

EPAE

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Arts Education

Philosophy
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Retrotopia

Zygmunt Bauman

COLLATERAL DAMAGE
SOCIAL OJÄMLIKHET I EN GLOBAL TIDSÄLDER

POWER/
KNOW-
LEDGE:

INTERVIEWS
WRITINGS
197

NICHE
UCAU
EDITED BY COLIN GORDON

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Editorial

Third issue of the European Journal of Philosophy in Arts Education

Ketil Thorgersen

Editor in Chief

Welcome to the third ever issue of EJPAE. Slightly overdue, but as we say in Sweden, the one who waits for something good does not wait in vain. In this issue there are three articles that constitute the good we have been waiting for. The three articles complements each other in fulfilling the scope of EJPAE in that their foci are very different and that they represent different art forms. Two of the articles also create bridges to other areas of education, science and art.

Lee Beavington's article *Romanticism and Science Education – Nature as a Poem* reflects on how poetry writing and reading can be a tool in teaching and learning in science education - particularly connected to nature. This article is also an example of arts based writing and the text itself mixes a more traditional philosophical writing style with poetry of different kinds.

Another example of a crossover article comes from *Sven Bjerstedt*. In his article *Musicality in Spoken Theatre – Fiction, Metaphor, Dispositif*, he discusses how musical terms works as a certain kind of metaphorical linguistic repertoire to talk about artistic quality among theater actors. In his article he connects to the third article in this issue through his treatment of musicality. Interestingly, to be musical or to act musically, is considered essential for a good actor according to Bjerstedt, and in his

definition he connects to a definition of relational musicality, coined by Sture Brändström in 2006, where musicality is not only something you are born with or something that is learnt, but rather a social agreement of what is considered musical in a particular culture. In a similar way musicality is also a central theme in the third article.

In *Kari Holdhus and Magne Espeland's* article *Music in Future Nordic Schooling The Potential of the Relational Turn*, the relationality that Bjerstedt is touching upon is treated in depth. Holdhus and Espeland draws on recent trends in educational discourses that shows a way towards a more relational approach to teaching and learning, and through analysing central texts about the present, pointing towards the future, they show possible futures for school music education. They warn against simplistic understandings of what knowledge formation is and can be: "The rationale for music as a compulsory subject in future public schooling could be improved by activating a web of music relations rather than reducing music education for children to a didactic triangle between the teacher, pupil and music."

This quote can also symbolise the complex web of meanings that arise through reading the three texts in this issue together. Enjoy the richness of the texts of nature, drama, music. Ride fast, read slow!

Ketil Thorgersen

Editor in Chief Stockholm January 20th 2018



Romanticism and Science Education

Nature as a Poem

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Abstract

This philosophical poetic inquiry argues for relational approaches and creative expression in university science education. Poetic inquiry as a methodology can cultivate connection to the other-than-human world that promotes contemplative practice and a reciprocal relationship with life phenomena under study. Throughout this philosophical inquiry I incorporate my own poems and photography, both as a Romanticism-inspired praxis, and to elucidate the vital importance of an ethical-holistic pedagogy in the current era of human-powered climate change, dramatic species extinction, and habitat destruction. Goethean science, where students understand nature inwardly, offers an alternative to Newtonian science by incorporating the intentionality of phenomenological learning and the development of ecological literacy. If we approach the scientific method with wonder and ethical-ecological holism, we might fully acknowledge our moral responsibility toward the biosphere and all earthly beings.

Keywords: Romanticism; poetic inquiry; science education; arts-based learning; philosophy of education

Romanticism and Science Education

Nature as a Poem

Lee Beavington¹

Introduction from the Amazon

The rain forest is alive with sound. Vines hang like snakes on every branch of every tree. The air is heavy with rain yet to fall. My thirteen students are trekking through primary tropical rainforest, the greatest terrestrial biodiversity on our planet. This setting is their teacher.

I have travelled with Kwantlen Polytechnic University's (KPU) Interdisciplinary Amazon Field School three separate years. Students with diverse backgrounds share an experience of cultural, geographical and ecological immersion. This is a collaboration between KPU and the Calanoa Project, founded by Marlene and Diego Samper. Calanoa is a private natural reserve located at the very heart of the Amazon rainforest and offers students the opportunity to engage in an intensive cross-disciplinary field study focused on integrating personal growth, nature experience, and reflective scholarship.

As a poet-scientist-philosopher my intention, both on this field school and in this paper, is to promote reflective and relational learning with university students

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through poetry, arts-based teaching, and direct nature experience. I will argue that if we approach the scientific method with wonder and reciprocity, we might fully acknowledge our moral responsibility toward the biosphere and all earthly beings. I incorporate my own poems and photography throughout, both as a Romanticism-inspired praxis and to elucidate the vital importance of an ethical-holistic pedagogy in the current era of human-powered climate change, dramatic species extinction, and habitat destruction.

But first, let us return to the Amazon. As my students breathe in the rainforest, serenaded by choruses of insects, amphibians, and the occasional primate, everything begins to feel more permeable, more interconnected. At one point our intrepid guide, named Elvis, gets stung by an aggressive wasp. He retreats from the nest and trail blazes us a new path to circumvent the danger. Here in the Amazon nature commands respect and a reciprocity with the wild. Humans are but a single species in a vast cauldron of biodiversity, no place more evident than here. As David Abram (1996) says, “We are human only in contact, and conviviality, with what is not human” (22). The other-than-human voices of the Amazon are many. Should we learn to listen, each species becomes a unique teacher.

Amazonia

every leafblade watches you
a study for each pupil
unfurls vision that never blinks
mentors through mystery and survival
a million lessons for those who listen

Ants

carve roads with six-legged fortitude
the way Maxine Greene speaks of the quest

a tornado of pheromone forges the path
one antennae twitch perceived by all
a tsunami that ripples through the colony

Dolphin
he glides through water's pedagogy
locating echoes of our evolution
fabled fins that once walked on land
this shape-shifting intelligence
narrates my ocean ancestry

Mosquito
buzz I want to slap
before that bloodsucker slips past my skin
this pest food for bat and bird
shows me a knot in the food web
and the human-made holes we cannot stitch

Strangler Fig
parasitic teacher that means well
star-stretcher first, then root digger
coddles with an overkill of material
the student becomes but a shadow
inner cavity hallowed of creativity

Tarantula
I fear those eight anxious appendages
an undulant of waves along the cabin wall
why does my stomach lurch before this beauty?
such delicacy in her gesture and touch
slows my heart in trepidation

Anaconda

limbless queen of the jungle river
with skin that weds sinuous to simple
no fingers to point or vertebrae to raise
to swim climb slither prey
this boa swallows caiman whole

Sloth

a still and single-minded reminder
patient guru of three-toed precision
slow life in a singular ceiba tree
every blink and breath a precious play
reflected in the year's long second

Amazonia

vast cauldron of leaf and fang
simmers with life's cardinal seed
a place terror and wonder collide
caught in the jaguar's perfect gaze
do you look or
do you look away?

When a student is tasted by a mosquito, gasps at the sight of a dolphin fin breaking the Amazon River surface, or shudders as eight hairy tarantula legs rambles across their cabin wall, such encounters jog our senses and attune our awareness. They remind us of our bodies' amazing vulnerability. Such visceral and pre-rational responses, in this "place where terror and wonder collide," cue us toward the ecological concept that we are but a small part of nature, interwoven into a larger tapestry.

Approaching the end of our trek, I look up to see the rain, tiny flecks caught in equator sunlight. Except behind every leaf the sky is blue. It takes a moment to register: this isn't rain, it's *insects*. Thousands upon thousands in descent, flitting to

and fro, ubiquitous enough to be mistaken for precipitation. The awe of this moment snaps me to attention. Is this the kind of wonder experienced by Humboldt and Darwin in the Americas when they first ventured, respectively, to the Andes and Galápagos Islands?

Our final yet most profound engagement with the forest happens off the well-trodden path. Elvis machetes his way down to a huge ceiba tree, its buttressed trunk grasping the surrounding earth like the talons of a giant harpy eagle. For the Mayans, the ceiba tree served as bridge between the Earth and the spirit-world. “Place your hands on this ancient mother tree,” Elvis explains. “Close your eyes for two minutes. Then let out a primal scream into the jungle. This scream is a release of some weight, hurt, or anxiety that we (or someone close to us) carries.” The students all take part, and we immerse in an all-too-rare moment of silent reverie. The resultant screams come from a place somewhere deep, a place usually kept behind the walls of reason and etiquette. The macaws perched above tilt their heads in curiosity at the shrill cries of these two-leggeds.

We load back into our small boats, heading out onto Matamata Creek and the twilight tunnels of forest flooded by the wet season. As I paddle the dark waters, I ponder on the teachings of the forest and the river. What lessons, forgotten by civilization, can this wild place teach us?

Matamata

the pulse of flooded Amazonia
thrums through our canoe
the current
every leaf and vein
sparks light
the paddle in my hands
a Colombian Excalibur

king of the river
her sunken secrets
hidden beneath
the turtle's earthen shell

I wipe away
the malarial blood
of squashed mosquitos
my nose wrinkles
at deet mixed
with forest sweat
my pores open
to the vascular
wilderness within
my skin tunnels
a memory of
death and breath

Matamata
you meander
wide round
bending light
your cauldron of algae
captures a
chlorophyll feast
you swallow roots
flood the forest
overflow your banks
with dolphins
under blackwater
tannin-leached artery
palpitates

what lurks?
at the surface mirror
whose nostrils?
anaconda
light falls
insects buzz
black bird cries
a sunset drone
for hunger and sex

remember
your wild blood
and feral heart
recover the soul
of the shaman
his scream silent
as the water lung
louder than
the darkness

Something ancient stirs in this river flooded ten meters deeper by rains in distant highlands. The poem, “Matamata,” speaks to the effects of the “sunset drone” and “forest sweat” on our cultured—or even academic—bodies. Beyond the rational, the intellectual, the logically defined is the spirit of our “wild blood” that connects us to this place. This remembrance pokes holes between the civilized and wild, the objective and subjective, the material and spiritual, forming a porous membrane that teaches us to own and embrace, rather than shun, our so-called primitive qualities. Intuition, awakened senses, humid sweat, and even the possibility of lurking dangers are all gifts heightened by immersive nature experience.

Students must prepare for this experience. While the Amazon Field School offers a tremendous opportunity for place-based learning, where the arts (drawing, photography, writing, etc.) can be explored alongside the sciences (chemistry, ecology, fluvial geomorphology, etc.), it also stretches our bodies and challenges our beliefs. Students need to bring a certain level of maturity, an openness to other ways of thinking and being, a willingness to be bitten, sunburnt, sweat-soaked, and an understanding of the power of vulnerability. Brené Brown (2013) has shown vulnerability to be the birthplace of innovation and creativity, a place for transformative opportunity. Throughout the Amazonia experience, students engage in reflective journaling, group discussion, and debrief sessions, in the hopes that any feelings of overwhelm or discomfort become opportunities for growth, or in some cases transformation.

Lessons from the Romantics

In the remainder of this paper, I will outline the ideology of Romanticism and the aesthetic, holistic and moral qualities it can offer science education. I will argue that poetry and poetic inquiry (Sameshima, Fidyk, James, and Leggo 2017) in university can be employed to engage students in a participant mode of consciousness and raise questions about post-secondary science pedagogy that positivism and Cartesian-Newtonian models de-emphasize. Can we engage in holistic-based, wonder-filled science education that happens in local ecosystems, or even within the confines of a conventional classroom? How can we re-integrate science, philosophy and the fine arts? How can we return to a more permeable relationship with nature, one that cultivates an ethical consideration of the more-than-human? Learnings from the Romantic era can help us answer these questions. Writing poetry presents one avenue toward understanding our relationship with the natural world, participating with the other-than-human consciousness, and the interweaving of science and art.

Next, I will examine poetic inquiry as a reflective and inhabiting methodology that can build connective tissue among human, other-than-human, and place, and later outline some science-based poetic teaching practices using ethical-holistic pedagogy. Where ecology attempts to study scientifically everything in relation, holism is its philosophical twin. Reductionism, or the investigation of phenomena in isolation, “can only give us a partial view of anything it dissects” (Miller 2000, 21). As such, we should contemplate the world as an interwoven tapestry lacking loose threads. *Métissage* (Hasebe-Ludt, Chambers, and Leggo 2009) will help integrate and conceptualize my inquiry in order to bring forth scientific, artistic and philosophical voices. I will braid lenses of inquiry with a variety of my own personal voices: academically inspired, poetic works, photography—and the lived-experiential writing found previous.

Western civilization’s privileging of the mind over the body enables a human-nature dualism and general desensitization from nature that discourages unity between epistemic object and epistemic subject (Abram 2011; Bai 2012; Hadzigeorgiou and Skoumios 2013; Matthews 2008). During the Romantic era (late 1700s to roughly 1900) the natural sciences unified human beings and nature, and Romantic scientists enriched their work with aesthetic and moral qualities such as drawings, creative writings, and a deep relationality that blurred the line between subject and object. As Hadzigeorgiou and Schulz (2014) explain, “The ‘Romantic’ scientists believed in an infinite and mysterious nature, whose study was similar to an aesthetic experience, and which was characterized by the experience of wonder, poetic inspiration and creativity” (1977). Science was not yet siloed from art and philosophy. Goethean science, where students understand nature inwardly, offers an alternative to Newtonian science by incorporating the intentionality of phenomenological learning and the development of ecological literacy (Cohen 2007). Goethe (1790/1988) asks us to engage directly with our subjects and avoid ontological reversal (Harvey 1989) where models take on more importance than the phenomenon under study. This common

practice happens, by example, when a student studies abstract photosynthetic mechanisms without examining an actual leaf, more concerned with chemical formulae and electrons than the wonder and welfare of the photosynthesizing plant.

Darwin was a Romantic scientist, although he would have called himself a natural philosopher (*philosophia naturalis*), as the word scientist, coined by scientist/philosopher William Whewell, did not enter the popular vernacular until the mid-1800s. The telling difference between natural philosopher and scientist is the removal of philosophy from science. Modern scientific studies seldom engage with ethics or philosophical discourse; this is reserved for other disciplines. Darwin's theory of natural selection, one of science's greatest discoveries, unifies all the myriad fields of biology (Darwin 1859/1998). Anatomy, ecology, genetics, cell biology, and developmental biology all dance to the rhythms of evolution the same way planets and moons dance to the laws of gravity. As a Romantic scientist (Richards 1987) Darwin was able to envision natural selection by examining phenomena in a perennial and inclusive manner, through eyes that saw the dynamic creativity of the world. Such a holistic and prescient ideology that unites divergent disciplines is vital in today's interdisciplinary world where, for example, climate change studies require biologists, geochemists, meteorologists, mathematicians, oceanographers and others to intimately collaborate.

How can holistic education in university, especially one that is experiential, reflective, and reciprocative, cultivate wonder in learners that influences their academic and ethical decisions? If we want to develop a relationally constructed autonomy and responsibility, the often atomistic scientific methodology needs to engage in cross-disciplinary pollination. Miller (2000) warns of strict intellectual training that leads to colonial thinking such as "how to gain knowledge *over* the world" (68); Hadzi-georgiou and Schulz (2014) suggest that we reclaim the Romantic conception of science where aesthetic, contemplative and moral deliberation (Richards 2002) fosters

an ethical-holistic purpose (Kearns 2015). Holism is an anti-reductionist view that recognizes the wholeness of our beings. Hadzigeorgiou and Schulz (2014) expand on this,

As a philosophy of education, holistic education is based upon the idea that meaning can be constructed through multiple connections to both the natural world and the community. In this sense, a ‘holistic experience’ is an experience that encourages unity between a subject and his/her environment (including his/her object of study), through physical, emotional cognitive, and even spiritual involvement with it (1987).

Through the lens of Romanticism, and inspired by Goethean science that promotes empathy and prolonged looking towards a non-dualistic unity (Robbins 2005; Wahl 2005), perhaps there is an alternative paradigm of, and methodology for, science that fully acknowledges and requires humans’ moral responsibility toward all earthly beings and our mutual flourishing? I will argue that poetry is one such method that promotes contemplative practice and a reciprocal relationship with the phenomena under study. Poetic inquiry can facilitate reflection and sensorial engagement, build connective tissue, and fine-tune our understanding via concise language and poignant metaphor. Poetry opens new doors of perception.

The Mexican poet-diplomat Octavio Paz contends that poetry is the remedy for “resisting modern man’s accelerating flight from the Garden of Eden into a world made pallid and plastic by technological glut” (Sherman 2009, 89). Sherman expands this further,

The remedy is poetry, of course, poetry as fact and as metaphor to repair the augmenting gulf between man and his surroundings, man and his being. There are two necessary steps: first, a profound contemplation of nature until we are in tune with its rhythms, can hear and articulate them, can overcome our instinctive fear of alien forces; and then, an essential recovery of that nothingness

which precedes being, that state of benign uncertainty which is the original but corrupted source of the bastardized progeny which currently afflict us: futility, anxiety, boredom. (89)

This suggests that poetic inquiry is more than mere words on a page or language poesis. Poems have the potential to be transformational both for the poet and for her or his readers, and in a larger socio-political context.

Poetry as Intimate Inquiry

I think that we're beginning to remember that the first poets didn't come out of a classroom, that poetry began when somebody walked off of a savanna or out of a cave and looked up at the sky with wonder and said, "Ahhh." That was the first poem. (Clifton 2010).

Documented poetry, such as Homer's *Odyssey* and Valmiki's *Ramayana*, have existed for thousands of years, while oral poetics in the form of song or hymn date even further back. Poetic inquiry can be seen as a subset of poetry that serves as intentional research. Before I distinguish these further, let us review what several celebrated poets have to say about poetry.

"A poet's work is to name the unnameable," says Salman Rushdie, "to point at frauds, to take sides, start arguments, shape the world, and stop it going to sleep" (as cited in Andrews 1993, 699). Rushdie emphasizes the transformative nature of poetry, and its ability to provoke conversations that matter and keep the truth alive. Robert Frost explicates the way poetry unearths the unknown: "I have never started a poem yet whose end I knew. Writing a poem is discovering" (as cited in Wiggerman and Meischen 2015, "Junk Drawers" para 12). Poetry is not a product but a process that comes to light through the act of living poetically, or constructing possibilities in the way Carl Leggo (2015) describes: "language is dynamic and energetic, and opens

up possibilities for understanding our lives and experiences and relations” (178). In summary, then, poetry is an engagement with discovery and wonder that acts as a bridge of understanding across divergent realms, prompting us to excavate and access the inaccessible.

Poetic inquiry uses poetry to study and consider fuller understandings of a research subject (Faulkner 2009; Prendergast 2009a; Wiebe 2008). This type of qualitative research is often contemplative in nature, and can help clarify our place in and feelings toward the more-than-human world. Through poetic inquiry—that is, through the rumination of a subject or experience, thoughtful word choice and use of imagery, and careful construction of a poem that may include “metaphor, lyric, rhythm, imagery, emotion, attention, wide-awakeness, opening to the world, self-revelation” (Prendergast 2009b, xxxvii)—one can deepen understanding of both *I* and the *Other*, and the relational space between. The visceral and evocative nature of poetry can bring the subject alive and forge a reciprocal relationship between the observer and the observed, blurring the lines that separate object and subject, human and nonhuman, teacher and student. Ellsworth describes this as “a location that defies the binaries of inside/outside, self/other, subject/object—a space of relation” (McKenzie 2008, 365). Inside this space of relation, and in the expression of affective experiences, we engage with our ecological self and thereby become aware of the larger ecologies that surround us.

Carl Leggo (2004) writes, “the poet *is* a human scientist” (30) who works with language to construct understanding. Science as a methodology utilizes objective data collection and analysis in order to better understand the outer universe, while poetry is a method that subjectively discerns our internal and external worlds and all of the relationships therein. Paz describes poetic experience as “the act of uncovering [that] involves the creation of that which is to be uncovered: our own being” (as cited in Sherman 2009, 89). Put another way, science examines external material truths while

poetry (or more generally, art) scrutinizes what it means to be the human animal. In some examples, poetry explores the *umwelt* of other-than-human species (Beavington 2017). Poetry acts as a gateway “between inner and outer realities” (Ellsworth 2005). As de Bolla (2001) writes, “poetic, painterly, or musical knowings arise from a place more elemental than intellectualisation” (8). Poetry thus offers us intimate access to a world largely explained by sterile science, at least in the dominant western culture, and both reconnects our senses with this world and ponders the questions that science has difficulty addressing. What is alive? What is human? What is our responsibility to the world? How are my body and being connected to other life phenomena?

Poetic inquiry can be seen as a specific form of poetry employed with intention for research or teaching. Data collected from interviews, journals, assignments, photographs or lived experience can be mined and moulded into a poem in order to express an idea or experience in a precise and provocative manner. Elliott (2012) defines poetic inquiry (through Emerson) as “the work of truth-seeking contemplation and inward observation itself” (17). Ultimately, Emerson envisions poetry and poetic inquiry as inseparable: “The true philosopher [i.e., the scholar] and the true poet are one, and a beauty, which is truth, and a truth, which is beauty, is the aim of both” (as cited in Elliott 2012, 17).

An Ecopoetic Inquiry

Prendergast (2009b) explains that poetry of all forms can “be a form of research, a researching of experience and sorting into expression and communication through language” (xxii). I have used poems as assignments, papers, and research, as a way to find “unity in variety” (Bronowski 1956/1972, 20), that is, to tie tightly together the common themes that underlie seemingly divergent realms. As Bronowski further explains, “The discoverer or the artist presents in [science or works of art] two aspects

of nature and fuses them into one” (19) or as Serres (1995) puts it, “A cluster of highly different relations becomes a body” (101). When we recognize our interrelations with other species, and conceive of our human bodies as but a smaller piece of the Earth’s body, we may become aware that we are but one knot in the biosphere’s infinite relationality. This work deepens my understanding of self and my purpose in the world. By synthesizing various modes of perception, poetic inquiry becomes a way of paying attention and clarifying intention. With this in mind, I offer the following poems.

Every inhalation and exhalation inextricably connects us to the animals, plants, and geography of our personal locus. Even the air itself is part and parcel of our bodies. “We mistakenly go out into the world to find life,” writes Jarvis (2009), “a life which, however, there is no need for us to ‘find’, since it is, necessarily, just what we already are” (362). Holding firm to this idea that we are life, and that “I mix with the world which mixes with me” (Serres 2008, 80), the poem “The Circle” examines both our connection toward and disregard for the more-than-human world, and brings our focus down to the level of the oxygen atom.

The Circle

thoughtless breath
sucks in the world
lungs—an inverted tree
windpipe—a trunk to leafy alveoli
spider webs, air sacs
snare oxygen exhaled by gods
into a pulmonary cocoon

hemoglobin
filled with atmospheric spirit
vessels borne in plant and animal

the dance of O₂—chloroplast to mitochondria
leaves the twig for the capillary that
digs into muscle and bone

hormones pollinate
red blood cells—
billions of messenger bees
in an endless circuit
artery to vein, vein to artery
death comes slow to these gods of old
microscopic Hermes
runs the organ gauntlet
spleen to pancreas
to Stygian pituitary
a race toward a galaxy of synapses
home to thought
and mind
and memory
with the nerve to believe
you are different

oxygen is a circle
a ring that holds
gods and bees and blood
every thoughtless breath
exhales carbon for the trees
that still stand upright

Can we be mindful of our body, this taken-for-granted vessel that carries us through corporeal life? The backbone of life as we know it is carbon, and oxygen is the gas that allows our cells to respire. Is it possible—or necessary—to show gratitude for mere atoms? The complex efficiency with which our organ systems carry out such precise physiological processes is astounding, an “endless circuit” that runs for more

than a century, in some cases. With our “thoughtless breath” we contribute to the carbon cycle, expelling carbon dioxide into the atmosphere so plants or algae can photosynthesize sugars once more. Yet we are ignorant of our role in this cycle, as evidenced by the desperation with which we keep seeking and exploiting fossil fuels. Perhaps if we clearly acknowledged and understood, on a fundamental level, our reliance upon oxygen, our species would make greater haste toward a more sustainable path *unreliant* upon plants and animals long dead (e.g., fossil fuels such as petroleum and coal).

A Photographic-Ecopoetic Inquiry

Recently at the optometrist, my first visit in nearly twenty years, the doctor used an optomap to scan my eye. I excitedly asked to see the resultant photo and requested the jpeg, which showed an inverted image of my retina. Fascinated by the capillaries that looked like rivers flowing into my central optic nerve, this became a way to explore the wonder within myself. I wrote the following haiku:

inside my own eye
rivers of sight spiral down
inward crystal ball

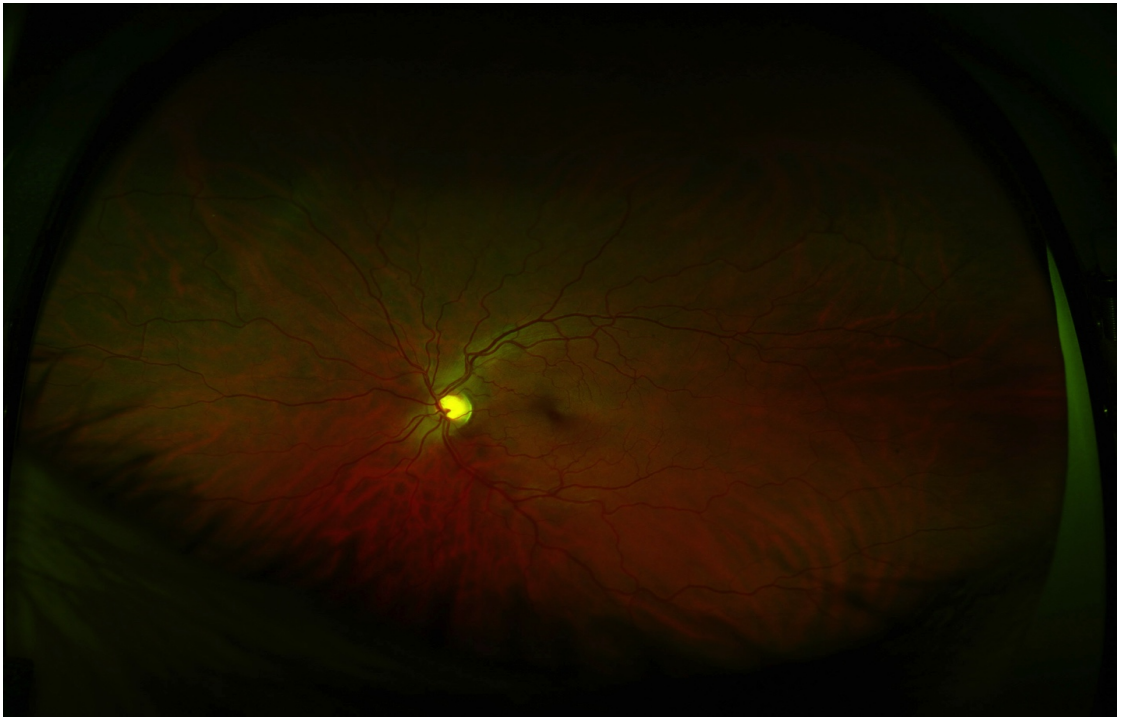


Figure 1. The right retina and optic nerve of Lee Beavington, photo courtesy of Dr. Juliana Jarvis.

I facilitated an activity with Education PhD students, showing them this image with no context. Their responses reveal the interrelations of thunderstorms, rivers, leaves, neurons and the human eye. These repeating patterns serve as a reminder of the unity in variety found across the biotic and abiotic worlds. Here are a few of their haikus:

Fragmented leaf veins
light shining through the thin veil
guides like a lighthouse
~Tamara Pearl

Moon light and thunder
Power manifesting
In different forms
~Jade Ho

Subaltern vessels
Amazonian Rivers
Bursting by the sun
~Dave Chang

Our bodies are poetry. Patterns found inside reveal “fragmented leaf veins,” “moonlight” and “Amazonian Rivers.” In fifteen words or less, each student explored this image’s mystery to reveal varied and yet unifying perceptions of a natural/human phenomenon.

Microscopic life captivates me. Connor (2006) explains how the invention of the microscope transformed “the deprecation of what were thought to be imperfect and accidental creatures into confirmations of the extent and orderliness of divine design” (80) and that “early observers through the microscope reported their amazed delight at the intricacy and regularity to be found in creatures too tiny to be seen with the naked eye” (80–81). Thus microbes were granted a more noble status.

Dramatic and diverse life thrives in a single drop of pond water. Through the microscope, I once watched an amoeba ooze in eleven directions at once. I snapped two photographs. Then I pondered, How do these unicellular creatures differ from us? How are they the same? How do they perceive the universe? The following poem, “Intimate Immensity,” borrows its title from a chapter of Bachelard’s *The Poetics of Space*, where he also says “the daydream transports the dreamer outside the immediate world to a world that bears the mark of infinity” (1958/2014, 201). My poem searches for the infinite in the small, and elucidates the interrelatedness of all matter from planet to cell.

Intimate Immensity

bits of chromosome and membrane
 pregnant with nuclear gods
a cell in a microscope
 there lies infinity
 my hand
on my wife's swollen belly
 I feel the kick of life
when two cells become one

a labyrinth of folded nebula
 layers of lipid and DNA
 inside my every cell
a coiled nest of centipede
 legs in constant motion
each part in touch with every other
 my son
 folded in the womb
his head on the placental pillow
an umbilical cord I quiver to cut

welcome to this atomic ocean
that flows as an amoeba in love
morphs swells stretches into you
 a spring without shores
caged sunlight
I cradle my newborn
 in his first hour
his arms reach out
to hold the hand of galaxies

I watch
the Big Bang throw her chains of light
weave particles into comets of creation
the Little Bang throws her ribosomes
a midwife that delivers the code
 an egg turned planetary body
now my son runs through the grass
 his tiny body
I love more than my own

I concede to my vast smallness
as we unravel the fluid mosaic
 the night sky an eclipse
my son moves his finger
from star
 to moon
 to his father's eye
as though he is counting the universe

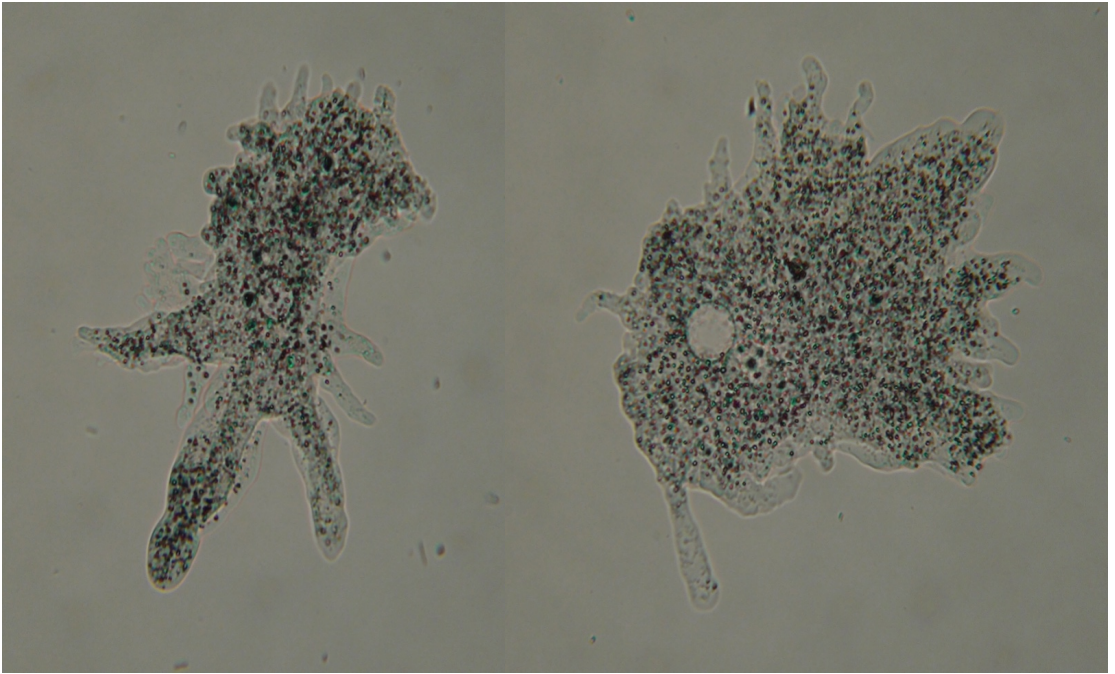


Figure 2. The amoeba (*Chaos carolinensis*) as viewed under 100X magnification.

As a biologist who often works in a laboratory, magnified organisms are at once familiar and uncanny, the microscope a window into hidden worlds. The “vast smallness” in this “atomic ocean” opens our perception to new forms of life. Both this amoeba and I are made from stardust, our bodies organized by ribosomes. Whereas science offers a profundity of facts, the relational world is the source of the emotionally profound, the authentically human. Science certainly provides the bedrock for our knowledge of the universe, and a rational approach to objective discovery, yet personal stories and connections are what offer our lives meaning. Poetry can bridge static facts with dynamic feeling.

Bringing Poetry into the Science Classroom

“Science is the poetry of reality,” said Dawkins (2007). At first glance poetry and science seem like odd bedfellows; the former is lyrical, emotional, and multivocal, while the latter is pragmatic, rational, and does its best to stamp out subjectivity. Poetry and science are both informed by bias, and while an exceptional poem relishes some ambiguity, a proper science experiment nullifies uncertainty to the fullest extent possible. However, both crave exactitude: precision of language and methodology in the search for truth. Sound poetry and science recognize that our knowledge is incomplete. Poetry is not simply inventive words on a page the same way science is not simply a body of facts. Both are ways of knowing, and oblige creativity to be successful in the pursuit to find novel ways of studying something familiar.

Christopher Langton speaks to poetry and science thusly:

“There’s a reason for poetry...Poetry is a very nonlinear use of language, where the meaning is more than just the sum of the parts. And science requires that it be nothing more than the sum of the parts” (as cited in Horgan 1996, 201).

Science begins with wonder, as both a noun and verb: awe for the beautiful and inexplicable universe, and pondering on how it all operates. Bronowski (1956/1972) explains how “we are moved by the poem, we follow the theorem because in them we discover again and seize the likeness which their creator first seized” (27), suggesting that both science and poetry are paths to wonder. Hadzigeorgiou and Schulz (2014) define wonder as “astonishment and admiration,” separate from curiosity which is “a scientific impulse that strives to ‘dominate nature’” (1994); we want to cultivate the former through the lessons of Romanticism for a more collaborative engagement with nature. Bronowski (1956/1972) adds, “Science is nothing else than the search to discover unity in the wild variety of nature—or more exactly, in the variety of our ex-

perience. Poetry, painting, the arts are the same search...” (16), and if this is true, then arts-based approaches are well-suited to science education.

Poetry strives to be succinct and incisive. A handful of well-chosen words can convey layers of meaning and question conventional thought. This becomes applicable in many contexts of pedagogy—the obvious being creative writing, expressive arts, and language studies—yet I will focus on science education. Theory, concepts and terminology dominate the typical science lecture. If we look at *Biology* (Reece et al. 2014), a standard first-year biology textbook, it speaks to photosynthesis in this manner: “The electrons cycle back from ferredoxin (Fd) to the cytochrome complex and from there continue on to a P700 chlorophyll in the PS I reaction-center complex” (207). Rich in terminology and pinpoint accuracy, yet lacking emotion and personal relevance, this is the language that inculcates biology students. Part of the problem is that “educators are handed, and largely accept, the mandates of a standardized, ‘placeless’ curriculum and settle for the abstractions and simulations of classroom learning” (Gruenewald 2008, 317). If “science can only be perceived by life and remains dependent on the body of the scientist” (Noys 2013, 235) then we need to re-invigorate university science pedagogy with sensorial engagement. Ontological reversal displaces us from our senses and direct engagement by giving models and signs more importance than the actual phenomenon under study. Hadzigeorgiou and Schulz (2014) remind us that conceptual details and reductionist approaches can mask the wonder of scientific exploration, and bog learners down in free-floating abstractions.

However, this is not the *only* way to approach science education. The instruction of abstractions and simulations can be complemented (and in some cases, replaced) by reflection, creative exercises, and direct and dynamic engagement. Experiential learning that places student engagement and creativity at the center can be implemented in the science classroom, laboratory and field settings. “The concept of ‘the participant mode of consciousness’ can indeed help us with the selection of curriculum

activities” writes Hadzigeorgiou and Schulz (2014), “that have the potential to lead to holistic experiences. Certain immersion activities, like storytelling, poetry, and the arts, have such potential” (1991). The components of photosynthesis can be role-played so students embody the experience. The differences among animal phyla can be learned by mimicking their movements (Beavington 2016). Student-led presentations that are creative in nature give learners permission to wear costumes, facilitate interactive activities, and utilize arts-based approaches to engage with science. Such approaches can also be applied in chemistry and physics. Specific examples include having astronomy students embody planetary orbits or the moon’s movement in relation to the Earth. In chemistry, chemical reactions can be role-played with signs, or the astonishing properties of water can be presented by students through active and creative methods. And, of course, poetry is an evocative tool that can be used across the disciplines to bring the senses, creative learning, and reciprocity to the fore.

Neilsen (2004) contends that “poetry and inquiry ask us to listen deeply. We must put ourselves in the context; we must feel, taste, hear what someone is saying. Sometimes we must learn to listen under the words, to hear what is not being said” (41). In this way, poetry interweaves experience and creativity, and makes the inaccessible accessible by providing another source of insight into a myriad of topics, including photosynthesis. One activity I facilitate, preferably done outside, starts with students finding and sitting with a leaf. This exercise is similar to Carolyn Elliott’s (2012) definition of poetic inquiry as “a mode of thought and discovery that seeks to reveal and communicate truths via intuitive contemplation and creative expression” (iv). I invite students to engage with the leaf in silence using multiple senses. With the leaf in their hand, I ask them to ponder: “What aspects of the leaf surprise you?”, “If the leaf could speak, what would it say to you right now?” and “How is your hand like the leaf?” This contemplative approach encourages a sensorial and participatory engagement, and students reflect on their experience with the leaf by written reflection. Then they underline a word or short phrase, and one-by-one students place

these upon the floor, thus forming a collective poem. This method is less intimidating for those uncomfortable with writing poetry, and promotes collaboration. Prendergast (2009b) questions, “What is the nature of the sediment upon which the poem is written in response?” (xxxiv). The sediment here is slow pedagogy and inquisitiveness, which invites more personal and reflective responses.

After facilitating this activity with education PhD students, they constructed the poem below. “Language is the place where alien otherness becomes adventure” (Todres 2004, 40), and here the adventure takes the form of a brittle autumn leaf.

Life is not linear
Death is another beginning, another life

ridges of my fingerprints
kicking up tiny beats against the leaf
or is it the leaf's veins drumming against my fingers?

red five fingered
veined soft and supple
handshake from the tree

the secret underside of the leaf

yet we walk by them
and on them without even thinking twice
Thank you little leaf.

A symmetrical shape none-the-less

linger with the memory
carry forth the joy
live the dying

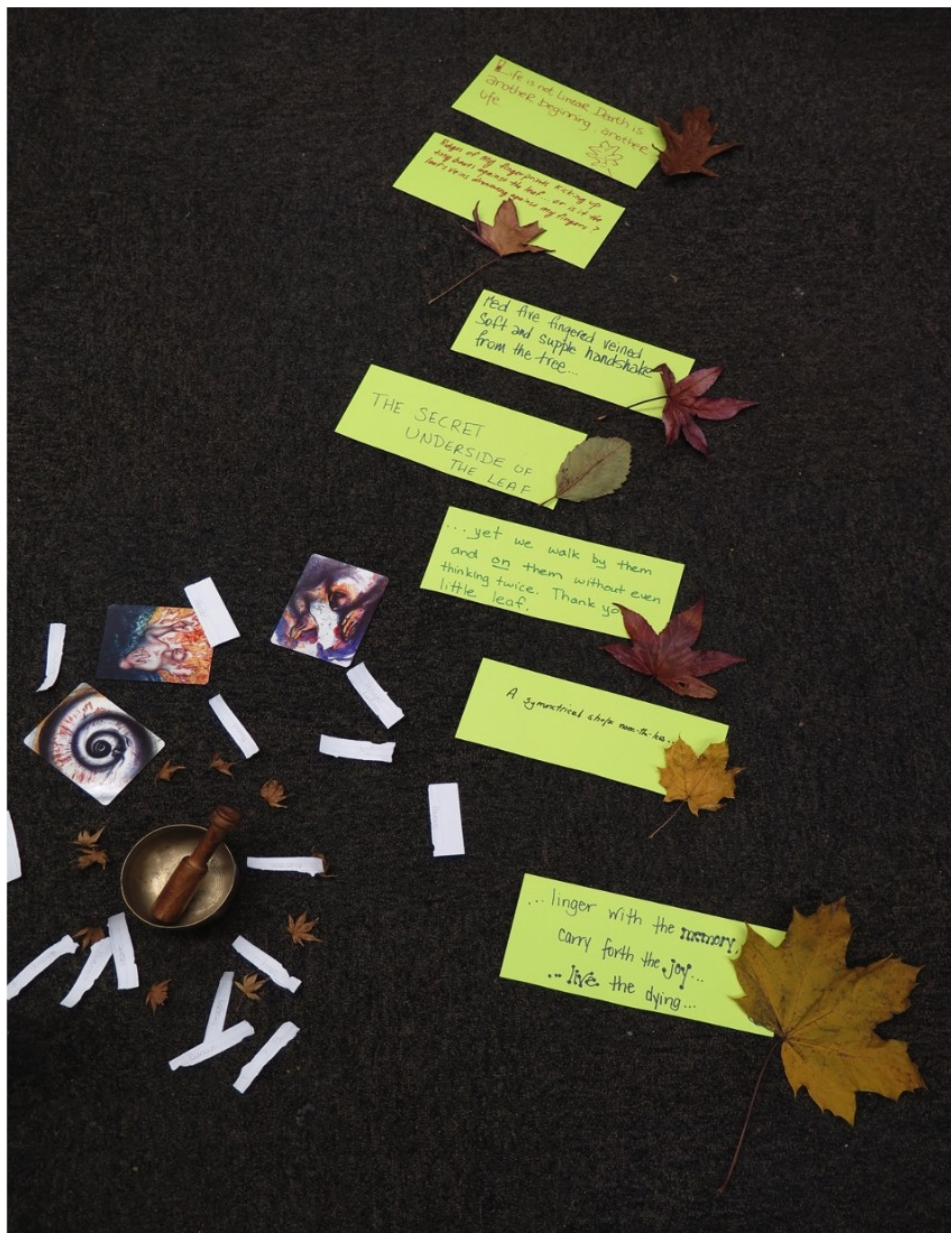


Figure 3. A group poem inspired by the leaf.

In the discussion immediately following the leaf activity, the following terms (each mentioned multiple times by participants) were used to describe the experience: aliveness, concise, curious, emotion, heart, imagery, joy, moment, movement, pausing, prolonged looking, tactile, watching, wonder. What a wonderful bedrock from which to build their learning. Post-activity feedback from participants included feeling less daunted by using poetic language in learning, being more curious to hear the science behind the leaf, and opening up to the grief of loved ones recently lost. This is a lot closer to the realm of holism than “The electrons cycle back from ferredoxin to the cytochrome complex” (Reese et al. 2014, 207) and cultivates not only a sense of wonder for the leaf but also a relationality that is not possible when ontological reversal is employed; that is, when more abstract models and symbols of the phenomenon dominant, and the leaf itself lay forgotten.

Poetry can be introduced many other ways. Since “an artistic expression and a scientific experience can complement each other” (Hadzigeorgiou and Schulz 2014, 1977), I have used poems to introduce formidable terminology to students, and I have invited students to write poems about mitosis and embryonic development. Other approaches include students writing haikus about scientific phenomena, breaking students into groups to compose a poem on a particular concept, and using prose poetry to grapple with larger ethical issues that relate to scientific research (more on this in the next section). For now, I will address potential concerns and drawbacks of poetic learning in science.

Poetic language, with its imagery, ambiguity, and artistic license, has the potential to contradict established science. For instance, a poem about amoeba might suggest they have a mind of their own; this is a metaphorical mind, as amoeba completely lack neurons that make up our brain and nervous system. Some poets, such as Gerald Manley Hopkins, choose their words based on sound more than meaning, which can

lead to misconstrued ideas about science. Worse still, a poem could trivialize science, promote an anti-science mindset, or anthropomorphize other-than-human organisms. We do not want to forget the methods with which science excels: unbiased gathering of concrete data. This fountain of dispassionate knowledge can further our health, technology and well-being.

We absolutely need science and scientific language. Poetic inquiry is not a replacement, but a supplement. Poetry can provide learners with an initial relational connection to phenomena, so learners might be more willing to engage with difficult scientific concepts and terminology. Bronowski (1956/1972) reminds us that “We remake nature by the act of discovery, in the poem or in the theorem” (20). There is an opportunity to fuse “the knowledge, precision, and language of science with the voice, vision, and language of poetry to produce something unique” (Gorrell and Colfax 2012, 13). Poetry can be a bridge between wonder and daunting learning objectives, and a way to link what we learn to our personal lives, with care taken to avoid putting forth pseudoscience.

The Legacy of Romanticism

The Romantic era provided fertile grounds for natural philosophy, an integration of philosophy and science that reigned until positivism instigated their divorce in the 1840s. What important aspects of Romanticism can we reclaim? Romanticism, of course, embodied more than poetry. Other key characteristics include unity between humans and nature, careful observation via the senses, the importance of the aesthetic dimension, and the revolt against the idea of controlling nature, all of which, one could argue, are vital in today’s environmentally tumultuous climate.

When my students in the Amazon Field School gathered around the elder ceiba tree, and placed their hands on that ancient trunk, they were invited to embrace the legacy of Romanticism. That is, to find unity with nature, engage sensorially, and

step out beyond reason and etiquette to become permeable with their subjective selves. In this manner, perhaps they felt a kinship toward all their relations on our planet.

Whether students study an intact leaf in the classroom or travel to the remote Amazon rainforest, the objective is the same: to re-enchant science, engage in a participatory way with the life phenomena under study, and bridge the worlds of art, science and philosophy. Since “every human being lives in three spaces, which interpenetrate and complete but also partially contradict each other” (Uexküll 1934/2010, 54), poetry can serve as a link among these three spaces.

But the larger need, here, is to have science students address philosophical issues regarding the scientific paradigm, the underlying assumptions of the Cartesian-Newtonian outlook—not to mention all of the “shared silences and prejudices” (Bowers 2008, 327) of university education—and the ethical implications of various scientific research such as genetic engineering, stem cells, fetal bovine serum, and the pervasiveness of other-than-human animal experimentation. The reflective and provoking nature of poetry is one path toward philosophical discourse. Descartes (1649/1989) wrote that “wonder is the first of all the passions” (52) to which Irigaray (1993) adds, “The first passion is indispensable...to the creation of an ethics” (74). By starting with wonder, and complementing scientific investigation with poetry or other creative art forms, we as educators can rekindle both a passion for science and a passion for the philosophy of science.

It feels fitting to end this paper with poetry as found through the words of David Abram (2011), whose phenomenological approach to using the senses promotes deep engagement “between the body and the breathing earth” (3). Abram writes poetically, which serves to draw readers into our sensuous and symbiotic world. In his book *Becoming Animal* there is a chapter entitled “Shadow” that moved me to reconnect with my own shadow, and see my shadow as part of myself and the Earth. This final

poem was crafted from Abram's words; each line is an intact phrase from *Becoming Animal*. The result is "a hand reaching straight into experience and arranging it with new meaning" (Bronowski 1956/1972, 18), and reaffirms the power of the poem.

Remembering Shadow

(words from David Abram)

born afresh every dawn
night's gloom flees the advance of the rising sun
gift afforded by the sheltering shade of the mountain
torn from the black cloak every morning
defines the mood of this moment where you stand
letting it untangle your senses

the country of shadow
breathing body of the mountain itself
voluminous being of thickness and depth
touching me
at every point of my person

absorbed through the pores of my skin
seeping in to my flesh
my personal night
enfolded within me

tutored by the darkness
disruption of the sun's dominion
inescapable consequence of our physicality
this shadow that eats all other shadows
indistinguishable from me
carries us out of ourselves into Earth's own awareness

References

- Abram, David. 1996. *Spell of the Sensuous: Perception and Language in a More-Than-Human World*. New York: Vintage Books.
- Abram, David. 2005. "Between the Body and the Breathing Earth: A Reply to Ted Toadvine." *Environmental Ethics* 27(2):171–190.
- Abram, David. 2011. *Becoming Animal: An Earthly Cosmology*. Toronto, ON: Random House of Canada.
- Andrews, Robert. 1993. *The Columbia Dictionary of Quotations*. New York: Columbia University Press.
- Bachelard, Gaston. 1958/2014. *The Poetics of Space*. New York: Penguin Books.
- Bai, Heesoon. 2012. "Reclaiming our Moral Agency through Healing: A Call to Moral, Social, Environmental Activists." *Journal of Moral Education* 41(3):311–327.
- Beavington, Lee. 2016. "A Creative Approach: Teaching Biology Labs through Arts-based Learning." Article 26 in *Tested Studies for Laboratory Teaching*, Volume 37 (K. McMahon, Editor). Proceedings of the 37th Conference of the Association for Biology Laboratory Education (ABLE).
<http://www.ableweb.org/volumes/vol-37/v37reprint.php?ch=article#>

- Beavington, Lee. 2017. "Aristotle's Lantern." In Y. Blomer (Ed.). *Refugium: Poems for the Pacific*, 161. Halfmoon Bay, BC: Caitlin Press.
- Bowers, Chet. 2008. "Why a Critical Pedagogy of Place is an Oxymoron." *Environmental Education Research* 14(3):325–335.
- Bronowski, Jacob. 1956/1972. *Science and Human Values*. New York: Harper and Row Publishers.
- Brown, Brené. 2013. *Daring Greatly: How the Courage to be Vulnerable Transforms the Way We Live, Love, Parent and Lead*. New York: Avery.
- Chambers, Cynthia, Erika Hasebe-Ludt, Carl Leggo, and Anita Sinner, editors. 2012. *A Heart of Wisdom: Life Writing as Empathetic Inquiry*. New York: Peter Lang.
- Clifton, Lucille. 2010, February 26. *Bill Moyers Journal*. (Bill Moyers, Interviewer). Retrieved from <http://www.pbs.org/moyers/journal/02262010/transcript2.html>
- Cohen, Michael. 2007. *Reconnecting with Nature: Finding Wellness through Restoring Your Bond with the Earth*. Lakeville, MN: Ecopress.
- Commoner, Barry. 1971. *The Closing Circle: Nature, Man, and Technology*. New York: Random House.
- Connor, Steven. 2006. *Fly*. London: Reaktion Books.

Darwin, Charles. 1859/1998. *The Origin of Species by Means of Natural Selection*.

New York: Modern Library.

Dawkins, Richard. 2007. The Enemies of Reason, "Slaves to superstition" (film),
timecode 00:38:16.

Descartes, René. 1649/1989. *The Passions of the Soul*. Translated by S. H. Voss.
Indianapolis, IN: Hackett Publishing.

de Bolla, Peter. 2001. *Art Matters*. Cambridge, MA: Harvard University Press.

Elliott, Carolyn. 2012. *Poetic Inquiry* (Doctoral dissertation). Retrieved from:
<http://d-scholarship.pitt.edu/12152/1/PoeticInquiryMayETD1.pdf>

Ellsworth, Elizabeth. 2005. *Places of Learning: Media Architecture Pedagogy*. New
York: Routledge.

Faulkner, Sandra. 2009. "Research/poetry: Exploring Poet's Conceptualizations of
Craft, Practice, and Good and Effective Poetry." *Educational Insights* 13(3).
Accessed May 4, 2016. Retrieved from
[http://www.ccfi.educ.ubc.ca/publication/insights/v13no3/articles/faulkner/
index.html](http://www.ccfi.educ.ubc.ca/publication/insights/v13no3/articles/faulkner/index.html)

Goethe, Johann. 1988. *Scientific Studies*. Translated by D. Miller. New York:
Suhrkamp.

- Gorell, Nancy and Erin Colfax. 2012. *Writing Poetry through the Eyes of Science: A Teacher's Guide to Scientific Literacy and Poetic Response*. Sheffield, UK: Equinox Publishing.
- Gruenewald, David. 2008. "The Best of Both Worlds: A Critical Pedagogy of Place." *Environmental Education Research* 14(3):308–324.
- Hadzigeorgiou, Yannis, and Roland Schulz. 2014. "Romanticism and Romantic Science: Their Contribution to Science Education." *Science and Education* 23(10):1963–2006.
- Hadzigeorgiou, Yannis, and Michael Skoumios. 2013. "The Development of Environmental Awareness through School Science: Problems and Possibilities." *International Journal of Environmental and Science Education* 8:405–426.
- Horgan, John. 1996. *The End of Science*. New York: Broadway Books.
- Irigaray, Luce. 1993. Wonder: A Reading of Descartes, The Passions of the Soul. In *An Ethics of Sexual Difference*, edited by C. Burke and G. C. Gill (Trans.), 72–82. New York: Cornell University Press.
- Jarvis, Simon. 2009. "Michel Henry's concept of life." *International Journal of Philosophical Studies* 17(3):361–375.
- Kearns, Laura-Lee. 2015. "Subjects of Wonder: Toward an Aesthetics, Ethics, and Pedagogy of Wonder." *The Journal of Aesthetic Education* 49(1):98–119.

- Leggo, Carl. 2004. "The Curriculum of Joy: Six Poetic Ruminations." *Journal of the Canadian Association for Curriculum Studies* 2(2):27–42.
- Leggo, Carl. 2005. "Pedagogy of the Heart: Ruminations on Living Poetically." *Journal of Educational Thought* 39(2), 175–195.
- Freya, Mathews. 2008. "Thinking From Within the Calyx of Nature." *Environmental Values* 17:41–65.
- Marcia McKenzie. 2008. "The Places of Pedagogy: or, What We Can Do with Culture through Intersubjective Experiences." *Environmental Education Research* 14(3):361–373.
- Miller, Ron. 2000. *Caring for New Life: Essays on Holistic Education*. Brandon, VT: Foundation for Educational Renewal.
- Neilsen, Lorri. 2004. "Learning to Listen: Data as Poetry: Poetry as Data." *Journal of Critical Inquiry into Curriculum and Instruction* 5(2):40–42.
- Noys, Benjamin. 2013. "Culture or barbarism?" *New Formations* 80/81:234–236.
- Prendergast, Monica. 2009a. "Poetic Inquiry is ... 29 Ways of Looking at Poetry as Qualitative Research." *Educational Insights* 13(3). Accessed December 4, 2017. Retrieved from <http://einsights.ogpr.educ.ubc.ca/v13no3/intro/prendergast.html>

- Prendergast, Monica. 2009b. "Introduction: The Phenomena of Poetry in Research." In *Poetic Inquiry: Vibrant Voices in the Social Sciences*, edited by Monica Prendergast, Carl Leggo and Pauline Sameshima, xix-xlii. Rotterdam, The Netherlands: Sense Publishers.
- Reece, Jane, and Lisa Urry, Michael Cain, Steven Wasserman, Peter Minorsky, Robert Jackson, Fiona Rawle, Dion Durnford, Chris Moyes, Sandra Walde, and Kenneth Wilson. 2014. *Biology* (Canadian Edition). Toronto: Pearson.
- Richards, Robert. 1987. *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*. Chicago: Chicago University Press.
- Richards, Robert. 2002. *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe*. Chicago and London: University of Chicago Press.
- Robbins, Brent. 2005. "New Organs of Perception: Goethean Science as a Cultural Therapeutics." *Janus Head* 8(1):113–126.
- Rothenberg, David, and Marta Ulvaeus, editors. 2001. *The Book of Nature and Music: An Anthology of Sounds, Words, Thoughts*. Middletown: Wesleyan University Press.
- Sameshima, Pauline, and Alexandra Fidyk, Kedrick James, and Carl Leggo, editors. 2017. *Poetic Inquiry III: Enchantments of Place*. Wilmington, DE: Vernon Press.

- Serres, Michel. 2008. *The Five Senses: A Philosophy of Mingled Bodies*. Translated by P. Cowley and M. Sankey. London: Continuum.
- Serres, Michel, and Bruno Latour. 1995. *Conversations on Science, Culture, and Time*. Translated by R. Lapidus. Ann Arbor, MI: University of Michigan Press.
- Sherman, Robert. 2009. "Piano Pieces." In *The Book of Nature and Music: An Anthology of Sounds, Words, Thoughts*, edited by David Rothenberg, and Marta Ulvaeus, 84–90. Middletown, CT: Wesleyan University Press.
- Todres, Les. 2004. "The Meaning of Understanding and the Open Body: Some Implications for Qualitative Research." *Existential Analysis* 15(1):38–54.
- Uexküll, Jakob. 1934/2010. *A Foray into the Worlds of Animals and Humans*. Minneapolis, MN: University of Minnesota Press.
- Wahl, Daniel. 2005. "'Zarte Empirie': Goethean Science as a Way of Knowing." *Janus Head* 8(1): 58–76.
- Wiggerman, Scott, and David Meischen, editors. 2015. *Wingbeats II: Exercises and Practice in Poetry*. Albuquerque, NM: Dos Gatos Press.

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Musicality in Spoken Theatre

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Fiction, Metaphor, Dispositif

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Abstract

The purpose of this article is to address issues of artistic knowledge and artistic learning by way of studying, through a concrete exemplification, the meanings and implications of linguistic metaphor in artistic and educational conceptualizations of spoken theatre. Professional artists and pedagogues in this field habitually use the concept of *musicality* to point to key qualities in actors' artistic work and learning processes. This article aims at a presentation, problematization and discussion of the findings of a recent extensive investigation into this usage. In order to attain this, the article is structured in six sections: an introductory presentation of (i) metaphorical language in learning processes and of (ii) the concept of musicality in the field of theatre; (iii) an overview of historical relations between music and theatre; (iv) a literature review of previous musicality research of relevance to the present topic; (v) a summary of a recent interview investigation into how Swedish theatre professionals view the meaning(s) of musicality in acting; and (vi) a problematization and discussion of the findings of that study, pointing to how this intermedial conceptual loan may be interpreted as a *fiction*, a *metaphor*, or a *dispositif*.

Keywords: Musicality, acting, spoken theatre, intermedial conceptual loan, metaphor, fiction, dispositif.

Musicality in Spoken Theatre

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Fiction, Metaphor, Dispositif

Sven Bjerstedt¹

Introduction

Through the development of artistic research, questions about artistic learning and artistic knowledge have gained new fuel, exemplified by several vivid contemporary theoretical and methodological discussions. The purpose of the present article is to approach such issues by way of studying, through a concrete exemplification, the meanings and implications of linguistic metaphor in artistic and educational conceptualizations of spoken theatre. Professional artists and pedagogues in this field habitually use the concept of *musicality* to speak of key qualities in actors' artistic learning. Based on a summary of a recent extensive investigation into this usage (Bjerstedt, 2017), this article problematizes and discusses how its findings may best be interpreted, suggesting that this intermedial conceptual loan may be understood as a *fiction*, a *metaphor*, or a *dispositif*.

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Metaphorical language in learning processes

It is hardly surprising that the use of linguistic metaphors in learning processes has attracted scientific interest. On a general level, the role of metaphor in conceptualization processes as viewed in recent theories of metaphor (Lakoff & Johnson, 1980; Johnson, 1987; Fauconnier & Turner, 2002) would seem very compatible with ideas of developmental psychology. For instance, inspired by Piaget's view of senso-motoric experiences as a basis for children's construction of reality (Piaget, 1951, Piaget & Inhelder, 1969), Swanwick (1988) views the development of children's musical intelligence in terms of a progression from thinking with the body to conceptual understanding. Swanwick makes explicit connections between children's development and the use of metaphorical language; the world, he says, is "thinkable" through metaphors, through "likeness" (p. 47). Such educational perspectives may blend well with the notion of 'metaphorical mapping' viewed as a process of getting from bodily experience to the structure of thought and language (Johnson, 1987).

Several metaphor theorists insist that the functions of metaphor are fundamental to human thought (Lakoff & Johnson, 1980; Johnson, 1987; Fauconnier & Turner, 2002). It is hardly surprising, therefore, that metaphor should be considered crucial by some epistemologists and educational philosophers as well. Taking their point of departure in the paradox of Plato's *Meno* (How can something radically new be learned?), Petrie and Oshlag (1993) maintain that "metaphor is one of the central ways of leaping the epistemological chasm between old knowledge and radically new knowledge" (p. 583). Referring to the view on interactive metaphors proposed by Black (1962), they conclude that such a metaphor that creates similarities "would allow truly new forms of knowledge and understanding" (p. 585); there would be no need to presuppose, as Socrates did, that the learner – in some sense – knows and understands already. According to Petrie and Oshlag (1993), interactive metaphors transfer "chunks of knowledge" by way of their anomalous character (p. 587). They

are anomalous in terms of the learner's current framework of understanding. When radically new knowledge is acquired, metaphors can be essential in bringing about a change in this framework.

Mayer (1993) focuses on what he terms the instructive metaphor hypothesis, "the idea that metaphoric language can play a productive role in fostering students' understanding of scientific descriptions and explanations" (p. 561). In particular, Mayer focuses on how instructive metaphors create familiar analogies, thereby enhancing the learning processes of "selecting, organizing, and integrating" (p. 572). Sticht (1993) distinguishes between on one hand metaphors as tools for thought and on the other hand metaphor as a tool for efficient communication: "the effective use of metaphor for producing a functional context for communication and learning requires the teacher to know that students possess the knowledge addressed in the metaphor" (p. 624).

According to Schippers (2006), metaphors are common and probably important in music education, especially regarding "intangible", "elusive" qualities of expression (p. 210). This observation has been one of the points of departure for a couple of Swedish investigations (Bjerstedt, 2014, 2017) of metaphorical usage in the artistic field; they both indicate how the understanding and conceptualization of a certain art form is developed through borrowing a central concept from another art form, thereby exemplifying the phenomenon of *intermedial conceptual loans*.

Musicality as a metaphor in the field of theatre

What is musicality? The word may of course denote abilities in music but in many other contexts as well, as, for instance, in Max Weber's conception of religious musicality (Weber, 1973, p. 395) – or in sport reporters' talk about musicality on the football field. Some might even want to state that musicality is a fundamental and important part of all human existence.

The phenomenon of words that are used in a transferred sense should probably not be dismissed too lightly. Metaphors can be meaningful in ways that are central to our understanding of phenomena (Lakoff & Johnson, 1980; Ortony, 1993).

In the field of theatre, the word musicality is often employed in such ways. Indeed, much theatre parlance would suggest that musicality in a certain sense – or perhaps in several ways – is considered to be crucial to the work of an actor. Musical terms and concepts are widely used as key concepts in theatre practice, in theatre education, and in writings on theatre (e.g., Ashperger, 2008; Boleslavsky, 1933/2003; Cole & Chinoy, 1970; Helander, 2007; Roesner, 2014; Staniewski & Hodge, 2003). For instance, the theatre director may be compared to a conductor, the actor (or the stage) to an instrument, and the script to a musical score. Furthermore, this usage includes the tone of the actor's line, the pulse of dramatic dialogue, the timing of a dramatic scene, the rhythm of a performance, the musicality of the body, musicalized dramaturgy, and so forth – instances of this kind of musical terminology transferred to the field of theatre are numerous. To refer to theatrical phenomena as 'musical' is generally considered a value judgment with strong positive connotations – while the opposite could be said to apply with regard to the adjective 'theatrical' (Bjerstedt, 2017, p. 11).

Generally speaking, for an actor to act in a 'musical' way would seem to have to do with the play's transformation from potentiality to actuality, 'from page to stage', from script to performance. The musicality of actors in this context, then, would refer to an ability to detect, identify and shape their own perspectives. The playwright John Webster [d. 1634], speaking of "the excellent actor", contends that the text on stage is something more than text on paper – and that this something is music: "He adds grace to the poet's labours: for what in the poet is but ditty, in him is both ditty and music" (cited from Cole & Chinoy, 1970, p. 89).

The step from text to performance is in itself an intermedial transformation – a journey from one medium to another. Wouldn't it seem overly complicated, in addition to this transformation, to include in some mysterious way a third medium, music, in this context? That question has prompted a recent investigation presented in the book *Skådespelarens musikalitet* (Musicality in acting; Bjerstedt, 2017).

Needless to say, musicality is used as one metaphor amongst a plethora of metaphors in theatre. It is in the nature of a metaphor to only lend certain qualities of its origin to the new field (Lakoff & Johnson, 1980; Ortony, 1993). Without gain-saying, musicality plays a significant role in theatre parlance. Occasionally – though not very often – it is the subject of texts where actors and other theatre workers formulate reflections about their art (Bjerstedt, 2017, p. 11). But works that approach the topic of musicality in spoken theatre in a more comprehensive, analytical way turn out to be surprisingly rare. More investigative work in this field is called for.

In sum, I regard the actor's musicality as a rich and fascinating field of research. It is also quite unexplored. The research question in Bjerstedt (2017) – approached by way of a literature survey and an interview study – was: How do theatre practitioners perceive the meaning of musicality in acting? Based on a summary of the findings in Bjerstedt (2017), presented in the next few sections, this article aims at a problematization of these results, addressing the question, How may the usage of this intermedial conceptual loan be interpreted?

The present article is structured in four parts: (i) a cursory historical overview of relations between music and theatre; (ii) a brief literature review of musicality research, focusing on links to aesthetic fields other than music; (iii) a summary of a recent interview investigation into how Swedish professional artists in the field of theatre perceive the meaning(s) of musicality in acting; and (iv) a problematization of the findings of that study, including the suggestion that the concept of musicality in the field of theatre may be understood as a *fiction* (Vaihinger, 1911), a *metaphor*

(Lakoff & Johnson, 1980; Fauconnier & Turner, 2002; Black, 1962; Ricoeur, 1975/2003), or a *dispositif* (Roesner, 2014).

Music and theatre: An old relationship

The phenomenon of musical concepts in the field of theatre is far from new. Aristotle pointed to some assets he considered valuable for an actor, being the hallmark of winners in dramatic competitions: sound volume, pitch, and rhythm. These obviously are concepts that also belong in music.

Bjerstedt (2017) presents a brief literature review focusing on how the concept of musicality and a series of related musical terms have traditionally been used in the field of theatre. From this attempt to approach historical, descriptive and analytical texts in relation to a historical development of theatre that could be subsumed by the keywords *rhetoric–realism–modernism*, two general conclusions emerge: (i) there are significant relationships between music/musicality and all of these diverse ideals of theatre, and (ii) these relationships have undergone interesting changes throughout history.

Originally, the arts were integrated. Music has been an integral part of Western theatre during its long history. Contemporary spoken theatre could be considered a little more than century-long "parenthesis" (Johansson, 2006, p. 26). Among actors in spoken theatre today there seems to be strong agreement that musicality is important. A study a few years ago even stated that "it is necessary for an actor to be musical. Musicality manifests itself in everything from text management to the way you move your body" (Helander, 2007, p. 35; my translation).

In theatrical contexts, the concept of musicality is often put to metaphorical or metaphysical use. The Polish director Włodzimierz Staniewski [b. 1950] presents a concept of musicality that may – with its holistic, spiritual and cosmological dimen-

sions – call the ancient Pythagorean concept of 'musica universalis' or 'harmonia mundi' to mind: "The earth is musical and man is musical. Man can be put out of tune and the same can happen to earth" (Staniewski & Hodge, 2003, p. 63).

Richard Boleslavsky [1889–1937] includes in his textbook on acting (1933/2003) a final chapter on rhythm, taking Dalcroze as his point of departure. According to Boleslavsky, rhythm is of the greatest importance not only to art but to the whole of life and the universe – although he does sarcastically admit the possibility of occasional exceptions:

There is not a stone in the universe without a sense of Rhythm. A few actors, maybe, but very few. Every normal being has it. (p. 132)

Even in more mundane contexts the concept of musicality in the field of theatre is often introduced in fairly general terms: pointing to, for instance, the voice, the body or the musicality of a text, although without going into detail on what is actually referred to by such concepts. Most likely they are employed in a figurative sense. When the 'pulse' of a dramatic scene is mentioned, one does probably not usually refer to three quarter time, and the 'tone' of an actor's line is hardly an F-sharp.

Although linguistic usage seems to testify to a close relationship between the art forms music and theatre, this does of course not imply that all theatre workers feel familiar, knowledgeable and confident regarding music. My own experience as a theatre musician and as a music teacher for acting students is that the contrary is often the case: bewilderment, alienation or uncertainty may characterize many actors' outlook on music.

Music and theatre – worlds apart?

In literature on theatre you will find widely differing views on the relationship between theatre and music. The border between the two art forms may emerge in quite

different ways depending on where you look. Historically, the distinction is not clear; rather, the two art forms have often been integrated to a great extent. Outside Western culture you will often find a close, even inextricable link between theatre and music; for instance, in Indian, Chinese and Japanese performing arts. But this study regards a culture where there is a relatively clear distinction between the two art forms; namely, in contemporary Western spoken theatre.

Since theatre could be seen as being "at the same time a unique moment and a repetition", theatre researcher Kurt Aspelin coined the term "theatrical event" in order to try to capture this peculiar and complex nature of theatre (Tjäder, 2008, p. 11; my translation). In this respect, theatre might be said to be more akin to music than, for example, literature or visual arts.

It has been possible to perceive music and theatre as art forms that are related but nevertheless lack clearly defined points of contact. Jacques Copeau [1879–1949] made it a point to integrate music in his training of actors: both solo and choir singing, musical literacy and basic instrument skills. But according to Copeau's biographer, his reasons for this policy were not entirely clear: "Music was a mystery to Copeau, which is perhaps why he continually sought to incorporate it into the training" (Rudlin, 2000, p. 69). It would seem, then, that Copeau's view that theatre needs music may have had to do with his perception of music as somehow alien to theatre.

The relationship between music and theatre has also been perceived as a matter of translation. Michael Chekhov [1891–1955] formulated a series of concepts and techniques of actor training. The impact of his techniques on today's theatre education and theatrical practice is described in a 400-page volume entitled *The rhythm of space and the sound of time* (Ashperger, 2008). Under the heading "Composition of the performance", Chekhov (1992) presents a series of exercises that relate to concepts such as pause, crescendo and diminuendo, and (internal and external) tempo. He describes his key concept *atmospheres* by way of a musical analogy: the atmospheres are

concrete modes of expression that may be compared to the different keys in music, and they need to be listened to in the same way as you listen to music. Chekhov's concept of *psychological gestures* also has a musical dimension, which he describes by way of both melody and rhythm, and its aim is to serve as a link to the actor's sub-conscious mind. Furthermore, he introduces an exercise that aims to translate music into psychological gesture. To Chekhov, then, the main reason to choose music as a source of inspiration would seem to have been the fact that he viewed music as an art form at a considerable distance from naturalistic theatre.

Some have suggested that there is a crucial difference between theatre and music, namely, the degree of independent creation. According to this view, while theatre merely imitates the world, music is about creating and thereby bring something new to the world. One rather extreme version of this perspective is exemplified by William Archer [1856–1924] who contends that acting is imitative; when it ceases to imitate, it ceases to be acting and becomes something else instead, perhaps orating, dancing or posturing (Cole & Chinoy, 1970, p. 364). Gordon Craig [1872–1966] formulates this view even more drastically: the actor's outlook on life is the same as that of the camera. According to Craig, the actor never perceives his task as a creative one – such as the musician's task – but seeks only to reproduce reality, to produce an image that can compete with the photographic image (Cole & Chinoy, 1970, p. 379).

One of the very few scholars who have written extensively about musicality in the field of theatre is David Roesner (2014). He employs Michel Foucault's term *dispositif* in order to pinpoint how the concept of musicality, in his opinion, has come to be used in the theatre. The word is not easy to translate; perhaps one can summarize it as an umbrella term for mechanisms and structures that enable the exercise of power. Roesner (2014) considers musicality as "a central, influential, transformative and multi-faceted *dispositif* with significant impact on the theatrical landscape of the last 150 years and more" (p. 257). It is an approach which I consider compelling, and I be-

lieve it is important to keep it in mind throughout the many various aspects of musicality described in this study: the concept is not merely descriptive; rather, in many ways it works prescriptively, as an evaluative term which is almost always positive.

Roesner (2014) does not, however, primarily focus on musicality as a norm, but as a sort of umbrella term that covers a variety of ways in which theatre approaches music in various historical, aesthetic, and artistic contexts: "I will use it heuristically to analyze a varied set of interart movements" (p. 9), he says. He is particularly interested in how music and musicality have acted as agents for the development of the theatre, "the central role that music has had until today in innovating theater":

while I cover a range of theatrical forms, from text-based, character-driven drama to surreal, anti-psychological or postdramatic theatre, as well as improvised and/or devised forms of theatrical performance, there is a uniting element in the experimental, reformatory, sometimes revolutionary nature of the practices under investigation. (p. 1)

What really is of interest to the present study, however, is not primarily the concept of musicality in theatre in such a general sense, but the concept of musicality in an actor: embodied, practised. Obviously, this is an interest that is rooted in my own experience from working with actor training, but also in statements that have captivated and mystified me. The actor Rolf Lassgård [b. 1955] once said in a newspaper interview: "I have the musicality of an actor, not of a musician" (Monk, 2004; my translation). The focus in the following sections – a review of musicality research, a summary of an interview investigation, and the concluding discussion – is on the phenomenon of how the intermedially borrowed concept of musicality is used in the field of theatre with reference to qualities and abilities in the actor.

Musicality in the field of music: A brief literature review

What may have been the first attempt to analyse the concept of musicality was made by a German music journalist, Christian Friedrich Michaelis (1805). He suggests in his article "Über die Prüfung musikalischer Fähigkeiten" that the ability to concentrate, musical memory, and musical imagination should be included as testable criteria of musicality. Michaelis does not mention perception, however. In our time, it may seem strange that he highlights as a primary musicality criterion something that, according to contemporary opinion, would rather be seen as a result of musical socialization: good taste (*der musikalische Geschmack*). In French aesthetic tradition, however, *Bon Goût* had long been a central concept. According to a common view, good taste was to some extent given by nature, not a consequence of musical socialization (Ljungar-Chapelon, 2008).

One of the first attempts to approach the concept of musicality with scientific methods was made nearly a century later by the surgeon and musician Theodor Billroth (1895). He proposes a variety of aspects of musicality: rhythmic talent and feeling, melodic talent, technical and mechanical talent, expression, melody and rhythm, memory, and a kind of sensuous receptivity to auditory stimuli. Billroth also tries to approach the issue by way of a negative formulation: who is unmusical? His answer to this question focuses on receptive and reproductive (in)ability. A person is unmusical who "cannot remember, recognize, or by humming or whistling reproduce an extremely short, rhythmically distinct and very clear melody, one which is not conceivable without a simultaneously perceived harmony" (Billroth, 1895, p. 232; my translation).

For a long time there have been considerable differences between different orientations within the area of musicality research, for instance, between researchers in

music psychology and educational practitioners (Pauli Jensen, 1970a). Some have wanted to describe musicality by measuring an individual's response to different musical elements such as pitch, intensity, timbre, and rhythm (e.g., Seashore, 1919, 1938). Others have considered musicality as a combination of awareness of tonal and rhythmic patterns and emotional response to these patterns (e.g., Mursell, 1947). Still others have focused among other things on the question of how, based on previous experience, a person learns to perceive musical patterns (e.g., Pflederer, 1963). A concept of musicality that might be considered as related to this, although formulated in even more general terms, is Peter Bastian's (1987) maxim "Musicality is the ability to perceive diversity as one" (p. 47; my translation).

Obviously, as a rule, explanations of and attempts to define musicality have contained references to music. For instance, Jørgen Pauli Jensen (1970a) provides this example of an interpretation of musicality:

in the broadest sense, the complex psycho-physiological structure that is a necessary but not sufficient condition that he or she will be able to perceive music as coherent (structured) and meaningful (*receptive m.*) and express themselves musically (*productive, reproductive and creative m.*). (p. 615; my translation)

Pauli Jensen (1970b) suggests, however, that also "aesthetic categories" in a broad sense (for instance, comic, tragic, grotesque, absurd) could constitute a field of interest to musicality research (p. 99 f). I take this as a suggestion that musicality can be a relevant concept also beyond the boundaries of music. This is of course a proposal that I consider to be of great interest in connection with the present study of musicality in the field of theatre. But similar observations are very rare in the literature I have studied. One of the few I have come across is Sture Brändström's (2006) observation about the communicative aspect of the concept of musicality, to which I shall return shortly.

Brändström (1997) addresses the relation of musicality to the influence of heredity and environment: "Much evidence suggests that the ability to express oneself musically is biologically inherited and equal for all, while the differentiated expression – how the music sounds and how it used – is socio-culturally conditioned" (p. 102; my translation). Brändström (1997, 2006) presents three main perspectives on musicality: *absolute*, *relativistic* and *relational* musicality.

In Brändström's (1997, 2006) use of the term, *absolute musicality* is the view that some people possess musicality within them, as it were. It is a perspective rooted in a view of individual opportunities for learning advocated by psychology in the first half of the 1900s. The concept is linked to an elitist approach to musicality as an inherited and rare ability. Against this absolute perspective on musicality, the objection has frequently been made that musicality tests will only provide a measure of receptivity, not of the ability of practical music making.

The second main perspective presented by Brändström is *relativistic musicality*: the view that all people are considered to be musical in the sense that they have both the ability to experience music and to express themselves musically, provided that the environmental conditions are favorable. It is an approach whose roots can be traced to the 1970s sociology of education. The critical influence of environment is emphasized. The primary purpose of musical education is not to train experts. The focus is not on skills, but on musical experience. The relativistic conception of musicality, according to Brändström (1997), has had educational implications that can be summarized "in terms of dialogue, reciprocity, self-expression" (p. 14; my translation). The concept of creativity is significant to this perspective on musicality. The focus has shifted from skill aspects to "personal experience, meaning, musicianship and understanding" (Brändström, 1997, p. 15; my translation).

One of Brändström's interviewees puts forward the following criterion of musicality, which I regard as particularly rich in potential:

it sounds like speech, it breathes and there is a natural flow. (Brändström, 2006, p. 149; my translation)

Indeed, a conception of musicality that explicitly relates this concept to qualities in human speech would appear to be interesting and relevant to an investigation of musicality in acting.

In a later essay, Brändström (2006) supplements the two aforementioned perspectives with a third one, focusing on the communicative aspects of music. He calls this third perspective *relational musicality*. Its origins may be found in the "communicative turn in Swedish education" (p. 146; my translation), such as the influence of socio-cultural perspectives, relational thinking and hermeneutic theory on educational theory and practice.

The absolute and relativistic perspectives on musicality are both individualistic. While Brändström finds an absolute approach to dominate higher music education, he notes that on "the highest artistic level of education" communicative aspects and musical experience are emphasized (Brändström, 2006, p. 152; my translation).

Brändström (2006) points to one aspect of a hermeneutic approach as particularly important, namely, that a central feature of all art is communication, the willingness to communicate with others. In sum, he notes that:

based on the hermeneutical presuppositions upon which this text is based, a relational perspective appears to be the most suitable. Although this text primarily deals with the field of music, it is not too daring an assertion to hold that these perspectives on communication are largely transferable to other parts of the aesthetic field. (p. 154; my translation)

Since my aim is to explore the concept of musicality in the field of theatre, Brändström's statement is of course of special interest to me. The communicative aspect of the concept of musicality provides a link to other parts of the aesthetic field, espe-

cially theatre. Such connections between the arts are extremely rare in the musical literature that I have perused. (Granted, a wider scope of research literature – e.g., neurobiology and music psychology – might perhaps have yielded further perspectives of relevance. In the context of the present investigation, however, I have limited myself to research literature with closer relations to the field of arts education.) The examples that I have found include the proposal that "aesthetic categories" in the broadest sense can be of interest to musical research (Pauli Jensen, 1970b, p. 99f); the interview quote suggesting that a criterion for musicality may be that "it [music-making] sounds like speech" (Brändström, 2006, p. 149); and the relational perspective on musicality that Brändström (2006) advocates.

Musicality in spoken theatre – an interview investigation

My strategy in Bjerstedt (2017) in order to investigate the usage of the concept of musicality in the field of theatre was to turn to those who should arguably know best: wellknown and recognized theatre workers with extensive experience of acting. I conducted extensive, open-ended interviews with thirteen Swedish actors, directors and playwrights. The aim of the interview investigation was to provide a few answers as to how practitioners in the field of theatre perceive the meaning of musicality in acting.

Method

For the purpose of attaining a deeper understanding of the usage of concepts and metaphors among practicing artists in the field of theatre, a hermeneutic approach including extensive, loosely structured qualitative interviews emerged as an adequate approach (Bjerstedt, 2017, pp. 20–24).

Bresler (2017) provides a broad presentation of the educational potential of 'aesthetic-based research', advocating an open-minded approach: "it is crucial to balance the development of expertise with the curiosity of a beginner's mind. [...] *Verstehen*, empathic understanding, is a special kind of seeing. [...] genuine listening to voices other than our own (or echoing our own) in recognition of others' richness – voices of artists situated in different places and times" (pp. 653–655). Such a stance was central to the interviews with professional theatre actors, directors, and playwrights.

The interviews were carried out in 2010–11 (Bjerstedt, 2017). Several considerations guided the selection of interviewees: I wished to interview experienced artists who were interested in talking about musicality in theatre and who preferably had experiences from working with theatre education. These professional artists all consented to being presented without anonymization of the material: Stina Ekblad (b. 1954), Gösta Ekman (1939–2017), Lena Endre (b. 1955), Staffan Göthe (b. 1944), Henric Holmberg (b. 1946), Mia Höglund Melin (b. 1973), Sissela Kyle (b. 1957), Rolf Lassgård (b. 1955), Ann Petré (b. 1954), Marie Richardson (b. 1959), Göran Stangertz (1944–2012), Tobias Theorell (b. 1969) and Iwar Wiklander (b. 1939).

My way of perceiving and applying the research interview is informed by the approaches expressed by Steinar Kvale (1996). Through the interview I want to attain descriptions formulated by the interviewee in order to interpret and describe the meaning of the phenomena in question. The exploratory interview does not aim to test hypotheses. It is open and not particularly structured. The exploratory interview aims at understanding a topic from the interviewee's own perspective, at generating knowledge – as a conversation, as a story, as a relationship. Kvale (1996) points out that such exploratory interviews can widen and change the researcher's own perceptions. One of the main purposes of an explorative study is to discover new dimensions of the topic that is the object of investigation. The interviewees direct attention to new and unexpected aspects of the studied phenomena; during the analysis of the

interview transcripts, new distinctions may be discovered. But the study does not merely relate the conversations without comments. The selection, arrangement and merging of interview statements has been an extensive process. If the results were to be reported only on the basis of the informants' self-understanding, without a deeper interpretation of the material, an important research dimension would be lost. In the analysis, the different voices are rearranged and confronted with each other and, not least importantly, with the researcher's way of perceiving and interpreting the phenomena.

Findings: Three kinds of abilities

In the interviews with thirteen renowned Swedish actors, directors and playwrights presented in Bjerstedt (2017), a number of everyday terms emerge as descriptions of important qualities in acting: for instance, *life*, *security*, *presence*, *focus*, *courage*, and *communication*. In addition to them, one central term emerges which has been borrowed from another art form: *musicality*. Several of the interviewees' perspectives on musicality in the field of theatre relate to a pattern of *receptivity–activity*: abilities to listen combined with abilities to act with awareness of qualities such as balance, focus, tempo, and rhythm (Bjerstedt, 2017, p. 85, 148). The ability to be open and "have an ear for everything" (p. 86) is described as essential to actors' interaction with each other as well as with the audience. Several additional interview statements will be cited and analysed in the concluding section of this article.

In the interviews (Bjerstedt, 2017), a relatively broad scope of concepts and metaphors emerge. They may all contribute to the explanation of what it means for an actor to act musically. In this section I will attempt to formulate a kind of overall picture based on the interview responses. In a way the task is, of course, not feasible; the image I can hope to accomplish must be both vague and incomplete, maybe also contradictory. My overall impression of the talks is that an actor's ability to "act with

musicality” can be seen as composed of a series of skills that complement each other. I have come to consider three key words to be particularly important: presence, structure, and fluidity. (A certain arbitrariness in the choice of words is inevitable. Alternative names might be: sensuousness–scheme–interaction; or perhaps: now–feeling–orchestration–communication. This said as a reminder of the power – and inadequacy – of words. After due consideration, I choose these three: presence, structure, and fluidity.) Each of these terms should this be perceived as a term for a collection of qualities and abilities that are central to the actor’s musicality. All of these abilities are closely linked. The capacities for presence, structure, and fluidity are integrated and interdependent. They engage, interact with, and presuppose each other – in space, in time and in interaction.

Presence

It is important for an actor to be here and now with all one’s senses. If acting is to be perceived as credible by the audience, the actor’s ability to be present is crucial. This is a quality that can be expressed in different ways. Marie Richardson formulates presence in terms of focus, but also desire, curiosity and respect in relation to fellow actors: to have ”all senses open” (Bjerstedt, 2017, p. 103; my translation). Staffan Göthe and Mia Höglund Melin speak of the courage to expose oneself to the present. Several actors highlight that what goes on on stage must ”live”. Gösta Ekman talks about yearning for a ”maximum ’now experience” (p. 74; my translation). Stina Ekblad compares musicality to a ”feeling for the situation” (p. 164; my translation). ”When all actors forget themselves but still keep their agreements, then it’s swinging”, Marie Richardson says (p. 164; my translation).

In sum, to act musically with presence may mean to have the courage to plunge into the unknown, to focus on your fellow actors, to be in the right place at the right moment, and to have maximum openness for the new, for the present.

Structure

It is also important for the actor to be able to perceive, analyse and build structures. It seems to be required to have both an awareness of "musical patterns" in a play text, and an ability to manage these patterns. Göran Stangertz emphasizes how important it is to "orchestrate" a theatrical performance: to balance and interpret the text, so that the audience perceives that which it should be perceived. Musicality in the theatrical field, according to several interviewees, involves an awareness of qualities such as tone, tempo, rhythm and pause. For many, contrasts and variations in rhythm and dynamics appear to be central.

In sum, to act musically with structure may mean to perceive the variations and contradictions in the text, to see the big picture, to identify and relate to the text's musical qualities, to create meanings and build a whole by shaping the text musically in time and space.

Fluidity

It is also important for an actor to be free, relaxed, active and open. As I mentioned, in the words of several interviewees, acting must have what they call life. If the audience experiences this, it gives them a feeling of safety and security. Acting should also have life in the sense that there is no mechanical repetition.

Furthermore, several actors emphasize communication as a key objective of acting. Hence, Sture Brändström's (2006) concept of relational musicality – formulated with a focus on music's communicative aspects – may be important also to understand the function of musicality in the art of spoken theatre. "What we mostly mean by musicality is the responsiveness of interaction," says Iwar Wiklander (Bjerstedt, 2017, p. 88; my translation). The concept of fluidity points to the dynamics between listening and action, between sensitivity and rhythm/timing, between receptivity and

activity. Several actors mention how one reaches flow through openness, by relating to the circumstances.

In sum, to act musically with fluidity may mean to live and to act in a free and relaxed manner, to interact, to work rhythmically in voice and body, to drive, to switch rhythm, to be active.

Implications of interview findings

In the interviews, the actor's musicality emerges as a physical and an intellectual but also a holistic capability. The actor's qualities and abilities that have been categorized as presence, structure, and fluidity are seen as interacting with one another. Based on the informants' views, it seems reasonable to view each one of these categories as a necessary (but not on its own sufficient) condition for what has been called the actor's musicality. The ability to act musically, then, could be taken to mean this: *to be here and now with all one's senses, to perceive, analyse and build structures and to be free, relaxed, active and open.*

Such an overall description might make abilities such as those ascribed to the categories of presence and structure to appear as opposite or even contradictory ones: on the one hand, an intellectual capability of structure, and, on the other hand, a physical capability of presence. But I think that would be a simplistic and misleading picture. The ability to be present, to experience as fully and richly as possible the 'music' of the play, could probably largely be a matter of sensuous, physical processes – alongside intellectual ones. To be in the right place at the right time also requires cognitive, analytical and structuring abilities in the actor. Furthermore, the ability to structure is not purely intellectual. Firstly, there are of course sensuous components in experiencing qualities such as heaviness, lightness, density, airiness, variations and contradictions in a play text. Experiencing them exceeds a purely analytical discernment. Secondly, relating to the text's qualities is an equally complex process. Not-

withstanding that planning how to relate to these qualities and evaluating afterwards how it went off may be seen as intellectual processes, the actual implementation of these plans still will include bodily components such as breathing, movement, voice and rhythmization. The relationship between abilities subsumed by the categories of presence and structure hence would appear to be an integrated one.

The abilities included in the category of fluidity are distinctly physical in character. But that does not mean that they are disconnected from the intellect. The ability to give and receive impulses includes an integral relationship between mind and body. Simultaneous activity and receptivity emerge as the essence of the actor's fluidity. The concept of fluidity is thus clearly related to the concept of presence: lack of presence means lack of openness and receptivity. It also has obvious connections to the concept of structure: the actor must be responsive, open and receptive to qualities, variations and contradictions in the text of the play. In summary, therefore, the relationship between the capability of fluidity and the capabilities of presence and structure would appear to be an integrated one.

A rather rigid schema such as the one presented here may of course only in a limited sense claim to depict what is included in the musicality of an actor. Yet, what would an actor's musicality mean if it did not include abilities of structure? In what contexts might an actor be said to act 'musically' without such abilities? Even in a theatrical equivalent to free jazz, a happening or a performance, some kind of structure is reasonably constructed. What would an actor's musicality mean if it did not include abilities of fluidity? A soloistic performance neither giving nor receiving impulses? What would an actor's musicality mean if it did not include abilities of presence? Chance? Trance?

In the section on the concept of musicality in the field of music, it was concluded that rather few musicality researchers seem to have been interested in the relevance of musicality to communication or to aesthetic categories in a broad sense. The image of

musicality that emerges in the field of theatre is a rich one. To musicologists, it may perhaps seem peculiar with its emphasis on the concepts of presence, structure, and fluidity. The prospect of bringing this image of musicality to the field of music and try it out there emerges as a tempting one. To what extent may these three categories of abilities be used to describe the concept of musicality in music? Might such a description be perceived as adequate by musicians, musicologists and music educators?

For an actor to act in a 'musical' way is a multifaceted thing. A concise way to express the function of musicality in theatre may perhaps still be that the actor, in the words of the Renaissance playwright John Webster, "adds grace" – but this grace is a rather complex one.

Discussion

The aim of the study (Bjerstedt, 2017) was to explore a concept used in the field of theatre by way of a literature survey and an interview study. There may be reason to discuss what may actually be achieved through such an approach. In trying to formulate some sort of unifying, summarizing perspective, I will not avoid the question of its validity.

First, there is the issue of selection. How may the selection of interviewees have affected the survey results? There are many different kinds of theatre, and there are radically different views on the relationship between theatre and musicality; already a comparison between, for instance, the formal restraints of Racine's 'word music' and the improvisational forms of the *commedia dell'arte* will make this abundantly clear. How would the results of this study have been affected if the interviewees had had, for instance, other types of theatre experience, and belonged to a different age span? In many ways, the actors' different backgrounds manifest themselves in the interview responses. One example clearly illustrates how different kinds of outlook on theatre, 'aesthetics', can be associated with differences in character in interview responses.

Various images of theatrical 'music' emerge in the interviews: (i) theatre as chamber music, with a focus on interpreting the playwright's intentions (exemplified by actress Stina Ekblad), (ii) theatre as jazz, with a focus on relating in a flexible way to the whole (exemplified by actress Ann Petré), or (iii) theatre as "more just like drums" (a citation from my interview with actress Mia Höglund Melin). As I stated in the beginning, my choice of interviewees was partly guided by my wish to talk to people with extensive theatre experience. This may have resulted in receiving fewer comments from those young theatre workers named "a courageous generation" by Mia Höglund Melin, people who want to abolish traditional genre classifications and "play in a new way" (Bjerstedt, 2017, p. 121; my translation). The overall picture that has been gained from these particular interviews would probably look a bit different if I had interviewed theatre people with different preferences and conceptions regarding style and genre. To admit this does not mean that this study loses its value, but that there is cause for further investigation.

The construction of concepts or metaphors

The relationship between language and external reality is rarely regarded as unproblematic. For centuries thinkers have spun variations on the theme that our observations cannot be objective, that both our experiences and our linguistic expression of them are necessarily guided by theories contingent on human thought.

The term construction often occurs in contexts where the freedom of human knowledge is problematized. I am interested in how concepts and terminology can be borrowed from one area of use (music) and transferred to and applied in a new field (theatre). That makes these kinds of issues relevant. Does a term such as 'musicality' refer to an underlying reality, an 'essence' which is timeless and independent of human consciousness? Or is the concept constructed in order to mean something else? What does it mean to say that someone is acting musically? Ludwig Wittgenstein an-

anticipated latter-day constructionist, anti-essentialist approaches with his well-known laconic words: "the meaning of a word is its use in the language" (Wittgenstein, 1953/1992, § 43, p. 31). The social constructionist opposes to an essentialist approach and considers, on the contrary, phenomena and concepts as products of human choice; the socially constructed reality is an ongoing, dynamic process in which social phenomena are created, institutionalized and become tradition (Berger & Luckmann, 1966). From this viewpoint, the concept of musicality could be considered as socially constructed. The interview statements contain examples of how the term is used in the field of theatre to clear 'feedback effect': as positive opinion, as an assessment measurement, as an overall aim, or as a tool for analysing the theatrical work of yourself and others.

Is there any real core behind this sort of talk – some kind of essence of musicality? A dominant perspective in theatre methodology following Stanislavsky is to focus on a character's actions – not on the character itself (Sjöström, 2007). Similarly, one could consider musicality as a dynamic activity, rather than a static property. Gender theory and queer theory have advocated a performative approach where what is traditionally perceived as properties is rather understood as something that people *do*, not as something they *are* or *have*. With such an approach, the question of the existence of an underlying identity becomes crucial. Following Lars Elleström (2005), it could still be argued that the very concept of construction assumes that some sort of essence is possible, and that these two terms get their meaning through their mutual dynamics: "Perhaps a dialectical understanding of the two concepts is necessary. The essence is something that is constantly becoming, and construction always exists in its coming to be" (p. 252; my translation). I view such considerations as important to this survey. When we speak of 'musicality', our relationship to the concept is arguably dynamic in exactly this way: we create and recreate (construct) it through our way of using it, while we at the same time have conceptions or even convictions regarding its core (essence).

With regard to how we use our concepts, there is a forgotten but not uninteresting approach called *fictionalism*, a doctrine of "useful fictions" formulated by the German philosopher Hans Vaihinger [1852–1933] in *Die Philosophie des Als Ob* (Vaihinger, 1911). In several respects, this 'as-if philosophy' is reminiscent of latter-day theory of cognitive metaphor (e.g., Lakoff & Johnson, 1980). According to Vaihinger, human thought cannot comprehend the given by merely using purely theoretical considerations. We have to create a number of useful, beneficial *fictions* which are regarded as if (*als ob*) they were true as long as we use them. There is an interesting terminological consistency between Vaihinger's as-if philosophy and the contemporary theatrical methodology of Konstantin Stanislavsky where the term "as if" also plays a significant role. According to Vaihinger, fictions are inadequate, subjective, metaphorical conceptions. They differ from hypotheses that can be verified (made probable); the task of fictions, on the other hand, is merely to serve in appropriate ways in a life practice. Whether fictions are self-contradictory or otherwise false is of secondary importance, according to Vaihinger. This way of considering our use of concepts is particularly interesting in the field of art. The arts do not require logic in the same way as science; thus metaphors may function in the arts in the same way as fictions in science. The concepts we choose to employ may convey a better sense of reality – by deviating from it. Even though spoken theatre does not contain music, many claim that musicality is necessary to the actor. Perhaps this view could be understood as an 'as-if' fiction – or as a metaphor.

One reason to consider that what we are dealing with might be viewed as a *metaphor* could be the fact that musicality is put forward with such an overwhelming positive consistency in the field of theatre. In factual issues there is rarely total agreement. But an overall impression of my previous experiences in theatre and theatre education as well as of the literature study and interview survey (Bjerstedt, 2017) that have been summarized here is that there is a remarkable consensus regarding the concept of musicality in the field of theatre. The interviewees are unanimous in their

high valuation of musicality, agreeing that it would be unreasonable to imagine a theatre that strives to be unmusical. It is not impossible to conceive of such a compact unity as a lack of reflection and questioning, an absence of discussion. The word 'musical' has been given a position as an umbrella term for a variety of desirable abilities and qualities in theatre, and it is rarely questioned, if at all. In music education, metaphorical language is common and probably also important (Schippers, 2006). It seems possible to interpret the term 'musical' in the theatrical field as a metaphor, a fiction or a construction. The perspectives introduced by Vaihinger (1911) may be relevant here, and even more so the recent theories of *conceptual metaphor* (Lakoff & Johnson, 1980) and *conceptual blending* (Fauconnier & Turner, 2002). I also view Max Black's (1962) and Paul Ricoeur's (1975/2003) remarks about the *interactive nature* of metaphors as fruitful in this context: metaphorical speech provides a new description of reality. The metaphor allows us to see reality anew; it is a tool for discovery. To interpret the meaning of metaphors requires a gentle and open approach. To speak of musicality in acting does not just mean to say something about what acting is, but also to assert something about what musicality is. The metaphor is bidirectional.

Based on the results of this study, would it be possible to interpret the concept of musicality in the field of theatre as a *social construction* with a normative function? Discourse analyst Jonathan Potter (1996) has pointed out how descriptions can be analysed both as actions and as constructions of fact. The notion that it would not be every actor's aim to act with musicality is viewed by the interviewees as an unreasonable one. While the term 'musical' has positive connotations in everyday language, the opposite goes for the term 'theatrical'. May the relationship between the field of theatre and the term 'musical', with its strong positive connotations, be interpreted as a parasitic one? Might one function of such a normative, socially constructed concept of musicality within theatre be to exclude certain theatre practitioners? Mia

Höglund Melin points out that the term 'musicality' is also used prescriptively in the field of theatre:

I believe that when you talk about musicality, there is a sort of elitism. Who am I to say that I have better taste than another person? When you talk about musicality, I think you touch this. Is one out of two musicians more musical than the other one? Or is this piece played in a more musical way than the other? Is this painting better than the other? Deep inside many would probably like to answer: yes, I think this one is better. But we refrain from that, because there is an elitism when you reach a certain level. Can you really talk about this? (Bjerstedt, 2017, pp. 161–162; my translation)

As mentioned earlier, David Roesner (2014) views the concept of musicality in the field of theatre as a *dispositif* in Foucault's sense: as mechanisms and structures for the exercise of power. As such, the concept points beyond the focus on sound, on the auditory, in conventional musicality, Roesner holds, and it points in several directions: firstly towards the embodied and prelinguistic, secondly towards the cognitive, towards a way of understanding theatre. Musicality, Roesner points out, can function very differently in theatre. In some forms of theatre, musicality becomes a means of disciplining the actors, in others a means to liberate them. Sometimes musicality represents the immediate, sometimes the contrary: a reflective stance. While musicality to Adolphe Appia could provide the way to the "inner essence" of a drama, Vsevolod Meyerhold rather viewed musicality as a way to create distance (p. 257). In sum, according to Roesner, this *dispositif* is characterized by its "transformative potential" (p. 258).

In line with this, the use of the musicality concept in the field of theatre might be viewed as symptomatic of two phenomena which could deserve critical attention: first, what Mats Alvesson and Kaj Sköldberg call *discursive introversion*, where a particular use of language, through being institutionalized and perceived as obvious, will

dominate consciousness and discussions; and secondly, what these authors call *mystifications*, that is, myths or ideologies that will limit understanding (Alvesson & Sköldbberg, 2008, pp. 338). To treat such themes critically based on a larger scope of empirical material would be an important task for future research.

The summaries and statements expressed in the presentation of findings in the preceding section should be seen against this background, and therefore be handled critically. In sum, I believe that these reflections and considerations add significant perspectives to previous views on educational metaphor in the arts as presented by, e.g., Swanwick (1988), Petrie and Oshlag (1993), Mayer (1993), Sticht (1993), and Schippers (2003); we should not ignore that the concept of musicality is arguably a constructed one, permeated by normative aspects when employed in the field of theatre.

References

- Alvesson, Mats, & Sköldbberg, Kaj (2008). *Tolkning och reflektion. Vetenskapsfilosofi och kvalitativ metod.* (Interpretation and reflection. Philosophy of science and qualitative method.) (2nd ed.) Lund: Studentlitteratur.
- Ashperger, Cynthia (2008). *The rhythm of space and the sound of time. Michael Chekhov's acting technique in the 21st century.* Amsterdam: Rodopi.
- Bastian, Peter (1987). *In i musiken. Om musik och medvetande.* (Into the music. About music and consciousness.) (Trans. Lisa Linn & Bo Sylvén.) Stockholm: Wahlström & Widstrand.

- Berger, Peter L., & Luckmann, Thomas (1966). *The social construction of reality. A treatise in the sociology of knowledge*. Garden City, NY: Anchor Books.
- Berry, Cicely (1987). *The actor and his text*. London: Virgin.
- Billroth, Theodor (1895). *Wer ist musikalisch? Nachgelassene Schrift hrsg. von Eduard Hanslick*. Berlin: Paetel.
- Bjerstedt (2014). *Storytelling in jazz improvisation: Implications of a rich intermedial metaphor*. Malmö: Lund University, Malmö Academy of Music. (Studies in music and music education, 17.)
- Bjerstedt (2017). *Skådespelarens musikalitet*. (Musicality in acting.) Möklinta: Gidlunds.
- Black, Max (1962). *Models and metaphors: Studies in language and philosophy*. Ithaca: Cornell University Press.
- Boleslavsky, Richard (1933/2003). *Acting. The first six lessons*. New York & London: Routledge.
- Bresler, Liora (2017). Aesthetic-based research as pedagogy: The interplay of knowing and unknowing toward expanded seeing. In Patricia Leavy (Ed.), *Handbook of arts-based research* (pp. 649–672). New York: Guilford Press.
- Brändström, Sture (1997). *Vem är musikalisk? Intervjuer med musiklärare och musiklärarutbildare*. (Who is musical? Interviews with music teachers and

music teacher educators.) Stockholm: KMH Förlaget (Pedagogiska publikationer från Kungliga Musikhögskolan).

Brändström, Sture (2006). Musikalitet och lärande. (Musicality and learning.) In Eva Alerby & Jórunn Elísdóttir (Eds.), *Lärandets konst – betraktelser av estetiska dimensioner i lärandet* (The art of learning – reflections on aesthetic dimensions of learning (pp. 143–155). Lund: Studentlitteratur.

Chekhov, Michael (1992). *On the technique of acting*. New York: Harper Collins.

Cole, Toby & Chinoy, Helen Krich (Eds.) (1970). *Actors on acting. The theories, techniques, and practices of the world's great actors, told in their own words*. New York: Crown.

Elleström, Lars (2005). *En ironisk historia. Från Lenngren till Lugn*. (An ironic history. From Lenngren to Lugn.) Stockholm: Norstedt.

Fauconnier, Gilles; & Turner, Mark (2002). *The way we think: Conceptual blending and the mind's hidden complexities*. New York: Basic Books.

Helander, Paula (2007). *Rytmik för skådespelare: Vad kan en rytmikpedagog tillföra i en högre teaterutbildning?* (Rhythmics for actors: What can a rhythmics teacher add to higher theatre education?) Malmö: Lund University, Malmö Academy of Music.

Johansson, Stefan (2006). Talad teater – en tongivande parentes? (Spoken theatre – a distinctive parenthesis?) *Teatertidningen*, (4), 26–27.

- Johnson, Mark (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago: University of Chicago Press.
- Kvale, Steinar (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- Lakoff, George & Johnson, Mark (1980). *Metaphors we live by*. Chicago & London: University of Chicago Press.
- Ljungar-Chapelon, Anders (2008). *Le respect de la tradition. Om den franska flöjtkonsten: dess lärande, hantverk och estetik i ett hermeneutiskt perspektiv*. (Le respect de la tradition. On the French art of the flute: learning, craft, and aesthetics in a hermeneutic perspective.) Malmö: Lund University, Malmö Academy of Music. (Studies in music and music education, 12.)
- Mayer, Richard E. (1993). The instructive metaphor: Metaphoric aids to students' understanding of science. In Andrew Ortony (Ed.), *Metaphor and thought. Second edition* (pp. 561–578). Cambridge: Cambridge University Press.
- Michaelis, Christian Friedrich (1805). Über die Prüfung musikalischer Fähigkeiten. *Berliner Musikalische Zeitung*, 57, 223–230.
- Monk, Kerstin (2004). Nu väntar Elling på hemmaplan. (Now Elling is waiting at home.) [Interview with Rolf Lassgård.] *Gefle Dagblad* 27 January 2004.

Mursell, James L. (1947). Growth gradient in music. *Music Educators Journal*, 34(2), 18–19.

Ortony, Andrew (Ed.) (1993). *Metaphor and thought. Second edition*. Cambridge: Cambridge University Press.

Pauli Jensen, Jørgen (1977a). Musikalitet. (Musicality.) In *Sohlmans musiklexikon 4* (pp. 615–616). Stockholm: Sohlmans.

Pauli Jensen, Jørgen (1977b). *Musikens psykologi och sociologi*. (The psychology and sociology of music.) Stockholm: AWE/Gebers.

Petrie, Hugh G., & Oshlag, Rebecca S. (1993). Metaphor and learning. In Andrew Ortony (Ed.), *Metaphor and thought. Second edition* (pp. 579–609). Cambridge: Cambridge University Press.

Pflederer, Marily (1963). The nature of musicality. *Music Educators Journal*, 49(6), 49–52.

Piaget, Jean (1951). *Play, dreams and imitation in childhood*. (Trans. C. Gattegno & F. M. Hodgson.) London: Routledge.

Piaget, Jean, & Inhelder, Barbel (1969). *The psychology of the child*. (Trans. H. Weaver.) London: Routledge & Kegan Paul.

Potter, Jonathan (1996). *Representing reality: Discourse, rhetoric and social construction*. London: Sage.

- Ricoeur, Paul (1975/2003). *The rule of metaphor: The creation of meaning in language*. (Trans. R. Czerny, K. McLaughlin & J. Costello.) London & New York: Routledge.
- Roesner, David (2014). *Musicality in theatre: Music as model, method and metaphor in theatre-making*. Farnham, UK: Ashgate.
- Rudlin, John (2000). Jacques Copeau. The quest for sincerity. I Alison Hodge (Ed.), *Twentieth century actor training* (pp. 55–78). London & New York: Routledge.
- Rynell, Erik (1998). Mellan det magiska 'om' och musiken. Skådespelarens arbetsmaterial och förändringarna i teatern kring sekelskiftet 1900. (Between the magic 'if' and music. The working material of the actor and the changes in theatre around 1900.) In Sten Åke Nilsson & Louise Vinge (Eds.), *Kring 1900* (pp. 91–111). Nyhamnsläge: Gyllenstiernska Krapperupstiftelsen. (Symposier på Krapperups borg, 4.)
- Rynell, Erik (2008). *Action reconsidered. Cognitive aspects of the relation between script and scenic action*. Helsinki: Teaterhögskolan. (Acta Scenica 22.)
- Schippers, Huib (2006). 'As if a little bird is sitting on your finger...': metaphor as a key instrument in training professional musicians. *International journal of music education*, 24(3), 209–217.

Seashore, Carl E. (1919). *The psychology of musical talent*. Boston: Silver, Burdett & Co.

Seashore, Carl (1938). *Psychology of music*. New York: McGraw-Hill.

Sjöström, Kent (2007). *Skådespelaren i handling. Strategier för tanke och kropp*.

(The actor in action. Strategies for mind and body.) Stockholm: Carlsson.

(Doctoral Studies and Research in Fine and Performing Arts, No 4. Malmö

Academies of Performing Arts, Lund University, Malmö, Sweden.)

Staniewski, Włodzimierz & Hodge, Alison (2003). *Hidden territories. The theatre of Gardzienice*. London: Routledge.

Stanislavski, Konstantin (2008). *An actor's work*. (Trans. Jean Benedetti.) London & New York: Routledge.

Sticht, Thomas G. (1993). Educational uses of metaphor. In Andrew Ortony (Ed.), *Metaphor and thought. Second edition* (pp. 621–632). Cambridge: Cambridge University Press.

Swanwick, Keith (1988). *Music, mind, and education*. London: Routledge.

Tjäder, Per-Arne (2008). *Uppfostran – underhållning – uppror. En västerländsk teaterhistoria*. (Education – entertainment – rebellion. A Western history of theatre.) Lund: Studentlitteratur.

Vaihinger, Hans (1911). *Die Philosophie des Als Ob. System der theoretischen, praktischen und religiösen Fiktionen der Menschheit auf Grund eines idealistischen Positivismus. Mit einem Anhang über Kant und Nietzsche.* Berlin: Reuther & Reichard.

Weber, Max (1973). *Soziologie, Universalgeschichtliche Analysen, Politik.* Stuttgart: Kröner.

Wittgenstein, Ludwig (1953/1992). *Filosofiska undersökningar.* (Philosophical investigations.) (Trans. Anders Wedberg.) Stockholm: Thales.

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Music in Future Nordic Schooling

The Potential of the Relational Turn

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Abstract

In this article, we discuss general school music in light of the fairly recent focus on relationality, specifically in pedagogy but also in related academic fields, such as psychology, aesthetics and philosophy. The main focus of the text is directed towards what we refer to as the relational turn in education, emphasizing school music in Nordic and Western countries.

The article is inspired by two recent Norwegian reports indirectly suggesting that the accountability and cognitive skill-oriented school policies within the Norwegian education community that have dominated for the past 20 years might be inadequate. The reports propose a new direction focusing more on creativity and inclusivity with an emphasis on deep learning and the social and emotional impact of education.

By investigating the relational turn in education as well as relationality in the fields of philosophy, psychology and aesthetics, we argue that many of these relational approaches may contribute to renewal of the rationale, as well as the construction and practice, of school music as a future curriculum subject.

In the last part of the article, we discuss how three internationally known disciplines of school music, namely music-making (singing and playing), composing and listening, could be renewed by pedagogies inspired by the relational turn.

Keywords: relationality, music in schools, pedagogic renewal, social and emotional competencies, inclusivity.

Music in Future Nordic Schooling

The Potential of the Relational Turn

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This article discusses general school music in light of the fairly recent focus on relationality, specifically in pedagogy but also in a number of related academic fields such as psychology, aesthetics and philosophy. Often, a focus on relationality is referred to as a ‘relational turn’ in these disciplines (Bourriaud 2002; Edwards 2010; Mitchell 2014). Based in teacher education, what interests us is how and to what extent a relational turn can be seen as a resource for renewal of future general school music programs in Nordic and Western countries.

The present text was motivated by two Norwegian National Official Reports on the future of compulsory schooling for students ages 6 to 18 (NOU 2014, 2015)². Referring to research (OECD, 2015), the Norwegian reports argue that the development of social and emotional competence should be considered a prerequisite for any kind of curriculum learning, and that these aspects should therefore be included and integrated in attainment targets for all curricular subjects in order to achieve deep learning. Although not all countries in Western and Nordic societies have nationally mandated

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² In Norway, music is a school subject framed by a national curriculum, and it is part of all compulsory primary and secondary education (ages 6–16). In total, 96,5% of the population attends state-run primary and secondary schools.

curricula for school music, we believe that a discussion about the future of general school music is relevant internationally. The history of music in schools and many of the challenges associated with school music are similar across the globe (Espeland 2011; Cox and Stevens 2016). Due to globalisation (Stromquist and Monkman 2014), we believe that debates across continents about music education, including school music, will become even more relevant in the years to come.

Some of the main ideas in the Norwegian Official Reports mentioned above reflect a deep concern for the future of compulsory schooling. The reports indirectly suggest that the accountability and cognitive skill-oriented school policies within the Norwegian education community that have dominated for the past 20 years might be inadequate. A new direction focusing more on creativity and inclusivity with an emphasis on deep learning and the social and emotional impact of education might be better for the future. By investigating the relational turn in education as well as relationality in the fields of philosophy, psychology and aesthetics, we shall argue that many of these relational approaches may contribute to renewal of the rationale, as well as the construction and practice, of school music as a future curriculum subject.

In the following, we present some of the main characteristics of what we have referred to as the *relational turn* in education. Next, in order to bring in a broader academic rationale, we present and discuss some recent perspectives on relationality within the fields of psychology, philosophy and aesthetics. All of these major disciplines have a long history of connectedness and relevance to pedagogy, including music teaching and education in many contexts. Thirdly, we discuss school music in Nordic and Western countries by answering the following questions: How could a 'relational turn' help renew the rationale for and practices in school music? What was and has been the foundations for school music in the past, what is at stake at present and which future challenges and opportunities might unfold in light of the recent focus on relationality? In the last part of the article, we discuss how three internation-

ally known disciplines of school music, namely *music-making* (singing and playing), *composing* and *listening*, could be renewed by pedagogies inspired by the relational turn.

The relational turn in education

In the book *No education without relation* all eleven authors published a manifesto of relational pedagogy (Bingham and Sidorkin 2004) where they claim to offer a ‘third way’ out of what is labelled the ‘alienation problem’ of Western schooling:

Students, teachers, and parents increasingly find themselves in situations void of meaningful human contact, ridden with frustrations and anonymity. This is the cause of the widespread dissatisfaction with schooling. The low expectations, breakdown of social order, and academic failures are only symptoms of the much deeper problem of alienation. (5)

Their ‘third way’ is different from two other major ‘ways’, the first being ‘traditionalist’ and relying on ‘high stake tests and accountability’, and the second being ‘progressivist’, which romantically and mistakenly believes that reformed curriculum and engaged instruction can awaken all children’s interest in learning (Bingham and Sidorkin 2004, 5). The suggestion that there is widespread dissatisfaction and uneasiness about the future is also expressed by leading music education philosophers such as Estelle Jorgensen (2003), who writes:

In music education there is a widespread loss of faith in our educational systems at present. Teachers disagree about their objectives, especially since they serve an increasingly diverse constituency, and society expects more of its schools than ever before. This crisis is expressed in cultural life, especially music among the other arts. (3)

In the relational pedagogic mind-set, learning and teaching are seen as relational transformations that take place in the space, or the gap (Biesta 2004), where teachers, pupils and content meet. Relational pedagogy does not focus on transmission and training, but on transformation—a change in the learner’s perception that must take place for true education to be possible. In relational pedagogy, the gap represents the difference between the teacher and learner. In traditional education, the teacher fills the gap between the teacher’s knowledge and the pupil’s ignorance. In relational pedagogic thinking, learning can no longer be described as a process whereby the individual only creates meaning for her/himself (Bingham and Sidorkin 2004). Biesta argues that the way in which humans perceive relations has a major effect on how and what they regard as knowledge and learning. A sender–receiver model of education presupposes that meaning is glued to information. But what is sent, Biesta (2004) claims, never defines what is received. Education is communication, he argues, and communication must be understood as a process of transformation, because how an utterance is understood depends on the communication process in itself.

Mayo (2004) wants school to focus on relations by aporia, a certain amount of frustration or confusion. He sees education as a state of constant doubt and perplexity, and thus school functions as a place where contradictions are not necessarily solved. Students have to learn to understand their relations to the world as complicated, uncomfortable and not necessarily solvable. Relations are not, by definition, only good; domination is as relational as love. Pianowsky (2004) claims that relational pedagogy requires teachers to frustrate their pupils enough to desire to learn about problematic issues regarding themselves and others. In this way, relational pedagogy can raise awareness of and responsibility for students’ views of themselves and their relations.

In the framework of relationality, issues of inclusion and social justice in music education can be seen as vehicles for addressing challenging relations (Woodford

2012). In inclusive music classrooms, ethics of recognition can serve as a basis for several relations: the teacher–pupil relation, pupil–pupil relation, relations between music, methods, teachers and pupils and relation between music and other subjects and disciplines. The complexity of inclusivity also makes the relational worldview difficult and emotionally challenging (Bingham and Sidorkin 2004). The findings in an international study of inclusivity in music teaching (Burnard et al. 2008) suggest that the investigated music teachers saw the subject of music as a common ground for pupils regardless of ability, culture or socioeconomic status. The researchers claim that ‘...this kind of common ground is not an assumed and colonial one, which is often the case with music experience, but one that is ethically engaged with the community in a genuine relationship’ (19). Inclusivity and relationality are closely linked to creativity because creativity, risk-taking and trust among individuals are always interrelated (Sawyer 2011). Inclusivity, then, possesses a cultural ability to enrich a potentially creative curriculum subject, such as music, because it allows pupils’ (and people’s) diverse experiences and knowledge to surface and interweave to the benefit of the creative process.

As we see it, the relational turn in pedagogy provides us with a potential for shifting the focus in education from learning in the individual, curriculum and pedagogy to a focus on the relation between the learner and teacher, content and curriculum. To us, this shift is crucial when thinking about the implications for the individual learner, especially when we examine how examples of a relational turn arise in psychology.

Relationality in psychology

In psychology, the relational turn is often regarded as a critique of the belief that knowing and knowledge can be regarded as individual dimensions and described in terms of a personal epistemology (Brownlee and Berthelsen 2006; Bronfenbrenner

1979; Bronfenbrenner and Ceci 1994). Social constructivists like Gergen (1999) and Rorty (1979) claim that if knowledge is local, it is also relational and subject to negotiation and therefore unstable. Consequently, negotiations around local ‘truths’ will be based upon societal and personal ethics framed in a democratic ideology and performed through reflexive dialogue (Shotter and Gergen 1989). Social psychological relationalism, as described by Gergen, focuses on personal relations to the surrounding world. He and Bronfenbrenner (1979) both emphasise that human beings are influenced by and develop because of their relations to society, persons and things around them and, conversely, that they have an impact on the way things, people and relations appear. The psychological view of people as relational beings also influences how Gergen (2009) thinks about education: ‘The primary aim of education is to enhance the potentials for participating in relational processes - from the local to the global’ (243). Gergen proposes focusing on relational learning rather than individual learning. He places relations prior to the individual in learning, and he sees the classroom as a local and global meeting ground ‘for the concerns of the world’ (Gergen 2009, 243). If we have such a deeply relational understanding of learning and creating, acknowledgement of others must be key to the development and facilitation of creative processes.

Relational aesthetics

For two centuries, aesthetic theory has been largely informed by Kant, his followers and numerous interpretations of his highly complex work, e.g. Hanslick’s (1854), Guyer’s (1996) and de Duve’s (1996) theories on aesthetics. Additionally, 19th century aesthetics and the romantic concept of art helped shape the paradigm of Western art music (DeNora 2000; Burnard 2012). Not all aesthetic concepts of modernity are based on Kant; for example, pragmatist aesthetics, formulated by Dewey (1934) and developed by Shusterman (2000), is a non-Kantian alternative that is relational in its

own sense. Dewey (1934), pointing at the recipient's interpretation of an artwork according to his/her own feelings and understandings (36), can be seen as a precursor to contemporary relational (Bourriaud 2002) and dialogic (Kester 2004) aesthetic philosophies and practices.

Pure autonomy–aesthetic views are not compatible with a constructivist world-view, but they are nevertheless deeply rooted in most of us and within the field of art in modern Western culture (Bourdieu 1996). As an alternative theoretical path contrasting autonomy–aesthetic concepts, relational aesthetics have been emerging for quite some time (Bourriaud 2002; Rancière 2009). Relational aesthetics always start from a theme and a relation outside the artistic work, such as a problem in society or existential discussions within or by groups of people. Relational aesthetic forms are thus inherently heteronomic and therefore site-specific and inclusive (Kwon 2004). Nicolas Bourriaud (2002) coined the term *relational aesthetic* as a new and significant branch of aesthetics in his essay 'Relational aesthetic', a work that has been highly commented upon and criticised. However, variations of heteronomic art forms had been flourishing for at least a hundred years before Bourriaud's essay described as site-specific art, social art, performance and so on (e.g. Duchamp 1917; Kwon 2004; Kester 2004; Fischer-Lichte 2008). Bourriaud ([1996] 2002) described the main ideas of relational aesthetics as follows: 1) art lies in human interaction and in its social context (14), 2) art is characterised by situations in which the audience creates a community (15), 3) art is a form of life and a model of agency in the world (13) and 4) newness is no longer the prime criterion for artistic quality (11).

According to Bourriaud, an artwork is first and foremost characterised by its appearance in what Bourriaud calls the *interstice*: 'Over and above its mercantile nature and its semantic value, the work of art represents a social *interstice*' (Bourriaud 2002, 16). Bourriaud describes the interstice as a room of human relations that are fundamentally different from the communication zones into which we are forced in every-

day life. To Bourriaud, art is primarily a meeting in an interstice, and in this relational space, he claims, there is space for negotiations that extend across interpretations, statuses and positions. Bourriaud's concept of the interstice in aesthetics features strong similarities to Biesta's concept of the 'gap' in pedagogy, which underlines our point that relationality features similar aspects and has undergone similar developments in different academic disciplines.

The relational turn in philosophy

Our reading and discussion of recent practices and theories of pedagogy, psychology and aesthetics suggest that there is a trend in and across these sciences and practices that may be described as relational. In these theories as well as in their corresponding practices, there seems to be a shift towards interactivity, sharing and participation rather than reception, learning and transmission. Such concepts fall within what Brownlee and Berthelsen (2006) describe as *relational epistemology*. These concepts are strikingly conducive to the main elements in the Norwegian reports that triggered this article, such as preference for deep learning over surface learning and official recognition of social, relational and emotional elements as deeply important to learning. This can be also described as an ongoing transition from a modern to a late modern rationale for agency in the world (Kuhn 2012). We have observed this transition, as discussed above, within the fields of pedagogy, psychology and aesthetics, but can it also be observed in philosophy?

In *Relationalism: A Theory of Being*, the Indian philosopher Joseph Kaipayil (2009) offers a complete relationist theory—ontic relationalism—based firmly on his view of the importance of relations not only among human beings but also between human beings and anything that can be described as an 'entity'. He argues that the fact that things and events (including humans) exist in relations '... is the very characteristic of reality, both existentially and structurally' (Kaipayil 2009, 9). This reality is

simultaneously pluralistic and unitary, and entities (e.g. things, humans and subjects) are defined by their relations. Knowledge is also relational, argues Kaipayil (2009), because ‘...knowledge is the result of interaction between the knower and the known’ and because ‘all human knowledge has its origin in sense experience’ (43). Kaipayil (2009) builds on Western as well as Eastern philosophy to develop ontic relationalism, arguing the following:

Though the concept of relation has received a good deal of attention from past and present philosophers, relationalism as a metaphysical theory has not yet been adequately expounded. This does not mean that relationalism is a novel position, unknown in the history of philosophy... But no sufficient emphasis on this idea was ever given, and a full-fledged theory of relationalism is yet to emerge (9)

The benefit of relationalism, writes Kaipayil (2009), is ‘its ability to give a unified perspective on reality by accounting for the unity and plurality we experience in the world’ (11). It is thus important to show how relationalism can be ‘our search for the ontological principles that account for the unity and diversity of the world’, and as such, be what he calls a theory ‘of the one and the many’. (Kaipayil 2009, 10).

Our (admittedly superficial) journey into some neighbouring academic disciplines to education and pedagogy, including pedagogy, psychology, aesthetics and philosophy, has reinforced our desire to look more closely into the potential for renewal of school music programs based on the ideas associated and advocated by proponents of the ‘relational turn’. To us, this requires a renewed focus on concepts and issues such as transformation (presented by Biesta and Jorgensen), interaction and transaction (Dewey 1949), the educational potential of the gap and the interstice (introduced by Biesta and Bourriaud), inclusion, doubt and perplexity. Before doing so, however, let us briefly discuss some of these ideas in light of the history of Western school music.

Western school music traditions and future schooling

While school music programs may differ from country to country, and in some countries may hardly exist, it is possible to identify common factors in Western traditions of classroom music pedagogy (Cox and Stevens 2016). The initial framework for teaching music in schools is often described as dominated by a series of successful music method developers and pioneers³. Although this may be true, we shall argue that music as a school subject first and foremost is the result of more overarching discursive positions in political and ideological theory and systems (Bourdieu and Passeron 1990) in addition to theories about aesthetics, psychology, philosophy and general pedagogy.

Adopting a macro view of existing music curricula in many Western countries, it is clear that well-established academic traditions focusing on work-based aesthetics, transmission-based educational theories and psychological theories focusing on perception and reception have been and still remain as vital elements in the existing rationale for music in schools (Mark and Gary 2007; Cox and Stevens 2016; Sætre 2014). Bourriaud's aesthetics, for example, constitute a very different platform than the aesthetic foundation of the modern school subject of music. For the latter, the aesthetics of the nineteenth century defined high-quality pieces of art as those given to us by a genius, and quality was determined by its newness and inner qualities. Aesthetics, in theory and practice, is currently marked by several threads of criticism that seek to answer the philosophical problems proposed by the concept of an artwork. In this context, it seems highly relevant to determine the extent to which such transitions and

3 A list of these influential movements and pioneers will be too long to mention here. However, names like Dalcroze, Orff, Kodaly, Paynter, Gordon, the Music Appreciation Movement, El Sistema and Musical Futures should illustrate what we have in mind.

concepts can affect our thinking about not only the rationale for music in schools but also for the subject's specific contents.

When discussing music as a part of future schooling, we must consider that traditional school music for some years has been heavily criticised for being insufficiently relevant to young people (McPherson 2015), insufficiently culturally sensitive (Drummond 2005), insufficiently critical (Hess 2014), too focused on training versus education (Bowman 2002), too sceptical of technology (Savage 2005) and too focused on performance over creativity (Burnard 2012). Although many of these criticisms might be relevant in many contexts, they fail, in our view, to provide balanced solutions applicable to national curriculum frameworks, and they do not seem to be grounded in a deep knowledge of relational recent trends in philosophy, pedagogy and aesthetics.

The modern subject of music in Western public schools is mainly constructed in three parts: 1) music making (or performing), 2) music listening and 3) composing (McCarthy 2004). In many Western countries, curricula often describe the subject of music by sets of learning outcomes within these three areas or with direct or indirect reference to them. We hope to show, however, that the rationale for the inception and constitution of music as a curriculum subject needs to be a dynamic one, ready for and adaptable to continuous change. Although brief and un-nuanced, we dare to describe the rationale for the first phase of music in schools (primarily singing) as based in religion and cultural transmission. The next phase (singing and listening) seemed to be more justified by aesthetics (Cox and Stevens 2016) and, first and foremost, by an obligation to transmit classical masterpieces to pupils (Espeland 2011). The third phase added intentional creativity in the form of composition, with a rationale comprising elements from progressive didactics, education, pedagogy, modernism in music and child psychology (McPherson 2015; Barrett 2011; Paynter 1970). In Norway, this historical development has until recently taken place within increas-

ingly prescribed and competence-based curricula focused on accountability, educational instrumentalism and learning outcomes.

Teaching and learning in the Western world today seem heavily influenced by the national results of the Program for International Student Assessment (PISA) (OECD 2017; Pereyra, Kotthoff, and Cowen 2011). In Norway, as well as in other countries (Lines 2006; Espeland 2011), a debate about PISA has marginalised music in many schools. Summing up our mini history of music in schools and its rationale, it seems fair to say that a rationale built on instrumentalism, transmission of cultural works and values and individual creativity, although still relevant, is inadequate as a rationale for school music to maintain an important place in contemporary and future national Bildung⁴ projects.

The current situation for music in schools

Music in compulsory Western schooling in the 21st century has fallen under intense pressure (Mark and Gary 2007). Today's western pupils are often described as digital natives (Prensky 2001), meaning that they often do not possess a practical conception of a world without the Internet as a major source of access to information, music, communication and creation. Practically speaking, pupils have access to all kinds of musics from around the world. As for education, the Internet also provides a considerable amount of learning resources, for instance, on apps or YouTube, available to anyone with Internet access. The music learning arena has thus transcended the music classroom and the band room into digital and global spaces, and it is not necessarily limited to what is curriculum-based or considered by a teacher to be a 'healthy'

4 Bildung is a key concept in Scandinavian and German education (Willberg 2016), and it 'refers to the German tradition of self-cultivation (as related to the German for: Creation, image, shape), wherein philosophy and education are linked in a manner that refers to a process of both personal and cultural maturation' (Wikipedia: Bildung: <https://en.wikipedia.org/wiki/Bildung>).

choice. The teacher as a cultural and artistic gatekeeper might therefore be in danger of fading in importance. Different musical identities can increasingly be constructed and made culturally meaningful through individual choices of influential sources. Peers seem to play a significant role in adolescence, inevitably connecting the construction of musical preferences and behaviors to sociocultural issues of gender, race, culture and personal economy (Parke and Ladd 2016; Yang, Wang, and Mourali 2015).

The whole music environment and background for music as a compulsory curriculum subject in the Nordic and other Western countries, therefore, seems to be fundamentally changed, and for many reasons. The overwhelmingly active commercial music industry dominates the musical scene (King and Himonides 2016), and thanks to modern technology, one can listen to music nearly everywhere and in almost any situation (e.g. on the bus, running, doing homework or in a setting reserved for members of a special subculture). Music creation increasingly occurs in authentic analogue situations outside schooling (Green 2002; 2008). Often, music creation starts from scratch, but it can also involve sharing and re-constructing in cooperation with a classmate or virtually with someone from across the world (Zucker 2016). Performing can also be shared via digital events, with geographically distant people playing together in real time. The use and reuse of previous artistic material is significant (Bourriaud 2005) in today's musical life (Ruthmann et al. 2010; Ruthmann and Hebert 2012; Koops 2012). 'New' music is influenced by different cultures—old and new, local or more distant in space—and thus the traditional conceptions of quality might seem to be breaking down, enabling the emergence of hybrid genres, art forms, tastes and intentions. Ultimately, these changes create a vastly different cultural environment for music as a curriculum subject compared to the environment when the modern curriculum subject was developed in the 20th century (Goodson 2013).

Directions in a relation-based renewal of school music

Recent developments in school policies in Norway (and elsewhere) and in the relevant aesthetic and educational theories and practice may appear to be quite radical. Yet, politically, the official Norwegian reports we referred to in the beginning of this article, argue for a renewal in contents as well as pedagogical approach. Our focus on the relational turn leads us to question the very foundation upon which music as a curriculum subject was created and developed in the 20th century. This, however, does not mean that we think instrumentalism, work-based aesthetics or the transmission of prior knowledge and culture is irrelevant for school music.

It is, in our view, not a question of replacing an existing rationale for school music, but of modifying and supplementing such a rationale. Neither do we think the solution lies in the substitution of formal music programs, which are often associated with the 'old' rationale, with more 'informal' programs, which are often focused on children's interests and priorities. A study of Swedish compulsory music education (Georgii-Hemming and Westwall 2010) reports that school music often is based on informal learning, the pupil's individual wishes and practical music-making in bands and large singing groups. The researchers argue that such a program is not necessarily meaningful for pupils. Georgii-Hemming and Westwall (2010) describe the Swedish situation of school music as follows: 'Instead of deliberately structured and formalized learning, large parts of music education are currently characterized by informal pedagogical strategies' (30). The researchers conclude that the teacher should be reinstated as the one responsible for decisions regarding music activities and content because 'if responsibility for music education content and activities is left completely to students, teachers risk to fail students, the music and the meaning that music can have for people' (Georgii-Hemming and Westwall 2010, 31). We agree with Biesta (2013) that a shift in focus from transmission to transformation in pedagogy and a

stronger focus on relations in no way diminishes the need for the professional and well educated teacher. Although Biesta's claim addresses teaching in general, this stance seems utterly relevant to teaching music. To us, it follows that a focus on the relational turn and renewal of the subject of music in schools also can renew our understanding of what it takes to be a relational and professional music teacher.

The Norwegian governmental reports (NOU 2014, NOU 2015) we have referred to in this text, suggest that curricular renewal in Norwegian schools should seek to simplify and reduce an overloaded curriculum by identifying and renewing the key elements of curricular subjects. Applying such an approach to Nordic and Western school music invites a discussion of the three key elements traditionally comprising school music programs in Western countries: 1) music making (or performing), 2) music listening and 3) composing (McCarthy, 2004). How could these areas, or key elements exist as major curricular areas of school music in the context of renewal and in light of the principles and propositions of the relational turn?

First, we shall argue with Jorgensen (2003) that the renewal of music as a curriculum subject and its teaching should be characterised by transformation rather than transplantation. We also believe that the future path of school music should be related to the past as well as the future and should be grounded within relevant theoretical fields.

Performing, music making or singing and playing might appear to be the backbone of school music. In some contexts, this aspect of school music dominates the scene in schools, sometimes resulting in the exclusion of reflection and a critical approach (Georgii-Hemming and Westwall 2010; Hess 2014). Performing and music making is intimately connected to bodily, sensory, feeling-based musical expression and action, and in schools, music is most often performed in groups; how can such a discipline be more relational than it already is? As we see it, a relational focus on a renewed performance-based discipline must involve specifying the focus of the 'per-

forming'. Elliott (1995) describes music making as a *praxis* incorporating far more than the physical actions necessary to produce sound: 'Praxis is guided by an informed and ethical disposition to act rightly – musically, socially, communally and so forth – with continuous concern for protecting and advancing human creativity' (44). From a philosophical perspective, a relational approach to music making can address this activity as a central, body-based part of a larger whole or as a core element of the all-encompassing verb to *musick* (Small 1998). This verb 'covers all participation in a musical performance, whether it takes place actively or passively' (Small 1998, 9). *Musicking* is recognised as a deeply relational enterprise, and Small (1998) claims that playing and rehearsing music can never occur free of relations:

If [...] musicking is an activity by means of which we bring into existence a set of relationships that model the relationships of our world, not as they are, but as we would wish them to be, and if through musicking we learn about and explore those relationships, we affirm them to ourselves and anyone else who may be paying attention, and we celebrate them, then musicking is in fact a way of knowing our world... (50)

Performing music, as a vital element of *musicking*, should be discussed in a broader context than mere instrumentality in classrooms as well as in other contexts. Given the strength of music making as an act of social and emotional agency⁵ around the world, a relational focus on performing might involve what could be labelled as *humanizing musicking*, the ultimate goal of which is to enhance humanity (Small 1998; Craft 2010). Such a focus could be criticised for harbouring instrumentalism, but it would respond to the call for greater emphasis on the social and emotional aspects of

5 According to Priestly et al. (2015), 'agency can be described as the ability or potential to act' (22). Further, according to Biesta and Tedder (2007), '[t]he achievement of agency will always result from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations' (137).

learning, and it would thus have a higher potential to contribute to personal *Bildung*, especially if contents and activities were culturally sensitive and critical.

Music listening has often been criticised for its heavy reliance on the canon of Western classical music and for neglecting relevance when selecting musical examples (Drummond 2010; Hess 2014). In Norway, listening is still part of the music curriculum, especially in primary schools, but it is increasingly being replaced by listening as background, ear training or edutainment (Espeland et al. 2013). In many secondary schools, listening only takes place when the pupils make their own music. It is therefore possible for this part of school music to be beyond the possibility of transformative renewal. Even if a modern international discipline of music listening has been thoroughly researched, developed and recommended as responsive and interactive music listening in school music programmes, such listening practices have not been sufficiently established in many schools (Espeland 2004; Kährik, Leijen, and Kivestu 2012; Herbert 2011; Kerchner 2000). Relation to the musical work has been and continues to be an overarching principle in educational music listening practices. What might be lacking, however, is a stronger focus on personal listening (DeNora 2000) and much greater awareness of the cultural and critical aspects of listening. A renewed listening discipline should therefore, in addition to recommending responsiveness as a guiding principle, include a stronger focus on personal as well as aesthetic, artistic and critical listening so pupils can relate to, interact with and discuss music in and across cultures. A culturally sensitive listening approach should allow pupils to experience and access musical values, ideas, critiques and expression in and across cultures to a much greater degree than when music listening as a discipline was first developed (Espeland 2011).

The third (and youngest) discipline in school music is music composition. In Norway, composition was first introduced as an area of study and classroom practice in the national curriculum of 1997. Its international foundation was Anglo-American

(Paynter 1970; Davies 1963), and programmes involving musical improvisation. The reception of such a practice in Norwegian schools, as in many other countries, has been slow and mixed (Webster 2012; McPherson 2015; Johansen 2003; Espeland 1995, 2006). However, composition can easily be connected to the political rhetoric regarding the importance of creativity in compulsory schooling (Craft 2010). As we see it, creative school music practices should not be confined to the discipline of composing alone; musical practices lend themselves to creative practices in performing and listening as well, because creativity is so closely connected to imagination, which is key for invention and new solutions (Hargreaves 2003). The relational turn is crucial for creativity, including composition, because recent theories have underlined the importance of creativity as a collective and interactive endeavour (Sawyer 2003, 2011; Gershon and Ben-Horin 2013). A relation-based renewal of composition should include more of the collective aspects of creativity, with improvisational and compositional activities and actions not only including generation of musical ideas but also sharing, collaboration, communication and critique.

Concluding remarks

We have argued that the ‘relational turn’, in different forms, could serve as a major and unifying concept for the renewal of school music, particularly given its capacity to overcome many current and future challenges facing music in schools. Some of these challenges are of a general nature, such as increasing bureaucratisation, alienation, pressure for accountability, a lack of creativity and inclusiveness, increasing globalisation and, particularly in Norway, a rapid shift from a monocultural to a multicultural society. The Norwegian reports that motivated the writing of this article have brought the question of renewal into focus for all curriculum subjects in Norway, including school music, and pointed to social and emotional competence as a key factor in such a renewal process and its implementation.

In conclusion, we argue that school music cannot, and should not, aim to overcome these challenges as a curriculum subject isolated from increasingly important community music initiatives directed towards children (Veblen, Elliott, Messenger and Silverman 2013; MacDonald, Kreutz and Mitchell 2013). The rationale for music as a compulsory subject in future public schooling could be improved by activating a web of music relations (Plomp and Nieveen 2010) rather than reducing music education for children to a didactic triangle between the teacher, pupil and music. Such a web must take into account relations to musical artefacts, events, genres, politics, theories and people and cultures in and out of school. One significant aspect of a relational approach to the subject of music is also that it allows us to relate to the past and thus to the way in which music education has been successfully implemented and is still conducted in many places. Furthermore, we shall argue that the didactics of school music, which are to some degree still separated into music making, listening and composing, with necessary renewals, still could serve as strands, or key elements, in Norwegian school music and beyond. This curricular distinction should be regarded as inherently related; who can make music without listening or create without making music?

We close this article by agreeing with Kaipayil (2009) that the very identity of any entity in the world—in our case, music as a school subject—is defined by its relations (e.g. among its curriculum constituents, teachers, pupils, artefacts, visiting artists, classrooms and venues). According to Kaipayil (2009), these can be described as the entity's intra-relations—relations among its constitutive elements—and inter-relations—relations with other entities. Adopting such a relationalist stance, however, should not lead to a misconception of relations as only good or high-quality. In the case of school music, a stronger focus on the relational turn in an improved rationale for school music must be subjected to constant criticism. Its ability to welcome controversial as well as progressive, educative and enriching topics should serve as the primary criterion for quality.

References

- Barrett, Margaret. 2011. *A Cultural Psychology of Music Education*. Oxford: Oxford University Press.
- Biesta, Gert. 2004. "Mind the Gap!" In *No Education without Relation*, edited by Charles Bingham and Alexander M. Sidorkin, 11-22. New York: Peter Lang.
- . 2013. *The Beautiful Risk of Education*. Boulder: Paradigm Publications.
- Biesta, Gert and Mikael Tedder. 2007. "Agency and Learning in the Lifecourse: Towards an Ecological Perspective." *Studies in the Education of Adults*, 39(2): 132-149.
- Bingham, Charles and Alexander M. Sidorkin, eds. 2004. *No Education without Relation*. New York: Peter Lang.
- Bourdieu, Pierre. 1996. *The rules of art: Genesis and structure of the literary field*. Redwood City, California: Stanford University Press.
- Bourdieu, Pierre and Jean-Claude Passeron. 1990. *Reproduction in Education, Society and Culture*. London: Sage.
- Bourriaud, Nicolas. 2002. *Relational Aesthetics*. Dijon: Presses du réel.
- . 2005. *Postproduction: Culture as Screenplay: How Art Reprograms the World*. New York: Lukas and Sternberg.

- Bowman, Wayne. 2002. "Educating Musically." In *The New Handbook of Research on Music Teaching and Learning*, edited by Richard Colwell and Carol Richardson, 63-84. New York: Oxford University Press.
- Bronfenbrenner, Urie. 1979. *The Ecology of Human Development: Experiments by Design and Nature*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, Urie and Stephen J. Ceci. 1994. "Nature-Nurture Reconceptualized in Developmental Perspective: A Bioecological Model." *Psychological Review* 101 (4): 568-586.
- Brownlee, Joanne and Donna Berthelsen. 2006. "Personal Epistemology and Relational Pedagogy in Early Childhood Teacher Education Programs." *Early Years* 26 (1): 17-29.
- Burnard, Pamela, Steve Dillon, Gabriel Rusinek, and Eva Saether. 2008. "Inclusive Pedagogies in Music Education: A Comparative Study of Music Teachers' Perspectives from Four Countries." *International Journal of Music Education* 26 (2): 109-126.
- Burnard, Pamela, 2012. *Musical Creativities in Practice*. Oxford: Oxford University Press.

- Cox, Gordon and Robin Stevens. 2016. *The Origins and Foundations of Music Education: Cross-Cultural Historical Studies of Music in Compulsory Schooling*. London: Continuum.
- Craft, Anna. 2010. *Creativity and Education Futures: Learning in a Digital Age*. Stoke-on-Trent, UK: Trentham Books.
- Davies, Peter Maxwell. 1963. "Music Composition by Children." In *Music in Education*, edited by W. Grant, 108-134. London: Butterworth.
- De Duve, Thierry. 1996. *Kant after Duchamp*. Cambridge, MA: Mit Press, 1996.
- DeNora, Tia. 2000. *Music in Everyday Life*. Cambridge: Cambridge University Press.
- Dewey, John. 1934. *Art as Experience*. New York: Penguin.
- . 2004. *Democracy and Education*. New York: Courier Corporation.
- . 2007. *Experience and Education*. New York: Simon and Schuster.
- Drummond, John. 2005. "Cultural Diversity in Music Education: Why Bother?" In *Cultural Diversity in Music Education*, edited by Patricia Shehan Campbell, 1-13. Brisbane: Australian Academic Press.
- . 2010. "Re-Thinking Western Art Music: A Perspective Shift for Music Educators." *International Journal of Music Education* 28 (2): 117-126.

Duchamp, Marcel. Fountain, 1917. Tate Gallery, London.

<http://www.tate.org.uk/art/artworks/duchamp-fountain-to7573>

Edwards, Anne. 2010. *Being an Expert Professional Practitioner: The Relational Turn in Expertise*, vol. 3. New York: Springer Science and Business Media.

Elliott, David James. 1995. *"Music matters, a new philosophy of music education."* Oxford: Oxford Publishing.

Espeland, Magne. 2004. *Lyttemetodikk: Ressursbok*. (A Methodology for Listening: Resource Book). Bergen: Fagbokforlaget.

—. 2010. "Dichotomies in music education—real or unreal?" *Music Education Research* 12 (2): 129-139.

—. 2011. "A Century of Music Listening in Schools." In *A Cultural Psychology of Music Education*, edited by M. S. Barrett, 143-178. Oxford: Oxford University Press.

Espeland, Magne, Thomas Arnesen, Ingrid Arnesen Grønsdal, Asle Holthe, Kjetil Sømoe, Hege Wergedahl, and Helga Aadland. 2013. *Skolefagsundersøkelsen 2011: Praktiske og Estetiske Fag på barnesteget i Norsk Grunnskule*. (The School Subject Investigation 2011: Practical and Aesthetic Subjects in Primary and Lower Secondary Stages of Norwegian Compulsory School). Stord: Høgskolen Stord/Haugesund.

- Fischer-Lichte, Erika. 2008. *The Transformative Power of Performance: A New Aesthetics*. London: Routledge.
- Georgii-Hemming, Eva and Maria Westvall. 2010. "Music Education—A Personal Matter? Examining the Current Discourses of Music Education in Sweden." *British Journal of Music Education* 27 (1): 21-33.
- Gergen, Kenneth J. 1999. *An Invitation to Social Construction*. Thousand Oaks: Sage.
- . 2009. *Relational Being*. Oxford: Oxford University Press.
- Gershon, Walter S., and Ben-Horin Oded. 2014. "Deepening Inquiry: What Processes of Making Music Can Teach Us about Creativity and Ontology for Inquiry Based Science Education." *International Journal of Education & the Arts* 15, no. 19. Retrieved 29.10.2017 from <http://www.ijea.org/v15n19/>.
- Goehr, Lydia. 2007. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*. New York: Oxford University Press.
- Goodson, Ivor F. 2013. *School Subjects and Curriculum Change*. London: Routledge.
- Green, Lucy. 2002. *How Popular Musicians Learn: A Way Ahead for Music Education*. Farnham: Ashgate Publishing

- . 2008. *Learning and the School: A New Classroom Pedagogy*. Farnham: Ashgate Publishing.
- Guyer, Paul. 1996. *Kant and the Experience of Freedom: Essays on Aesthetics and Morality*. Cambridge: Cambridge University Press.
- Hanslick, Eduard. 1854. *Vom Musikalisch-Schönen. Ein Beitrag zur Revision der Aesthetik der Tonkunst*. Leipzig: Weigel.
- Hargreaves, Andy. 2003. *Teaching in the Knowledge Society: Education in the Age of Insecurity*. New York: Teachers College Press.
- Herbert, Ruth. 2011. *Everyday Music Listening: Absorption, Dissociation and Trancing*. Farnham: Ashgate Publishing.
- Hess, Juliet. 2014. "Radical Musicking: Towards a Pedagogy of Social Change." *Music Education Research* 16 (3): 229-250.
- Johansen, Geir. 2003. *Musikkfag, lærer og læreplan: En intervjuundersøkelse av læreres fagopfatning i musikk og en ny læreplans påvirkning på denne*. (Music, Teacher and Curriculum. An Investigation of Teachers' Conceptions of Music as a Subject and the Influence of a New Curriculum) Oslo: Norges Musikkhøgskole (The Norwegian Academy of Music).
- Jorgensen, Estelle. 2003. *Transforming Music Education*. Bloomington: Indiana University Press.

Kährik, Pille, Äli Leijen, and Tuulike Kivestu. 2012. "Developing Music Listening Skills using Active Learning Methods in Secondary Education." *Procedia - Social and Behavioral Sciences* 45: 206-215.

Kaipayil, Joseph. 2009. *Relationalism: A Theory of Being*. Bangalore: JIP Publications.

Kerchner, Jody L. 2000. "Children's Verbal, Visual, and Kinesthetic Responses: Insight into their Music Listening Experience." *Bulletin of the Council for Research in Music Education* 146: 31-50.

Kester, Grant H. 2004. *Conversation Pieces: Community and Communication in Modern Art*. Berkeley: University of California Press.

King, Andrew and Evangelos Himonides. 2016. *Music, Technology, and Education: Critical Perspectives*. London: Routledge.

Koops, Lisa Huisman. 2012. "'Now Can I Watch My Video?': Exploring Musical Play Through Video Sharing and Social Networking in an Early Childhood Music Class." *Research Studies in Music Education* 34 (1): 15-28.

Kuhn, Thomas S. 2012. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

Kwon, Michelle. 2004. *One Place After Another: Site-Specific Art and Locational Identity*. Cambridge: MIT Press.

- Lines, David, ed. 2006. *Music Education for the New Millennium: Theory and Practice Futures for Music Teaching and Learning*. Hoboken, New Jersey: Blackwell Publishing.
- NOU. 2015. *Fremtidens skole. Fornying av fag og kompetanser*. (The School of the Future — Renewal of subjects and competences). (8) Oslo: Ministry of Education and Research.
- NOU. 2014. *Elevenes læring i fremtidens skole*. (Pupils' Learning in Future Schools). (7). Oslo: Ministry of Education and Research.
- MacDonald, Raymond, Gunter Kreutz, and Laura Mitchell, eds. 2013. *Music, health, and wellbeing*. Oxford; Oxford University Press.
- Mark, Michael and Charles L. Gary. 2007. *A History of American Music Education*. Lanham: Rowman and Littlefield Education.
- Mayo, Chris. 2004. "Relations are Difficult." In *No Education without Relation*, edited by Charles Bingham and Alexander M. Sidorkin, 121-136. New York: Peter Lang.
- McCarthy, Marie. 2004. *Toward a Global Community: The International Society for Music Education*. Perth: International Society for Music Education.
- McPherson, Gary E. 2015. *The Child as Musician: A Handbook of Musical Development*. Oxford: Oxford University Press.

Mitchell, Stephen A. 2014. *Relationality: From Attachment to Intersubjectivity*.

London: Routledge.

OECD. 2015. *Skills for Social Progress: The Power of Social and Emotional Skills*.

Paris: OECD Publishing.

OECD. 2017. "Programme for International Student Assessment (PISA)."

<https://www.oecd.org/pisa/>.

Parke, Ross D. and Gary W. Ladd. 2016. *Family-Peer Relationships: Modes of Linkage*. London: Routledge.

Paynter, John. 1970. *Sound and Silence: Classroom Projects in Creative Music*.

Cambridge: Cambridge University Press.

Pereyra, Miguel, Hans-Georg Kotthoff, and Robert Cowen. 2011. *PISA Under Examination*. Rotterdam: Sense Publishers.

Pijanowsky, Cherlyn. 2004. "Education for Democracy Demands 'Good-Enough' Teachers." In *No Education without Relation*, edited by Charles Bingham and Alexander M. Sidorkin, 103-120. New York: Peter Lang.

Philpott, Chris and Gary Spruce, eds. 2012. *Debates in Music Teaching*. London: Routledge.

- Plomp, Tjerd and Nieke Nieveen. 2010. *An Introduction to Educational Design Research*. Enschede: SLO - Netherlands Institute for Curriculum Development.
- Prensky, Marc. 2001. "Digital Natives, Digital Immigrants Part 1." *On the Horizon* 9 (5): 1-6.
- Priestley, Mark, Gert Biesta, and Sarah Robinson. 2015. *Teacher Agency: An Ecological Approach*. New York: Bloomsbury Publishing.
- Rancière, Jacques. 2009. *The Emancipated Spectator*. New York: Verso.
- Rorty, Richard. 1979. *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press.
- Ruthmann, S. Alex and David G. Hebert. 2012. "Music Learning and New Media in Virtual and Online Environments." In *The Oxford Handbook of Music Education, Volume 2* (2 ed.) edited by Gary E. McPherson and Graham F. Welch. Oxford: Oxford University Press.
- Ruthmann, S. Alex, Jesse M. Heines, Gena R. Greher, Paul Laidler, and Charles Saulters II. 2010. "Teaching Computational Thinking Through Musical Live Coding in Scratch." In *Proceedings of the 41st ACM Technical Symposium on Computer Science Education*: 351-355. New York: ACM.

- Savage, Jonathan. 2005. "Working Towards a Theory for Music Technologies in the Classroom: How Pupils Engage with and Organise Sounds with New Technologies." *British Journal of Music Education* 22 (02): 167-180.
- Sawyer, Keith. 2003. *Group Creativity: Music, Theater, Collaboration*. Mahwah: L. Erlbaum Associates.
- . 2011. *Explaining Creativity: The Science of Human Innovation*. Oxford: Oxford University Press.
- Shotter, John Edward and Kenneth Gergen. 1989. *Texts of Identity*. Thousand Oaks: Sage.
- Shusterman, Richard. 2000. *Pragmatist Aesthetics: Living Beauty, Rethinking Art*. Lanham, Maryland: Rowman and Littlefield Publishers.
- Small, Christopher. 1998. *Musicking: The Meanings of Performing and Listening*. Hanover: University Press of New England.
- Stromquist, Nelly P. and Karen Monkman, eds. 2014. *Globalization and Education: Integration and Contestation Across Cultures*. Lanham, Maryland: Rowman and Littlefield Education.
- Sætre, Jon Helge. 2014. *Preparing Generalist Student Teachers to Teach Music. A Mixed-Methods Study of Teacher Educators and Educational Content in Generalist Teacher Education Music Courses*. Oslo: Norges Musikkhøgskole (The Norwegian Academy of Music).

- Veblen, Kari K., David J. Elliott, Stephen J. Messenger, and Marissa Silverman, eds. 2013. *Community music today*. Lanham, Maryland: Rowman & Littlefield.
- Webster, Peter. 2012. "Towards Pedagogies of Revision: Guiding a Student's Music Composition." In *Musical Creativity: Insights from Music Education Research*, edited by Oscar Odena, 93-112. London: Routledge.
- Willbergh, Ilmi. 2016. "Bringing Teaching Back In: The Norwegian NOU The School of the Future in Light of the Allgemeine Didaktik Theory of Wolfgang Klafki." *Nordic Journal of Pedagogy and Critique* 2: 111-124.
<http://dx.doi.org/10.17585/ntpk.v2.268>
- Winner, Ellen, Thalia R. Goldstein, and Stéphan Vincent-Lancrin. 2013. *Art for Art's Sake? The Impact of Arts Education*. Paris: OECD Publishing.
- Woodford, Paul. 2012. "Music Education and Social Justice." In *Debates in Music Teaching*, edited by C. Philpott and G. Spruce, 85-101. London: Routledge.
- Yang, Zhiyong, Jingguo Wang, and Mehdi Mourali. 2015. "Effect of Peer Influence on Unauthorized Music Downloading and Sharing: The Moderating Role of Self-Constructual." *Journal of Business Research* 68 (3): 516-525.
- Zucker, Rachel. 2016. "The Effects of Social Media on Music Sharing." San Rafael, California: Dominican University of California.

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