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Joanna Jaaniste

The Dramatherapy Centre, Sydney, Australia

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Dramatherapy and spirituality in dementia care

Joanna Jaaniste*

The Dramatherapy Centre, Sydney, Australia

Dramatherapy lends itself seamlessly to a person-centred approach, particularly important for elderly people who are nearing the end of their lives. The dramatherapy group affords a holding environment where existential issues and key life questions can be worked with creatively. Although their expression may sometimes seem chaotic (as in dementia), elderly people are often the guardians or holders of much end-of-life wisdom. By means of story, metaphor, play and improvisation, cultural questions and answers can assist with celebration, reminiscence, pleasure and grieving, and ultimately the transition to a dignified and spiritually meaningful death. In this way, the spirituality of the person with dementia can be explored and accepted.

Spirituality has informed theatre and drama throughout history, and the healing properties of the arts are referred to in the histories of many societies. In contemporary western culture, especially that of the last 50 years, there has been a growth of consciousness that creative activity can contribute to people’s health and well-being and that the area of spirituality is integral, and perhaps even central, to psycho-social health and a sense of well-being.

In this paper, selected dramatherapy literature is reviewed, that supports the contention that the practice of these therapies is an effective means of assisting elderly people afflicted with moderate-to-severe dementia to value their ageing process. Arts therapies may assist them to cope with the grief and loss their ageing may entail, as they lose friends and physical and mental capacity, in a society where elderly people are marginalised.

Case studies and theoretical examples are presented to show how group work can be structured so that issues of elderly people with dementia can be addressed in a creative way.

Keywords: dementia; spirituality; theatre; aged care; late life stages; existential questions; grief and loss; scene shifting

Introduction

This paper refers to some connections between spirituality and drama, especially to Shakespeare’s *The Tempest* (Shakespeare 2007) and Beckett’s *Waiting for Godot* (Beckett 2006). The dramatherapist is considered as ‘scene shifter’ as well as a ‘shape shifter’ in the quest to address the issues of persons with moderate and severe dementia. In this role, the therapist notices the transformative potential
of the drama being enacted by the clients and shifts the scene from within the playspace in order to extend a useful theme for them. Listening for meaning in embodiment or dialogue, the dramatherapist allows the client to change roles to allow transformation to occur.

Kitwood and the Bradford group have gone some way towards addressing the possibility of transformation on the level of quality-of-life (QOL) and spiritual fulfilment with their person-centred therapy (Kitwood 1997, pp. 55, 69). Other writers (Pargament 1999, 2007, Gollnick 2005) have more recently defined similarities and differences of religion and spirituality in the areas of psychology and the social sciences.

Through storytelling, puppetry and play, as well as Jennings’ EPR approach (1999, pp. 51–53) and Johnson’s Developmental Transformation (DvT) work (1986, 1992, 2000, 2005), people come to know each other in a very different manner, and discover a great deal about themselves. Client names in case studies have been changed to protect their identity, and client or family consent has been given for clinical material to be used.

The meaning of spirituality

Grainger (1995) explores the question of spirituality and its links with psychotherapy. He discusses models which are explicitly religious, such as logotherapy, clinical theology and Jungian analytical psychology. He describes an experience in an experimental ward for the treatment of long-stay institutionalised patients. The ward was run on ‘token economy’ lines, a method where behaviour was reinforced and learned by giving a token which could be exchanged for goods at the ward shop. As the patients became less withdrawn and found themselves ‘competing and cooperating’, Grainger asks the question: ‘Was it token economy that had succeeded, or the opportunity for relationship?’ The behaviourists found themselves acknowledging ‘the presence of the imponderable’ (p. 1).

Grainger believes that dramatherapy ‘not only lives spirituality in the moment of encounter, it speaks spirituality in its mode of communication’ (1995, p. 2).

One way in which dramatherapy does this kind of living and speaking is through the drama at the precise moment where the therapist and the client are at one in revealing a truth in the ‘as if’ which shines a light on the client’s own story. Jung called these moments ‘numinous’. It is a sacred moment in a turbulent or chaotic world where ‘spiritual sense’ occurs. Jung said of the spiritual confusion of the world:

The modern world is desacralised, that is why it is in crisis. The modern person must rediscover a deeper source of his [or her] own spiritual life. (Eliade 1952)

The Jewish existentialist Buber identified what he termed the ‘I-Thou’ relationship in spiritual discourse (1965, p. 60). Buber sees this interaction between one individuality and another as communicating with authentic unity of being and
meeting in the reality of the present. This has a strong connection with dramatherapy, where healing cannot take place without this connection. Ricoeur (1976, p. 21), existentialist Christian, sees our spirituality reflected in metaphor which cannot be translated but ‘finally brings forth information concerning reality’, where metaphor is an essential aspect of drama. Gollnick (2005, p. 6) is a proponent of ‘implicit religion’, as opposed to ‘explicit religion’ which expresses itself ‘in religious experiences, institutions, doctrines, communities, ethical systems, myths and rituals’. The movement towards spirituality which is not necessarily aligned with religion can also be seen as part of a larger socio-cultural trend towards deinstitutionalisation and individualisation (Pargament 1999, p. 6). Pargament argues that the construct of ‘institutional religion’ is contrasted with the spiritual, ‘which refers to the personal, the affective, the experiential and the thoughtful’. However, he believes the terms ‘religion’ and ‘spirituality’ are not mutually exclusive, but intimately connected. Spirituality is the ‘search for the sacred’, he says, which is also the central function of religion (1999, p. 12).

The DSM IV (American Psychiatric Association 1994) now acknowledges religious and spiritual experiences as non-pathological. The word ‘spirituality’ often appears in QOL assessments for people with dementia and others. How do we then define spirituality? For the purposes of this paper my own understanding of spirituality, as opposed to religion, is:

[A]n holistic and authentic way of being that comes about through awareness of an element or being(s) greater than ourselves and the self weaves certain values into the cloth of a life whose warp and weft include others and nature.

This personal definition, although not accommodating the views of those whose spirituality, as Pargament suggests, have a strong search for the sacred within their religious affiliation, is holistic. It encompasses, unlike religion, QOL and self-esteem. It also includes ‘I-Thou’ relationships with unseen beings and recognition of connectedness to and love of the earth with all its wonders, that are so familiar to many religions.

**Dramatherapy and dementia**

There is a growing body of qualitative research into the efficacy of dramatherapy with elderly people with moderate-to-severe dementia. It is not always possible to have precise information about the diagnoses of dementia, or Alzheimer’s disease in particular, and dramatherapists may find they need to work with people whose abilities vary (Langley 2006, p. 122). Johnson’s (1986) model of dramatherapy known as Developmental Transformations (DvT) gives elderly participants an opportunity to play with end-of-life concerns, while the dramatherapist shifts the scene according to themes which arise during the course of therapy. Smith (2000, pp. 321–322) shows how the exploration of death anxiety can allay some of the
fear and loneliness in people with various levels of dementia, although she states that on the whole her group was ‘relatively cognitively intact’. Using case examples, she illustrates the significance of DvT which allows clients to ‘confront death anxiety and the existential concerns of freedom and responsibility, isolation and meaninglessness’ through imagined scenes of a peaceful afterlife.

The value of play in engaging people with dementia cannot be underrated (Lev-Aladgem 1999, p. 4, Knocker 2001, pp. 5–7). Lev-Aladgem structures dramatic play, using objects, place and character, in a geriatric care centre, in a way that takes dramatherapy further than simply achieving good social and cognitive outcomes. She quotes Courtney (1974) using dramatherapy to ‘cultivate the “whole man” and concentrate on the human being’s creative imagination’ (p. 8). She observes, in common with Gersie (1997), the passive resignation of people waiting out their time in the day centre she visits, obedient, silent and reluctant to make a fuss, until her arrival in the facility and their engagement in active creative expression (Lev-Aladgem 1999, pp. 3–4). In her storytelling with elders, Gersie recognises that ‘beneath sullen surface behaviour’, these were people who ‘wanted to surmount these unexamined confines of what old age was supposed to be about’ (Gersie 1997, p. 69). The waiting and the habitual behaviour are reminiscent of the two tramps in Waiting for Godot (Beckett 2006) as they question their mournful existence.

End of life for people with dementia

Erikson sees the last stage of life as ‘Ego Integrity Versus Despair’ (Erikson 1963, pp. 247–274). He considers the acceptance of one’s life as ‘something that had to be.... a new, a different love of one’s parents’. He states that ‘the possessor of integrity is ready to defend the dignity of his own lifestyle against all physical and economic threats’ and in the ‘healthy’ person he says: ‘In such final consolidation, death loses its sting’ (p. 268). In dementia, however, the therapist cannot be certain that death in fact loses its sting and Erikson sees the alternative to what he calls integrity, as despair. Although he is not referring to dementia here, it is relevant to ask the question: ‘is health the absence of illness?’. In dementia, it seems, where cognitive function may be in question, there are other healthy aspects of the human being which can be addressed as respectfully and compassionately as the illness. Dramatherapy addresses the whole person, and the healthy aspects of the person respond with creativity and may ease the discomfort of any deficits.

Lievegoed (1997), a psychologist and follower of Rudolf Steiner, is close to Erikson in the description of the last phase. He describes his conversations with older people past the age of 63. Some people are more than content with their life, and have settled their accounts with others well before death. Others desperately cling to a life which is slipping away. Importantly, he notes that those involved in creativity can live and express themselves through the arts until their eighties and even nineties. He cites Grandma Moses, Goethe, Richard Strauss, Verdi, Schuetz and Sibelius as practising their arts until the end (p. 81).
It is difficult to find reference to the positive qualities of old age or spirituality in the dementia literature, perhaps because of the focus on medicalised care in a society which lauds youth. Advertising and celebrity reporting in the media rarely depict people in later life-stages, and discussions of longevity often emphasise the question of how to ‘stay young’. There is an apparent blind spot in most discussions of treatments where only the deficits of age are discussed.

**Developmental transformations and theme recognition**

Johnson’s work in DvT (1992, 2000) uses improvisation in a developmental manner with elderly people, referencing Erikson’s model, to create meaning (1986, p. 17). His goal for sessions is to establish healthy ‘I-Thou’ relationships among group members. In a group case study, using a dramatherapy session with six people in a nursing home, with moderate cognitive impairment, he illustrates the pivotal role of the dramatherapist in creating personal (and group) significance.

Here, he identifies a developing image that seems to express a group theme. For example, when a client’s action makes a distinction between good and bad children, (perhaps connected with the patient’s concern about their own children’s infrequent visits), he takes an opportunity to shift the scene and render a positive transformation when various participants ‘see’ a skyscape:

> Therapist: OK, let’s take all that good up there, the sky, the white cloud, and the rainbow . . . and bring it down, all together, bring it down and into ourselves (indicates by bringing arms down onto chest. Group follows in unison) (thus shifting the scene). (Johnson 1986, p. 26)

**Embodiment, projection and role**

In order to understand how to attend to the spirituality of our older people with dementia, it is valuable to look at Sue Jennings’ ‘Embodiment, Projection and Role’ as a developmental paradigm for the young child (Jennings 1999, pp. 51–53), and reverse the categories for old age.

As we know, we can observe in the young child how her earliest experiences are mainly expressed physically, through bodily stimulus and senses. The infant moves and plays along with the world physically, in order to experience it. In projection, the child relates more to the external world, beyond the body. There is a focus on toys and objects that belong to the outside world. During this stage, children explore their own relationships to objects, and stories can be dramatised through toys or dolls. Children from the ages of two even speak through their teddy or favourite doll, for example: ‘Teddy wants a drink’.

At about three years old, the child identifies himself as ‘I’. Dramatic play becomes a new way of playing, and the child starts to distinguish between ordinary reality and dramatic reality. Imitation is strong, and the role-modelling that comes from parents and caregivers is played out. The child wears the care-givers’ clothes and goes into role.
It is interesting, in the light of the very positive relationship that often occurs between old people and children that elderly people and those with dementia in particular, seem to live their lives in reverse order of this developmental paradigm. (Here, age incongruities expressed by people with dementia should be borne in mind, for example when they may refer to care staff as teachers and themselves as children.)

The infant arrives amongst us from a mysterious place, and the elderly adult is about to disappear to an equally mysterious one. The following examples illustrate RPE in practice and have been discussed with Sue Jennings. (It is relevant to note here that EPR is not a rigid paradigm and Jennings herself indicates that the stages overlap and that with client groups the starting point may be at different points in the paradigm: for example, with survivors of sexual abuse projection is a safer place to start.)

Role
The case example below took place in the second weekly session of 10 weeks of dramatherapy with six women with moderate-to-severe dementia in a hostel for the elderly within a retirement village. Elspeth, an 89-year-old with mild dementia, came into the session with a slight headache, after a dream the night before. In the dream, she had died and was looking down at the earth, from above. She saw incidents from her entire life unfolding there from the past, and she knew she was not happy with some of the ways she had dealt with her life. When invited to improvise the dream with the group she chose an elderly woman to play her ‘younger self’ role. This participant also had mild dementia, but was able to move, as Elspeth was confined to a wheelchair.

One of the incidents portrayed was the journey to Australia with her mother, when she was a teenager. Other group members played her mother and the captain of the ship. Sadly for her, as she told us during the improvisation, in real life her mother would leave her and play deck quoits or sit at the captain’s table on the voyage. The two participants engaged with each other in improvised deck quoits. It seemed the ship was going to ‘the land that never was’. She did not say so, but perhaps for her, some of the unhappiness she felt was about never telling her mother about how unfair this felt. Elspeth, as she watched the improvisation, said she felt ‘hopeless’. A few other life incidents took place, directed by her, where she felt she had not ‘done the right thing’ as a younger person. Elspeth in the wheelchair expressed how alone she had felt in the dream. As the therapist, I asked her to choose someone to be with her, so she chose the care worker, who became an angel at my request, and connected the young Elspeth with Elspeth the dreamer as she looked on. The scene-shift was made, connecting the client’s internal world and painful reminiscence of abandonment by her mother with the death anxiety which was being expressed in ‘the land that never was’. This was a theme which had emerged in the group in earlier sessions. It enabled Elspeth simultaneously to be held by her younger self and an angel, observing her life, and provided an image
for the group of a potentially smooth end-of-life transition. She accepted more positive aspects about her life in reflection, partly because of her own spiritual belief in angels.

The reflection for the group had the same fine quality of the improvisation. Elspeth said that she felt the angel had given her new hope. She had been ‘so sad’ on waking that morning, but now her headache had gone, and she felt safe and ‘not such a bad person after all – my angel helps me’. The quality of the improvisation and her feelings after it had a quality described by Levine (2009) as ‘liminality’, a ‘space in between’ or of ‘free play’, neither one state nor the other, a concept taken from the anthropologist Turner (1974, p. 95) and seen by Levine as a way of ‘bringing together body and spirit unity’ (p. 171). For Elspeth, it was a significant moment for her sense of self in a felt and imagined identity, in owning her biography. Glaser (2004) argues that ‘good acting is a form of shape-shifting’. She also quotes Celtic shamanic practitioner Cowan, who states that:

In this dreamlike state, the imaginal realm reshapes itself, creating a placeless, timeless field in which the shaman can participate in the consciousness of other creatures. (Glaser 2004, p. 81)

These ideas can be connected with Elspeth’s dream, where the dream, which brings with it unpleasant or sad experiences can bring a fresh approach to a memory, reframing it with self-forgiveness, just as the shamans of old learned to do through their training in dreams and ecstatic experiences, resulting in new hope for their devotees (McNiff 1988, p. 285, Glaser 2004, p. 78).

In a similar way, in Shakespeare’s *The Tempest*, Prospero emerges from a dreamlike landscape and finds forgiveness for his enemies. At one point in Act IV, still on his magic island, he says, ‘we are such stuff as dreams are made on’ (Act IV, sc. i, 156) and we believe him as we have witnessed the magic he and his fairy, Ariel, have performed. At the end of the play (Act V, sc. i, 55–62), he has a change of heart and promises to drown his great book of magic containing all he has learned on his dream island and break his magic staff for good. He confirms he has done so in the epilogue to the play (Act V, sc. i, 356). There is a poignant moment in the play where his shape shifts – he steps out of his dream world and stands before his former enemies as a citizen of the world, rather than a magician. He faces them and then he forgives them for the past wrongs they have done him (Act V, sc. i, 83), ready to own his renewed and more authentic relationship to them in the ‘real world’.

**Projection**

Puppetry is one of the oldest forms of performing arts and has been employed for centuries to portray myth, legend, parody or religious dramatisation. Astell-Burt (2002, p. 69) cites Potheinos, who entertained the people of Athens with puppet plays when the city exchequer could no longer afford Euripides’ plays.
Used therapeutically, they are ‘at a safe margin of overdistance’ for most clients (Landy 1983, p. 180). People with moderate dementia can still be inspired by puppets, even though on some days they are not sure who and where they themselves are.

Kate, a person with moderate dementia in the same hostel as Elspeth, in a dramatherapy session one year later than the dream experience, was playing with a puppy dog puppet and it was conversing with the therapist’s koala puppet. Kate was upset about leaving her home, especially as one of her sons had died there in his fifties, so the koala said: ‘they have cut down all the gum trees and I have nowhere to live’. The puppy replied: ‘Oh I am so sorry – I want to look after you’. Kate had been a matron of a large hospital in a major city, and had spent her working life looking after 600 patients as well as the staff, so the function of caring was a part of her sense of identity. After the session, it was possible to report to the facility staff about this, and arrange to get Kate a bird to look after. Scene-shifting to the koala’s homelessness had been intended to give Kate a chance to grieve; however, her grieving over home and son transformed into an opportunity to care for the puppet with whom she identified.

**Embodiment**

People with severe dementia need all manner of assistance, ranging from opportunities for more flexible bodily coordination to consideration of bladder and bowel incontinence. Dramatherapists may be asked to work with people whose physical abilities vary (Langley 2006, p. 122). They often find embodiment useful for communication when word retrieval is difficult or even impossible. Kontos (2006) describes the following interaction when two individuals with dementia, sitting at different tables, were about to eat breakfast in a long-term care facility’s dining room. The apparently senseless exchange brings to mind the two tramps, Vladimir and Estragon in a production of *Waiting for Godot* (Beckett 2006), who wait for someone who never appears, where the actors’ embodiment was a stark reminder of people with dementia, waiting for death.

Abe: [sat down] Bupalupah! [shouting]
Anna: [twisted around in her chair to be able to look at Abe]
Abe: [eyes wider, smiling] Brrrrrrr! [shouting with rising to falling pitch]
Anna: Brrrrrrr! [imitating volume and intonation contour]
Abe: Bah! [shouting, then pausing while looking at Anna]
Anna: Shah!
Abe: Bah!
Anna: Shah! [turned back around in her chair with her back to Abe]
Abe: Bupalupah! [shouting]
Anna: [raised one arm about her head, lowered it in a swift motion; both then began to eat breakfast] (Kontos 2006, pp. 206–207)

Kontos claims that this exchange illustrates Merleau-Ponty’s (1964, p. 7) argument that ‘communication dwells in corporeality or, more specifically, in
the body’s capacity to gesture. Importantly, the speakers continued to exhibit intersubjectivity and displayed aspects of self-identity through their bodily posture and repetition of syllables, volume, pitch and intonation contours – enacted embodied meaning. It is extremely important for people with severe dementia, where verbal communication is grossly impaired, to express themselves through their bodies. Group movement, mirroring and gesture allow self-expression through such embodied communication.

Existential anxiety

It is relevant to refer to some of the apparently simple, yet profound spiritual questions of the play Waiting for Godot. Jenkyns (1996, pp. 73–77) has written about this play in detail with reference to four sessions of dramatherapy with a group of men.

The actors’ embodiment of meaning would suggest a substitute for the two characters’ inability to connect their questions with their own reality, let alone find answers. The play’s first line however, spoken by Estragon as he tries to remove his boots, is not a question; it is a morose statement: ‘Nothing to be done’ (Beckett 2006, p. 1). How often do families or therapists visiting a facility for the aged see rows of elderly people in armchairs or wheelchairs, in front of a television set or even a blank wall? The first line speaks of disempowerment, boredom and hopelessness in this seemingly endless state of being: waiting for ... what?

As the play unfolds, the questions come thick and fast. When they start to investigate the sparse environment and cannot find the words to describe the one leafless tree that dominates the set, Estragon asks: ‘What are you insinuating? That we’ve come to the wrong place?’ (p. 6). When Estragon asks ‘We’ve no rights any more?’ Vladimir replies ‘You’d make me laugh if it wasn’t prohibited’ (p. 11), reflecting the need for compliance to which Gersie (1997, p. 69) and Lev-Aladgem (1999, pp. 3–4) refer. Godot never comes, and each act ends with Vladimir’s question ‘Well, shall we go?’ followed by Estragon’s ‘Yes, let’s go’, accompanied by the paradoxical stage direction ‘They do not move’ (Beckett 2006, pp. 47, 87).

For people with dementia, these questions can be read on more than one level, rather like the parallel of the sparse set and lifeless tree: reflections of their perhaps barren existence. Firstly, they can be understood on the level of the facility where they live or at home, when family rarely visits and where there is nothing to do. Like children, they must ‘behave themselves’, as cited earlier, and they have no apparent rights, being people who are unable to care for themselves. They may be in ‘the wrong place’ and want to leave, but have no way of organising this. Secondly, on the spiritual level, the existential questions are implied in the endless waiting for death with Godot a reminder of the unknown character of death and the uncertainty of when it will occur.
Grief and loss
In older age people experience many losses, among them elderly friends who have died. Life stage strengths, such as the intensification of memories, vivid reminders of lost loved ones, and questions about their own mortality can be responded to creatively (Jaaniste in press). For example, Chin (1996, p. 39) in her work in a long-term aged care facility with used a shift in scenery. She brought a small ‘grief table’ – a box with flowers and photograph into the room after a member of the dramatherapy group had died. The installation was unacknowledged during the session; however, the following week when the box was there again to mark the end of winter by placing a butterfly inside and a sprouting bulb on top, a member with early late-stage Alzheimer’s disease got up, walked to the box and started talking and weeping over friends who had recently died. The scenery had reminded her of the loss of significant others and helped her to express feelings of grief.

Conclusion
The relationship between theatre, dramatherapy and spirituality gives us a recognition of the rich personal meaning, sense of the numinous and the liminal that can improve the quality of life of people with dementia. Statements and questions such as ‘What are we waiting for?’ and ‘Is he coming tomorrow?’ underpin the existential quest of the elderly and the witnessing of their expression. The dramatherapist’s containment of therapeutic understanding and time-and-place-boundaries can serve as a warm enfolding of these elderly people, whose cognitive and physical function inevitably and inexorably erodes in the process of dementia. Powerful qualities of later life stages, such as intense memories, a sense of the presence of familiar people who have died, and questions about their own existence and journey over the threshold of death can be responded to sensitively. Dramatherapy approaches such as shape-shifting and scene-shifting can allow for the emerging questions and transformative responses. As the population ages and more of us are likely to fall prey to dementia, it is ever more important to bring ‘I-Thou’ communication, a relationship to the sacred and meaningful rituals to these people, and to see them as treasured elders of our community.

Notes on contributor
Joanna Jaaniste, B.A. (Hons.), Dip.Ed., Dip.Dramatherapy, AthR (Drama), is a registered Dramatherapist who has practised in mental health and substance abuse for sixteen years. More recently, she is working on her PhD at the University of Western Sydney, and her research topic relates to Dramatherapy with people who have dementia. Joanna believes strongly in dramatherapy’s power to assist participants to find new meaning in their lives, and to assist elders with existential questions. She is principal of the Dramatherapy Centre in Sydney and teaches at postgraduate level. She has presented papers in UK, USA and South Africa and has published articles in a variety of journals.
References


