

Making Sense of Contemporary Dance: An Australian Investigation into Audience Interpretation and Enjoyment Levels

Short Report Prepared for *fuel4arts*, February 2005

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Acknowledgements:

This research was supported by an Australian Research Council Linkage grant (Grant No. LP0211991), MARCS Auditory Laboratories at the University of Western Sydney, the School of Dance at the Victorian College of the Arts, and industry partners the Australia Council, Ausdance, and the Australian Choreographic Centre. Further information may be obtained from <http://www.ausdance.org.au/connections/>. For information about using the Audience Response Tool (ART) contact Renee Glass (r.glass@uws.edu.au) or Kate Stevens (kj.stevens@uws.edu.au).

Background to the Research

In 2002 a collaborative research team in Australia launched a new project called *Conceiving Connections* (see <http://www.ausdance.org.au/connections/>). The parties involved in this project include the Victorian College of the Arts, The University of Melbourne, dance industry partners The Australia Council, Australian Dance Council (Ausdance), The Australian Choreographic Centre, and researchers from MARCS Auditory Laboratories at the University of Western Sydney.

Several key questions have driven the *Conceiving Connections* project. These aims can broadly be classified into one of two larger research objectives: i) psychological and ii) industry-focused. A brief review of the psychological objectives will be discussed. However, the present paper is framed to present a pragmatic and applied emphasis.

1. Psychological Objectives.

Our aim was to fill a lacuna in the literature of psychology and empirical aesthetics by investigating a medium that is visual, temporal and dynamic. Contemporary dance is such a medium.

Psychological theories have been used in the context of the arts and theories about the nature of aesthetics and art appreciation are numerous. However, these theories are generally formulated with the intention of explaining a host of human behaviours and use the arts as a way of illustrating the validity and generality of a particular theory (Kreitler & Kreitler, 1972). Additionally, empirical studies investigating aesthetics have largely used static and visual stimuli including the visual arts such as painting and architecture, artificial stimuli such as random dots and geometrical figures, and objects such as furniture and faces. By focusing on contemporary dance which is temporal, dynamic, rhythmic, kinesthetic, expressive, affective, and multimodal we examine how well many of these theories explain stimuli that are not purely visual and static.

2. Dance Industry Objectives.

Our research into audience response to contemporary dance also holds a more pragmatic and applied research focus. It is expected that by researching psychological responses to dance, greater knowledge and understanding of the spectator's psychological processes will help direct practical solutions to the issue of 'audience attendance rates'.

For some time, it has been suggested that audiences are often left quite baffled and confused after observing a dance performance and have little idea of the purpose or the intent of the dance work (*Australians and the Arts: A Report to the Australia Council* by Saatchi & Saatchi, 2000; *Made to Move, Research Report*, 2000). Satisfactory communication between the performance of a work and its simultaneous observation is often not achieved – leading for some, to a very frustrating experience with contemporary dance. It is possible that the "communication loop" that connects performers and observers may be incomplete. In this paper we will shed light on the performer–audience connection beyond anecdotal accounts.

The Impact of Information on Interpretation

If it is the case, that audiences are left baffled and confused, what can we do to help alleviate this problem? Psychological theories predict that spectators with prior knowledge of, say, contemporary dance will respond differently to naïve spectators.

Priming audience members about a particular work should assist them to engage with the work at a greater level of understanding. Using methods from experimental psychology, we asked 'does presenting information about a work before its performance increase the level of insight and, in turn, enjoyment reported by participants?' 'Is this one of the strategies that the dance industry could further explore in an attempt to make new works accessible to Australian audiences?'

The Relationship between Insight and Enjoyment

One of the first in psychology to theorise about the nature of the aesthetic response was Sigmund Freud (e.g., 1914, 1928). Similar to other behavioural activities such as nocturnal dreams, daydreams and jokes, Freud recognised that creating and observing art is pleasurable and cathartic because it allows a way to dispel unconscious wishes. Although stylistic qualities or formal properties of the artwork may elicit pleasure, it is the content or subject matter that constitutes the most potent source of pleasure. According to Freud it is in the process of interpretation that observers are able to identify with the content, project their own wishes and desires onto the artwork thus gratifying their own unconscious tensions in a sublimated form. It could therefore be argued that if dance audiences cannot make sense of a work, the most potent source of pleasure or enjoyment may be unsatisfied.

Another contributor to the field of experimental aesthetics was Daniel Berlyne. Berlyne (e.g., 1969, 1971) argued that arousal levels mediate aesthetic pleasure and that there are three artwork variables that contribute to changing arousal levels. These three variables include: 1) psychophysical variables, 2) collative variables and, 3) ecological properties. In the case of dance, psychophysical properties would include kinematic properties such as velocity, acceleration and displacement. Collative properties such as novelty, complexity, incongruity and surprise can give rise to arousal. Finally ecological variables including the associative value, signal value and *meaningfulness* of the artwork can give rise to arousal.

In recent years there has been a debate about which of the above three variables (psychophysical, collative and ecological) are better predictors of aesthetic pleasure. Berlyne supported the notion that artists are able to manipulate aesthetic pleasure by manipulating the stimulus properties, particularly collative properties such as complexity. However, several studies have found that ecological variables may be better predictors of preference than collative variables (see Martindale, Moore & Borkum, 1990 for a review). These findings have led to more sophisticated cognitive theories of aesthetic preference including Whitfield and Slater's (1979) Preference-for-Prototypes Model and Martindale's (1984, 1988) Cognitive Theory of Aesthetics. The above models emphasise the *cognitive* components of aesthetic pleasure including recognition, understanding and meaningfulness.

The above literature suggests that various aspects of a performance can lead to aesthetic pleasure. Is this true of contemporary dance and what do current audiences report as enjoyable? Is it necessary for observers to *understand* the work in order to *enjoy* it? Or are there other more important factors contributing to audience enjoyment?

Specifically, the present research seeks to investigate the following four research questions:

- R1. Do current audiences, in general, respond with insight?**
- R2. What impact does pre-performance information have on interpretation?**
- R3. Do current audiences typically enjoy contemporary dance?**
- R4. What factors contribute to enjoyment levels?**

The research uses an experimental method to investigate these questions. There are numerous advantages associated with using an experimental method. Firstly and most importantly, it is the only research design that can determine cause-and-effect relationships, rendering it the most powerful research design. By manipulating a particular variable (independent variable), and controlling for extraneous variables, we can decipher whether that variable affects other variables (dependent variables). Statistical tests can then be applied to determine whether the observed effects or differences between experimental conditions are “significant”.

Method

Participants

A large-scale study was conducted over three years using 472 participants residing in various city and regional locations around Australia including Melbourne, Canberra, Geelong, Launceston, and Sydney. All participants were affiliated with a particular arts institution and were invited to attend the dance production and be a part of the research. Overall, there were ten performances/testing sessions. In each instance, the particular work was performed in a theatrical venue. Participants varied in education, gender, experience with and expertise in dance and other art forms. See Table 1 for a selection of demographic details. The average age of the sample was between 37 and 38 years.

Table 1: Gender, Education and Dance Experience demographics

| Variable | Frequency (f) | Percentage (%) |
|---------------------------|---------------|----------------|
| Gender | 458 | |
| Male | 109 | 23.8 |
| Female | 349 | 76.2 |
| Education | 449 | |
| None | 1 | .2 |
| Primary School | 8 | 1.8 |
| Some High School | 60 | 13.4 |
| School Certificate | 34 | 7.6 |
| Higher School Certificate | 52 | 11.6 |
| Certificate/Diploma | 52 | 11.6 |
| University/College degree | 242 | 53.9 |
| Dance Experience | 444 | |
| None | 228 | 51.4 |
| 1-4 years | 63 | 14.2 |
| 5-9 years | 56 | 12.6 |
| 10+ years | 97 | 21.8 |

Note: Dance experience denotes applied experience in any form of dance.

Contemporary Works

Two new Australian contemporary dance works performed live were used to examine response and the effect of information on such responses. Approximately 65% of participants observed Anna Smith's *Red Rain*. The remaining 35% of participants observed Sue Healey's *Fine Line Terrain*. Both Anna Smith and Sue Healey are highly accomplished choreographers. Anna Smith won the Victorian Green Room Award for

original choreography in 1999 and 2001. Sue Healey's film *Fine Line*, adapted from *Fine Line Terrain*, was awarded the Ausdance 2003 Best Dance Film Award.

The two works are equal in duration, 40 minutes, and were deliberately included in the study because of their differences. *Red Rain* is more representational, whilst *Fine Line Terrain* is an abstract piece.

A description of *Red Rain* (choreographer: Anna Smith)

The 40-minute work *Red Rain* begins with the delicate sound of water dripping gently through a dancer's fingers into a hidden pool. It ends with a torrent of 'red rain' pouring over bodies and falling in huge droplets of sound. There is something archetypal about the complex of image and sound, an evocation of ancient memories, perhaps of sacrifice and renewal. Between these powerfully conceived images the work unfolds in finely wrought structures that suggest the cycles of experience in which rituals of birth and death, isolation and community, mark the passing of women's lives.

A description of *Fine Line Terrain* (choreographer: Sue Healey)

Fine Line Terrain explores the fragile spaces we inhabit - fine lines separating order from chaos, gravity from levity. The movement explores the physical and emotional human experience of moving or changing from one place to another.... The ways in which human actions and interactions affect us all..... Individual, pair and group dance sequences....explore themes of restriction, freedom, community and the individual.

Information Sessions

Participants were divided into 3 groups. Thirty-seven percent were given specific information before the performance of a work – presented orally, with screened material, by two dance critics and scholars. High points of significance in the meaning and/or crafting of the work were discussed. Some details of the choreographic process were described as well as possible strategies to interpret or engage with the work. Twenty-one percent were given generic information preceding the performance of a work. General information about contemporary dance was provided with the assistance of screened images and dance video footage. Contemporary dance and classical ballet were compared with regard to style, movement vocabularies and choreographic approaches. Forty-two percent were given no information prior to a performance.

Measurement of Responses

Audience responses were measured using the Audience Response Tool (ART) which assesses various psychological responses including cognitive reactions such as interpretation and enjoyment, as well as affective reactions including emotional response and visceral sensations. The newly developed questionnaire (Glass, 2005; Glass, doctoral thesis, in preparation) incorporates 5 sections including qualitative questions and quantitative dimensions that used 7 point-Likert type rating scales. The data to be presented here examined the research questions using two open-ended questions. To examine whether current audiences respond with insight, participants were asked how they interpreted the work. To measure whether current audiences respond with enjoyment, participants were asked whether they enjoyed the work and were asked to state particular reasons for their level of enjoyment. Data pertaining to emotional response are reported elsewhere (Glass, doctoral thesis, in preparation).

Results and Discussion

Interpretation and Insight

R1. Do current audiences respond with insight?

Based on responses to open-ended Question 1 we determined that approximately 88% of participants formed an interpretation. Table 2 provides details of the percentages of interpreted response across works and information sessions.

Table 2: Percentage of Interpreted Response by Contemporary Work and Information Session

| Interpretation | Red Rain (%) | | | | Fine Line Terrain (%) | | | |
|-------------------|---------------------|---------|------|-------|-----------------------|---------|------|-------|
| | Information Session | | | | Information Session | | | |
| | Specific | Generic | None | Total | Specific | Generic | None | Total |
| Interpretation | 90.2 | 84.1 | 88.8 | 88.4 | 85.4 | 97.3 | 84.1 | 87.3 |
| No Interpretation | 9.8 | 15.9 | 11.2 | 11.6 | 14.6 | 2.7 | 15.9 | 12.7 |

R2. What impact do information sessions have on interpretation?

Although the above table indicates slight variation between the three information sessions, statistical analyses revealed that the information sessions did not impact significantly on the tendency to interpret the piece. However, *specific information* sessions did impact on the *content* of interpreted response where participants presented with specific information about the choreographic process and 'ideas' on how one may interpret the piece were more likely to interpret the work consistent with those ideas expressed in the information session.

Additional inquiry: What cues did participants use to form their interpretations?

Fifty percent of respondents indicated the cues they used to form their interpretation. The visual elements including set design, costuming, lighting and props were the most commonly reported cue participants extracted to form an interpretation in *Red Rain* (40.5%). Whilst the use of space including the relationship between dancers, the relationship between dancers and set/props was the most commonly cited cue for participants in *Fine Line Terrain* (63%). Other commonly cited cues include aural cues such as music and sound effects and movement. See Table 3 for pattern of responding.

Table 3: Commonly cited cues used to form an interpretation of a contemporary dance piece

| Cue | Red Rain (%) | Fine Line Terrain (%) |
|-----------------|--------------|-----------------------|
| Visual Elements | 40.5 | 35.9 |
| Aural Elements | 31.4 | 35.9 |
| Movement | 31.4 | <10 |
| Use of space | <10 | 63.1 |

Enjoyment

R3. Do current audiences typically enjoy contemporary dance?

Approximately 76% of participants said they enjoyed the work, 3% did not enjoy the work, and 21% enjoyed some elements but not all parts of the work. The information sessions did not impact considerably on the tendency to enjoy the piece.

R4. What factors contribute to enjoyment levels?

Various factors emerged that contribute to spectator's enjoyment of contemporary dance. See Table 4 for details. As shown in Table 4 there are many elements contained in a work that participants enjoy. These include the visual and aural elements as described earlier; dancer characteristics including the physical appearance of the dancers and the physicality of the dancers; movement; spatial elements and dynamic elements. Here dynamic elements include kinematic elements such as force, speed, direction. Other factors contributing to enjoyment levels include the particular interpretation and the level of intellectual stimulation attained; emotional stimulation and emotional recognition (a factor not addressed in the above theories but discussed elsewhere – e.g., Glass, doctoral thesis, in preparation) and; novelty, one of Berlyne's collative variables.

Table 4: Enjoyment Reasons

| Cue | Red Rain (%) | Fine Line Terrain (%) |
|--------------------------|--------------|-----------------------|
| Visual | 32.4 | 51.3 |
| Aural | 28.4 | 28.3 |
| Dancer characteristics | 28.0 | 39.5 |
| Movement | 25.6 | 36.8 |
| Choreography | 10.0 | 18.4 |
| Interpretation | 7.6 | 25.0 |
| Emotional recognition | 3.6 | 6.6 |
| Novelty | 15.2 | 11.2 |
| Spatial/dynamic | 14.4 | 26.3 |
| Intellectual stimulation | 14.4 | 7.9 |
| Piece generally | 5.6 | 3.9 |
| Emotional stimulation | 7.6 | 9.2 |

Additional Inquiry: What factors contribute to a lack of enjoyment?

Of the 24% of respondents that reported no enjoyment or a lack of enjoyment at some point, 95% provided a reason. The main finding here was that a lack of understanding contributed largely to an unenjoyable experience. Of those that reported not enjoying *Red Rain* or parts of *Red Rain*, 56% had difficulty understanding the piece. Approximately 21% of *Fine Line Terrain* observers reported lack of understanding as a

key component of their lack of enjoyment. Other reasons included not liking the visual design, aural elements, and movement. An inability to concentrate on the piece, boredom and no or minimal connection to the piece also contributed to a lack of enjoyment.

Conclusions and Implications

In this brief report we have reported whether a sample of audiences in Australia interpret and enjoy contemporary dance. After a thorough empirical investigation the results suggest the problem appears not to be associated with the performer/audience relationship. A staggering 90% of observers held some level of insight. Whether consistent with the choreographer's intent/ideas or whether the ideas were completely novel, it would seem that, for a large majority of spectators, contemporary dance offers a chance for intellectual stimulation. Of those observers that did not interpret the piece, one prevailing reason for their lack of insight was because they either chose not to assimilate an intellectual component as part of their overall experience with the work, or needed more time to gather their thoughts. And while the information sessions did not impact considerably on responses, the specific information sessions could be used in future performances to offer those observers, particularly those that are not familiar with dance or who are not confident in their ability to make sense of a work, ways to interpret and understand the work. This could be regarded as an ongoing educational process with, perhaps, the Audience Response Tool (ART) applied as a one-on-one educational device.

In this section of the psychological research component of *Conceiving Connections* we have focused on some of the factors likely to contribute to an apparent breakdown in communication between performance and observation of a contemporary dance work. Overall level of understanding was the most common complaint amongst observers which fits well with psychological models theorising a relationship between meaning and aesthetic pleasure. However, 97% of observers found some, if not all, parts of the particular performance enjoyable. These results suggest that the interplay between performance and observation is a vigorous relationship and as such cannot be solely held accountable for the consumer interest in contemporary dance. Regardless of experience and expertise, most observers respond with some level of insight and enjoyment.

There are several explanations for, and implications of, these results. It may be the case that *once individuals are seated in the theatre* the experiences that dance produces are universal and that most people appreciate and enjoy. If this is the case, perhaps the problem lies outside the realm of the immediate dance environment. Audience awareness and motivation may be candidates for future refinement and improvement.

Another plausible explanation may be that an important part of the process is for the audience member to be given a chance to reflect on the particular dance work in a positive environment. The questionnaire used in this research (ART) created a secure and anonymous environment in which to explore thoughts, opinions and feelings in relation to the work. Instructions to complete the ART stated that there was no right or wrong response and that all responses were valid. It is worth noting that while the ART could be completed in 20 minutes many respondents chose to take 40 minutes, apparently welcoming the opportunity to take time, reflect on *their* response to the work, and become active intellectual participants in the dance event. Future research could explore this speculation; and could investigate what effect it has on memory for the dance event, associated enjoyment, and future audience behaviour (attendance rates).

The questionnaire has only been able to tap into the kinds of responses that participants are able to verbalise. Physiological reactions and kinaesthesia may constitute a powerful source of pleasure, particularly in experienced dancers. A recent study conducted by Calvo-Merino, Glaser, Grezes, Passingham and Haggard (2004) investigated whether experienced dancers respond differently to individuals with no experience in dance when observing movement. In general, they found that an individual's motor repertoire or skill level effects brain activity during action observation. Using neuroimaging techniques, the researchers investigated brain activity levels in expert classical ballet dancers, expert capoeira dancers and non-experts after observing a particular dance. The results indicated that motor skills have a clear effect on brain activity during action observation. Specifically, they found greater brain activity in areas collectively known as the mirror neuron system when the expert dancers observed movements they had once performed compared to observing movements they had not performed.

The research presented here, represents a starting point to facilitate the accessibility of new contemporary dance works to Australian audiences. The study has raised additional questions and it is suggested that further research explore the above speculations including the possibility that the ART questionnaire itself may be an appreciated aspect in the dance experience. With its focus on psychological reactions to dance, and its ability to focus audience members' attention to aspects of a work, the ART holds great potential as a one-on-one education tool.

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