



# Rethinking musicality in dementia as embodied and relational

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## ABSTRACT

With the biomedicalisation and the pharmaceuticalisation of dementia, music programs, as with other arts- and leisure-based programs, have primarily been implemented as non-pharmacological means to generate social and behavioural changes. We argue that understanding and fully supporting the musicality of persons living with dementia requires engagement with citizenship discourse. Specifically we draw on a model of relational citizenship that recognizes that corporeality is a fundamental source of self-expression, interdependence, and reciprocal engagement. We articulate this argument with reference to the musicality of two residents living with dementia in long-term residential care; one example is drawn from an ethnographic study of selfhood in dementia and the other is from a study of elder-clowning. Relational citizenship brings a new and critical dimension to the discourse on music, ageing, and the body in contemporary society. It further highlights the ethical imperative to fully support musicality through institutional policies, structures and practices.

## Introduction

Dementia care is dominated by the biomedicalisation and the pharmaceuticalisation (Abraham, 2011; Coveney, Gabe, & Williams, 2011) of behavioural and psychological symptoms. This approach reduces the person with dementia to his/her neuropathology (Behuniak, 2011; Cuijpers & van Lente, 2015). Consequently the care of persons living with dementia is restricted to attending to basic bodily needs and the management of “challenging behaviours” using high levels of psychotropic medications (Daly & Szebehely, 2012; Lucas et al., 2014; Twigg, 2000). This has received international critique given evidence of significant harms and deleterious consequences of inappropriate psychotropic use (Schneider, Dagerman, & Insel, 2006; Simoni-Wastila et al., 2009). Additionally, this approach to care overlooks how the actions of persons living with dementia are not always symptomatic of dementia itself, but may be indicative of purposeful and meaningful communication (Kitwood, 1997; Kovach, Kelber, Simpson, & Wells, 2006; Rader et al., 2006).

In response to critique regarding the overreliance on pharmacotherapies, non-pharmacological approaches are now recommended as an alternative to psychotropic medication (Fossey et al., 2006; Moniz-Cook, Woods, & Richards, 2001). The standard approach is behavioural therapy, which involves assessing behavioural triggers and implementing interventions to modify the behaviour, such as implementing in-bed towel baths rather than forced showering (Douglas, James, & Ballard, 2004; Rader et al., 2006). Arts-based programs, such

as music therapy, have also been adopted as a non-pharmacological means to improve ‘behaviour’, cognition, and emotional states (Petrovsky, Cacchione, & George, 2015). Such programs have been shown to have positive clinical outcomes (Beard, 2011; Cohen-Mansfield, Libin, & Marx, 2007).

Research on the impact of music programs is dominated by studies that evaluate music as a therapeutic tool to achieve instrumental outcomes (DeNora & Ansdell, 2014). Evidence supporting the beneficial effects of music on cognitive and behavioural function has been demonstrated (Chang et al., 2015; Vasionytė & Madison, 2013). Specifically, music therapy has been found to significantly improve neuropsychiatric symptoms, mood, and memory recall (Chang et al., 2015). However, it remains unclear what therapies are most efficacious, and there is little consensus on the generative mechanisms that account for the impact that music has on targeted outcomes (Chang et al., 2015; DeNora & Ansdell, 2014; Spiro, 2010). Further, with the biomedicalisation of dementia care, music programs, as with other arts- and leisure-based programs, have been primarily implemented as a non-pharmacological means to generate social and behavioural changes (Genoe & Dupuis, 2014; Sylvester, 1996) and improve “hedonic” conceptions of quality of life (Jennings, 2009).

To better understand and to more fully support musicality (i.e. musical perception and engagement) of persons living with dementia requires engagement with citizenship discourse. Specifically, we argue it requires a model of relational citizenship that recognizes that embodiment is a fundamental source of self-expression, interdependence,

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and reciprocal engagement. We articulate this argument by drawing on the musicality of two residents living with dementia in long-term care; one example is drawn from an ethnographic study of selfhood in dementia and the other is from a study of elder-clowning, both of which were conducted by Kontos (Kontos, 2004b, 2006, 2012; Kontos, Miller, & Kontos, 2017; Kontos, Miller, Mitchell, & Stirling-Twist, 2017; Miller & Kontos, 2016). We argue that relational citizenship brings a new and critical dimension to the discourse on music, ageing, and the body in contemporary society. It further highlights the ethical imperative to fully support musicality through institutional policies, structures and practices.

### Approaches to understanding musicality

Dominant approaches to understanding musicality in dementia have focused on theorizing music perception with reference to the cerebral cortex such as ‘cortical sparing’ and distributed neural pathways hypotheses (Cuddy, Sikka, & Vanstone, 2015; Hsieh, Hornberger, Piguet, & Hodges, 2011; Peck, Girard, Russo, & Fiocco, 2016). These theories are largely premised upon information-processing models that rely on a sophisticated stimulus–response system whereby music is perceived with mental manipulation of lower-order stimuli (Bowman, 2004). The implicit assumption is that music perception is cognitive. Without such cognitive intervention – transformation, processing, representation of lower-order stimuli and auditory sense data – music is thought to be little more than “a booming, buzzing confusion” (2004, p. 9). This theory has influenced understandings of musicality in dementia, whereby the persistence of musicality is regarded as evidence of cortical sparing, or the activation of neural mechanisms thought to be less impaired in dementia such as the neural pathways in the right temporal lobes (Cuddy & Duffin, 2005; Hsieh et al., 2011; Johnson, 2013).

Understandings about musical perception implicit in these accounts derive from a presumed dichotomy between mind and body, and an inherent inferiority of bodily-constituted knowledge (Bowman, 2004). Theorists have sought to locate music’s value in its abstract, mindful, and cognitively distinguished benefits to which bodily perception and production are jettisoned as distraction or contaminants (Bowman, 1998). Where music’s distinctive origin in bodily experience is explicitly acknowledged (i.e. physiological arousal), such experience is reduced to low-level auditory processing and is of interest only to the extent it feeds into and enables higher-level, language-like, rational/inferential processes (Peck et al., 2016; Simmons-Stern, Budson, & Ally, 2010). For example, high arousal music (e.g. fast tempo, loud) has been found to activate sympathetic activity of the autonomic nervous system, as evidenced by increasing skin conductance, rate of respiration, and blood pressure. Low arousal music on the other hand is thought to activate parasympathetic activity, as manifest in the attenuation of skin conductance, respiration and blood pressure (Peck et al., 2016). In this way, music is thought to regulate autonomic function, which in turn has been found to influence cognition; arousal levels are said to modulate memory and support encoding, consolidation, and retrieval of information (Peck et al., 2016; Simmons-Stern et al., 2010).

With an interest in granting something more to the body in music perception, music scholars have turned to embodied cognition, a cognitive science theory that ascribes a physically constitutive role to the body, thus marking a departure from dualistic approaches that distinguish mental processing from physiological arousal (Perlovsky, 2015; Sedlmeier, Weigelt, & Walther, 2011). The mind in the theory of embodied cognition is conceptualized as being distributed throughout the body as an elaborate network of interconnections (Iyer, 2002; Schiavio, Menin, & Matyja, 2014). While this theory has gained traction in the field of music studies, critiques have focused on the lack of empirical support for this theory across cognitive science and neuroscience (Adams, 2010; Mahon & Caramazza, 2008). Further, it has not yet been taken up in the context of musical perception and cognitive impairment, such as in the case of persons living with dementia. Neuroscience

researchers exploring this theory of music perception have focused on healthy adults and infants, and individuals with sensorimotor based disorders such as Parkinson’s without dementia (Schiavio & Altenmüller, 2015).

Embodied cognition grants a dynamism to the body, however that dynamism is conceptualized solely in relation to cognitive processes (Iyer, 2002; Schiavio et al., 2014). Further, bodily movements and gestures are reduced to sympathetic reaction to music. In dominant theories of music perception, corporeality, as a potential source of agency, has largely been neglected (Bowman & Powell, 2007). The habit of treating the body as the subordinated counterpart of mind is difficult to change. However, there have been important strides made in linking music and human embodiment with notable inspiration taken from fields as diverse as sociology (Crossley, 2015; DeNora, 2003), philosophy (Downey, 2002), and cultural theory (Driver & Bennett, 2015). Driver and Bennett (2015) in drawing on empirical data generated through research on the punk scene in Southeast Queensland, Australia, retheorize the concept of ‘music scene’ to highlight the critically important role of embodiment for how music scenes are constructed, enacted, and maintained. Focus is on the affective attachment of participants and the visceral nature of that participation. Crossley (2015) takes up this theme in his exploration of the links between body techniques and music scenes, or what he refers to as ‘music worlds’, focusing on early UK punk in London. His work signals an important conceptual shift from music as an object or noun to ‘musicking’ as an activity or verb. Downey’s (2002) work too is noteworthy in his analysis of the Afro-Brazilian martial dance, *capoeira*, where he conceptualizes the perception of capoeira music as a cultural accomplishment but not because “a semiotic web of meaning” informs perception after “visceral sensing”, but rather because bodily patterns of responsiveness and attentiveness are instilled through habituation (2002 p. 503–4). Here he emphasizes cultural patterns of embodiment that are acquired through an “apprenticeship in listening”. An important thread in all of this work is the aim to link embodiment and music, and to highlight how bodies and culture are co-implicated in musicality.

While this research importantly broadens current conceptions of musicality and underscores the imperative of an embodiment perspective in understanding musicality, bodily-constituted knowledge continues to be largely cast in terms of cognition (Davis et al., 2012; Iyer, 2002; Perlovsky, 2015). Reference to the mind in studies of musicality effectively reproduces the dichotomous structure that such analyses are intended to transcend. A further limitation is that even where bodily roots of musical experience are theorized more fully in terms of their non-representational nature (Andrews, Chen, & Myers, 2014), further theoretical articulation of the interrelationship between pre-reflective intentionality, the socio-cultural environment, and the musical self is needed.

We argue that understanding the musicality of persons living with dementia requires engagement with critical and cultural gerontology’s subfield of embodiment and dementia (Kontos & Martin, 2013). Of particular relevance here is ‘embodied selfhood’ (Kontos, 2004a, 2006) wherein primordial and socio-cultural dispositions of the body are recognized as pre-reflective sources of perception that persist despite even severe cognitive impairment. Lack of engagement with this sub-field has not only impoverished understandings of musicality, but has also restricted music in dementia care to its application as a therapeutic tool to achieve instrumental outcomes such as improving cognitive functioning. Further, to more fully support the musicality of persons living with dementia requires engagement with the fields of citizenship and human rights, fields of study that focus on social entitlements and state responsibility to support citizens’ participation in social life (Somers & Roberts, 2008; Turner, 2006). Insights from these respective fields have been integrated in a model of relational citizenship (Kontos, Miller, & Kontos, 2017; Kontos, Grigorovich, Kontos, & Miller, 2016; Miller & Kontos, 2016) that, as we argue here, is particularly pertinent for both understanding and more fully supporting the musicality of

persons living with dementia.

### The move to citizenship in dementia studies

A citizenship lens is fundamentally concerned with fair and equitable treatment of individuals living with dementia and thus centres on their relationships with the state and its institutions over the course of their lives (Bartlett & O'Connor, 2010). Such relationships are rarely explicitly discussed in dementia care, despite the fact that the “rules, laws and policies of the country or jurisdiction in which a person lives” (Bartlett & O'Connor, 2010, p. 30) will inevitably influence the experiences and opportunities associated with the health and social care a person with dementia receives (Kontos, Grigorovich, et al., 2016; Kontos, Miller, & Kontos, 2017; Miller & Kontos, 2016; Reid, Ryan, & Enderby, 2001). In the context of dementia studies, social citizenship is defined as follows:

A relationship, practice or status, in which a person with dementia is entitled to experience freedom from discrimination, and to have opportunities to grow and participate in life to the fullest extent possible. It involves justice, recognition of social positions and the upholding of personhood, rights and a fluid degree of responsibility for shaping events at a personal and societal level.

(Bartlett & O'Connor, 2010, p. 37)

Our model of relational citizenship extends the model of social citizenship by drawing on insights from critical and cultural gerontology's theoretical subfield of embodiment and dementia (Kontos & Martin, 2013) in order to more inclusively grant citizenship entitlements to persons living with dementia in long-term residential care (Kontos, Grigorovich, et al., 2016; Kontos, Miller, & Kontos, 2017; Miller & Kontos, 2016).

#### Relational model of citizenship

Embodied selfhood (Kontos, 2004a, 2006), the first theoretical tenet of the model, is premised on a pre-reflective notion of agency that resides below the threshold of cognition, and facilitates meaningful engagement with the world. Embodied selfhood has emerged from a subfield of dementia studies that puts the body and embodied practices at the centre of explorations of how dementia is represented and/or experienced. A critique of self/body duality is an implicit starting point for scholars who have sought to reframe and reclaim the self in dementia (Hubbard, Tester, & Downs, 2003; Sabat, 2006). This has been accomplished via historical analyses (Katz, 2012), as well as philosophical (Hughes, 2001; Kontos, 2004b; Matthews, 2006; Millett, 2011) and empirical explorations (Kontos, 2004a, 2012; Twigg, 2010), which have deconstructed the Enlightenment's “cerebral subject” that is based on the coupling of memory, mind, and selfhood (Katz, 2012).

Embodied selfhood takes its theoretical bearings from Merleau-Ponty's (1962) reconceptualization of perception and Bourdieu's (1977, 1990) concept of habitus. This advances a notion of selfhood that considers both the pre-reflective intentionality of the body and its natural (pre-social) engagement with the world (the body's power of natural expression), and the ongoing socio-cultural relationship between the pre-reflective body and the world (history, culture, power, and discourse). Together these theoretical bearings capture the pre-reflective capacity of the body to seize upon and transform the perceptible into something meaningful. The body here is intentional in its capacity to perceive and experience (Kontos, 2004a, 2006). This importantly challenges assumptions of loss of agency with dementia by treating the body as itself having creative and intentional capacity. Thus, even in the face of cognitive impairment, agency persists because it is sustained at a pre-reflective level by the primordial as well as the socio-cultural significance of the body. This has been demonstrated in dementia research with attention to propensities and movements of the body in religious and artistic practices (Kontos, 2006; Kontos, Miller,

Mitchell, et al., 2017; Miller & Kontos, 2016), expression of food preferences (Kontos, Miller, & Mitchell, 2010a, 2010b), bodily dispositions that disclose expressions of class distinction (Kontos, 2004a) and that convey the prior vocation of persons living with dementia (Kontos et al., 2010a; Kontos & Naglie, 2007a, 2007b).

Embodied selfhood highlights our intrinsic corporeality of being-in-the world, which sustains and animates self-expression, and which is always intertwined with a shared world. In this sense, embodied selfhood is inherently relational (Kontos, 2012; Kontos, Grigorovich, et al., 2016). Relationality is the second core tenet of the relational citizenship model, central to which is the notion of intercorporeality. Intercorporeality captures the ways in which bodies are interconnected with one another through a pre-reflective intertwining of body schemas; it is what Merleau-Ponty describes as an intertwining of the lifeworld through the flesh (Merleau-Ponty, 1962, 1964). Relationality is understood here not as a function of cognitive agency but rather as embodied agency, with embodied selfhood as a primary agential source of interactive and communicative practices for persons living with dementia (Kontos, 2004a, 2012).

Given that embodied selfhood and relationality are fundamental to the human condition, it is essential that they be supported through socio-political institutions and organizational practices at the local level of citizenship. Furnishing the model of relational citizenship with a human rights ontology that recognizes these pre-reflective dimensions of agency thus helps ensure that we cultivate a relational environment that supports the capacity of individuals living with dementia for creativity, imagination, and other positive human potentialities (Grigorovich & Kontos, 2016; Kontos, Grigorovich, et al., 2016; Kontos, Miller, & Kontos, 2017; Miller & Kontos, 2016). This model has already been applied to explicate an ethic of sexuality that offers an important alternative to the positivist legacy of bioethical principles in the field of dementia (Grigorovich & Kontos, 2016; Kontos, Grigorovich, et al., 2016). The application of the model to understanding and supporting musicality in the context of dementia is novel; it stands to advance the discourse on musicality by bringing a new and critical dimension to understanding self-expression, interdependence, and reciprocal engagement, all of which are fundamental to musical perception and engagement.

#### Methods

We have chosen the examples of Abe and Betty, both of whom live with severe dementia in a long-term care home, not because they are exceptional in their musicality; indeed, there are many other examples from Kontos' study that equally capture the primordial, sociocultural, and relational dimensions of musicality that are highlighted here. Further, musicality in the context of dementia abounds in popular culture and empirical discourse (Cuddy & Duffin, 2005; Oppenheimer, 2005; Pickles & Jones, 2006). The examples of Abe and Betty instead serve to raise crucial questions about the generative mechanisms of musicality that are most commonly attributed to cognition, as well as problematize the restriction of musicality in dementia care to its application as a therapeutic.

#### Abe

Kontos conducted an ethnographic study of selfhood in a dementia unit of a long-term care home in southern Ontario, Canada (Kontos, 2004b, 2006). The study was approved by the research ethics boards of the participating facility and the University of Toronto. Participant observation was conducted over eight months for approximately 8 h per day, three days per week. Observation sessions occurred during scheduled program activities, holiday celebrations, meal times, and when participants engaged in unscheduled activities such as walking in the hallways or sitting in the living room. All these activities provided a field of experiential possibilities to observe and explore the ways in

which individuals with dementia inhabit their life-world. For full methodological details see [Kontos \(2004b, 2006, 2012\)](#).

Drawing on an embodiment perspective, Kontos' analysis captures the richness and complexity of selfhood as was observed in relationships and gestural communication, expressions of preference and style, social norms and customs, and religious and artistic practices. This powerfully challenges the assumed erasure of selfhood in dementia ([Behuniak, 2011](#); [Davis, 2004](#); [Kaufman, 2006](#)).

A number of social programs at the long-term care home involved music – social tea, concerts, and a sing-a-long program. These were particularly popular with the residents. However, singing was not confined exclusively to the recreation room where the scheduled social programs were held. It was common to see residents singing spontaneously in the hallways, living room, or dining room. This is aptly captured with Abe, one of the participants of the ethnographic study. Abe was 80 years of age (at the time of the study) and had a diagnosis of Alzheimer's disease. He was feared by most residents because of his loudness and seemingly random outbursts. During meals he would slam his cutlery against his dishes, pound his fists on the table, and sometimes yell which could escalate to screaming.

Abe would frequently sing a popular Yiddish song repeating the one verse he knows over and over. Some residents would sing along with him or 'orchestrate' his music which would bring a smile to his face. However, because the attention caused him to become excited, he would progressively get louder and louder until he was actually shouting. For fear of disruption to other residents, he was thus not encouraged to participate in the music program. The following is a field observation that captures how Abe would take delight when other residents would sing along with him or orchestrate his music:

Abe was seated on the sofa in the living room and Ethel was in one of the easy chairs facing him. They sat in silence for over an hour, not even exchanging glances. Suddenly Abe started singing a Yiddish song. He emphasized the end of each phrase by singing the last word very loudly. Ethel was watching Abe and she laughed each time he punctuated the end of a phrase this way. Anna pushed her walker into the living room and sat next to Ethel. When she sat down she looked at Abe and raised her arms, smiled, and proceeded to mark off the beat of his singing with an imaginary baton. Florence was walking in the hallway and as she passed by the living room she paused to watch Abe. As he sang she listened and laughed when he shouted out the last word. After a couple of times she too was shouting with him.

## Betty

Kontos conducted an evaluation of an elder-clowning program in a dementia unit in a long-term care home in Ontario, Canada ([Kontos, Miller, et al., 2016](#); [Kontos, Miller, Mitchell, et al., 2017](#); [Miller & Kontos, 2016](#)). The study was approved by the research ethics boards of the participating facility and Toronto Rehabilitation Institute – University Health Network. The purpose of the study was to explore the impact of elder-clowning on residents of a long-term care home and to explore the relational and aesthetic dimensions of elder-clowning that support residents' engagement. For full methodological details see [Kontos, Miller, et al. \(2016\)](#), [Kontos, Miller, and Kontos \(2017\)](#) and [Miller and Kontos \(2016\)](#). Elder-clown and resident interactions were video-recorded and then transcribed, as if they were occurring in real time, as non-participant observer fieldnotes. Interviews with the elder-clowns, family members of the resident participants, and health care practitioners were also conducted.

The performance art of clowning is the most recent arts-based program in long-term residential care for persons living with dementia. Elder-clowning involves multiple artistic modalities such as song and music, theatrical devices, humour and emotions, and movement and physical performance ([Warren, 2008a, 2008b](#)). Elder-clowns don a red

nose, but unlike circus clowns, they keep their faces natural, with minimal make-up, and wear clothing that evokes an earlier era, such as 1950s swing dresses. Elder-clowns also rely on clinical, social, and familial details to customize their interactions to each resident. Interactions with residents typically involve elder-clowns offering: song and music by singing residents' favorite songs with them with the accompaniment of musical instruments or co-constructing improvised songs with them; witty, playful scenarios involving good-natured teasing; supporting sadness with soft reassuring touch rather than trying to change the emotional timbre; and pens and sketch pads for artistic expression ([Miller & Kontos, 2016](#); [Warren & Chodzinski, 2005](#)). Elder-clowning has been shown to reduce neuropsychiatric symptoms and improve quality of life ([Kontos, Miller, et al., 2016](#)). It has also been found to support the capacity of persons living with dementia to initiate as well as respond to verbal and embodied engagement expressed through creativity (e.g. singing/dancing, drawing), imagination (storytelling), and playfulness (e.g. verbal and gestural humour) ([Kontos, Miller, & Kontos, 2017](#); [Miller & Kontos, 2016](#)).

Betty, one of the resident participants of the study, was 80 years of age (at the time of the study) and had a diagnosis of dementia with Lewy bodies. She would spend most of the day in her motorized wheelchair in her room with her arms folded and her eyes closed. Staff would sometimes provide her with a walker and assist her to walk on the unit. She was a homemaker and also worked as a travel agent. Her hobbies included singing, dancing, and other artistic pursuits; in the past she was also part of a community-based theatre group that performed musicals. The elder-clowns used these biographical details to tailor their interactions with her. Specifically, they always sought to support her musicality by offering songs and melodies from the style of musical theatre from the 1950s. In the following interaction, Betty engages musically by co-constructing with the elder-clowns a highly improvised song composed of complex melodies with varied dynamics, rhythm, and pitch (see [Fig. 1](#) for a musical transcription of the interaction):

Betty is sitting in her wheelchair by the window, angled towards the door. The chair is tilted slightly back so that she reclines with her head against the head rest with her eyes closed and her hands are clasped together across her lap with her elbows on the arms of the chair. In a cheery falsetto Cherry says 'Good morning, Betty!' Zazzie sings 'Good morning Betty' while playing her ukulele. Cherry begins snapping her fingers to the beat of the tune and Zazzie begins to sing an improvised song (see [Fig. 1](#)): 'Would you like to open your eyes today? Would you like to open to see the skies today? The skies are blue, yes indeed, they could be the skies you need. Oh, would you like to open your eyes Betty? Would you like to open your eyes to see the beautiful blue sky?' Both clowns are gently swaying to the music and Cherry begins using her clutch purse filled with loose change as a tambourine. Betty responds by tapping her left foot against the wheelchair footrests, raising and lowering her clasped hands to the beat of the music. She then interjects: 'Boop...boop... And boop be boop' with the clowns repeating her words and matching her rhythm. Betty then moves from interjecting words in the existing rhythm to embellishing and shaping the melody. She speak-sings: 'ham and eggs, and ham and eggs and ham' followed by the clowns singing: 'And ham and eggs and ham and eggs. Ham and eggs.' Without missing a beat, Betty continues to sing 'Everywhere there is a place for you' followed by the clowns: 'A place for you....' The clowns continue to echo her musical phrases and add harmony. Betty then speak-sings 'Here. Here. Here. Here. HERE!' moving her clasped hands to accent each word; she also changes the rhythm and introduces increased emphasis with each successive repetition. In response to Betty's emphasis Zazzie and Cherry pause the music in anticipation of what Betty will do next. Betty holds the pause and then sings 'Oh it's a big one' with Zazzie coming in with the ukulele precisely on the down beat of Betty's new musical phrase. Zazzie and



Cherry respond with 'It's a big one' that complements Betty's melody but is altered by them raising the pitch at the end of the phrase. Betty then completes the musical phrase with 'For me', which in turn is repeated by Zazzie and Cherry. Betty finishes with 'it's a big, big, big, big, big, biggy for me' alternating between a higher and lower musical pitch. This co-constructed improvised song continues until Betty slows and quiets her singing, relaxes her hands, her mouth dropping open, eyebrows relaxing, and she falls asleep.

## Discussion

Our analysis of musicality begins with the first core tenet of embodied selfhood - Merleau-Ponty's pre-reflective notion of perception is primordial and thus is prior to and independent of reflective thought. For Merleau-Ponty (1962), perception represents that inarticulate but

fundamental attunement to things, which is our being-in-the-world. That attunement is a function of bodily schema, the body's natural investment with a certain perceptual significance, a bodily know-how or practical sense. This pre-reflective notion of perception is particularly pertinent to our analysis of musicality in dementia given Merleau-Ponty's critique of the reduction of experience and behaviour of an organism to simple causal and physiological mechanisms, and also his critique that the mind is what gives meaning to the world. Thinking about selfhood as emanating from the body's power of natural expression and manifesting in the body's inherent ability to apprehend and convey meaning (Kontos, 2004a, 2006), underscores the embodied nature of the musical self. In this sense, musicality is tantamount to the existential expressiveness of the body that emerges from our active and responsive propensity towards the world. Thus, in reference to the primordial source of selfhood, music perception is understood not in cognitive terms but rather as coming into being by taking for granted

$\text{♩} = 120$

*mp*

Zazzie: Would you like to o - pen your eyes to-day? Would you like to

o - pen to see the skies to-day? The skies are blue, yes in - deed,

they could be the skies we need. Oh, would you like to o - pen your eyes

Bet - ty? Would you like to o - pen your eyes to see the beau

- ti-ful blue sky. Da da da do. Blue

Betty: Boop

Fig. 1. Musical transcription.

26 *mf*  
boop boop. Zazzie/Cherry:Be doop bedoop boop.  
boop and boop be boop. Ham and eggs

31  
Doop. And ham and eggs and ham and eggs. Ha-m and eggs.  
and ham and eggs and ham.

36  
A place for you. For you.  
Ev-'ry where there is a place for you. For you. A

42  
A lit-tle place for you. Here. Here. Here.  
lit-tle place for you. Here. Here. Here.

48 *rit. - - allegro*  
here and here. Here, here. HERE! It's a big one.  
Here. Here! HERE! Oh it's a big one. For

54  
For me. me.  
me. It's a big, big, big, big, big, big, big-gy for me.

Fig. 1. (continued)

“all the latent knowledge of itself that...[our] body possesses” (Merleau-Ponty, 1962, p. 233). This latent knowledge can be understood as “kinesthetic background” (Merleau-Ponty, 1962, p. 116), with musical gesture and its background both being “moments of a unique totality” (Merleau-Ponty, 1962, p. 110). The background to the gesture or its form is not related by way of being a representation that is externally linked, but rather is immanent in the gesture itself, impelling and sustaining it at every moment.

These elucidations displace the primacy of cognition in the dominant approaches to music perception, and further, challenges the passivity of the body implied in physiological accounts of such perception.

For Merleau-Ponty, the body in movement is not limited to submitting passively to space and time; the body actively and intentionally takes up space and time in their elemental significance. In his words, “a system of possible movements radiates from us to our environment” giving us at every moment a practical and implicit hold on our body, a hold that situates us as subjects perceptually, linguistically, as well as through motor activity (Merleau-Ponty, 1964, p. 5). These elucidations enable us to more clearly understand how perception is in the first place not a matter of “I think that” but of “I can” (Merleau-Ponty, 1962, p. 137). The resilience of Abe’s and Betty’s musical expression can thus be understood in terms of embodied know-how and practical sense, that is,

a perspectival grasp of the world from “the point of view” of the body. Musical engagement then is not the function of a cognitive form of consciousness that carries the body to a given space by way of a strategic plan formulated beforehand. It is a bodily form of consciousness, what in Merleau-Ponty's terms is the body's pre-reflective ability to direct itself towards the world.

It is significant that in the examples of Abe and Betty the musicality expressed was both creative and spontaneous, as evidenced by the improvised nature of their expression whether of their own accord, as in the case of Abe, or prompted by others as with Betty by the elder-clowns. Their creative and spontaneous acts render visible how musicality emanates from the body as a generative spontaneity which asserts itself in an improvised engagement with the world. The idea emphasized here is that musicality entails an intrinsic intercorporeality of being-in-the-world, a positioning and directionality that is inherently primordial and relational. Primordial intercorporeality provides “a formative and dynamic structure” for musical engagement wherein intercorporeal connection between Abe and the other residents, and Betty and the elder-clowns is constitutive of the musicality expressed (Käll, 2017, p. 8).

Betty's and Abe's musicality cannot solely be accounted for with reference to the primordial. There is also a socio-cultural style or content to their musicality as an interactive practice, manifest in their bodily movements and gestures, and style and content of song, the source of which is not attributable to a primary level of signification. This is consistent with the second core tenet of embodied selfhood which takes its theoretical bearings from Bourdieu's (1977, 1990) concept of habitus that foregrounds the socio-cultural sources of bodily practices and captures the ways in which embodiment and enculturation are co-implicated. Our social being derives from habitus, what Bourdieu defines as socialized inclinations associated with membership in a particular cultural group, which instill in individuals dispositions and generative schemes for being and perceiving. Bourdieu (1977, 1990) argues that social history and culture, acquired through the process of socialization, are objectified in habitus, which is the source of an individual's way of being and perceiving. Just as dispositions are embodied and materialized in practice, so is selfhood embodied and manifested in socio-culturally specific ways of being-in-the-world (Kontos, 2004b, 2006). Of paramount importance to the concept of habitus, and of relevance to our analysis of musicality is that the power of habitus derives from the nonconsciousness of habituation rather than consciously learned principles and rules (Bourdieu, 1990). In this sense, the music making and music appreciation in the examples provided can be understood as forms of know-how that are internalized, function below the threshold of cognition, and are enacted as practical sense at a pre-reflective level.

One is not born with socio-cultural musical dispositions, but acquires them through cumulated exposure to music, a kind of practical learning that “treats the body as a living memory pad” (Bourdieu, 1990, p. 68). Abe's Yiddish song is a cultural aspect of his embodied selfhood determined by his cultural heritage. Thus, determinations attached to his primary socialization and cultural environment give his selfhood its socio-cultural specificity by virtue of being embodied and materialized in habitual states and in a culturally distinct style of music. Ritualized patterns of action render cultural possibilities embodied inevitabilities (Bowman, 2004). Similarly, Betty's performance was consistent with her experience with improvisation and composition of musical theatre from the 1950s. Her socially and culturally distinct dimensions of musicality are manifest despite her impaired cognition because of how socio-cultural dispositions are regulated not by conscious obeisance to external rules but by the pre-reflective nature of embodied selfhood (Kontos, 2004b, 2006). Embodied selfhood harmonizes practices without any deliberate pursuit of coherence or conscious reference to a norm, and without explicit coordination.

The argument here is that Abe's and Betty's musicality is “learned” by the body but is not a kind of knowledge that one has but rather is

“something that one is” (Bourdieu, 1990, p. 73). This means that what the body learns is never detached from the body; it is pre-reflective and thus can be activated only by evoking it in practice. To be even more precise, it is a “practical reactivation” whereby the knowledge that the body reproduces is not a memorization of the past but rather an enactment of the past (Bourdieu, 1990, p. 73). Such enactment does not derive from rules, principles or calculations, or a premeditated goal, which would in any case be excluded by the improvisational nature of Betty's performance. And in both Abe's and Betty's case, reflective thought and calculation would be further excluded by the fact of their advanced dementia. Neither could their movements be mistaken for pure imitation, particularly if we consider that Abe gave a solo performance and, while the elder-clowns offered musical accompaniment, it was Betty who produced the improvised lyrics.

Abe's Yiddish song and Betty's improvised song further resonate with the theory of embodied selfhood that suggests that expressions of musicality are not mechanical but rather disclose an element of inventiveness and creativity, albeit within the limits of the embodied sedimentations of the social structures that produced it. To say that a cognitive form of consciousness is not the generator of practice does not imply the corollary that their actions were blind urges. Abe's and Betty's musical practices are suggestive of “a generative spontaneity which asserts itself in the improvised confrontation with endlessly renewed situations,” and thus their musicality can be understood as following “a practical logic, that of the fuzzy, of the more-or-less, which defines the ordinary relating to the world” (Wacquant, 1992, p. 22, emphasis in original). It is this fuzzy and vague but no less masterful capacity to relate to the world that makes it possible for them to express themselves in such creative and complex music traditions as East European folk music and 1950s musical theatre respectively. In the example of Betty, her embodied selfhood not only disposed her to recognize the music the elder-clowns offered, but it further facilitated the pertinent incitement of a capacity to grasp and engage in the music. Abe's spontaneous song suggests that embodied selfhood itself is what propels his musicality since there was no pertinent incitement of selfhood through the body by a concrete practice, as we saw in the case of Betty with the elder-clowns. Yet he did have an audience with Anna, Ethel, and Florence that likely offered a dynamic and structure of encounter of mutuality that intersected with the dispositions of his embodied selfhood and thereby reinforced those dispositions necessary for his musicality. The concordance between dispositions and the socio-cultural horizon that produced them is argued by Bourdieu as being central to the generative mechanisms of habitus, which “tends to favour experiences likely to reinforce it” (1990, p. 61). This is most apparent with Betty for whom the concordance between the opportunity provided by the elder-clowns' offering of music and her socio-cultural dispositions to grasp it is what facilitated her performance.

There is an apparent contradiction between Abe's and Betty's coherent performance and the fact of their cognitive impairment. This apparent contradiction can be resolved when we approach their musicality as the application of a practical logic, produced without any conscious intention by a structured, structuring body that functioned as a generator of song. Their performances were not an intellectual effort of meditation and contemplation. That they were in such command attests to their embodied selfhood and its schemes of perception, appreciation and action, which are not only acquired through practice, but are implemented in a practical state. So long as one ignores the notion of a “conductorless orchestration” (Bourdieu, 1990, p. 59), that is, spontaneity without reflection, we are left with no other unifying principle than conscious co-ordination and, consequently, no reasonable explanation for the musicality of Abe and Betty given their severe cognitive impairment. Their performances disclose a kind of mastery, acquired through practice and implemented by way of immersion within a practical state.

Drawing upon the core tenets of the model of relational citizenship for our analysis foregrounds the body's pre-reflective capacity and

socio-cultural dispositions for musical self-expression, interdependence, and reciprocal engagement. This effectively challenges dominant approaches to understanding the generative mechanisms of musicality that privilege cognition. Further, given that our analysis demonstrates that musicality is embodied and persists despite even severe cognitive impairment, it is egregious that music is restricted in dementia care to its instrumental application as a therapeutic tool to improve 'behaviours' and cognitive functioning. The implication of our argument is an ethic of musicality that requires that musicality be more broadly supported in and through institutional policies, structures and practices. This entails the mobilization of structures and resources to nurture and facilitate musicality and opportunities for persons living with dementia to engage with music in their everyday life in long-term care settings. It is a new kind of ethic that goes well beyond custodianship and remediation. It is characterized by a pre-reflective intercorporeal sensibility that shifts the goals of care to a moral responsibility to promote human flourishing (Carlson, 2015; DeNora & Ansdell, 2014; Jennings, 2009). Flourishing in this context occurs when embodied selfhood is supported in and through the creation of enabling environments and relational practices – or corporeal-ethical spaces – that support embodied forms of communication and meaningful engagement (Macpherson, 2016). It issues from a pre-reflective or intercorporeal sensibility, which not only is an individual virtue but is the "primordial condition of personal, interpersonal and communal existence" (Diprose, 2012).

Supporting musicality of persons living with dementia will require introducing educational initiatives to raise awareness about the nature and extent of music perception and creativity in dementia. Central to these initiatives would be to counteract deeply seated assumptions about capacity that foster practices that limit musical self-expression by persons living with dementia. This would ensure that care staff have a better understanding of the nature of musicality and how it can be supported in the context of everyday life. Educational initiatives should also be opened to family carers who are largely neglected in initiatives to support the quality of life of individuals living with dementia (Austin et al., 2009; Wilson, Davies, & Nolan, 2009). A greater breadth of opportunities to engage in music also needs to be provided. There are some innovative musical programs offered to persons living with dementia in community settings such as the BUDI Symphony project (Bournemouth University Dementia Institute, 2015), the Scottish Opera project (Reynolds, Innes, Poyner, & Hambidge, 2016), and the Bitove Wellness Academy (Bitove Wellness Academy, 2016). However in long-term care settings, music is typically restricted to single event performances (e.g. concerts), structured singing (e.g. sing-a-long), and individualized music appreciation activities (e.g. the iPod project). Exceptions include the 'Wee Drams' (Live Music Now Scotland, 2015), a multi-arts program that included a series of 48 live music performances, and elder-clowning, which is also a multi-arts based program in which music is key to fostering communication, and supporting creativity, affective relationality, and playfulness (Kontos, Miller, et al., 2016; Kontos, Miller, Mitchell, et al., 2017; Miller & Kontos, 2016). It is our hope that the relational model of citizenship will offer the vital stimulus for the development of yet more diverse and engaging opportunities for persons living with dementia to express their musicality.

## Conclusion

Oliver Sacks, whose case studies of neurological anomalies underscore essential characteristics of the imagination, says "music imprints itself on the brain deeper than any other human experience" (Rossato-Bennett, 2012). However, rather than seeing musicality as a testimony to the potential of the human brain, we have argued that the continued implementation of musicality in the face of cognitive impairment suggests a depth that goes beyond inscription on the brain to a pre-reflective mastery of the world by way of immersion within it. As such, Abe's and Betty's musicality invites a rethinking of conventional notions

of music perception, calling for the understanding of musicality as emanating from our corporeal depths. As Kontos (2014) argues "it entails a shift in the current preoccupation with musical cognition to musical embodiment" (p. 117). The model of relational citizenship importantly highlights that intelligibility of the body is primary to the continuity of our being and existence in a shared world. Thus, to disregard the pre-reflective level of our existence is to fail to take into account a fundamental dimension of human existence that is essential to selfhood, ageing, intentionality, and mutuality with the world. The relational citizenship model with its emphasis on embodiment and relationality holds promise for ensuring that persons living with dementia have opportunities to participate in music to the fullest extent possible.

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