movement of the technology and the body in order to create an image. This is significant because, "... suddenly the projection is dictating the speed of the movement, it's dictating the choreography, the kind of movement. In order to make the image manifest, you have to change your movement, or you have to create specific movements in order to have a true collaboration of image and movement" (Mazarakis, Interview app. B p. 159-160).

In the examples mentioned in Chapter One, the moving projector in performance was demonstrated in the experiments conducted at the Judson Church. In contrast to this, *Flicker* uses the moving body in order to enable the appearance of the projected image. Therefore, in *Flicker*, the projector, the projected image and the body are active through a process of movement.

The mobility of the projector in conjunction with the projection surfaces also enhanced the concept of time throughout *Flicker*. The physical manipulation of the box and the paper by Mazarakis and Morris point to imagery of time passing or time disappearing. An example of this is demonstrated in the instance in which the box was used as a projection surface for the video blog entry of Mazarakis in which she lists the things that she wanted in life. Here the projector and the projected image are controlled by Morris and the projection surface by Mazarakis. As the content of the video unfolds, Mazarakis manoeuvres the box in such a way that the flaps of the box drop from top to bottom and then open from left to right, resembling the turning of the pages of a book. The flaps of the book dropping down could be regarded as an allusion to a previous time. In the same way that a story progresses as the pages of a book turned, the content of Mazarakis' video blog entry points to time that has passed; to thoughts which once existed but may not exist

anymore. This illustrates the relationship between the technology of new media, the content of the work and the physical action of the body.

The use of paper as a projection surface shifted according to the content of the videos featuring Mazarakis and Morris. The physical interaction between the performers and the paper corresponded to the content of the video blog entries of Morris and Mazarakis. Paper was used as a projection surface for the video blog entry in which Morris listed the things that he thought he wanted in life. For the duration of this video blog entry Morris begins to fold the sheet of paper, making the projection surface smaller and smaller until the paper is scrunched up in a ball. This action of making the projection surface smaller in size also parallels Morris' perception of the things he wanted in life altering and changing completely. This illustrates the use of paper as both a projection surface as well as a design element which is conceptually linked to the content of the work.

The projection surface of paper was also used for the video blog entry in which Mazarakis lists the things that she has lost in life. In this instance, it is Morris who controls the projector and the projected image and Mazarakis who controls the projection surface. This is the one instance in which the projector is then positioned, and Morris begins to tear the projection surface, while Mazarakis tries to keep and hold onto the sections that have been torn while maintaining the projection surface (see fig. 16). Referring to this, Mazarakis states that, "... Craig starts tearing; again he's tearing my things. It's not my wanting to lose things, but things that are really kind of being taken away from me" (Mazarakis, Interview app. B p. 162). To expand on this Morris' action of tearing the projection surface, while Mazarakis tries to maintain it can be said to elicit the feelings of the sense of loss, the helplessness or desperation one feels when trying to recover after a loss of any kind. The concept of time is addressed though the manipulation of the projection surface in conjunction with the movement and content of the projection.



Fig. 16. Athena Mazarakis, *Flicker*, Sep. 2011. Photo Credit: Christo Doherty

Time is also addressed through movement and choreography, as well as the pace of the movement of the performer who is manipulating the projector. In this way the manifestation of the projected image bears a direct relationship to the choreography. In *Flicker* the way in which the image is viewed on the projection surface is influenced by the quality of the movement of the performer controlling the projector (Mazarakis, Interview app. B p. 164).

Their movements have to be continuous and controlled, in order to prevent the appearance of a shaky image. Therefore, the mobility of the projector adds a new dynamic to the movement language of the work, in that the performers are then involved in a dance with each other as well as with the projector and the image (Mazarakis, Interview app. B p.164).

This work becomes less about the spectacle of choreographed steps and more about the dialogue which is formed between the content, movement and projection. In this work, the projector functions in relation to the projection surface. It is important to note that the projector cannot function unless positioned and manipulated in relation to the surface. In turn, the manipulation of the projection surface also engages with the content of the text spoken by the performers. From the perspective of a dancer, experimenting with the mobility of a projector, which is a device that is usually stationery and not designed to move around, is both a risk as well as a challenge within which potential possibilities are created. This will be discussed in greater detail under Challenges Experienced Working with New Media in the Creation of *Flicker*.

In terms of movement and choreography, the moving body yields possibilities for future choreographers in that the idea of movement begins to filter into the operation and the mechanism of the technology, as was illustrated in *Flicker*. What begins to emerge with this work is that the content informs the

manner in which the projection surface is manipulated. The mobility of the projector also illustrates that the deviation from back projection is possible. In this work it is as if the image and content become performers of sorts and the movement of the projection surface introduces a new type of choreography. As a result, collaboration between movement, projection, projection surface and content becomes highly visible in this work.

Collaborative Process: In Relation to the Creative Process in *Flicker*

The collaborative process employed in *Flicker* involved constant conversation and improvisation between the performers, designer and director. According to Gerard Bester, “...In a sense it started then becoming more of a collaboration through the process and we [with Mazarakis] would meet on a Sunday night to sort of have these mad kind of discussions about where the piece was going” (Bester, Interview app. D p. 173).

In terms of authorship of the work, it is important to distinguish between the fact that Mazarakis conceived the work and Bester directed it. This joint authorship of the work means that while Mazarakis conceptualised the work and brought the creative team together, Bester facilitated the creative process through his role of director in guiding the content and its direction without losing sight of Mazarakis’ style of working with digital-technological elements.

The joint authorship of this work allowed for a constant conversation and brainstorming between them as they tried to find the direction of the piece. In a devised work it is important that the director has a clear idea of the direction in which the work is headed in order to steer the creative process (Bicât and Baldwin 9). For this reason it becomes essential to find a focal point. Ultimately, Bester narrowed the ideas down to the focus on Mazarakis’ references to “disappearances beneath their feet” (Mazarakis, Interview app. B

p. 155). According to Mazarakis, "... the idea of disappearance and the idea of loss became the driving force..." (Mazarakis, Interview app. B p.155).

This concept was carried through all aspects of the work from the design to the movement and the projection.

In *Flicker*, the devised approach to working allowed for open communication between the collaborators. As the work evolved and developed, a sense was evident of allowing the direction of the work to change as new discoveries were made during improvisations. Bester initiated improvisation sessions by, for example, asking the performers to create lists of things which they thought they wanted in life and things which they had lost. According to Crewe, "Gerard was very amazing in that he keeps asking questions...I mean he's actually like tireless in his questioning ... 'what if we did this? What if'..." (Crewe, Interview app. C p. 167). This illustrates that there was constant questioning as well as an engagement and willingness to try new and different things in the creative process. It is this questioning that allowed for the thorough integration of choreography, content and technology in this work.

Crewe contributed a number of ideas for possible designs for the piece. Even though her role was that of the designer she states that, "...other people would filter in... So Craig would say, 'What if you did this?' You know what I mean? So even though you have your roles there's a sense of you're all working towards the product, you know, and the process" (Crewe, Interview app. C p. 168). This creates a sense or image of a creative space and environment which is actively shared between the members of the collaborative team. It is important to note constant conversation combined with physical experimentation and action which ultimately enabled the creative process to develop in the way that it did.

The devised approach to working also allows for ideas that do not work to be discarded, that is, to let go of things that do not work and to move on to a new improvisation and thereby continue to find creative solutions. The director plays a significant role in this process. Bester describes as follows, “Well, part of being a director and part of the process of directing is a lot of editing. Not being precious. Allowing yourself to constantly edit. Throw out” (Bester, Interview app. D p. 175). Designer Jenni-lee Crewe shared the same sentiments, “...It was almost like a process of reduction ... I think that happens a lot when I work with Athena. We start with lots of ideas...” (Crewe, Interview app. C p. 165).

A prior working relationship between collaborators has its advantages in that it influences the creative process of a work as well as the nature of the collaborative relationship. A long-term collaborative relationship exists between Bester, Mazarakis and Morris. Crewe on the other hand, had worked with Mazarakis before, but not with the other members of the collaborative team. Having a prior working relationship allowed for what Crewe describes as, “speaking the same language” (Crewe, Interview app. C p. 170). This point of understanding between collaborators is pertinent to the creative process. A prior working relationship allows for an environment of trust which opens itself up for play, experimentation and risk-taking owing to a sense of safety which characterises the space. Participants feel free to do absolutely anything as the boundaries of uncertainty and self-consciousness do not exist. Mazarakis comments on the idea of trust stating that, “...Craig and I have worked together for twenty years now since first year [at Rhodes University], so we have an understanding; there’s immediate trust, which is no small thing” (Mazarakis, Interview app. B p.158). The element of trust is important within a collaborative relationship in that it shapes the efficiency of the relationship, because it eliminates the necessity for the collaborators to have to familiarise themselves with each other’s working processes. This was clearly the case in *Flicker*, because in dance, when working with a partner, the performers’ ease with one

another is visibly reflected in their relationship onstage as well as in the execution of the content.

The choice by Mazarakis to have Bester direct the work was motivated strongly by the element of trust. According to Mazarakis, "... I trust him ... more probably than anyone else in the country, in terms of guiding the process, and I trust his artistic integrity..." (Mazarakis, Interview app. B p. 154). When referring to his role as director as well as to the capacity to provide an outside perspective on what was taking place visually, Bester admits that he and Mazarakis would alternate between seeing what was onstage, "...We would constantly swop, so I would say, 'Athena, I think this is really working' and then I would hold the projector and say, 'Look at this.' So with Athena as the main author it was very important for her to see how the production was working visually" (Bester, Interview app. D p. 175).

In terms of having a prior working relationship there exists a danger of reverting back to the same pattern of working and this is something that Bester, Mazarakis and Morris were constantly conscious of. Having collaborated on *Attachments 1-7*, they were also conscious of not falling back on their earlier working patterns. According to Mazarakis, " we were very conscious we didn't want to repeat *Attachments* ... so that was kind of a driving force to make sure that it was something else" (Mazarakis, Interview app. B p.158). In light of this it becomes clear that trust within collaborations also has its disadvantages in that the performers run the risk of reverting to their old working patterns. This is of course highly problematic in that the essential purpose of collaboration is to bring people with various skills together in order to create something new.

The nature of the collaborators involved in a work is also highly influential in enabling a favourable outcome of the work, and in this manner

plays an important role in the direction of the creative process. When referring to *Flicker*, for example, Crewe, the designer, comes from a history of physical theatre and performance, and therefore has an understanding of the physical body and the manner in which it is able to move in space and occupy space. She agrees that her performance background influences her method of design and thought process (Crewe, Interview app. C p. 170-171). This is influential to this particular piece in that Crewe understood how important it was that anything the performers needed to lift in the space had to be light and easy to manoeuvre. In addition, she is also able to think and conceptualize her work in relation to the body and not solely for aesthetic purposes and views her working process and philosophy from the perspective that, "Everything - and all objects and things that are in space or even in the space itself is always in relation to the body. " (Crew, Interview app. C p. 170). Therefore, having a designer who understands this is advantageous because the transitions between the projections and the projection surfaces in *Flicker* would not have been so seamless if the design elements had been complicated, heavy or difficult to move.

As mentioned, the approach to collaboration within the devised method of working, allows for discoveries to be made (Bicât and Baldwin 9). This process of discovery through experimentation was important within the creative process of *Flicker*. However, it was the open relationship that existed between the collaborators, and their familiarity with one another which created the space for these discoveries to be made. This ultimately highlights the essential point that collaboration extends beyond bringing people with different expertise together; it is indeed the collaborative environment as well as the relationship between the collaborators which guides the creative process. The success of the collaboration rests on whether there exists constant conversation and open communication between the collaborators. This provides the impetus for the movement and all other aspects of the performance.

Challenges Experienced working with New Media in the Creation of Flicker

Having examined the advantages of using new media as well as the possibilities it offers in terms of this specific case study, it is also important to take into account that working with new media also poses certain challenges. This is primarily due to the fact that the projector, which is normally a stationary object, was being moved around. This caused various technical problems such as the bulbs blowing not only during rehearsal, but during performance as well. Mazarakis recalls, "In our run at 969 [Festival] the projector broke ten minutes before the end of the show, so we had to improv. which was hard, because it really relies on the projection. The last three videos we had no projector; we only had sound" (Mazarakis, Interview app. B p. 160).

Technical difficulties cannot be avoided. Certain questions are raised in the event of such an occurrence, namely: Where does it leave the performers? What are the allowances made for such situations? Thanks to their familiarity with one another, Mazarakis and Morris were able to improvise when the technology stopped working, and thankfully this only occurred within the last ten minutes of the show (Mazarakis, Interview app. B p. 160). For the later performances at the 969 Festival, Mazarakis was able to set up a second projector as a backup in the event that technical difficulties occurred with the first projector (Bester, Interview app. D p.179). Choreographers tend to avoid projection and new media, and with good reason, as it involves a great deal of planning and consideration for technical difficulties. This is in complete contrast to the manner in which traditional choreography is approached, in that everything relies on the perfect execution of the performance with even the possibility of error being out of the question. Working with new media therefore calls for a different approach to the choreographic process; one also has to

prepare the performers for how best to respond in the event of an error of any kind.

Recapturing spontaneous moments in devised work can become problematic. Despite its advantages in terms of its capacity to allow for play and improvisation, the devised approach to working is also tricky in that recording improvised moments becomes difficult. A familiar case is that of an improvised scene enacted by the performers who are then unable to remember exactly what they did because they were driven by a particular moment. Bester comments on this difficulty indicating that, “It’s always tricky because you have wonderful improvisations, then to try and record it, then to try and script it, and then the process of then re-rehearsing it to create what was initially found, and that’s always the hard part of the process.” (Bester, Interview app. D p.173).

This then, serves as an ideal illustration of the importance of video as a tool to record and review rehearsed material when using the devised approach to creating work.

Having Buckland as the remote performer also presented a challenge initially, in that he was working in his own space away from the other performers. Bester recalls, “ ... In the beginning it was difficult with Andrew. We had to set him questions in the beginning. He was improvising alone in his office, in front of the computer. Eventually Athena then scripted text for him and suddenly that seemed to help” (Bester, Interview app. D p. 178). There was a risk involved in contrasting the video presence of Buckland with the live performers and in attempting to find links between the two. In works which incorporate new media, there is always some form of video presence together with the live body onstage. What becomes challenging then, is attempting to find a way to link pre-recorded information with the live performing bodies. The challenge itself lies in the form of the link between the content of the video and its relationship to the performing body as it could either be conceptual or

physical. In *Flicker*, the content of the video projection corresponded directly to the actions of the performers. This can be seen for example, in the segment in which Buckland's projected image is made visible through the rapid movement of Morris' arm. The content of the video projection is that of Buckland speaking about his presence in the show, and at one point he says, "I'm here, but not really here." The link between the pre-recorded information and the live performing body here is one in which the action of the physical body, Morris' body, is in direct relationship to the content of the video projection. The relationship between the projected image and the live body can be understood through sections of Matthew Causey's work entitled *Theatre and Performance in Digital Culture: From Simulation to Embeddedness*, as well as through Steve Dixon's concept of the 'digital double' (*Digital Performance* 241-244). Causey (16) interrogates the relationship between the live body and technology, and from his work, two distinct points are relevant to this research. These points refer to his description of technology as having the ability to reconfigure the physical body, and the convergence between the human and the machine, with the machine dominating the human subject. The latter component of Causey's argument regarding the machine dominating the human subject is a point which this research is arguing against. Through the use of case studies, Causey (17) addresses what he refers to as the *double*, as the instance in which "a live actor [performer] confronts her mediated other through the technologies of reproduction". In *Flicker*, the performers come face to face with their personal stories which are projected onto the projection surface they were holding. As previously discussed, Mazarakis held the surface onto which her video blog was projected, thus creating a direct relationship between her own body and her mediated self. Similarly Morris held the surface onto which his video blog was projected.

Causey refers to the televisual as an "agent of transformation, altering the manner in which we represent and look at narrativity, subjectivity, spatiality and temporal images" (38). In *Flicker* it was not solely the narratives expressed

through the video blogs, but also the movement of the body in relation to the projection surface that facilitated the viewing of the narrative. I would like to supplement Causey's statement by indicating that in the case of *Flicker*, in addition to the projected image, the projection surface also played a significant role in the manifestation of the projected image. As discussed throughout this chapter, the movement of the performers' bodies ultimately influenced the reading of the projected image, as they had to position it in relation to the handling (by the other performer) of the projection surface.

As discussed in Chapter Two, Dixon elaborates on this by grouping his concept of the digital double into four categories, as explained in Chapter Two, the reflection, the alter-ego, spiritual emanation and the manipulable mannequin. The notion of the reflection is most applicable to *Flicker*, as the characters interact directly with their reflection. One could also argue that due to the character's portrayal of their innermost feelings in the form of what they had though they wanted in life, that there is also the presence of the alter-ego. As mentioned earlier these categories, particularly the alter-ego and spiritual emanation, are limiting in that they are subject to the opinion of the viewer. Furthermore they impose ways of viewing and interpretation onto the performance. The concept of doubling however does, provide an entry point into the understanding and navigation of the live performer and the projection surface.

Film editing also plays an important role in the development of new media works. Editing is also involved in getting the projected image to fit into a projection space in order to guard against image spill (Mazarakis, Interview app. A p. 151). Video editing therefore becomes another tool in the choreography, in that it allows for many takes as well as the cutting and splicing of information to create the desired effect. The video projection and its relationship to the performance space are important. In works using projection,

video is as much a part of the choreography as the editing process. The content and the manifestation of the video need careful thought as well as a thorough edit.

Concluding Points:

The detailed discussion of the case study of *Flicker* has various important points. This case study served as an illustrative example to support the argument of this research for the use of new media. What this research argues for is the necessity of a link between projection and content. In this case study, the link between content and projection surface was demonstrated by the manipulation of both the projector as well as the projection surface. This case study was particularly significant because it presented surfaces of projection which indicated a deviation from the use of back projection. Also of particular significance was the use of the moving body to activate the projected image and make it visible. This addresses the earlier discussion in the chapter devoted to an examination of new media, regarding the use of projection in dance and the necessity for it to be inspired by and be a reflection of the movement of the body. The constant presence and awareness of new media from the beginning of the creative process in *Flicker*, also supports the argument of this paper that new media use should be carefully considered before its implementation in a work. In *Flicker*, the constant experimentation with this form by members of the collaborative team, allowed for the creation of a piece which consciously took the risk of making the projector mobile. The mobility of the projector created a new kind of mobility in the bodies of the performers.

Conclusion: Closing Points and Recommendations

What became highly apparent during the course of this research was the lack of information pertaining to South African dance works which make use of new and interactive media, exposing an obvious need to write about the relevant South African works. In addition, archives of South African dance works need to be created, in order to increase and ensure accessibility of video footage of works. This problem could, for example, be solved if choreographers, who have web pages, were to have video excerpts of their works on their respective web pages. Out of all the South African artists, Jeanette Ginslov's website proved to be the most comprehensive in that her works were chronologically arranged with descriptions of the respective works as well as video excerpts from the performances.

A conscious effort needs to be made by dance practitioners to document their finished works and make them accessible, to prevent the works being lost. Developments concerning choreographers who work with technology should be documented as well, and it is important to have these records available. While conducting this research I came across short articles and reviews of works, but more needs to be written concerning the collaboration between choreography and technology in order to establish a discourse on this subject.

Furthermore, in order to ensure growth of the use of technological forms in dance in South Africa, it is necessary for the drama departments in tertiary institutions to actively expose their students to interactive media technologies within a choreographic context. Due to the expensive nature of interactive technologies, it would clearly be unfair and unrealistic to expect the drama department of every university to invest in a technology lab. This problem could, for example, be solved by creating an awareness of the

possibilities of interactive technology. This could be done, for example, by hosting intensive skills workshops in which interactive artists introduce choreography students to the mechanism of an element, such as motion capture, for example. There exists a need for choreography students to be made aware of interactive media technologies in particular, because new media and video projection are already widely used in choreographic forms. Interactive media technologies could offer great potential for the development of choreographic works. The University of the Witwatersrand (Wits) offers courses in its Digital Arts Department at both an undergraduate as well as a postgraduate level. The undergraduate courses allow for a practical Digital Arts semester course to be taken as part of a degree within the Wits School of Arts. These courses equip students with the fundamental skills necessary to use and create work with digital and interactive technologies. Students are free to create whichever works they wish using the skills which they have acquired. This provides the ideal starting point from which to expose students from various disciplines to digital and interactive technologies.

In order for the development of technological forms to occur in South African dance, the ideal scenario would be one in which the choreography departments of tertiary institutions acquire specialized digital choreographic laboratories. Here, the focus would be on the use of technology towards the development of choreography. This implies that focus would then be directed toward exploring the potential of the body through the use of software such as Isadora and Max/MSP. Additional focus would be on the creation of wearable technology using a wearable circuit such as the LilyPad Arduino¹⁸. In this manner, choreography students would be able to directly test the effects of the technology on the choreography. Likewise, students would be able to directly test the effects of their momentum on the interactive technology in the

¹⁸A LilyPad Arduino is a microcontroller board developed and designed by Leah Buchley, for the use in the creation of e-textiles. ("LilyPad Arduino")

rehearsal space. A specialized digital choreographic laboratory would allow for this. In order for the development of such a facility to occur, resources and funding are needed and intensive and thorough planning is required. Taking initial steps to expose choreography students to interactive media technologies would provide a starting point for creating greater awareness of the possibilities of the form within a choreographic context.

Having discussed collaboration extensively, this research would like to emphasize that the sole combination of two forms does not qualify a work as a collaborative one. It is of utmost importance that there exists a seamless combination of technology and choreography, in order that neither one could be said to overpower the other in the performance space. The two case studies examined in this research provided an illustration of the merger between technology and choreography. Through the collaboration involved in the creative process, these works were able to integrate content with technology and choreography.

The mere addition of projection to a dance work does not qualify it as a new media work. Similarly, the inclusion of interactive media in a dance work does not qualify it as an interactive media work. It is essential that the technological forms are carefully considered, as well as the manner in which they are able to inform the choreography. The use of technological elements in the work cannot be added at the last minute as was highlighted through the two case studies. In both *Coming To* and *Flicker*, the interactive and new media elements respectively were involved in the conception of the work from the outset. The technological elements were allowed to develop alongside the choreography.

Different implications are involved in new and interactive media respectively. The use of interactive media involves the negotiation between unpredictability and control, while new media on other hand, is concerned with the elements of projection and the projection surface. Both technological forms call for a relationship to be created between the technology and the physical body. In terms of new media, this is the relationship between the body and the projection surfaces. The success of *Flicker*, for example, could be attributed to the use of the body, paper and the box as projection surfaces which aided in the creation of meaning in this work.

In terms of interactive media, it is the relationship between the physical body and the interactive environment which needs to be established. In *Coming To*, for example, the interactive technology provided Mazarakis' body with qualities which could not have been considered realistically possible otherwise. The interactive technology also allowed for interplay between the live movement of the performance body and the old footage from Mazarakis' childhood.

This research examined case studies of Mazarakis' work in order to unearth the creative process which was involved in the creation of these works. The case studies demonstrate a cohesive collaborative process. This research attempted to draw attention to intricacies of the use of technology, and in so doing, illustrated that this process needs careful thought and consideration. This research also attempted to highlight that new and interactive media technologies, if well integrated with the content and choreography, are able to yield unforeseen possibilities which could potentially enhance the development of a work.

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Appendices

Appendix A

Interview Transcript: Athena Mazarakis

Subject: Smoke and Mirrors

Personal Interview

16 January 2012, Johannesburg South Africa.

Jessica Foli: With *Smoke and Mirrors* what was the inspiration behind the use of projection?

Athena Mazarakis: I suppose from *Coming To* and *Elev(i)ate* I really was quite hooked on working with new media or interactive media, knowing that I couldn't work with a digital artist because of budget et cetera on *Smoke and Mirrors*. I still wanted to work with projection and I became quite interested in a sort of documentary style of interviewing; offering different version of the performer to what you saw on stage. I was interested in kind of...again I suppose whenever I do work with new media or digital or projection work it's to offer another layer, to reveal something else to offer another reading and with *Smoke and Mirrors* it was really to try and explore the idea of the illusion. So for me the first thing to play with was the performer as well and the illusion of the performer that they are not this indestructible amazing being, but that they are people and that they have other thoughts and another aspect which you rarely see onstage. Because even if we present self on stage in a similar way to Wuppertal's kind of style, Pina Bausch's style it's still performative. Even if you have people's first names et cetera there is a performativity or a performance that comes into that performance of self which is not in the level of the real. So it was using projection to try and strip or open up or put the spotlight on those different layers or versions of self.

J.F: What was the inspiration behind the various projection surfaces?

A.M: Again thematically driven I suppose, but before I get there also about my kind of little pet hatred I suppose it is, of people just being boring and using the back, the cyc [cyclorama], as a projection screen. Also from what I said earlier, is I find that that tends to dwarf the performance and there's an imbalance between the live performing body and the projected body. So that was one aspect, the other aspect was the piece dealt with illusion, smoke and mirrors, magic on some level as well and there is a magic and there is a sense of magic to projection and how images can appear and disappear on stage. So that was a challenge that I had and "how do I make an image appear where the audience hasn't seen that there is something?" and then it disappears and rather that have a surface that is constantly there, where if the projector is on and you are constantly projecting you will see that image, was to have something that was malleable that the performers could control as well. So I'm coming to that idea of the thematic concern driving the use of the device, where the performers are very much engaged in revealing and concealing the images that the audience sees which speaks to that idea of illusion again; because everything on stage is an illusion and is controlled either by the performers or the director or the choreographer on some level. So the screens allow us to, or allowed me to, give the performers that control but also allowed images to appear on different spaces in the theatre space and for me that was important, to shift the big overarching image that is projected on the back wall, but that these images can appear and dance in the space. When I say dance I mean move through the space in the same way that the live body does. So I needed something that had to be portable and something that had to open and close, which was that idea of the...they were really windscreen visors that keep the sun out that we cut. There's a spring system and it's a round coil that you simply twist open and that allows it to open and close.

J.F: What was the reasoning behind the content within the video footage that formed the projection?

A.M: So primarily it was an interview with the performers that was really the thrust of all the imagery. But what it also was, was a fake interview it was trying to create an idea that or an illusion that the work had happened before that nothing you see is what it seems, that everything you see on stage is not necessarily trustworthy. What was interesting for me is that when we see a documentary on television, that documentary is assigned to fact and truth and so I was playing with that medium or the device of the documentary style. Then the moment that that was on stage allowing that to be a fiction as well. So yes on one hand it is what I said, to reveal another aspect of the performers, but I was also asking them to imagine (I did not prepare them for this). I organized an interview session and I pretended to be somebody else, I pretended to be a BBC news reporter, a journalist and I asked them several questions about this work that they had performed, that they had made with Athena Mazarakis and where were their favourite places et cetera. So it was trying to create a myth around the piece itself, which was another smoke and mirror, it was the medium which is normally that of truth was not one of truth in this instance. But even in the telling of the untruth the performers also start to reveal something about themselves. Some of the questions I wanted to work on, what I had pushed the performers for throughout the process; was trying to reveal what their smoke and mirrors were as performers. "What were the things that they do to conceal something about themselves? What are their little tricks?" I kept giving examples of myself. I know I've developed a gestural vocabulary because I don't have high legs, I 'm not by nature limber and supple and so I developed something else. So I was trying to find that information and they weren't very forthcoming with that in the process so I had to create a device for them, another kind of layer through which they could reveal themselves in a way even though that layer was false. Some of that came out, for example Ivan eventually said, we used that footage [where] we spoke about his smoke and mirrors, that he jumps a lot because he's short. He has tremendous spring and so we used his jumping a lot in the piece and revealed that the reason he does that is that he doesn't want to look short. So the footage was partly fake, setting up this idea of the show as having been. The thing that you expect to be real is not real but also information about themselves [the performers].

And strangely when they entered the space of fantasy, when they were answering these questions about this work that had happened and this problem that they had with the choreographer that they no longer speak to her et cetera, then they started to open up about themselves. To ask them honestly about themselves they were not really capable of answering that, unfortunately.

J.F: What inspired the theme of magic especially with the design choices; specifically with the set and the costume because I remember there were various instances like the shifting of the screens and the playing with the costumes and height?

A.M: I've had an obsession with magic from a young child; I had several magic boxes when I was a kid. I'm obsessed with illusions. Entering theatre and studying, specializing and majoring in mime, I started to see a connection between the illusions of the stage and the illusion work. One of my honours mime pieces was about a magician who cuts up a woman and can't put her back together again. In the mime world we are playing with illusion and illusion of the illusionist. When I wanted to make this piece, I really did come up with the title first because there are so many instances in our contemporary life where we can't really trust anything from our interpersonal relations; we don't know what someone is concealing, "what's the truth and what's not?" What we read and see in the media, there is just constant layers and smoke screens. So it then, for me, made sense to play with that overtly in the theatrical sense as well really play with the audience's capacity to suspend their disbelief. We do that in theatre anyway but we really do it when we are watching illusionists, although of course they are working with a great deal of skill in order to that and to divert our attention. I really wanted to play with that so that the audience would go, "Oh I didn't see, how did he do that?" and then when they hook onto that, in terms of illusion, to hopefully see that we are doing that all the time, to a lesser degree, theatrically as well. And that of course there are all those layers that are happening theatrically in terms of the projection, I wanted that to be another layer of

the magic as well. I mean, as much as we advance, it's magical for me that we can project an image and it appears and there it is.

J.F: What led to the conscious choice of the theme and the narrative of exposing and revealing and concealing that kind of idea? How the moment vocabulary related to the theme of magic and also creating the spectacle and the “wow” factor. When I was watching it and the screens were moving and some people were coming “magically” from different spaces “I was like wow.” So creatively to arrive at that point, how did that work with the performers? Was it also a case of playing with the screens...or was it, “you going go there, go there?”

A.M: I would love to say that it was through play. Those mirror screens that wheel around I mean it's a device that's been seen many times but I wanted to explore it again because we were dealing overtly with this idea of concealing and revealing it was so part of the thematics or the thematic concerns of the work. And we had those screens and how mirrors reflect reality, but it's not quite reality. Those mirrors were also, they weren't flat screen they were edged so they refracted like...a fragmented version of the body. And so...it's that simple device it's a magic, I mean we have seen it in theatre and in magic shows quite a lot, that kind of moving how movement conceals and reveals different people. I wanted to play with it because movement does that it reveals something, whatever that something might be or it takes our attention away from something in the same way that a magicians hand will take your attention one way so you can do something else. So it was trying to play with that on all those different levels from the real illusion to how it works in kind of choreography. But it was quite hard for the performers to play because it was quite hard to push those screens around. Unfortunately there I did have to stand on the outside and [say], “right you go there” and orchestrate it quite carefully. Also they weren't really eager to be pushing the things around because managing the props wasn't such fun for them they thought that stagehands should perhaps do it. They weren't really happy to do that so I did have to, unfortunately, that was something I

had to choreographically dictate. But also one sees it from the outside better, but that's also quite different to the other illusion work because Nico does a lot of slight of hand. A lot of those were his own tricks with the magic ball and the newspaper; he brought those. And so on the first improv was, "show me a magic trick" to all of them and even if you didn't know a magic trick you had to make up a magic trick. I was interested to see well what is the mode of presentation not what they did. I didn't really want to see a magic trick; I wanted to see them as magicians and illusionists. So I don't think I'm really answering your question...

J.F: I think bits of it have been answered before as we've been going through the questions.

A.M: Ja I suppose it was just trying to explore that idea of smoke and mirrors of concealment or subterfuge in order to take your attention one way on all those levels. Looking at magic on all those levels and illusion, not necessarily magic, but using the device of magic to draw our attention to the fact that it's happening all the time. So slight of hand and Nico's newspaper and red ball motif, the screens but also to try and use those illusions of the screens; bringing people on taking them off, to introduce sections I suppose so that that is not necessarily the important thing but what comes after it. So for example in that sliding screens it was to allow I think first Dada and Songezo to come together to do a duet, which was what we call the slippery duet that she was wearing a wig. It was setting up this woman who was full of artifice I suppose and disguise because disguise is another element of smoke and mirrors so it was a link to bring her on more than anything and then to allow that to frame the duet that follows. So the duet that follows was that he would grab her head and the wig comes off and that idea of slipping out of someone's hands, someone being slippery was really the thrust of that duet. So that helped us frame that and then playing with illusion on all the levels early on in the beginning after Nico's solo with the newspaper and he retreats, the others emerge from standing in front of the things and going into a bourrée section. Kind of using the classical bourrée and looking at, balletically the bourrée was about illusion. It was trying to

create the illusion of gliding. To create that ethereal quality of the ballet dancer, so that even in dance vocabulary there is a sense of illusion; people don't glide across the stage and yet we find a technique or a technical capacity to create that illusion. So I suppose ja I was trying to investigate illusion on all those levels; in movement vocabulary, in a theatricality, in a technical aspect and the in the very overt slight of hand.

J.F: Was there a specific reason for the use of the colour red, because I remember it was used for different elements?

A.M: Well first there was the ball which Nico made appear and disappear with the duet with Dada, and then there was the big tall lady that Dada and Lulu created, there was red in that dress. Not really no it was really a design element it was design so I had the performers in these black hoodies which was also about kind of disguise and covering. They would often come to rehearsal wearing these hoodies, which I found strange. So we played with that strange sense of concealment. But then it was really accentuation and playing with the theatrical, because black and red are very theatrical colours and really playing with those ideas of theatricality as illusion and artifice I suppose.

J.F: I find it quite interesting with your work that you kind of have an element of yourself within your work, is this a thread that runs through your work not specifically with this one but with the works that you create, or does it just happen?

A.M: I think it has been conscious, look *Coming To* was about myself so it was overtly about that. Ja I suppose it's trying to find...I'm not interested in character, I'm not interested in straight drama really or theatre that deals with character and so I'm aware that I'm always playing with a version of myself onstage and so I make that overt. It gets a bit limiting though, I'm a bit tired of doing that. *Elev(i)ate*, the installation version, I was just myself lifting people and then in *Elev(i)ate 2*, the stage

version of that, I didn't think it was about myself until I had made the piece. I was playing with these two characters really, the person in the installation and the kind of more academic voice who's speaking about the installation. But once I made it of course I realised that it was largely about myself - the kind of sequence of events that led to making that piece. So I think I make meaning out of my own life through the works that I've made that means that I kind of seep into the works quite a lot. But I think that it's myself and versions of myself, so I say that I don't want to play a character, but it's almost like character versions of self as well. In dance I feel you are constantly drawing on your own experiences so it's very hard then to disconnect that and make that into somebody else. So yes I think I do, it has been a trend, something that I'm not really interested in carrying on though. In *Smoke and Mirrors* I needed to insert myself because I felt I needed to put the choreographic voice in when we talk about smoke and mirrors and let that be another voice which you can't trust on screen. Knowing that there is yet another choreographer who's not performing, the choreographer who's actually constructing it all and that is the truth. So I suppose ja I play with layers of, versions of self, that you constantly engaging with.

J.F: How did using kind of a projector in this work push the work further or enable you to do something different to what you had done before?

A.M: I think in *Smoke and Mirrors* I really started freeing up the projector - there was a projector there was no camera. I really started moving it in the space and allowing that projection to happen elsewhere and so that was a development. What it allowed me to do which I suppose was again...just drive home that point of that idea ,of playing with smoke and mirrors and of "what you see is not what you get", borrowing the credibility of the documentary style and using it to debunk the experience. So I suppose it gave me another conceptual stronghold another foothold conceptually. In *Smoke and Mirrors* specifically, the interviews with the dancers helped me access something that I couldn't get them to access onstage, performance wise. They were quite uncomfortable speaking in the theatre, they were

more comfortable dancing only, they were far more comfortable speaking to camera. So it allowed me to access something more of those performers as a device.

J.F: Did using the projector and experimenting with it, did it pose any challenges?

A.M: Yes, technically always. These projectors aren't made to move around the stage they are meant to be handled very carefully. So even though we weren't moving them around a lot the projector bulb burst after the technical [rehearsal]. It's hot so it's hard to handle, so some of the dancers didn't want to hold it because they felt like stage hands. Although for me it's quite important that the performer is someone who manipulates the space and manipulates the content and so I did want them to engage and hold and move the projector. It gives...obviously technical issues in a theatre in that it will cast a beam, the projector will cast a beam that is not the size that you need it to [be], the performer is not always going to do exactly the same thing, they're not going to aim it exactly right, there's lot of technical issues. So if you want to project onto one of those round screens, you're going to get a lot of spill so then one has to go back to the edit and experiment. You get there and you go "gee I've got a lot of spill" [then] we've got to go back to the edit suite and mask out the peripheral, black out the image just around the head of the performer that we want. I think the problem is that one needs to have those elements really early on in the process and unfortunately often one comes to that idea quite late. So one doesn't have the kind of technical time to get the precision right and that's a great pity; you need to really be working with it from early on in the process.

J.F: From what you were saying, was the video editing then a large part of this work?

A.M: Of *Smoke and Mirrors*?

J.F: Yes.

A.M: Well yes in terms of capturing the content for sure and then also then to also just make the projection aspect work there had to be collaboration. So luckily Jessica Denyschen was on standby to help me black out all those kinds of areas, but ja editing started to become another tool for choreography; it's huge. I either sit with Jessica Denyschen and do it or now that I have started editing my own, it's a huge part of the choreography. So your work isn't just happening in the studio it's happening at night when you're selecting what the material is that you're using.

J.F: Ok, Thank-you.

Appendix B

Interview Transcript: Athena Mazarakis

Subject: *Flicker*

Personal Interview

16 January 2012, Johannesburg, South Africa.

Jessica Foli: What was the reasoning behind the title *Flicker*?

Athena Mazarakis: It's tricky you have to send proposals in way ahead of time and so before we even knew what we were doing I had a vague idea about this piece but I knew that, knowing the nature of creative process, things change. So it was to be able to find a title that could hold big developments from the initial concept and so *Flicker* emerged because a) I knew that I wanted use projection again because it's starting to become a stylistic component of my work and so it's playing with the idea of the digital flicker. The initial idea was dealing with the notion of time running out. We're constantly being bombarded with the environmental issues of climate and the globe, but also looking at it on a personal level that we all have a finite amount of time, within that, where there's a broader sense of time. So that was the first kind of conceptual thrust. So in terms of that, you know our lives are like a flicker of a candle their either in or their out. So it was trying to hold a few concepts together initially, of course it moved on from there but that was the initial thing.

J.F: I'm just curious; when I was reading the program, just to clarify; it says that you conceived the work, what exactly does that mean?

A.M: *Flicker* is quite tricky terms of that because I knew I wanted to make a work for the Arena Program for Grahamstown [Festival], I knew I didn't want to work alone again, I wanted to work with old time collaborators Gerard [Bester] and Craig [Morris] and for a long time I've been wanting to work with Andrew [Buckland] and so

conceiving of the project was my doing and in order to write the proposal I had to come up with a concept. So it was an initial concept, which is what I just articulated now, about having a kind of broad universe, theatrical universe to play. This interactive, well not interactive, this new media universe. Working with projection, manipulating those projections, playing with the body and projected images; that's something that I knew that I wanted to work with and really explore the idea of surface more and take it a step further from what I had done with *Smoke and Mirrors*. So conceiving of the project was knowing that I wanted to do this piece, working within this universe, with the following people, on the following broad theme. I also knew that I didn't want to direct the piece I wanted to be in it. I wanted to have the luxury of being directed for a change, but doing that I knew that authorship becomes quite tricky. So I approached Gerard and one of our first meetings was, "well how do we deal with this?" because there's this idea that I have, Gerard I trust him implicitly, more than probably anyone else in the country, in terms of guiding the process and I trust his artistic integrity, in the same way that I trust Craig as a performer and co-creator, and so it was handing over the reins to Gerard. Going, "this is the universe I want to create, this is the kind of thing" but knowing that it's going to shift and "you [Gerard] can have the reigns to shift that." But it was a constant negotiation for Gerard and myself because what we came up with was the kind of ideas people use in writing, kind of as first author and second author. So I suppose I was first author, because I had the initial idea and I knew the kind of theatrical universe that I wanted it to be in and I was also producer, so I was pulling in Jenni-lee, I knew the people I wanted to work with; Jenni-lee as the designer and Carrie as the lighting person et cetera et cetera. Throughout the process Gerard and I would meet once a week, so I was both kind of performer in the space but still working conceptually with him, so that there was a very close negotiation that happened throughout trying to understand this work. I also set up a very difficult and challenging set up for us in that I knew I wanted to work with Andrew, but Andrew was not able to come to Johannesburg because of his Head of Department responsibilities. So I offered Andrew something and knew at the same time that it was a challenge that would need solving and the challenge that would need solving

would dictate the artistic connection or the thematic connection, so it was like “I would love you to work with us and the challenge I’ll set is that you will be a projected presence throughout.” What that is, we still didn’t know when we began, but It was a parameter I guess or a restriction. In the same way that an improv. [improvisation] works better when there are restrictions that was our beginning point, to solve the question of “who is this man that is not here?” “What is his relationship to me and Craig?” I’m totally not answering your question now, but that negotiation with Gerard was constant in terms of I conceived and he directed, but it wasn’t something that ended at a certain point. Once or twice a week he would come here we had papers up on the wall and we would try and understand the piece and there was a certain point at which, Gerard went, “this is what’s reading, this isn’t what’s reading. One line of what you gave in the concept is what I’m interested in which is disappearances beneath their feet.” So the idea of disappearance and the idea of loss became the driving force and at a certain point I had to say to Gerard “here are the reigns and take it conceptually and thematically where it needs to go.” So that’s how I conceived of it.

A.M: I’ve probably answered a couple of questions.

J.F: Yes.

A.M: But I’ll answer them again.

J.F: **As performers and co-creators of the work was the use of new media part of the creative process or was it introduced as the work grew and evolved?**

A.M: We knew that we would use it, we didn’t start immediately, we started from a physical place, we tried to find the work, the physicality of the work, what it was exactly. Then once we started understanding what it was we started to introduce those devices and what we would do is, we would actually bring the camera and projector into the room with us and we would experiment; quite coldly and not

always in terms of content, but we knew we wanted to play with [projection]. Firstly we had a design meeting with Jenni-lee and there were a whole lot of ideas over that, just taking the idea of paper, we then played with projecting different things on paper and we started to think, "Well what would work? What would the content be?" It was kind of the other way around with this piece, to really play with that idea of trying to engage set and projection, then from there try to see what that contact was. But it was also developing at the same time because we were really struggling to find what the piece was, so it was actually developing at the same time it was a kind of parallel development going on there.

J.F: How did the use of the projector influence your movements because during the piece it was quite clear that the projector had to be moved in a specific way at a specific point?

A.M: It was our intention and as coming through the last works, that the manipulation of the projector is visible that we we're not trying to hide [anything]. A lot of the time with theatre we try and hide and let the magic emerge, again it was trying to take the idea of making the performer manipulate the material. A lot of the time the material we were manipulating was visuals of ourselves doing our kind of blog entries, video blog entries as performers, so it didn't really restrict our movement, we had enough cabling to move anywhere we wanted, that was the point that it was free and we were able to move anywhere. In a way what is interesting for me is that, that doesn't just become a functional thing but it becomes an element of choreography that it has to work together; that even if it is a simple action of lifting and moving it is functional and yet part of the movement. It was a very minimalist piece so that's not very important. you're talking about projector , so you'll probably ask me the thing about the screen later so I won't say it, it didn't really limit [us], we were controlling the device, the projector, and we found ways, it didn't limit us I suppose. I mean we did back projection, we did front projection. If anything what is limiting is how the projection is visible to the audience, so its finding surfaces and angles et cetera that are good for the audience.

J.F: How did the particular kind of set, the box and the sheets of paper influence your working process and when were they introduced?

A.M: I mean the first thing we did was have a design meeting and Jenni-lee came up with some beautiful ideas. It was a process again of prototypes, she would bring something to the room, we would play with it, it wouldn't work. We had a whole idea that we were going to create an entire paper universe because we were playing with this kind of almost Scandinavian, desolate landscaping that's the idea we had in our mind at first, when we were playing, the idea of time running out, these two people isolated somewhere. But that idea shifted and grew and changed a lot, the idea of paper remained and it was really about a set that could be used for projection that was the driving imperative for the designer and the design. So we started playing with this idea of these two people in a house and how things get lost in a house and the domestic space as a space of loss, because of repetition of your daily things. So the box emerged because, it could be a table, it could be many things, it became representative rather. So it really was a collaborative and an addition that really merged with the process. Jenni would bring stuff we would play, we would toss it out, she made a whole lot of things, we had origami, we were making origami. There were many ideas of course that just get lost, popup books, we were playing with the idea of paper from the beginning, but in the end I suppose we stripped it right down to its most simple form. To find a box that can become many different things; a domestic space, whatever, a projection surface, just the box, a barrier, a pathway whatever.

J.F: I think I've asked this but I'll ask it again. The decision to have Andrew as a remote performer how did that come about?

A.M: It really was a deal with him that, "I would love you to be in the piece, I know you can't come how would you like to be a projected presence?" I mean in saying that I was really intrigued by that challenge and so if we're dealing with projection,

you're always dealing with a virtual presence. So what if you make that an overt choice from the beginning that that person is not there. Of course we wanted to play with that idea, in the beginning we were going to go to Grahamstown to perform, so there was going to be a moment at which the real Andrew emerges. But that never really worked when we figured out what his role was as this kind of video blog, performer an aging performer speaking about performance and the ephemerality of that and how the magic of the moment that is lost can never be recreated, we let go of that idea. So ja it was really looking at making overt that idea of the virtual performance, performer or presence or a mediated version of self whatever you would like to call it.

J.F: Having worked with your collaborators and co-creators before, did this affect the way in which you all worked together because you had had a prior working relationship with one another?

A.M: Well it assists us because we have an understanding and Craig and I have worked together for twenty years now since first year [at Rhodes University]. So we have an understanding and a physical way of working together; there's immediate trust which is no small thing. It was exactly because we had worked together, that we were very cognisant of the fact that, very conscious, we didn't want to repeat *Attachments*. We kept going "is this *Attachments 8*?" because we had made *Attachments 1-7* so that was also kind of a driving force to make sure that it was something else. But also Gerard was quite good in that he wanted to honour my style of working, what's emerging as my style of working, with this idea of interactive digital media, of projection and new media and at the same time a mode of working that reflects on itself, so a kind of meta-layer to the work. So I suppose that his respect of that and understanding where my work is going and knowing that this is a project of mine a not necessarily a project of the three of us, that we all three conceived of together, that helped us shift and not fall back into a way of working that we worked in before. Also body shift and change; Craig and I don't move in the same ways, I'm not particularly interested in that kind of movement or movement

only. The conceptual work that I've been doing with the new media and digital interactive media has opened up other possibilities for me that I would like to explore. Then it's about questioning what the body is in relation to that and how the body moves and for me those questions are very interesting and they drive the process. And I suppose that also helped us shift from our usual kind of ways of working. So it helped us because we have that trust that even if we are going into new territory, we understand each other and we find ways to work together, but that is also exactly the thing that helped us move, hopefully, to a new direction.

J.F: The use of projection in this work is quite interesting; I mean how did you reach those particular points, creatively? I remember there were quite a few interesting things. For instance when Craig moved his arm up and down and the image of Andrew appeared and the play with distance with the projector.

A.M: That was through improvisation, so using the technology as another player in the improv. [Improvisation] room and trying to play with surface. So I had used body as surface before in my work in a production I did with the Wits students in 2007 called *Touch* and so I knew that that was a possibility. So we used that, but then when we were playing one of us would hold the projector and another one of us would try and create surfaces really. Craig just started doing that up and down action with his arm and it was just a magical moment, because we went, "there's *Flicker*" because there really is this flicker of the image and it starts to capture how film used to work kind of with the black spaces in between the image, there's a flicker that happens there in a roll of film. So it started to kind of call back to those kind of modes. Why that image really works for me is that it is the movement of the performer that allows the image to become, to manifest. The image is not there if his arm is not there, his whole arm can't contain the whole image and yet if he moves rapidly enough it creates a surface which becomes a projection surface. So for me that was just a very exciting moment because suddenly the projection is dictating the speed of the movement, it's dictating the choreography, the kind of movement. In order to make the image manifest, you have to change your movement or you have

to create specific movements in order to have a true collaboration of image and movement. So the body starts to really shift for me and that's really interesting, so that it's not then about finding dance movements, but movement that can manifest an image that would not necessarily be there. So that was such an exciting moment when Craig did that, because we all knew that that's one of those gem moments that's beautiful. Then it starts to kind of create a dance in itself, that movement between the projector and the projection and the performer's hand. So the body becomes site in that moment of projection, but also medium and medium of projection. Ja the movement becomes the projection surface, which is interesting, not just the body, not just the skin it moves beyond skin to movement. That was very exciting for me.

J.F: I'm just curious, was it a special kind of projector?

A.M: No it was standard little 2400 ANSI Lumens. But again technically tricky, because again in our run at 969 the projector broke ten minutes before the end of the show, so we had to improv. [improvise]. Which was hard because it really relies on the projection. The last three videos we had no projector we only had the sound.

J.F: Oh I remember.

A.M: You saw that one? Did you see another version?

J.F: I saw another version, I saw it twice.

A.M: Thank goodness, ok good because that would have been appalling. It's a standard projector, a small one. Small one so you can manipulate it and also small enough to be able to direct the beam to be small enough, because anything bigger has too much spill. Already we really had a problem with spill, but in the end we were quite happy to have some spill onto the back wall because there's also

something interesting, when that image is fragmented and distanced from the object of projection or from the subject itself.

J.F: I have a question about the video blog entries, of you and Craig and also of Andrew. They were done in different, in different styles and I'm curious about that?

A.M: Well you know they're going to be restrictions always, one can't always control everything, so that's part of the problem of working with the remote performer that Andrew had to work with the space that he had and the equipment that he had. So we recorded ours on our Mac, which has superior sound quality and image quality. We could both do it in the same space, on the same evening, so the conditions were the same, but it was also okay that they were different for me, because Andrew, Craig and I are quite different. In a way [with] Andrew's blog entries he was playing a character whereas Craig and myself were really being ourselves as honestly as we could be. Not only ourselves as performers but really those questions were aimed at ourselves, we were both present as performers and then projecting projections of our real selves. So the formatting, I know, was different but it also felt fitting that they were different because they were very different things. Of course if we could do it over we would, it was really about, "how do we get the material from Andrew?" Often we thought to go and hire a cameraman and then go and do it there and then we kind of hooked onto the video blog format for all of us to have some kind of consistency and to have it in his office. But there were so many variables that were totally out of our control, you know, in the end Andrew would offer many kind of improvs and we would try to use those. They weren't really working and in the end I wrote a script, which he used and developed a little bit and did the script really, interpreted the script to camera. So ja of course I would get rid of the blue chair if we had to do it over again. It was just about being in different spaces, but I suppose also we're so used to that image of the person blogging, the Skype kind of image in those different kinds of spaces. So I suppose to put Craig and me in the one universe and Andrew in another.

J.F: So for Andrew's section, did he video it and send it to you?

A.M: He emailed it. Yes.

J.F: Did it all fit in an email?

A.M: Well we found a way to compress the files and then he put it in, kind of like, a drop box I suppose; that I could access through his code because it was very difficult to get all that stuff.

J.F: The decision to manipulate the paper in various ways as a projection surface, for instance Craig would scrunch it up at one point and then it would tear and expand and contract, was that also a result of play and improv?

A.M: Play absolutely, and then working with what was being said in that blog entry. So Craig's one the example you mentioned, now he starts with a very large piece of paper and it's projecting his blog entry of the things he thought he wanted in life and I suppose we tried that just as an experiment without that material. Just if we project and, "how small and what can you do with it?" But then once we had come up with this idea of loss and thoughts, "what you think, what you thought you wanted, the things you've lost". We then started to couple the kind of the content with the action, with the form and that started to resonate and make sense that to would start to really crumple this into this small little ball. There's something about the quality of that action and the flavour and what that action means, that then resonated with what he was saying. Similarly with my, "I've lost list," we had lists, Gerard made us do lists, [of] "I've lost this, I've lost that." Craig starts tearing; again he's tearing my things. It's not my wanting to lose things, but things that are really being taken from me. So again we had that as an idea, we had played with that image in our improves, we were just projecting anything really and either with live camera or images that we

had. We thought “wow that’s really beautiful” because that image does start to fragment and move away and then “well if you’re going to use that how can you couple it to the content?” Otherwise it’s empty, it’s just pretty and tricky, but if you can connect it to content then the two start to talk to each other in a way that adds meaning to both things, both that action and again that action is the dancing. There wasn’t much dancing but the action is the dancing and it starts to speak to the projection and what that’s saying and hopefully the two together give us yet another layer.

J.F: I’ll ask this anyway but I think some of it has been answered. What inspired the content of the video footage that formed the projections?

A.M: Well as I said with Andrew, I’ll speak to his process later, but in the process Gerard kept giving us improves; of just sit down and give me a list, just talk, list for me the things you’ve lost, things you thought you wanted, things you don’t have time for et cetera. And we really liked the lists but we didn’t know how they fitted in with the kind of movement vocabulary, well the kind of images that we were creating with the scenes that we were writing. So when we started to think “What else can we project other than Andrew?” and we were working with Andrew as this blogger, video blogger, we suddenly thought well it’s a kind of private activity; it’s a private list which then makes sense to speak into that private space of the blog “Is it intended for you? Is it intended for someone else?” But there is something about sitting alone in the room that then makes sense of those private lists and so and then again it was, “well we’ve got these lovely images” and then “what can we project on there?” and then, “how we find the pathway to that?” Andrew was from the outset going to be a projected image and it was a par journey with Andrew because we didn’t know, “was he a character that was involved with us?” because you’re working with video there’s, for me, always a bit of reality to that. It’s not fantasy, it’s not the theatre space, it’s a real something. So we were trying to engage the idea then of loss and disappearance in the act of performance itself; so that reality of his talking about loss as a growing performer that’s aging or whatever, the things he’s lost. The kind of

musings, philosophizing on the idea of performance as a space of repetition and loss and disappearance, it made sense then that his layer starts to comment on what we're doing in the live act.

J.F: Using the projector, I think we have answered this quite a lot in the previous interviews, but specifically with this piece because the projector was moving a lot and being, well from what I could see, tilted at different angles. Did that pose any challenges? Did your movement of the projector have to be the same every single night?

A.M: Well the thing is that the surface was always moving, so Craig and I, one of us would be manipulating the box or the paper and so one can never do exactly the same thing, it can never be the same. So there had to be some leeway, it has to be kind of the same but you have to work together. It's like dancing together through the medium of the projector and the surface, in that we have to be really connected. I might not lift it at exactly the same time and so there is a movement, we had choreographed pathways of projection. So the projector would move up, stay there until a certain moment in the text and then it would move down. That was set but obviously the fine tuning had to be adjusted in the moment, because Craig's not, if I'm projecting on his head, he's not always going to be exactly the same; the speed will be different et cetera, but of course it's choreographed movement, it was rehearsed movement because if I suddenly make a jarring movement with my leg the image wobbles. So rather than creating dance movement in a way, yes it started to dictate how I move, when I move it, because you see all my movement through the image if I'm holding the projector. So yes it did define how we move when we're projecting. But of course there has to be some kind of openness and leeway. Of course there was wobble often when there shouldn't have been or whatever, but I quite like seeing the kind of breathiness of the performer. That it's an act of performance; it's not going to be stable and exactly the same every time.

J.F: Okay. Thank-you.

Appendix C

Interview Transcript: Jenni-Lee Crewe

Subject: *Flicker*

Personal Interview

18 January 2012, Johannesburg South Africa,

Jessica Foli: The design elements in *Flicker* are quite interesting in that they are multifunctional. Let's start with the box; how did you come up with the idea to create something that can shift from a box to multiple other elements within the piece?

Jenni-Lee Crewe: We never actually started with the concept of a box; it was almost like a process of reduction. I think that happens a lot when I work with Athena, is that it's never a process of adding things it's always a process of taking away. So we start with lots of ideas and actually I think Athena said to me in one of our initial meetings, She said, one of the sort of recurring images and something that kind of struck me was that she said, "I want the floor to constantly disappear, underneath these people that they are kind of losing time; and if we can see that spatially." That they start with a certain amount of space or a certain amount of time and as time is eliminated, so the space gets smaller and smaller and smaller. So we looked at lots of different things before we settled on the idea of a folding and unfolding box, because that can open up and be compressed or whatever so it offers that movement in the space. But actually what we did is we actually started with the material first, so we looked at paper and cardboard and things like that and how one can fold a certain surface up. You can fold it up and it gets smaller, so that surface is smaller. So it started off quite conceptually like that and there were lots and lots and lots of versions before you see the simple box that can unfold and refold. And also Gerard had said to me that there were a couple of things that they needed; like they needed a table, and so the box sort of conveniently goes into kind of a table shape.

It doesn't really have to look like, a wooden table but it has to offer the dancers that surface to play around. So ja it was a process of elimination just like "what doesn't work, what doesn't work, what doesn't work?" Lots of research into paper folding, origami, lots of geometry and maths and popup books and that sort of thing. Essentially it's about disappearing and appearing and losing time and flicker, that moment that disappears. So how do you do that on stage and not make it part of the theatre magic, because the theatre can offer you black outs and certain illusions, but actually we weren't really interested in that. We were interested in the dancers making that illusion. Not necessarily the theatre and its machinery. So ja, it offers a great surface for projection and because it's always changing. That surface keeps changing in terms of where it is in the space, but also before your eyes the shape of the surface can change. The only thing for me I would do differently in terms of that is that it's still very flat. So it's still like a cardboard surface it's still two dimensional, whereas when Athena projects on Craig's head it becomes more sculptural; which is quite interesting.

J.F: What inspired the use of paper as part of the design, was it a special kind of paper, as well as the choice to have them hanging in the space just as the show was starting and Athena and Craig would kind of pick them from the space as they needed them.

J.C: The paper and the cardboard were very important in a way; they kind of started the exploration or whatever it was. So I think going back to that idea of disappearing, like space disappearing, paper is easily folded, so literally the surface area becomes smaller. It's the action; it's what paper can do not necessarily the kind of connotations of paper. It's like, "what can paper do?" and that's what's really so nice in terms of the collaboration. So we would be in rehearsal and we would have this material with us; paper and cardboard and then a projector and the dancers' bodies and so then we would try things. "What happens if?" or "you know that question." So we would just keep trying different things and so some things worked and some things didn't. But the suspension of the paper really came about as more of kind of a

practical solution, because in the beginning it almost seems as though you've come full circle; you're at an ending. So you see the pre-set, which is what you see when you walk in it's kind of like these bits of paper strewn across the stage. Then they come in onto the stage and then they set up for the next round, which like already gives you a sense of cycle. So the suspension is really about - we really wanted to have these things on stage, we never wanted to go off stage and grab a piece of paper. It kind of gave it a kind of ethereal look a suspended moment in time, you could connotate around that and of course the wax paper was just so beautiful; it's that ordinary sort of cooking wax paper that you use in your kitchen.

J.F: Really?

J.C: And it's so lovely because it's got such a nice quality and you can back project, so you can use the projector from the front or from the back and see that image because it's quite translucent. It's just beautiful because when you scrunch it up it retains its form, so it can be quite sculptural. So ja I mean a lot of decisions are practical decisions, "it doesn't work if you don't do this, so we're doing this." Gerard was very amazing in that he keeps asking questions, "What if? What if? What it? What if?" I mean he's actually tireless in his questioning, each moment 'what if we did this, what if?' even slight changes. The paper was part of that just as their movements were; the things on the stage were shown the same amount of questioning.

J.F: I think you've answered bits of this but I'll ask it anyway. What did your working process involve, was it inspired by the movements of the performers and the content of the work? Or were you given a specific brief to work around?

J.C: There was a specific brief. So working particularly with these people it's not choreographed it's devised and there's a different approach. It's not about making a series of movements but rather about a concept and how do you unpack that

concept physically. So there was a very strong concept, although it was very strong but it was very vague at the same time. Athena kept apologising to me: [saying], “It’s so vague, it’s so vague” but actually, that’s what’s so wonderful about it that the concept is so strong; that we all feel as though at some point we are running out of time. That life, a moment or whatever is passing, it’s fleeting and so that really was the concept. That this couple was losing ground, losing time which is very heady but also a great challenge in terms of, “so what does that look like?” and “what does it feel like in the body?” So ja a very strong brief, but also very vague, but also it could’ve gone anywhere. Then you just go through those processes of research and bringing things to the table so for instance, I mean it’s such a nice group of people, it’s amazing. Athena introduced the concept to us and Gerard directed so they share a kind of an overriding vision for the work, but of course Gerard was directing and Athena dancing or moving. So she had to let that go, certainly so the collaboration was quite interesting like that and then she briefed me. Then what I did was I went away and then researched and drew and came up with some ideas and then I presented to the group. So [I said], “okay this is what I’ve found and what do you think?” I mean there was like a huge range of things, so there wasn’t, “this is my idea like these are all my ideas what do you think? Is there something that you think we could follow and chase down?” So it’s constantly like that and I mean even though my job is the designer other people filter in. So Craig would say, “What if you did this?” So even though you have your roles there’s a sense of you’re all working towards the product and the process.

J.F: It’s almost like a constant conversation.

J.C: It is and I must say for them I think it was quite pressured also because we had the deadline of going to Grahamstown Festival. So they felt a lot of pressure, but I had a very different experience, it was one of the most what would one say, relaxed, de-pressurised experiences I’ve ever had.

J.F: Really?

J.C: Ja, because it was never about - Often you work as a designer with a director and they have a vision in their head, like a picture. It's very stressful for you as a designer because you can't see what's in their head so in a way you're kind of making things in the dark and then it never matches their expectation. So it becomes quite stressful whereas this way there is no expectation, the expectation is to work, to bring your imagination and your stuff and your talent and whatever that's it. There's no sort of like outcome except a great show, so it's a really amazing way of working.

J.F: The next question, were you kind of aware from the beginning that the design elements had to be functional and that aesthetically that they also had to be a projection surface?

J.C: Ja that was always clear, that was part of the brief that we needed projection surfaces, that it always needed to be changing in terms of the space and the configuration. I kind of know that about Athena's work anyway there's a kind of, it's not a long history; there's a kind of history of working. So I know that Athena's not going to want a static set, she wants something that keeps moving and changing and that the performers can move and change it doesn't happen magically with people dressed in black, backstage that doesn't happen. They [the performers] do the work so, and that's what's so interesting about Craig and Athena's work is that whatever objects or things that are in the space those things, even if its projection, will impact their bodies and that's what's so exciting. So a couch is not just something to sit on it's like the world of the couple or whatever it is.

J.F: So then having worked before with all the people involved in this production, how did that affect your working process; because you had worked with them before?

J.C: Well in fact I've only worked with Athena before. So it was new for me to work with Gerard and with Craig, I had never worked with Craig before. So I loved it, I mean it was bliss. But I am very familiar with their kind of work, in a way we kind of come, like Craig, Athena and myself, from your heritage which is from Rhodes and Gary [Gordon] and Andrew [Buckland]. So there's definitely, how should we say, a sharing of performance values I don't know how else to say it because it's not an aesthetic necessarily but it is how you approach work I think. So ja but definitely working with Athena previously helped immensely. I really enjoy working with someone who has a body of work, and that you form part of that it's a really great relationship and you can understand why directors often go to the same designer, because it's like you start to speak the same language so you can start to share things easily or with ease and that's very helpful. It's very difficult to try and encounter a new relationship and try and figure out, "what is it that you like or what is it that you want?" So it helps immensely and I'm a big fan of Athena's work and what she's doing with kind of digital media, I mean it's really it's kind of ground-breaking in terms of dance in this country, well not even just dance any kind of theatrical format. So ja it helps immensely you can start to have conversations without having to learn a new language.

J.F: And then the last question; does your own background in movement and physical theatre as well as a performer influence the way that you design or make design choices?

J.C: Definitely, definitely without a doubt. I have always been interested in the body that's always primary for me, and even though I design now and I don't perform the body is still the most important thing. Everything, all objects and things that are in that space or even the space itself is always in relation to the body. So in a way the body becomes like the unit of measurements like you would use meters or whatever. Instead of that you say a body will fit into this so it's like always, the objects don't matter at all, the things they don't matter unless they are engaged with the body or the absence of a body but still the body. That comes from that initial, you know,

training as a performer and as a dancer, more actually as a choreographer because choreography is just that it is designing the body in time and space. So it's exactly the same thing and in fact as a designer you often treat the body as an object rather than as some kind of psychological identity with social issues and stuff. You can actually just treat the body as a sculptural object. So ja the body is the unit of measurement, it's like that's the default that everything should be in relation to that. That's how I think, so like often at times you're oblivious, when you're watching the show, to those decisions which you should be. Like how big do you make that box, you don't just sort of willy-nilly suck that out of you're the air you go to the body; "how big is a body? What does that body need to do with the box?" So ja it's always in relation to that unit.

J.F: Now that you say that, it's quite interesting because when as I was watching there was space for both Craig and Athena to fit in the box and pull the box to close with them.

J.C: Oh yes that lovely moment. That's really about proportion and ratio. It's like the classic design, it doesn't matter if you're designing a cup or packaging or a stage show it's all about proportion and it's about the human; how does the human interact with those things and images.

J.F: And also because the elements that they have to work with are quite, they're light and easy to move around in the space and play with.

J.C: Yes absolutely, it's like, "how can you make them like unpack and pack up time or space quickly?" It's actually quite practical problems that you are like creatively solving, that being said it's not always like absolute clarity and decision sometimes its accidents. Its like, "Oh look what this can do, oh my God." That's also the joy of being with those people, there's always a sense of play, you know, "what if we did this? What if we did that?" Lots of laughter and lots of ,not even mistakes but

mishaps shall we say, so there's play and that's what you need because if you don't have that spirit it's, you know it's done before its even started.

J.F: Okay, thank-you

Appendix D

Interview Transcript: Gerard Bester

Subject: *Flicker*

Personal Interview

23 January 2012, Johannesburg, South Africa

Jessica Foli: So how did the idea for this work come about, was there a specific intention from the beginning?

Gerard Bester: Well it was Athena's concept and she brought the artistic team together so ja she essentially was main author, producer of the production and then I came on board as director. In a sense it started then becoming more of collaboration through the process and we would meet on a Sunday night to sort of have these kind of mad discussions on where the piece was going. Because as soon as we started playing, improvising new ideas would emerge. Athena wrote a funding proposal, sort of a narrative for that proposal, and very quickly it started going in another direction.

J.F: Because the work was created collectively by you and the cast how did you focus the all multiple ideas?

G.B: It becomes tricky and I think we even made a mistake after all our experience of making work. I suppose the easiest way is videoing and videoing rehearsals and then going back and watching that material or else it was lots of scribbling. It's always tricky because you have wonderful improvisations, then to try and record it, then to try and script it and then the process of almost re-rehearsing it to create what was initially found and that's always the hard part of process. For me we tend to never give ourselves enough time to then rehearse the text that's been created. Athena and I eventually, what I sort of said [is],

“we need to start creating kind of headings, categories” and we started just putting each section that we thought had potential on pieces of paper and then basically stuck it onto the wall. It was very important that it becomes visual and that it becomes a mind map in a way and a jigsaw puzzle.

J.F: So the kind of creation process, we’ve spoken about the mapping and the planning and all of that on paper, but what was the text that they used in the video blogs and the movement as well, what was that driven by?

G.B: Well it was interesting we’ve done a work before the three of us. We did nine or seven solos on different stages of a relationship it was called, *Attachments*.

J.F: Oh I heard about it, I didn’t get a chance to see it but I heard quite a lot about it.

G.B: So it was a constant joke, in a way in rehearsals, that we didn’t want to create another *Attachments*. But in a sense we couldn’t get away from *Attachments* bringing Craig and Athena together, bringing two people together in a duet it was very difficult to get away from relationship. Maybe I’m wrong but one of the first improvisations I set was sort of a domestic encounter. So the keys immediately sort of came up for me and for me the two of them presented a beautiful improvisation and it was interesting because they both vocalised and with *Attachments* we never had any text, spoken text. For me suddenly hearing both of them speak was very exciting, I felt that we have something that we could use. Sorry I’ve lost your question?

J.F: My question was; the text and the movement what drove that kind of process, getting there?

G.B: Well again improvisation, again Athena’s concept and her one very strong concept is always to comment, to reflect on performance itself and to project that

onto the performance. So Andrew Buckland's text was going to be about the artist looking back, reflecting on the immediacy of live performance, the loss of live performance, the loss of self through aging and then playing with this idea of recording.

J.F: The use of the projector with this work was really interesting for me. How were those discoveries made, I mean with the different angles? For instance that moment when Craig moves his arm up and down?

G.B: Through play and just playing and Athena and Craig are just fantastic at just playing and improvising. Look it was definitely a challenge right from the beginning about what we were going to project onto and as soon as we started playing with the paper idea. Then projecting onto Craig's head; yes there were some exciting discoveries.

J.F: So within those projection discoveries are there things that you had to throw out or not use? Or you as the director visually, because they couldn't see how those things looked like?

G.B: Well part of being a director and part of the process of directing is a lot of editing. Not being precious. Allowing yourself to constantly edit. Throw out. I suppose it's always attempting to be clear about what one is trying to communicate conceptually. We, just in terms of set ideas, threw out an enormous amount and I suppose what one always forgets is ,well for me, there is such beauty in simplicity and not get too cluttered and not to get too tricky. Ja, but in terms of being an outside eye we would constantly swop, so I would say, "Athena I think this is really working" and then I would hold the projector and say, "Look at this." So with Athena being main author it was very important for her to also see how the production was working visually. Ja there's a point where Athena has to step into the role as performer and trust, but as much as possible it was attempting to share.

J.F: Was it always the intention from the beginning to make use of video and projection?

G.B: Ja... [with] Athena definitely it's a mode she's working in it's something that excites her.

J.F: So it was very clear?

G.B: Ja and she always well she...Andrew was always going to be recorded and then we started recording Craig and Athena. We were never sure if that was going to work and what was that saying in terms of the live performance also being recorded, but eventually it felt right and ja it was.

J.F: The kind of idea to have Andrew as a remote performer, a video presence how did that come about?

G.B: Budget (laughs). Well again it was Athena's idea so I'm not sure what she's said to you, but she wanted to work with Andrew Buckland. Andrew's her ex-teacher and with Andrew being in Grahamstown and us being in Johannesburg it was a way of Athena incorporating him and then finding a clever device to bring him in. Then this kind of this concept of him playing with time and space which for me added wonderful comedy.

J.F: I mean within this work how did you negotiate balancing the new media element of the projection, with the text and the movement so that one kind of doesn't get lost within the other?

G.B: Well it was very tricky, and again going back to this idea of the jigsaw puzzle and constantly playing with the pieces and seeing how they work together and you know there were constant changes. There was never a set structure and I suppose for me what was very important was that eventually everything was speaking to each

other, sort of dialoguing with each other. And I suppose structurally it was quite hard because I didn't want it to be alright now section and section and I suppose with projection you do get into that transition moment of picking the projector up, placing it, making sure that it's focused. But I think in the end we managed to find sort of a throughline and a poetry and this kind of dialogue between all the elements. And because we were playing with this theme of repetition, of disappearance I think that helped as well those silent moments allowed the audience to reflect, to kind of just to settle. I always think silence is something that we forget about; silence and pause became important moments.

J.F: Because, I mean when I was watching it, I wasn't aware of that, "Okay now they're picking up the projector, going to one transition."

G.B: Good.

J.F: "And then stop it's another one," the transitions were smooth I didn't physically notice that "okay there's silence now," which was quite an interesting thing for me to watch. Because often with projection things sometimes there's a little...this was quite interesting for me to watch. Especially with the different surfaces and the box and how it shrunk and when they tore it. When Craig scrunched it up so there were some really very interesting things.

G.B: I mean I was very excited by the work eventually, it was hard in the making, I do think we found some really beautiful imagery and I think the video of Craig and Athena; the lists gave a very sort of private, personal, delicate kind of in, which I thought added greatly to the work.

J.F: Were there any difficulties that were experienced working with the video projection as a medium?

G.B: Well it was interesting because we tried to record as much rehearsal as possible. When we started doing the lists the first time we did them in rehearsal was so beautiful because Craig and Athena were just improvising, they were being quite brave and it was spontaneous, it was fresh and then we debated about using the lists or not. Then we eventually decided that alright we were going to record it, we eventually recorded it at Athena's flat and that was one difficulty, it was very hard then once we had gone in front of the camera, set up the camera, set up that shot to find that spontaneity and that freshness and again not wanting to recreate and yet wanting to recreate what we knew was so powerful. So that for me was possibly a lesson learnt that if one ever does kind of personal narrative within a work, is to try and record it at that first improvisation. The wonderful thing about video is that you can edit, you can pretend (laughs), you can edit out the shit stuff. So that was one interesting thing for me [with] Andrew it was hard, because Andrew was so far away, as a director it would've been wonderful to have been in the same space, to really have been able to help guide that process for him. So in the beginning it was very difficult with Andrew. We had to set him questions in the beginning. He was improvising alone in his office, in front of his computer and he would send us stuff. And we would sort of say "ja err" and eventually Athena then scripted text for him and suddenly that seemed to help Andrew and suddenly we had this wonderful material. Then just bloody technology and things breaking down and video projection not working or the computer doing something odd and then you just want to curse and then you just want to go back to just performers, you know onstage, and get rid of all this machinery and technology. So that was our first two performances, I don't know if you came to our first performances?

J.F: I came to the first one and then I came to one a bit later.

G.B: Okay Good. Was it the first one we had technical [problems] I can't remember? But two of the performances we had technical problems and eventually then Athena set up two projectors connected to two computers in case one messed [up].

J.F: So was there just one projector at first?

G.B: Mmm, for the first two performances.

J.F: I thought so. As I was leaving the theatre I was thinking, “But wait, the first time I came here there was one projector now they are two.”

G.B: No it was just as a backup.

J.F: I thought it was intentional as part of...?

G.B: No it was...ja all that cabling...

J.F: As I was watching I thought about that and I thought Oh my word (laughs).

G.B: Ja no it was... (laughs)...

J.F: Having a prior working relationship with one another did this affect the way that you worked together on this work?

G.B: Absolutely it makes it so much easier and ja I mean it's just an enormous sense of trust, a lovely sense of play. Athena and Craig have known each other for years and years and years and years and we all just said it was so wonderful to be back in the rehearsal space. So ja definitely, but on another level there's the challenge to then create something new.

J.F: Okay, was there a difference between the performances in Grahamstown and the performances that were done at Wits, because I saw the Wits version?

G.B: Well I think the work had been developing. I'm a bit embarrassed because it was partly budget considerations but I could only be there for the first performance in

Grahamstown; which was terrible actually because the work was so new and so we were developing it. So even after that first performance we changed lighting, so it was great to do it at Wits again and just to revisit stuff and again we made changes. Not big ones, but just again lighting and I don't think we cut anything structurally but it was again just finding sort of seamless transitions.

J.F: Last question, what was the reasoning behind the title?

G.B: Again it was Athena (laughs), but again sort of referring to this idea of loss or of that final moment before something disappears or emerges again. So it's that sort of trying to hold onto coming in and coming out and...I think...ja...I hope Athena answered that better than I did.

J.F: Thank-you.

Appendix E

Interview Transcript: Athena Mazarakis

Subject: *Coming To*

Personal Interview

16 January 2012, Johannesburg, South Africa

Jessica Foli: When did you start making use of interactive media and new media in your works?

Athena Mazarakis: The first time I used it was in *Coming To*, in the making of *Coming To*, so that was 2007 but I think the things that I've been involved in are productions that used new media before. So I was in a production of PJ Sabbagha's and the Forgotten Angle Theatre Collaborative called *Petra*, but actually let me go a little bit back, PJ had collaborated with Nathaniel Stern who was kind of the first people doing new media and interactive media in the country, in fact he trained Tegan [Bristow], if I'm not mistaken. So we did a show called *There's No Room in this Bed* and Nathaniel was collaborating on that so I think the kind of intrigue emerged from that piece, but I didn't put it in my own work until 2007 where I set myself the task of making a full length solo. I was a bit hesitant as a solo performer making a full length work, I suppose I wanted to give myself as many relationships as possible, you know Gary Gordon always said, "You are constantly in relationship to the floor, to gravity," whatever. As a solo performer I wanted to multiply those possibilities and relationships and I wanted to start pushing my work kind of into [what was] uncharted territory for me. I wanted to challenge myself and shift style and mode and so I thought that using interactive media would help me to do so and would, in terms of content, could assist me greatly.

J.F: With *Coming To* was it your intention from the beginning to have an interactive element within the work or did it develop as...?

A.M: No from the outset. I had made a shorter version, it was like a very small solo for Dance Umbrella it was ten minutes or something like that and that was starting to explore the thematic and the conceptual idea of embodied memory and memory in the body and tracing memory of other people through the body. But when I then came to making this piece which was also quite important because it was my creative project or my practical project for my for my M.A my M.A.D.A [Master of Dramatic Arts] and ja from the outset I knew, it wasn't something that emerged, it was something that I wanted to engage with because I suppose it's similar to what I said. I was quite daunted to work as a solo performer and just work with myself, I needed collaboration, but I wanted to be a solo performer in that there were budgetary constraints. So I knew that I couldn't employ other people as performers but I could certainly engage with people like Tegan [Bristow] to kind of collaborate on a kind of conceptual level. So I knew from the outset that I wanted to make it because I felt that other than just design, although I did collaborate with a designer as well, for me I wanted the piece to operate on many levels, layers. And so from the outset the kind of first layer; the audience must be able to hook in and grasp what you're doing but I like that there to be many many layers and the interactive element I imagine that the interactive element would give me that. But also that it would also really give me something to play with, I don't know how much detail...but you're talking about the outset.

J.F: Yes.

A.M: So from the outset, absolutely yes because I wanted, I suppose I wanted a playmate, I wanted a collaborator in the same way that you then work with another body in the space and through that engagement the material emerges. I needed that without the presence of another performer in a way I needed a mediated version of myself to play with and the interactive element gave that or I imagine that it would give that.

J.F: Okay. If you can remember how was the collaborative process between the designer and the interactive artist initiated, by that I mean did you give them an idea of what you were looking for? And then they kind of came back and then you played or how did it work? Or what can you remember about that?

A.M: No I do actually remember, so you're in luck. I think the important thing is that each of those relationships was different and I think that the primary relationship was with me and each of them. So in the end there's a collaboration of design and interactive interfaces and myself but primarily the relationship was between myself and Tegan and myself and Naomi. And those relationships were quite different, so if I start with the design with Naomi, yes I briefed her as to what the intention was, what the kind of narrative threads were and I wanted to engage her as much as possible in the process. So very early on in my kind of exploratory, very much improv [improvisation] based rehearsals it was again to bring someone else into the room so it wasn't just me, another person to play with. So I had sessions with Naomi where we brought a whole lot of objects, kind of very typical design improv, where one starts to map a space, or sculpt a space through objects and start to look at the relationship between objects and try to understand what is emerging through that. In that she was quite active she was playing with me in the space she wasn't on the outside giving input, we were both, as I recall there weren't many of those sessions there were perhaps three or so. So we played and sculpted, made kind of paper sculptures and installations in the space, I brought objects and it was about kind of clustering and allowing the installation almost to grow and placing the body in relation to that so that sort of exercise. Then there were also times in which I would say to her, "I have this crazy idea" one of the first things that I said to Naomi was that I was looking at the body as site specifically and subject, so the idea of mapping on the body was quite interesting to me and we had many interesting ideas. For example I was playing with the idea of the island that my family comes from, that my grandmother came from, that I dealt with in *Coming To* was also the island in mythology where *Aphrodite* emerged out of the ocean. So of course many things

don't make it into the final work but we had these ideas of almost like a fan-like structure emerging so the body is to the naked eye looks as it is, but suddenly as a joint unfolds, if the arm is folded in, as the joint opens it reveals a piece of fabric or a screen [of fabric]. We were trying to play with surfaces as well for projection because we knew we wanted to project things on, so we thought well maybe something like that. So often I would set her that as a task and say, "Can we create some kind of device that as the body extends we see that there is fabric or that the surface area of the body increases?" So I would often set her that task and then she would come back bring something, a prototype and I would play with the prototype in terms of the design. Sometimes it works sometimes it wouldn't work. Often with my work I get images, like the image of that dress. I had an image of flowers growing out of a body and we couldn't figure out how to do it on my own body. Naomi found a way to create that shape [through] the dress which represents the grandmother and then [she] found ways to let that emerge. So ja a kind of balance between play and improvisation together and then me giving Naomi very specific images that I would like her to try and create. So I would get the image and I would give her the hard task of trying to manifest it. With Tegan [Bristow] I suppose kind of similar, although Tegan didn't play with me in the space, we spoke a bit about what it was that I wanted to do and I relied quite a lot on Tegan because I didn't know what kind of interfaces were possible. I would say for example, in my kind of ignorant way kind of around interactive media, I would say, "I would love to play with the idea of making music out of my body." For me it was about the image that I was playing with and the idea of culturally inscribed memory that the body contains not only personal memory but a kind of body of cultural memory. So I thought well, "How could I create the sound of a bouzouki playing using my own body?"

J.F: The sound of a?

A.M: A bouzouki, which is a Greek instrument, it's a stringed instrument. Then Tegan would think about that and in that instance she created that interface where we had a microphone and every time I struck my body it registered a certain pitch.

She matched that with certain tones on a bouzouki synthesiser and created a kind of feedback loop, so that it would translate the pitch of my slap and that translated into a sound, so in that instance she kind of I suppose she delivered on an idea I had. Other times I didn't know what was possible and she brought to me something, so I had gathered a whole lot of cine footage. A whole lot of eight millimeter cine footage, my mom was a compulsive film taker, so I had all this visual stuff and we didn't quite know how to use it. I suppose it was in discussion with Tegan about what it is we were trying to do I think if I remember correctly, you'll have to check and I think Tegan would maybe remember better than me, but I think she brought the idea of; I think she called it the kind of mask. It's a silhouette of my body in real-time into which the cine footage is projected so it contains that kind of archive footage. I suppose it was quite hard for me to imagine what was possible until I could see it, so Tegan would work on something and then once I saw it then I could get really excited and say, "Let's try and push this, let's do that." So Tegan's input was hugely significant because I didn't know really what was possible and I remember being so excited because the first time we tried the prototype of that, I think she calls it masking, I'm not sure if there's like a technical term, and I had Gerard Bester in the space with me, for some reason he was stage managing for me, and I couldn't really see it on myself I was kind of being the example and then I stepped out and he happened to walk past the camera and as he did that he like took images with him of my childhood and that just excited me like immensely. So ja there were kind of these gem moments of discovery and then there were other times where I said to Tegan, "I would like to have a duet with my grandmother how can we make it possible that I can dance with an image, how can I be in the image of the cine footage of my grandmother." Then she created that she found a way to insert my kind of white silhouette into the projected imagery. So ja different relationships.

J.F: I'm going to ask this anyway, but I think some of it was answered before. What parameters if any were set for the collaborators?

A.M: Parameters? Explain what you mean?

J.F: In a sense, I think you have mentioned it already about giving them a framework within which to work and then you came back and played...

A.M: I suppose the parameters were also kind of the conceptual concerns, so I think we were quite open with what was possible especially because I didn't know what was possible. So with the interactive stuff I was quite open to allowing anything to emerge, but there were also some set parameters in terms of what can be achieved on a theatre stage at that time with the technical stuff. With Tegan we knew that there's some technical parameters; that in terms of lighting we had to be lit very well et cetera. So that kind of defined the interfaces that we used, the stage space itself defines that because it needs to be very clear. What emerged for me was that it needed to be very clear for the audience that this is something intentional. They need to see the interaction happening, it can't be something invisible like I do a movement and the sound changes because how does the audience know that's me onstage doing it and not the sound operator in the sound booth. So I suppose that, I'm not sure if that's what you're asking, there were physical parameters and the thematic and conceptual concerns kind of created the frame in which to investigate. So bearing in mind the first time I performed it was at Grahamstown at the festival [National Arts Festival], so you're even more limited in terms of technical, it might seem irrelevant but those actually were quite clear parameters, well technical parameters anyway, within which to work. I suppose I guided the process, primarily it was my work, I was kind of artistic director of the work if you want to call it that so I suppose, although it's a collaboration, I had final say as to what worked and what didn't and how it was shaped. So I suppose it was kind of my vision of the piece and where it was going, that was what kept creating parameters as we went along.

J.F: I just wanted to ask in relation to the interactive elements, I hope it doesn't sound like I'm speaking a different language, but specifically with the motion tracking elements and the camera things, because for that the space in which

you have to move to activate that is very specific. So did you have to make your movements within particular spaces to activate those different interfaces?

A.M: Ja what became very clear was that, that became a very important part of the choreography; the interfaces started defining the organisation of movement and space. Of course what freed us was the ability to move the camera around which is what we did. Tegan was quite free in the space, so she would move the camera so we weren't locked into doing specific things in specific spaces for the entire piece, we could shift them. But yes I mean that it's both a restriction but for me restrictions are also interesting things because they open up possibilities and they open up choreographic possibilities. So for example in the one motion tracking section where it's quite near the end of the piece and again it's the silhouette of the body and it's the projected images of myself ,you know dressed as a kid and doing that Greek dance with my father and my grandfather. It worked quite nicely that the piece began in quite a contained space and that I kept moving away in a circular action, mirroring the action of the dance, the *Syrtos* and that I kept catching the camera. So that actually started to work quite nicely it wasn't a restriction anymore, but it started to work conceptually quite well, that one kept keeps getting pulled back into the circle and one can move out of the circle but you come back to the same point. As you come back to the same point one is still aware of one's archive and one can't escape it; so I mean that's one possible reading and intention I mean there were many in that moment but it started to give possibilities. I can't really move in the space without encountering the camera again and the camera immediately kicks back the archive because it's going through the computer and out. So it started to create possibilities, I suppose we struggled quite a lot in the beginning mainly because of lighting and the difficulty and I know Tegan tells me now that the technology has moved so far that we don't have to worry about that because the *Kinect*, I mean it uses infrared so you don't need lighting. So yes it defined movement in space but I could get around that. What was very difficult was the relationship between the camera and the projector, keeping spaces dark enough to

project on without spilling and dissolving the image and keeping spaces lit enough for the camera to capture me, that was the tricky thing. We did it the first time around in Grahamstown and that was really tricky because it cut up the space in ways I wasn't entirely happy with. But I think we started to solve it better towards the final performance at The Nunnery, but still it was quite challenging because you then had to really cut up the stage space. It was hard to keep both my body and the projected body in the same kind of frame a lot of the time, because the stage area needed to be divided with light and darkness. But I think ja we got that a little better but yes that certainly defined the choreography quite a lot, but not always in a negative sense, it gave possibilities.

J.F: The process of writing a journal is it something that you do with all of your works?

A.M: Ja I think I was more thorough for *Coming To* because I knew that I had to write a research report but it is something that I do. I suppose there were many journals though for *Coming To* and that was because I was writing the research report and I was the subject so it became very complicated. So I needed to have as many filters as possible and layers, but I do keep a journal, I would probably call it more of a workbook where I capture images, ideas. I think I've been using it less and less because I start relying more and more on video, which I don't think is very good, because I think in the process of writing one processes what you've just experienced and already start translating it and finding the theatrical extension of what you're doing or the theatrical possibility. I think when you're just capturing video you're just capturing, recording what happened and you can redo it you're not actually processing. But yes I find the workbook very important to plan the rehearsal and to get what came out of it, but more so to try and pull images, thoughts from everywhere else.

J.F: Well specifically with your improvisation sessions, I think in your thesis you call them "open improvisations" how do you, specifically when you are

working by yourself how do you clear your head and allow your body to just be free in a particular space and moment in time?

A.M: I mean that's very important to me, to be in that space, to tune in and I do it through a kind of physical preparation. When I say physical I mean an integrated preparation of stilling the mind and really tuning into the body and shutting out the outside world. Allowing yourself to be in that space in that moment. If you're doing a process like I was doing, for me it was really important. It was stuff I had been doing without thinking about it for years [which] I really wanted to do quite seriously and be aware of those connections between memory, stored experience and it's expression. You really do need to be in a state of being able to listen to yourself, so I think each process has its own preparation. I find different ways to tune in or one's body is different everyday so you need to do different things. Sometimes you need to do serious cardio for twenty minutes, just to shut everything up and at other times a more kind of meditative yoga style, breathing kind of focused warm up would do the thing. But I would call it kind of tuning in and listening because in that space where you want anything to emerge you need to let your everyday concerns go otherwise they are going to come in. If you want to dig deeper and deeper you need to allow yourself to reach deeper and deeper and listen deeper and deeper and not be side-tracked by what you've just brought into the rehearsal room with you.

J.F: What was it like being able to interact with your grandmother and your childhood self through the medium of the interactive video?

A.M: I'll probably dilute it now; it was quite astonishing because I was engaging with that material I really did find myself remembering a lot more about my grandmother. I speak about it in the thesis as well, I look at how she moved et cetera and trying to get to an understanding but it's strange I don't know what the reason is exactly but I did find that my own memory of her was jogged by having to, by trying to interact with her. It was quite strange seeing myself as a child because obviously I don't remember any of those instances that I use the footage of. I remember often going

to that place where that footage is, it was like a resort called Marzelspoort where we used to go for picnics. I remember kind of a global thing like “Oh I remember Marzelspoort,” but I don’t remember for example those images and it was quite powerful and strange what happened in one of the improvs. I was playing that material, I was working towards finding a way to start doing the duet with my grandmother and what was really possible and there’s an image of myself as a five year old eating a piece of watermelon and for some reason I felt a weird protection over that little self. In a sense what I was dealing with now was not for that little self and I walked up to that little self and I just put my hand over her eyes, which was quite a powerful moment. I still can’t really articulate why and why as an image it worked for me, but I kept it. So it was quite...I mean I would be lying if I said I wasn’t affected by that engagement, having seen a lot of the footage, I didn’t use a lot of it, but watching the footage of myself as a child I also, from this point, saw patterns and versions of myself and it was like, “Oh I’ve always done that” or “I’ve always been obsessed with moving,” it was quite interesting.

J.F: I’m just curious why the potatoes?

A.M: Because of the story itself that I tell that my grandmother used to, I’m not sure if I tell it properly in the thing [the performance], if you had a wart she had this white magic thing that she used to do. She would cook up a potato and she would rub the potato on the wart and say some things and then throw the potato over the neighbour’s wall. They must have had a whole lot of potatoes growing, but bizarrely it worked that my brother used to suffer warts and she did that and they went. For me the connection is that the potatoes are the thing that remove this blemish, this thing that you don’t want and growing up in a Greek household and being gay I often felt like that blemish that must be removed or that aspect that must be removed. So often it feels like it would take a whole shower of potatoes, so that was the reference. Then I use them as kind of those key points and that was just a theatrical extension I suppose it signifies. I had done an improv. with my supervisor with Jay Pather and we were talking about key moments and kind of mapping a life. I had

been using any old object or different objects so we then thought to use the potatoes because then that object is transformed theatrically and they were already there and there's a process of transformation; from being this thing to remove the blemish to actually being significant moments or being representative or symbolic of significant things in my life.

J.F: From working with an interactive artist and the designer is there anything that, working with them did, did it bring anything new kind of to your creative way or process of working?

A.M: Ja absolutely. I mean of course always with the design because the designer brings a different approach or a thought to set and scenography but more so with the digital artist. I learnt a lot and yes it started to make me engage conceptually in a very different way with my own work because it allowed me to shift away from making movement meaning to making meaning theatrically in other ways, engaging with the technology, which I had never done. I was quite excited by that and what's always kind of enlightening is to see how other people take an idea and an image that you have and translate it through their medium and then to come back to your own medium and then to see how that then resonates and what kind of relationship can that find. So I found that that constantly pushed my own excavation, my own interrogation of what I was doing by having to engage through their medium.

J.F: Had you worked with any of your collaborators before this?

A.M: Yes, I had worked with...well Naomi was a student of mine so I hadn't worked with her in that capacity it was the first time we worked professionally together and Tegan and it was our first working experience. We had, as I said, she had worked on one of PJ's [Sabbagha] productions which is how I met her and we were both young academics at Wits and I knew that I wanted to work with a digital artist and it felt right to work with her.

J.F: What did the use of the interactive elements in this work enable you to achieve beyond the physical body and the physical self?

A.M: How do you mean, achieve beyond the physical body?

J.F: I mean as opposed to if you had just done a piece using solely movement, what did this kind of bring to the table for you? I think you have kind of answered it in snippets...

A.M: Yes, I'll try and consolidate those answers. I think it allowed a frame or a holding space for that movement. I think what was important for me was that the technology didn't ever dwarf the movement, because I find that a lot of the stuff that I had seen with interactive, not so much with interactive media, but multimedia that the kind of focus on the eye goes to projection when it's huge et cetera. For me I wanted to create a real collaboration and an interesting relationship between the two and so it's kind of a long way around of answering your question and so I'll say again what I said earlier that it really gave me something to relate to and to play with. So the movement will always have meaning and that's important to me, that the technology doesn't take over or that it becomes so conceptual or cerebral that movement no longer has meaning. For me the movement still needs to have meaning, every gesture is important in this case we are dealing with embodied memories so it's about either accessing, expressing, engaging with aspects of that experience in that memory. So it was important to create something to relate to, to allow that movement to sit in and not only sit in, not only be held by the technology but to actually have a dynamic relationship with it. So that then gives the movement even more meaning and a life beyond itself because as we know movement is ephemeral, the moment we execute the movement the trace is gone and yet there is something about the visual aspect and the fact that the digital trace remains on a computer programme wherever it might be. That it also allows that movement and that relationship to remain in a more kind of solid way; but ja I suppose more importantly that it gave me something to interact with and engage with that added

layers beyond the movement meaning. For me that's important because we might feel something as an audience when we watch a particular movement and that might stay with us, but if we add an image to that we're engaging not only the kind of the visceral connection of the spectator, or the audience member but also their intellectual faculties, their poetic faculties. If an image is poetic and opens up a question in their mind, if it registers in the audience member beyond their visceral kind of faculties then I think that image will be far more potent and the engagement with the interactive media I think allowed me that.

J.F: What was the reasoning behind the title?

A.M: I suppose it was a play on coming out it was about you know about those difficulties of being Greek and gay and trying to deal with a narrative of muted narratives; my grandmother's narrative, my narrative in that community. So the kind of coming out and also coming to like waking up and part of coming to, or gaining consciousness, is about gaining consciousness of the past as well. So trying to understand yourself in the present is also having an understanding of yourself in the past and what you relate to. So I suppose it's about coming to, waking up, becoming.

J.F: Okay, Thank-you.

Appendix F

Interview Transcript: Tegan Bristow

Subject: *Coming To*

19 January 2012, Johannesburg, South Africa

Jessica Foli: To start off with can you tell me about your working process with Athena, were you given a brief or how did it work?

Tegan Bristow: For *Coming To*?

J.F: Yes.

T.B: Okay, with Athena for *Coming To* we luckily had a lot of time, which was nice because sometimes you don't have a lot of time, and because of that she came to me with a kind of outline of what it is that she was interested in. So she had an understanding of sort of the general concept that she wanted to work with, so the relationship with the grandmother and sort of this kind of feminine thing happening between moving and changing and coming to I suppose. So then she had this basic idea, she explained it to me, we discussed what kind of things we could make technically together. I spoke to her about kind of the technology aspects that I had been exploring, so she was like, "okay that's great let's do this." I made two applications for her, which we then tested in studio, like in practice with her, but she felt kind of a bit uncomfortable with just having me there all the time and she wanted to take them and play with them. So I set her up with the camera and with the software on a laptop and she played with them and she would come back to me with suggestions and then I would develop and then I would give it back to her, it was very back and forth kind of growing for the different parts. We had lots of discussions about how the content and what she wanted to do kind of spoke to the media and how the media allowed for certain things to be said without them being said.

J.F: So from what you're saying, how early on were the interactive elements introduced into Athena's movement process, was it constantly from the beginning?

T.B: I think she had some ideas of some things already that she wanted to do, that she knew she wanted to do already. Like she wanted bring in the Greek dance where you kind of hit the body and it makes a very specific kind of noise and it's a very kind of traditional dance and she somehow wanted to include that in. Other aspects we developed together with the technology, so as she performed with the technology we realised that if she moved in a certain way it would respond in a certain way and there was adjustment happening on both sides. Then with that one particular section she said very specifically that she wants, right from the start, to do this, that this is the kind of action she wants, she wants to have something changing or happening when she smacks herself. I came forward with the idea of just micing from the ceiling and just picking up the sound. So ja, it was some from the beginning, some halfway through.

J.F: With the collaborative process how did you marry Athena's concept with the interactive possibilities, because she obviously didn't have an idea of what was possible and you also trying to put the ideas that you had across to get kind of her vision and concept to be realised?

T.B: Ja I suppose I have answered some of that already, also it was a very very new thing for her at that time, I think her focus on that particular piece was trying to understand collaboration. So the way she engaged and was open to suggestions or open to trying things out really really helped a lot. I had never worked with a performer before then myself, so it was very new. I was beginning to get an understanding of a language I that didn't understand either and I didn't know that there was a language in movement before then. So it was a big learning curve for both of us and we were both very open to what the other one had to bring and offer

and I think the discussion really kind of helped with that stuff. I think for that particular piece I didn't contribute hugely to concept with regard to idea like "let's do this and then do that" it was more what the technology could contribute to the concept. So there was a kind of understanding of the mood and message that she wanted and I would sort of help her make that happen, but now that's one of the reasons that we keep working together is because we now have a strong understanding of that and we have a strong understanding of how the two pieces can come together. So it's much easier to then to contribute to actual concept because we have a stronger sense of how each other works. I think the one thing that is not totally relevant to Athena's piece is that one of the pieces of technology that I was kind of working on then, it was very very basic and I was kind of trying to make it quite pretty, I wanted to experiment further. So I got her and another performer onto a project of mine that extended the software that I wrote and it extended the idea that I wanted to follow through; that they came in as performers to kind of enhance and change. So ja *Coming To* was Athena's conception and development, but once you work in that realm it goes all ways and new things come out of that.

J.F: The next few questions are kind of about the technical process and that kind of thing. So the idea of the projected text right in the beginning of the show, if you can remember, as it started right in the beginning there was text introducing that saying that Athena's going to explore this and that she's speaking about her grandmother. It was a brief summary of the process.

T.B: Before the film part?

J.F: Yes before the film part.

T.B: Was that in the DVD or on the actual stage?

J.F: It was on the stage, the dress was on the side and right next to it was the text.

T.B: Oh okay, what do you want to ask about it?

J.F: I just wanted to ask how both of you came to that idea or the reasoning behind that?

T.B: Oh okay, I think there were parts which like I said we worked in a very kind of different exploratory form and she had some stuff that was kind of established beforehand. So she had already started working on some of the stuff already, so she came to me with some parts already established like the dance and the part right in the beginning with the film like the kind of introductory thing where she's standing in front of the microphone and she's got the feather boa on and then there's like her in the car. So that was almost from an older way I think for Athena of thinking about media and that's when her and I first started talking I think that she thought that it would be more just projections and like that kind of thing. So the first thing that we actually did together was go shoot that little film and make it hook up because she had already kind of started thinking about the beginning, you know, when you think about things slowly. So that introduction was kind of part of that film where they just had the black text that said something and I think it might have been a requirement because it was an M.A initially. But it was very much part of an early understanding of media that Athena had around mixing performance with projected film and I think she was really surprised when I started doing other stuff.

J.F: I'm very interested about the sound activation in the beginning with the microphone where Athena taps on parts of her body and claps can you tell me about the mechanics of that, technically?

T.B: Okay, we did it in *Max/MSP* which is one of kind of the fundamental programmes for designing interactive media and at the time it was a programme that

I used a lot. I have since changed but it's a very easy and nice programme to use and basically what we did was we hung the microphone in front of her, was it hanging?

J.F: From the video I could see that there was one in front; she placed one in front of her. Maybe there were others hanging but I couldn't see.

T.B: No I think it was placed in front of her. So it was a moment of like where she was beginning to perform and it fell into something else. So basically we just did frequency analysis where it was amplitude which is loudness, so how loud it was, so beyond certain loudness it would pick it up. But because that really wasn't good enough because if you hit on your head or if you hit your arm it will still be as loud depending on how hard you hit yourself. So we did a frequency analysis so there's a very very slight difference in frequencies to that so if you smack the inside of your arm versus your chest there's a different kind of frequency in that. So we did frequency analysis and then kind of worked it out with her, so getting her to smack her arm quite a lot so that we knew that that is that sound and then trigger this sound and then the chest is like a deeper one; so when you it hears that it would trigger the other one.

J.F: Was it a special microphone just out of interest?

T.B: No it wasn't a special microphone, it was a condenser mic. [microphone] so it would pick up, it picked up sound in all directions which is a problem actually because if the audience did anything at that moment it could potentially trigger. We should have been using a monodirectional mic. But we just had that and it was USB driven and because we were running everything off the laptop the sound output for the films or the interaction whatever was coming through the mini jack on the laptop, so we couldn't use the mini jack for the microphone because it started interfering so we found this microphone that was USB driven.

J.F: Can you tell me more about the use of the, I'm not sure if it was a webcam, I know there was a camera used in different kind of instances to activate different things?

T.B: The camera was kind of interesting because and I think this was one of the first times me working with [theatre] actually I lie had done theatre before but not like in part of the development I hadn't got kind of very closely involved. So because it was such a small space and because the lighting had to be so specifically focused and because once we started working with the computer vision stuff, we wanted to get kind of very specific kind of silhouettes and we wanted the relationship between her silhouette and the screen at the back of the space to be kind of in relationship to each other. It was really hard to just have one big camera looking at the whole space because the camera would then pick up the projection and then the projection would start interfering with what the camera saw. So then what we had to do, because the projection was going to be at the back, we had to kind of point the camera at Athena from the side so that the camera didn't see the projection, because it's very very light sensitive. We didn't have *Xbox Kinect* back then so we were doing very very light sensitive stuff and for Athena positioning became a very important part of meaning and the content. So there was a place at the back of the stage where because it was very much about mapping as well, so her engagement with the actual floor space of the stage became quite meaningful as well. So we moved the camera around a lot.

J.F: I saw that.

T.B: That's one of the reasons we decided to keep me onstage as a kind of person who was documenting, so it wasn't documenting so it was like I was reflecting back almost as a character that was reflecting back the historical view and all the history was in the technology, So in a way I and the technology that I was using came to represent something very specific and then we kind of worked that in with the positions of the camera and moving it at specific times and the mapping of the floor

included mapping. We kind of went and chose yellow tape specifically to put where the camera positions should be, the tripod so that it became a kind of workshop map space where things would be and then moved to different locations. So we did use one camera and then move it around a lot because of that but we did every single step, every single decision because it was there visible, you had to begin feeding back into the beginning. None of it was arbitrary and we never let any moment or any engagement become arbitrary it had to represent, it did represent, it does represent something so we let it kind of speak for an aspect.

J.F: Can you tell me a little bit about the video of the moving map, I think in one of the scenes towards the beginning there's a map projected at the back and Athena is in front of it but the map is moving and it kind of gave the illusion, well to me, the illusion of moving or travelling on a ship how did you achieve that technically?

T.B: Technically, well ja Athena was looking for something that represented that idea of mapping and travelling and changing movement and it was actually a piece of film that I had from a workshop that we just reused. It was actually a map and we took a video camera and just moved it slowly along the map. So we made a very very short film of like a camera kind of following a road on the map with like sort of a handheld [camera] and we just put it into a loop, so it ran. I think when we used it with Athena her movement and how she was moving was also affecting the speed of it and how it was changing. So it was very interactive with how she particularly was performing as well.

J.F: Was it a, if I understand correctly was it based on timing and then in rehearsal then you kind of set the speed and pace of the video?

T.B: Ja exactly, I mean some things you know that, "okay this," I'm trying to remember it was so long ago, I mean there's a lot of adjustment that happens in rehearsal, lots and lots and lots and lots. So we have an idea, do something, she will

try it out and then we will be like, “Oh no let’s tweak it this way or let’s tweak it that way.” Never is it just straight off what it is which is quite nice because then it becomes about performing and practicing.

J.F: I just have a question about the various stands on the wheels that held the different technological elements like the projector, the camera how did you come to that decision to have them all on wheels?

T.B: Oh ja because the projector was on wheels because we needed to move it back and forth, was it just the projector, and then the doll was on wheels and what else was on wheels?

J.F: It was just the projector and the camera I think?

T.B: No the camera was on a tripod that we just moved around. The projector was on wheels and moved back and forth for the exact same reasons we had the camera on a tripod it was about positioning, mapping the location of the actual performance space and how that began making meaning. Also we needed to focus the projection in and out, so obviously if you pull the projection more forward you’re going to get a bigger projection surface and if you push it right in you’re going to get a smaller projection surface. So when we pushed it back it was a) to give us more space for what was interfering with a location that we needed but what it was also doing was it was also allowing for a bigger projection, so some of the interactions were intimate but she could have more space. Especially if she was performing in front of the stage we needed to push the projector back so we had a bigger thing [area]. If she was performing towards the back I would push the projector more forward so it would cover her. Because she was also quite far from the audience we also needed to - it was almost like using a light in a way we needed to bring it in or spread it out, that kind of thing.

J.F: Can you tell me more about the use of Athena's silhouette within the interactive elements. Her silhouette was used in many different ways: the one where her silhouette was filled with the video of a map; there was another one where it was filled with the footage of her childhood, and then there was another one where she was interacting with the video of her as a child and her grandmother. I wanted to ask about those?

T.B: Okay and I think, I mean it was kind of a technology; it was a technique that I was working with anyway in *Max/MSP*. You could work quite nicely with body mapping, so you could extract a silhouette or you could put video into a silhouette and it was kind of, "with interactive video that's what you do," you allow the interactor to somehow become part of the video through some change or alter or that kind of thing. So what we did was we took that principle of interactivity where the camera acts as a sensor to feed information about the body into the programme and we used it as a purely aesthetic form. So it was kind of interactive in a way but we started looking at it as like, "what kind of aesthetic and content driven qualities does this actually hold?" rather than just information. So for *Coming To* the relationship between Athena now, Athena in the future or Athena that didn't exist and then the grandmother and this relationship between someone who is dead and in the past and someone who is alive. She was finding these connections between her and this person so her body, and I think this is something very much with physical theatre, is that the body very much holds meaning and conversation and information and that kind of thing. So it was kind of an immediate and almost obvious decision to keep the body in that stuff and then the media became a connection to a historical form. The media was the old movies; the media was a projection into the past you know what I mean so it was almost like a physical relationship between Athena as a body in the real world. Athena as a bodylike as a kind of a metaphorical body in the connection with her grandmother as well. So we just kept that thread of relationship and allowed that to aesthetically begin talking to that. So that's the nice thing for instance the one where Athena she had these movies and she was like, "what can we do with these movies? How can we use them?" so rather than just projecting

them was to put them in her silhouette, so when you're watching the piece you can see her performing and see her like engaging and feeling with it but then you're also seeing a real thing. So for instance with the one with her as a little girl, when we played and played with it, we definitely played with it, she knew that at a very specific moment that the movie changed and then she would go down and then she stood back up again. So she allowed the film to kind of become embodied in her body through her performance. Then the one with her grandmother we inverted it because it was more of a nostalgic thing and it was more about somebody else and not her so we put her white silhouette into a historical form because she's not really there and she never really will be there; but the play was about connecting. So if we kind of allowed her to physically connect through media and that's pretty much what the video was.

J.F: The section where Athena maps the stage space with potatoes and then behind her there's a projection where I think different circles appear as she places a potato on the ground. I'm just curious about that were these triggered by anything?

T.B: They were triggered by me (laughs). It was a Flash animation actually, so it was in compartments. It was one of the few things that we couldn't make live and reactive. I would basically watch and as she put that potato down we would run the next piece in and then so it was very paced in that way which was quite nice because you didn't have to rely entirely on the media. She could kind of feel her way through it and it was right at the end so she was quite tired and she never really knew exactly...

J.F: The timing?

T.B: Ja so we just sort of paced it out like that and ja it then went kind of quite mad at the end, that it was one long animation basically and I kind of stepped them along, it was a cheat.

J.F: There was also a section in the end where, well from what I could see, it looked like when Athena clapped it triggered a series of different images was this the same principle as with the microphone?

T.B: Yes.

J.F: Okay and then just feeding video into in?

T.B: Yes, so the first one she was using her body and so this time I actually just switched over to look for amplitude so it just looked for loudness. That's why she was clapping quite hard and then it was changing pictures over as well, so exactly the same idea, ja.

J.F: Then the last question, your experience working with a performer how, does it affect the way that you work now and your working process now, Did you learn anything kind of from this process of working with Athena?

T.B: Ja I learnt a lot actually because I had always been sort of an independent person and working alone. Theatre is very much a collaborative form you have a choreographer, a director, performer, lighting person and sound person and I had never really worked in that environment before and it was fascinating the kind of communication that happens. The kind of engagement and interaction, that things are allowed to change in rehearsal, nothing is ever set in stone and the ability to be open to shift and change and practice like that was very exciting to work with. I was also incredibly spoilt I think working with Athena because she was so open to potential and like I said in the beginning I think she thought that it was like just going to be videos and media; and then I came with all this other stuff which was great and she didn't know about it; which is one of the kind of exciting things of working collaboratively. I often say I'm spoilt because people will approach me and say, "will you do a projection for me, we need this projection on the back?" and I will actually

just say no because, “I’m not just interested in making a projection for you to like project on the back of your stage while you’re doing something else,” because the potential for it is so so much more. I’m spoilt by working with her and I’m working with her some more. I think it taught me so much, I think if I had got involved with somebody and it had just been, “we’re the choreographers, we’re the directors this is what we need you to do” it would have been a completely different piece.

J.F: Thank-you.

Appendix G

Interview Transcript: Naomi van Niekerk

Subject: *Coming To*

Telephonic interview

30 January 2012

Jessica Foli: Can you tell me about your working process with Athena, was there a brief, did she give you specific instructions?

Naomi van Niekerk: Okay so the working process with Athena?

J.F: Yes.

N.N: Well, I have to remember now because it was quite a long time ago. As far as I can remember it was like a real collaboration in terms of like on that first day of rehearsal, it was like in the Nunnery, she came to rehearsal with some objects and some things and then she actually did improvisations. I was kind of the outside eye about giving her feedback about what I saw, so ja she did like (**inaudible**) improvisation exercises like creating a map with objects and then telling the story about these objects or like I said it's quite difficult to do that kind of thing on one's own. So at the very beginning of the process that was part of my role as kind of giving her feedback on everything she did and then I would tell her what I saw and how she had to recognize which part of the improvisation was interesting and which part could be kept for the performance later. So that's how it started it was very very free and then later, in terms of instructions for the design, there was like that one doll thing like a standing puppet. I can't remember how we came up with it, but it wasn't about her saying that she wanted exactly that, something like that onstage, I think she would kind of give an idea and I would give an idea and then I would also quickly cut objects up and then she would experiment and then see how she could use it. She was very open in letting me try things.

J.F: My other question is: the video footage of Athena and her grandmother, did that influence the way that you created that doll figure?

N.N: Yes it was obviously very much influenced by the stories of her grandmother and that she was telling her grandmother's story that is where the idea came from.

J.F: I remember one of the things I saw in the video was that there were these two little heads that were on small sticks, I don't know if you can remember that?

N.N: What was that, oh ja the two little puppets.

J.F: Yes the two little puppets.

N.N: Yes I remember that, that was like her grandmother meeting her grandfather, falling in love, if I remember it well. Yes I think that was it.

J.F: That was quite interesting because at that particular point she used them and did almost like a dance with the two puppets and I thought visually that was quite interesting to create another scene in that way with those kind of two design elements. How did you arrive at the decision to have kind of that minimalist look of those two puppets?

N.N: Just repeat that please? What was the question?

J.F: I was asking how did you creatively arrive at that point?

N.N: Well the thing is that at that time when I was working with Athena that was my method of making puppets that was kind of what I was doing at the moment. So I basically just brought them and it was first finger puppets and then she said no let's

put them on sticks, so it was because I was making those sort of puppets at the time.

J.F: And I also wanted to ask about the yellow flowers on the dress, can you tell me a little bit more about that? Was there a symbolic meaning behind the flowers or was it just an aesthetic?

N.N: There was something very significant about the flowers in the story I just can't remember what, because it was so long ago, but I think the flowers on the dress that was kind of... You know it's also about this figure standing still and then flowers in the dress (**inaudible**) about her story being told, because it's like this still standing figure, so you know, about heritage and retelling that to today. I didn't think that the flowers had a specific meaning but it was more about what it provoked in that moment, this still standing figure and suddenly these flowers appear on it. I think... didn't she say something in the show about her dress having flowers on it? I think later there's like a text, I would have to re-watch the video, but it was more about the thing of this is her story that we are now going to tell. You know it was just about, sometimes an image doesn't have a specific meaning but it's about what it evokes.

J.F: Another interesting thing that I saw in the video was this one kind of object Athena had, I think it was like a spinning wheel and it had black cut-outs on it.

N.N: Yes, like the shadow wheel yes I remember that. Well it was like the three figures that were on it was from a monument I think from... I should have checked this with Athena, because that story that she tells about the women throwing themselves off the cliff. I think on that site there was a monument built and so I kind of took pictures of that monument and put it on the wheel, the thing that's turning, it's about you know time and it also can evoke this wheel of time passing... it was about... Oh what did Athena say about that did you ask her?

J.F: No I didn't ask her about that.

N.N: Ja you should because that was an important object. Ja it also made the shadow so it had these figures. Did you see just the video or did you see the show performed?

J.F: I just saw the video, because I wasn't living in Joburg at the time I was studying in Grahamstown.

N.N: Oh okay, I understand. But the spinning wheel was...I think you should ask Athena because she would probably be able to remember better than I do, but there was something specific it was quite an important, she'll be able to elaborate a bit more about that...Check with her, because I can't actually remember and she did her whole thesis on the thing...there are many things that I can't really remember that well.

J.F: Ja because it was quite a while ago, so I understand. I also wanted to ask; before this had you worked with Athena before at all and how did you come together to work on this piece?

N.N: Well I did her set. She did a show at Wits, a student production with all the physical theatre students, it was called *Just in Time* and I did the set design with a friend of mine, we were two. Then it went quite well and I really enjoyed working with Athena because she's really so open, she's like the dream director for any designer because she really sees the designer as a collaborator. She's not someone who says, "Ok I want this and that." She would give some instructions, when things wouldn't work, but she's always open... **(inaudible)** She's a true collaborator in the sense that ,you know, we would have these ideas like these visual things and then I wasn't sure whose idea it was because it was just such a collaborative process...So

ja as a student I worked with her (**inaudible**) and then she kind of phoned me and then we just started to see. We weren't sure where this project would go (**inaudible**)

J.F: So then would you say that the easy communication and the way of working that you had with Athena helped with this working process when you worked together on *Coming To*?

N.N: Definitely, so I think that also (**inaudible**) working with Athena [in] physical theatre at Wits, having seen her productions, having played in her productions I had also got a sense of her universe, so her artistic feel. Then it also makes it quite easier when you make propositions because you know what aesthetic she would like and I mean her things are always quite playful.

J.F: Thank-you very much.

N.N: It's a pleasure, Good Luck.

