

# The effects of mindfulness on dancers when improvising



**ASSIGN  
BUSTER**

## **a) Introduction**

### **Introduction:**

Discuss more living in the now and relate it to dance and improvisation (lived body experience, phenomenology, somatic practices)

- mention key texts you use
- include a summary of what you will write in following chapters

My dissertation looks at the effect better understandings and deeper experiences of mindfulness have on dancers whilst improvising. Sol Petersen defines mindfulness as " the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception." (Peterson, 2009, 94)

My first objective will be to identify the nature of the disruptions to mindfulness experienced by dancers when improvising and how these inhibit dancers from fully expressing themselves. By disruptions to mindfulness I am referring to anything that stops dancers feeling a mind-body connection - anything that interferes with their ability to feel that they are 'in the moment' and able to express physically what they feeling. (Roth, 1999, xxii)

My second objective was to test whether stimulating dancers' mindfulness can help overcome these disruptions and help dancers to achieve a greater sense of mind-body connection when improvising. I used meditation as a key technique to help quieten the mind and assist in bringing about a free-flowing interaction between the mind and body. (Zinn, 2003, online) Other

tools I used to provoke an easier learning were group discussions and the readings of inspirational and thought provoking texts.

Some religions, such as Hinduism and Buddhism, believe meditation is a key to spiritual growth. As well as over-complicating my research, I feel that some might find this off-putting and it could make my investigation more complex. Therefore I did not intend to focus on spirituality as an element of my investigation, neither involve it in my practical (particularly when presenting mindfulness to the group). However I was prepared and aware that there would a chance that it could be brought up spontaneously through the dancers' experience anyway. (Sperry, 2003, 1-10) However, despite this decision, I have looked into religious traditions where spirituality is a central element for their practice and understanding of mindfulness because.. particularly as I involved meditation in my practical.

**In order to try to achieve these objectives I conducted a study amongst a sample of dancers from Roehampton University. This study consisted of a programme of four one-hour weekly sessions, during each of which I asked the group to take part in a mix of meditation, dance improvisations, diary completion and group discussions. I then collected data on the attitudes and experiences of members of the group, both at the start, and at the end of the programme through personal interviews. The diaries enabled me to understand their immediate reactions in their own words as the sessions progressed as well as helping the individual members to record their thoughts and journey across the study.**

**I asked the group members to undertake completely open improvisations without any guidelines to follow as I felt this would free the dancer from care and thoughts of 'right' and 'wrong' during their improvisations. And in effect hoped this would create a less cautious and more free-flowing experience for the group members, even though I am sure some people might find guidelines of some comfort and reassurance.**

Before conducting my practical element of my dissertation, I felt it would of great importance to look at depth into more specifically the .... Of my study.

Therefore the next three Chapters I explain better through use of other research and .. I define what I mean my the terms 'Mindfulness',

'Improvisation' followed then by drawing on the links between the two. My research then goes on to outline my practical element where I explain my aims, preparations and pre-study questionnaire, before following next by my practical analysis where I use the post-stage questionnaire and diaries to

draw my ideas. Lastly I finish with my conclusion where I gather my research, practical analysis and own personal thoughts to draw up my conclusions which cover my whole dissertation.

The structure of this dissertation follows the journey of my investigation and on account of carrying out a practical case study for my dissertation where the use of questionnaires, diary entries and session outlines are part of my development of ideas and conclusions I have attached an Appendix. In this appendix there is ..... and I will make references to this area throughout where necessary.

## **b) Chapter 1: Mindfulness**

My research in chapter 1 begins by looking at mindfulness in its broadest sense and then focuses more specifically on mindfulness in relation to the body (body mindfulness).

### **What is mindfulness?**

" Mindfulness is the clear and single-minded awareness of what actually happens to us in us at the successive moments of perception."

(Petersen, 2009, 94)

This definition of mindfulness by author and pioneer of mind-body healing Sol Petersen focuses very clearly on maintaining awareness from moment to moment.

However, teacher and practitioner of mindfulness meditation John Kabat-Zinn's definition of mindfulness introduces the concept of maintaining a non-judgemental attitude.

" Mindfulness means paying attention in a particular way: on purpose, in the present moment and non-judgmentally."

(Kabat-Zin 1994, 4)

Coming from a more spiritual background, Zen Master Shunryu Suzuki emphasises the importance of mindfulness in developing inner wisdom. In his book, " Zen Mind, Beginners Mind," Susuki writes about how when striving for mindfulness, it is important for the mind to remain open enough to 'see things as they are without effort and to understand things as they are'. (Suzuki, 2005, 12)

Teacher and practitioner of ecstatic dance Gabrielle Roth, when talking about mindfulness when specifically related to dance stresses the importance of not being preoccupied or wasting energy dwelling on the past, or concerning about the future. As Roth puts it, 'listen to your body and do what is appropriate for you in the moment.' (Roth, 1999, 15)

Although the quotes above do express slightly different angles on mindfulness, the ability and awareness of being in the moment of the present is an undeniable thread. This is the essence/place which I believe to be most relevant to my research. This it the centre and root of the experience which I hoped to bring and strengthen of the dancers in my

practical study. I look at the links between mindfulness and improvisation in more depth later in chapter 3.

In its simplest expression mindfulness is about being totally present in the now and resisting the temptation to get caught up in thinking about and/or regretting our past or worrying about the future. It has been shown (evidence?) that if an individual is pre-occupied with regrets about the past and worries about the future, they are unable to really involve themselves and appreciate their experiences at present as they are not fully engaged with them. Not only can living in the past or future detract from experiencing "the present" (the gift?) but both can be seen to be a waste of time and effort as the past is gone and the future is unforeseeable. As the songwriter Bob Dylan wrote in his song Don't Fall Apart On Me Tonight, 1983, "Yesterday is just a memory, tomorrow's never what it's supposed to be." (Dylan, 2006, 207)

## **Types of Mindfulness**

Many writers on the subject of mindfulness break the concept down into various mindfulness types particularly in terms of their application to clinical and behavioural therapies. (REFERENCE) However it is interesting to note how many of these analyses are based on or around the Buddhist analysis in which mindfulness is seen as the key to wisdom, mind-control and spiritual growth. (Kumar, 2002, 40) Buddhism says that there are in fact four different types of, or dimensions to mindfulness:

Mindfulness of the body: which includes mindfulness of breath, sensations, movements and postures, and the sense of the body in space.

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

Mindfulness of feeling: which includes the qualities of desire, aversion and neutrality. Desire, aversion and neutrality are how we respond to feelings (or vedana) and this is said to be really important for those working through issues such as anxiety, pain, addiction, depression.

Mindfulness of the knowing faculty (the mind, but often thought to include the heart), also known as 'citta'. This includes mental states such as fear, anger, lust - the condition of the mind itself. citta as the knowing faculty is not bad, usually it's translated as mind but citta includes emotions so heart/mind is more accurate (although some academics dispute this practitioners and most scholars agree on this interpretation) so it's the condition of the mind that it represents more than objects in the mind (dhammas)

Mindfulness of 'things' or events' also known the dhammas , for example awareness of the five mental hindrances to meditation (craving, aversion, restlessness, doubt, sloth/torpor).

(Silva, 2010, 5), (Ñānasampanno, 2004, 6), (Bhikku, 2009 [online])

In my dissertation I propose to focus primarily on body mindfulness which is described in point number one, in an attempt to stimulate the mind-body connection. However it is not possible to ignore the other types of mindfulness, not only because they are all parts of a greater whole but also because these other types of mindfulness also have relevance to the body, to movement and to dance as each of them has the potential to disrupt the individuals ability to be in the moment. When I say I will concentrate on

body-mindfulness it is because

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>



By body-mindfulness I mean the development of a more specific and deeper connection between the mind and the body by the cultivation of sense awareness of the body. Tai Ji teacher, Patrick Kelly, refers to this fine body awareness as " self-sensing": " Self-sensing .... begins with a sense of the body's spatial positioning and movement, pressure and warmth along with other sensation for which there are nerve sensors throughout the body, then expands to include the sense of the life energy of the body itself." (Petersen, 2009, 95)96)

## **Meditation and Mindfulness**

Jon- Kabat Zinn and Shauna Shampino, Gary Schwartz and Ginny Bonner are just four on many who believe a key tool for developing mindfulness is the practice of meditation. There are innumerable different definitions and descriptions of what meditation is and how it should be practiced, however all of these involve the individual focussing on their attention and awareness and attempting to slow down the constant stream of thoughts, emotions and senses being experienced by the mind.

Meditation has been around for thousands of years. Indian scriptures called " tantras" mentioned meditation techniques 5000 years ago. Some researchers have speculated that primitive hunter-gatherer societies living around 15, 000 years ago may have discovered meditation and its altered states of consciousness while staring at the flames of their fires. (University of Florida [online])

Today there are almost innumerable different meditation practices, many for specific objectives such as pain relief, stress relief and also mindfulness. One

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

popular misconception about meditation is that it is a way to make your mind blank so you can escape from what you are feeling. However as Dr. Jon Kabat-Zinn puts it is important for the individual to understand that meditation is about creating a new type of relationship with pain, stress and anxiety so that they do not impact negatively on your life. It is not about evading or hiding away. (creativity?) (Zinn, 2005 [online]) Meditation is not about running away from your life for a few minutes but is about taking what you can experience from meditation in terms of mindfulness, stillness, peacefulness into your everyday life.

I believe that this is key to dancers... Look into and discuss in more detail in Chapter 3 which particular reference to the work of Gabrielle Roth. ...

There seems to be no specific research on what barriers to mindfulness exist, although it is generally reported that the main barriers to maintaining a state of mindfulness are to do with the pressures we all experience in our daily lives and the human condition of being 'born in time' where decisions taken in the past seem to impact on our future.

" Most of us find ourselves frequently 'swept away' by the current of thoughts and feelings, worries, pressures, responsibilities; wanting things to be different from how they are right now." (Bangor University, 2011 [online])

Perhaps the lack of dedicated research on barriers to mindfulness is partly a function of the fact that anyone who tries to strive for mindfulness knows instinctively the problems encountered when the trials and tribulations of everyday life distract the mind from calmness and serenity.

## **The benefits of mindfulness**

The benefits of mindfulness are claimed to be both wide-ranging and significant and are said to include pain relief, stress reduction, increased concentration, stimulated feelings of well-being, increased insight and heightened confidence. (Walsh, 2006 [online]???)

Although there has been an increasing amount of empirically based research into the effectiveness of mindfulness, there is not yet a widespread acceptance of its effectiveness partly and much of the older work has been described as " rife with methodological problems" (Bishop, 2002, 71). There is now more recent and robust scientific research available for which the methodologies have not yet received the same levels of criticism, and I summarise the results of this work below as I feel that

If it can be shown that mindfulness has an effect

There is now clear evidence that suggests that mindfulness may hold some promise in a therapeutic context. For instance, two Professors of Social Psychology at the University of Rochester, New York, carried out an 'empirical examination of the role of mindfulness in psychological well-being'. In doing so they developed the Mindful Attention Awareness Scale (MAAS) which was the first attempt to measure 'individual differences in the frequency of mindful states over time'. The results of this work, based on a sample of 327 University Students indicated 'that mindfulness is a reliably and validly measured characteristic that has a significant role to play in a variety of aspects of mental health'. (Brown & Ryan, 2003, 844)

A resource which I have come across frequently throughout during my research is the work of the biologist Dr. Jon Kabat Zinn at the University of Massachusetts, one of the leading academic exponent of mindfulness. Zinn took Buddhist mindfulness practice into a clinical setting for chronic pain management with the development of Mindfulness-Based Stress Reduction (MBSR) which has been proven to have beneficial consequences of improved sleeping and reduced stress and mood disturbance amongst cancer patients. (Carlson & Garland, 2005, 278) It is Zinn's work that is behind the availability of these therapeutic applications on the NHS (usually combined with cognitive behavioural therapy). Interestingly it was felt necessary to secularise Zinn's approach in order to make it more 'acceptable' to the medical establishment. (Chandler, 2010 , Aubrey, 2007 [online])

Both these studies conclude that mindfulness has a role to play in stimulating well-being which has obvious relevance for those in the creative arts where stress and anxiety has obvious negative implications.

In a more performative context, in 2009 Tamara L. Giluk of the Department of Management and Organizations, University of Iowa published a meta analysis of 29 mindfulness studies (involving 32 samples) in an attempt to reach a 'precise empirical estimate of the relationship between mindfulness and the Big Five personality traits', as assessed by the NEO Personality Inventory ('neuroticism, extraversion, openness to experience, agreeableness and conscientiousness'). Giluk concluded that although all five personality traits 'display appreciable relationships with mindfulness, the strongest relationships are found with neuroticism, negative affect, and conscientiousness'. Giluk commented that she felt it was important for <https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

further research to focus clearly on the development of clearer definitions for, and measurements of mindfulness. (Giluk, 2009, 1)

**An interesting experiment has been done into 'Mindfulness, spirituality, and health-related symptoms'. The article published in Volume 64 of the Journal of Psychosomatic Research specifically examined how 'participation in the mindfulness-based stress reduction (MBSR) program was associated with increases in mindfulness and spirituality'. The research was based on a sample of 44 individuals and reported that 'there were significant improvements in spirituality amongst the sample', as well as other benefits associated with well-being and medical symptoms. (Carmody et al, 2008, 393)**

Taken as a whole these research studies seem to clearly demonstrate that mindfulness can have positive benefits both therapeutically and in terms of stimulating well being and spirituality. It was these conclusions and the lack of any research on mindfulness when relating to dance improvisation that persuaded me to make this the subject of my dissertation. Having explored the concept of mindfulness and looked at evidence for its effectiveness in a general sense.....

## **Chapter 2: Improvisation**

### **What is improvisation?**

Before investigating the importance of the mind-body relationship within dance improvisation, I feel it is necessary to define what is meant by improvisation and explore its importance to dance.

The word improvisation originates from the Latin word "improvisus", which itself is derived from "in" meaning "not", and "provisus" meaning "foreseen", i. e. unforeseen. (Etymology dictionary [online]) This etymology of the word has in itself associations with living in the moment in terms of not having prepared or pre-planned for an occasion, but taking it as it comes.

It is not easy to define exactly what dance improvisation is, and in fact some commentators such as Lynne Blom and Tarin Chaplin have said that it is easier to define exactly what improvisation is not as opposed to what it is.

Attempting to define improvisation using words can be said to be problematic because "language is linear and improvisation is not." (Blom & Chaplin, 2000, iv) In their book "The Moment of Movement" Blom and Chaplin, stress that improvisation is the most vibrant and "free-spirited" form of dance. "Improvisation is the dynamic daughter of dance...she has a free spirit; she should be given free rein within wisely and flexibly set boundaries."

For the purposes of this dissertation I wanted to define dance improvisation as simply and to impose the minimum possible guidelines and restrictions and have decided to define dance improvisation as a spontaneous creation of movement.

Before exploring the relationship between the mind and body in dance improvisation I felt it was important for my dissertation to ascertain what importance improvisation has within dance, as these areas would become the visual representation of any effect of my practical research.

## **The Importance of Dance Improvisation**

Dance improvisation aims to counteract the need many dancers feel for control and pre-planning which exist in almost every other type of dance performance: improvisation pushes against the familiarity of the previous experiences of the dancer. Improvisation is the only form of dance that allows the dancer to express themselves in a totally free environment, although of course improvisation can have guidelines imposed on it. (Blom & Chaplin, 2000, xi)

Dance, choreographer and therapist Miranda Tufnell lists the uses of improvisation as firstly a key 'source' for creating original movement and developing a piece, 'as training in perception' and as a performance form alone. (Tufnell, 1993, 45) The technique aims uncover the hidden opportunities which lie 'behind our thinking, seeing." In her book " Body, space and Image?" Tufnell expresses her great fascination with improvisation and its ability to strip layers of the reality of human existence and move awareness towards a deeper, more honest place. (Tufnell, 1993, 46)

This analysis has similarity to the objectives of mindfulness meditation in many ways - the ability to control the impact of day to day existence on thoughts and feelings and allow access to a more grounded truth. This immediately suggested to me that mindfulness mediation and dance improvisation had a close relationship.

Many choreographers see improvisation as a key tool for creating original dance material, particularly in the world of contemporary dance.

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

Improvisation is often used in the early stages of the process for creating movement. Although improvisation is seen as an important element within contemporary dance, this has not always been the case. It had existed within folk and theatrical dance, but only broke through to the forefront of postmodern dance in the 1960's, mainly through the work of Steve Paxton, Yvonne Rainer, Trisha Brown and Anna Halprin.' (Blom & Chaplin, 2000, ix)

The breakthrough of improvisation into mainstream contemporary dance was seen to overturn the traditional position of power occupied by the choreographer and to challenge all the assumptions that emanated from this power and resulted in a new status quo. These traditional boundaries were further challenged by a new dance group that practiced improvisation known at the time as the 'Grand Union', (1970-1976). This group included well-known pioneers of postmodern dance, such as Trisha Brown, Barbara Dilley and the recently late Merce Cunningham, whose work is still very current and respected today. " Where formerly the primary value had been the artistic control by the choreographer, there was now an excitement about seeing choices being made at the moment. The intelligence of both dancers and audience was being engaged in a more active way." (Morgenroth, 1987, xi & xii)

A key element in the development of improvisation within contemporary dance at this time was the increasing appreciation of the dynamism offered by live performance, which began to be regarded more as a " process" than a " product"; something that existed only in the moment rather than cast in stone. When the performance was over it was in the past, never to be repeated in exactly that way again. This immediacy was seen to add value to <https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>



the performance, making it more compelling both for the performers and the audience. (Morgenroth, 1987, xii)

Morgenroth brings up the immediacy of the moment as being both appreciated by the audience and dancer. I believe it is the free spirited nature of improvisation described earlier by Blom and Chaplin that creates this appreciation.

The history of the Grand Union and its impact of dance culture is one key example of the boundaries which improvisation has broken. I am curious as to what other boundaries might be challenged if my research into the effects of a more mindful improvisation demonstrates a significant effect.

## **Improvisation And The Mind Body Relationship**

Improvisation originates from the inner self and requires the dancer to have a strong understanding of the connection between their mind and body. The mind makes the spontaneous decisions and then processes these decisions into a physical response. It is this intuitive communication between mind and body that both enables and can hinder a dancers ability to improvise. As the dancer is able to detach from thought of preplanning and judgement, and become absorbed in their own mind and body in the moment. By being in this moment they can overcome self-censorship, and tap into the power of their subconscious. (Blom & Chaplin, 2000, 17-30) Many artists claim that by focussing on their mind-body relationship they feel able to channel creativity that comes from external sources. (Klimo, 1998, xvi)

These are powerful, exciting concepts but the difficulty of reaching and maintaining a state of mindfulness for dancers when improvising, and indeed <https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

for everybody, should not be understated. From birth we are conditioned to accept and follow instructions, but with improvisation we are instructed that we have no instructions which can be a very discomfoting experience for many people. But it is only by doing this that new experiences and emotions can be accessed. (Roth, 1999, 35) The difficulties which I call "barriers" of mindfulness in improvisation is an area which I look into further in Chapter 4. However before doing this I felt it was important to look into the already established connections between mindfulness to dance improvisation.

### **Chapter 3: Improvisation and mindfulness**

There has been no specific research done on the link between mindfulness and dance improvisation which is one of the reasons that I felt it would be valuable to look at this topic in my dissertation. However, some work has been done on the general area of mindfulness and theatrical improvisation by theatre artist Steve Clorfeine who has been running creative process sessions at the Authentic Leadership In Action Institute for the last 10 years. Clorfeine believes that children have a natural ability to be absorbed in the moment, for instance when at play, but that as we get older this instinctive ability is eroded as adults lose their confidence that 'it's okay to play', as interaction with the world increases and our egos develop. Clorfeine's work has led him to the conclusion that " By mixing mindfulness and improvisation, we invite a bit more of ourselves, from outside our usual comfort zones or strategies". (Hartley, 2011 [online])

### **Gabrielle Roth:**

Specifically in the context of dance, Gabrielle Roth also believes that

unlocking the child within us is of particular value and that meditation is the  
<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

key to this. " Kids dancing. Free. Not self-conscious. No shames. No guilt. Natural instinct- showing us their naked flesh." (Roth, 1999, 2)

Gabrielle Roth is regarded as an international teacher and explorer of dance. Her way of dancing works against the idea of controlling the body, which dancers are trained to do, to follow a strict form that requires execution (to move in certain ways, shape and place their body in certain ways and in a certain time). Instead Roth works on letting the body take over and move without hesitation and very interestingly without concern. She calls her dance " ecstatic dance" which comes from the word ecstasy where she describes it as an " egoless state of being". (Book)

Roths form of ecstatic dance called " the wave" a moving meditation which uses five basic rhythms that she believes help form a map to the dancers inner most being. The form is con not about how you look, but how you feel, whether you feel happy or sad its about tapping into the feeling and letting it move, feeling it, breathing into it to let it flow. (Video) Roth describes her dance as " mindful movement", where the dancer is dancing from the inside out, not the outside in.

My sessions followed a very similar idea, to help encourage the dancers to understand and 'feel' their bodies. I deliberately emphasised the importance of not caring, judging or planning as a means to stimulate a peaceful willingness for the dancers to let go. Like Roth I aimed to take the dancers back to the basics, to their bodies, stripping all other layers aside to get to them and their being, at that moment. Finding out what it is really to be a human being.

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

Roth suggests that dance is a key to achieving mindfulness but does not refer specifically to mindfulness as a tool for unlocking the potential for dance improvisation. Roth also believes that meditation is the best way to achieve mindfulness and that the most effective way to do this is to move your body and that the "more deeply we experience our bodies the more deeply we know ourselves", that by opening the mind and being attentive we enable body parts to communicate through movement. (Stewart, 2009 [online]) This idea draws a link with the Buddha teaching mindfulness of the body first in the satipathana sutta which I mention in Chapter 1.

### **Somatics:**

Roth is an inspirational figure and her work has been tremendously important in establishing the importance of the mind-body relationship in dance improvisation. Another key concept that explores this relationship is that of somatics. The Oxford English dictionary gives the etymology of the word "somatics" as being "from Greek *sōmatikos*, from *sōma* 'body'" and a term now used for the study of "the body when experienced from within." (Oxford Dictionary [online]) (Fraleigh, 1996, 25)

The origin of somatics came from the 19th century gymnastic movement "which used breath, movement, and touch to direct awareness." Today Somatics is widely used by many dance teachers as a stimulus for improvisation (Wozny, 2006 [online])

Sondra Fraleigh is a leading specialist on somatics who developed her own form from her learning of "Feldenkrais, Craniosacral Therapy, Myofascial Release, yoga and Zen meditation." (Wozny, 2006 [online]) She describes

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

her practice as "Dancing Down the Bones" where dancers pay particular attention to their skeleton and the way in which bones are connected.

(Fraleigh, 2010 [online]) However Fraleigh does not stipulate that an anatomical approach to understanding the internal body is needed, but she does encourage dancers to be fully immersed in the movement of the internal parts of the body and the feelings expressed. (Fraleigh, 1996, 27)

Although this is a different take on the mind-body relationship there are obvious similarities between the mind's concentration on the internal body of the somatics approach and the mind-body relationship as seen in mindfulness training. Both focus clearly on the development of the pathway between the mind and the body. Another clear parallel between mindfulness and somatics is the need to suspend judgment.

## **Phenomenology**

The philosophy of phenomenology or more specifically existential phenomenology was a development of Edmund Husserl's phenomenological philosophy by later twentieth century existentialist philosophers such as Martin Heidegger, Jean Paul Sartre and Maurice Merleau-Ponty. (Fraleigh, 1991, 11)

phenomenology of dance, which also touches on the concept of the "unity of body, soul and mind." (Fraleigh, 1987, p. 4)." (Vézina, 2006, 24 [online])

Phenomenology has been defined as "a philosophy or method of inquiry based on the premise that reality consists of objects and events as they are perceived or understood in human consciousness and not of anything

independent of human consciousness". (Kipp et al., 2003, 249)

<https://assignbuster.com/the-effects-of-mindfulness-on-dancers-when-improvising/>

At a simpler level, phenomenology can be said to answer the philosophical question as to whether, if a tree falls in the woods without anyone observing it, does it make a sound? Another viewpoint, taken from quantum physics has put forward the theory that sub-atomic particles, rather than being singular phenomena, can take on different forms depending on the nature of the observing mechanism. This is known as " the wave particle duality principle" which says that " matter and light exhibit the behaviours of both waves and particles, depending upon the circumstances of the experiment." (Jones, 2010 [online])

**The wave particle duality principle that what is seen depends on the seer can also be said to have echoes of the Buddhist view of the nature of reality -**