




Early Childhood in the Era of Post-humanism: Lending an Ear to Nature

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ABSTRACT

Parents, or pre-school educators in early childhood education, focus on assisting children to attain the highest possible pre-numeracy and pre-literacy skills in an attempt to give children a better academic foundation. Children are presented with technology, for example, in the form of a tablet, that act as baby-sitters even before they can speak properly, and this has largely deafened them to the sounds of nature. Sounds of man and machine are the only ones most children will be exposed to, due to their living in cities with few natural spaces. Children are not taken into nature to experience it and get to know the sounds of the bio-network, of which they are an integral part. Rural children may have a better chance to get to know, respect and cherish nature, due to their context, but their guides - parents and/or communities - have sunken into their own disregard for their environment. It is only when children are taught to listen to and appreciate nature that they will be enabled to begin moving back to being 'mensch' where the focus, ironically, moves away from the human and focuses instead on creating an equilibrium between humanity and nature, rather than stripping the planet of its natural resources through harmful practices. This empirical research explored the literature to highlight the significance of listening as a mode of developing an appreciation of and caring for nature. Attuning children of the post-humanist era to their natural environment through listening will encourage them to understand their function as part of nature, and assist in the restoration of the planet.

KEYWORDS

Anthropocene; early childhood; indigenous knowledge; nature; nonhuman; posthumanism; pre-school.

*Cherish the world
A present from God
On behalf of all creatures
Made by the Lord
Care for the Earth
Foundation of life
Slow progress down,
Help her survive*

(Farrian, 1981)

INTRODUCTION AND BACKGROUND

The lyrics from the song “We kill the world” (1981) was an eighties hit song that had the world singing along. However, the important message of these lyrics, passed South Africa, and most of the world by. These lyrics are now more relevant than ever before, since it is the post-human who has to “slow progress down” (Farrian, 1981) to save our world from the devastating effects of the time of the Anthropocene, where the whirlwind of progress caused devastating damage. The lyricist’s calls upon humankind to “cherish” and “care” for the God-given gift of earth and all creatures, has mostly fallen on deaf ears. The effects of the Anthropocene must not be taken lightly and should shock humanity into listening mode.

The National Geographic’s (2020) summary that explains the concept of “Anthropocene”, which has become a buzz word in academic writing, and which refers to a specific time in the history of the earth, is useful to clarify the concept. Earth’s history is divided into smaller segments, deriving their names from fossils that were found between the different rock layers of the earth. Accordingly, modern-day humans are officially found to be living in the time of the Holocene which started after the last ice age. The word “Anthropocene” is not yet an official name on the geological time scale because it has not yet been adopted by the International Union of Geological Sciences (IUGS), who are responsible for naming these time segments (National Geographic, 2020). However, there is a strong movement urging for the official acceptance of this time segment, where the actions and activities of humans have started to negatively impact upon the earth.

The word “Anthropocene” was coined by biologist, Stoermer and chemist, Crutzen (2000) and derived from two Greek words meaning, ‘man’ (anthropo) and ‘new’ (cene). The ‘new’ or modern man, caused the onset of devastation and disrespect for both human and the non-human through irresponsible use and disregard for Earth’s natural resources. There are several different theories about the actual start of this time segment. The earliest time given to the start of the Anthropocene is stated as a thousand years ago with the start and ‘spread of agriculture’ (Anthropocene working group, 2014, p. 1). Another theory states that it started after the Industrial Revolution of the 1800s, where carbon and methane were released into the

atmosphere. Yet another theory says that the time of the Anthropocene started in 1950 when the first atomic bomb was tested, and radio-active smidgens scattered over the planet. The Anthropocene Working Group (2014) supports the date of 1950, which is regarded as the time when accelerated human activity started affecting the planet adversely.

When studying the literature, the consequences of disrespectful use of our planet includes: “changes in the water cycle, imbalances and destructions in the marine and terrestrial ecosystems, the increase of extreme meteorological phenomena, the acidification of the oceans or the disappearance of the forests (Acciona.org, n.d., p. 1).” The Spanish foundation, Acciona.org (n.d., p.1), that works towards sustainable developmental goals, provides two main causes for the destruction of the planet, namely: “the model of energy production (*coal, oil, gas*)”; and “the resource consumption model (*growing population that exceeds the ability of earth.*)” The foundation warns that much of the devastation is irreversible, but some of it can still be reversed by the responsible use of natural energy such as sun, water and wind, that is renewable and sustainable. Prideaux et al. (2020, p. 675) also mention the impact of consumption on climate change along with the use of unsustainable energy resources and suggest a “flattening of the curve” approach, such as was used to manage the Covid-19 pandemic, in order to manage climate change sustainably, rather than implementing a drastic ‘turnaround’ strategy.

The author acknowledges all the above-mentioned consequences caused by a disturbed equilibrium between human and nature, but wishes to suggest that these afore-mentioned causes and consequences are far removed from the understanding of young children. Children must be well sensitized to nature before they will be able to comprehend the full impact that man has on nature. It is through growing up in a community, and/or home, where children are exposed to nature in a beneficial way and taught its wonders, that they will develop an affinity for all the creatures surrounding them. In the era of the post-human, knowledge of and about the non-human, including the way in which an individual is intertwined with his surroundings, is essential to ensure a sustainable future.

With the renewed awareness of the harm the ‘new man’ has done to the world, the human of the Anthropocene has become enlightened, and is now the more knowledgeable human of the post-humanist era. The definition provided for post-humanism by Herbrechter (2017, p. 1) is aligned to the author’s way of thinking, saying that, “post-humanism basically means we’re no longer happy with humanist ways of defining what it means to be human.” The human is still there, albeit with a more informed way of thinking, moving back to the simple and the natural ways of living without excess and with respect for all - human and non-human. Aikenhead and Michell (2011, p. 78) urge us back to the values of indigenous knowledge where humans and non-humans alike are regarded as equal, and reminds us that humans are not the centre of the universe, since a community also consists, “of many non-human persons – the four-legged, winged ones, plants, and even landforms”. This notion is further augmented by Zidny (2020, p.147) who adds that, “learning about indigenous knowledge may help students

recognizing this intimate connection between humans and nature in the fore-ground of culture from their regional environment or beyond.” To change would thus mean acknowledging the equal importance of nature, animals and even the mountain down the road. More importantly, it means restoring the values of the traditional community to care and respect for one another as well as for the non-human.

Purpose

The purpose of this paper is therefore to explore the ways in which children can be drawn closer to nature so that they can understand the human’s interwovenness with the non-human. The question to be answered is thus: what can be done to sensitize our children to the fact that humans and nature share the same level of importance? The rest of the paper focusses on how change should take place in humans, how the earth has been ‘silenced’, and philosophies of change. This is followed by practical advice on teaching young children to listen, both figuratively and literally.

THE CATALYST

To change the thinking of a child, the change must start in the traditional community or home, since a child’s behaviour is shaped and retained through mirroring of the more knowledgeable parent or community. The significance of the community in children’s development and learning is emphasised by Nsamenang (2013, p. 15), who states that all domains of knowledge are obtained from the home, society and peer culture through active participation, and include: “social, emotional, practical, cognitive, relational, and other situated intelligences.” This theory can contain a disadvantage if the community values regarding nature are distorted or harmful, since the transfer of harmful knowledge would increase the negative impact being currently experienced. Nsamenang (2013) also adds the notion that children learn better through their peers than through adults. This is certainly true, but the initial learning must come from examples of adults, after which children will eventually be empowered to exchange inter-generational knowledge. The challenge in the era of the post-human is that many communities have taken on harmful living practices and values, and the learning that should occur in the traditional community, as explicated by Nsamenang (2013), has become a legend from the indigenous past. A fictitious sense of human superiority and disrespect has seen the inconsiderate use of natural resources and an over-use of consumer goods, which have littered and stripped the planet. Community examples of respectful living and behaviour towards both human and non-human have been besieged by individuals who litter, destroy, and abuse the natural resources, without a full understanding of the consequences. Hsueh et al., (2016) mentions that people’s urge to gain higher social and economic levels has caused both a neglect of social responsibilities as well as a concern for nature, which in turn has caused damage to the environment and increased pollution. Our children see this example from their desensitized role models in the community, and then mirror the poor example they are exposed to, since they experience this negative type of behaviour as normal. The catalysts for change must come from our communities where our children grow up, so that future generations will be able to go

back to sharing exemplary inter-generational knowledge that is not detrimental to our world. Time is at a premium if changes are to be made to children's actions and thinking, since Cooper (2009) states that children develop their limit of understanding flora by the age of nine. It can thus be deduced that the beginning years of a child's life are the best time to gain knowledge about nature and enhance children's understanding of their natural environment, before the window of opportunity passes (Herbrechter, 2018, p.2). The implication of this notion is that children's understanding of nature must be developed even before they start formal schooling, to ensure optimum learning and understanding.

A SILENT EARTH

Due to the destruction of the Anthropocene, the planet's natural sounds have started declining into a deadly diminuendo, and, if natural sound is disappearing, it can be inferred that ecological health is flagging. Vidal (2012, p. 1) mentions the prediction of Bernie Krause, musician and naturalist, that, "[t]he fragile weave of natural sound is being torn apart by our seemingly boundless need to conquer the environment rather than to find a way to abide in consonance with it." To illustrate his statement, Krause has been recording natural sounds for 40 years, and has observed how nature has started going silent. Krause's work includes a recording of two Australian reefs – one which is still in a good natural state, and one that has been damaged. The reef that was still in a good condition had vibrant underwater sounds that were made by the creatures living on it, while the damaged reef had what he called the "desolate sound of extinction" (Vidal, 2012, n.p.). We need to listen before nature goes totally silent since, "[l]istening is one of the most powerful tools for engaging with and understanding our environment" (Paine, 2017, p. 177). The author therefore advocates that children be taught about nature through immersing them in natural spaces and teaching them to listen to what nature is communicating to them.

PHILOSOPHIES OF CHANGE

The need for change is evident, and the question now arises how change should occur. As stated by Ruuska et al (2020), to move away from the destruction of the Anthropocene, another way of organizing life and another type of politics is needed. Politics have always determined who will be in power and how non-human elements will be regarded. Due to this mis-placed human supremacy, human-kind has been left with a world that may not be able to sustain life for much longer, since we are well on our way to destroying that which should be an integrated part of our being – the non-human world. Further destruction, however, can be halted through education and involvement in nature.

One of the ways that can bring about change, is through sensitising children to nature by using their sense of listening. It is possible to assist them to regain their listening skills. One philosophy of bringing about change comes from Jeong, Sherman and Tippins (2021), who propose a repositioning of humans and their interaction with the world – in other words, an instant turn-around strategy. Another notion of how to bring about change is through making gradual shifts. Bateman et al. (2020), propose that humans see their interwovenness with other

humans, animals and plants, but that they remain at the centre of control, with the human responsibility to find solutions to diminish their impact on their environment. The author concurs with Bateman's (2020) idea of a gradual, yet focused shift to undo the destruction of our Anthropocene past. Although time is of the essence, using a gradual shift as a mode of change can be more realistic, and should be done in a contextually appropriate way. In the current context, technology has been blamed by many for the current damage. However, this technology is firmly entrenched as part and parcel of the world. Therefore, denouncing it, and retreating into our metaphorical caves are not the way to return to proper traditional values and safe, indigenous knowledge. Instead, technology should be utilized to restore our natural environment, and become part of future living. The author concurs with Herbrechter (2018, p. 3) who avers that a post-human world should include, "those others that are normally excluded", and mentions that machines (technology) amongst others, should be part of developing a, "more ecological relationship with our planet." Moving forward in a technological world in a way that will sustain life is possible through firstly, moving back to the past to reclaim what was positive, in order to understand and re-integrate humans back into nature, before it goes 'silent.'

LISTEN WHEN NATURE SPEAKS

Sound sources

Our acoustic ecology (Paine, 2017, p. 172) can be divided into three main sounding sources: Biophony which is, "the music created by organisms like frogs and birds"; Geophony, which is, "the composition of non-biological sounds like wind, rain and thunder"; and Anthropony which is "the conglomeration of noise from humans" (NSF, 2012). These sound sources are affected by the environment in which the sound is heard (Luc Ferrari in Caux, 2013). For example, a bird will sound different in a tree from if it is sitting outside on a rock, since the acoustics of the environment, which are influenced by landforms and geophony, will be different. When listening, one hears both acoustics and sound simultaneously, and this relationship between sound and acoustics is referred to by Paine as "somaphony" (2017, p. 175). It is through recordings of environmental spaces over time that have been submitted to a database, that environmental change can be detected. Paine (2017) asserts that these recordings might help researchers track changes faster than currently used scientific methods.

Intertwined with the ecology

A baby's first audible communication when entering the world is through a primeval cry, announcing his or her presence (Viragova & O'Curry, 2021). Within days, parents master the child's intuitive language and understand each cry through detecting the changes in sound. This nascent sound language shares several musical elements of the sounds heard in natural spaces, such as dynamics (loud or soft), tempo (speed/urgency), timbre (the tone quality), pitch (high or low), and rhythm (grouping of long and short notes). These are the first steps to intelligent communication. For this reason, it should be a natural process for children to interpret or even just recognise, the sounds they also once used when they were babies, when listening to the

non-human. It is important that this form of non-verbal communication is understood in order for children to learn about, and appreciate, nature. Children can be raised with an awareness that they are an integrated part of the natural world.

When they are attuned to the sounds of their natural surroundings and understand the inter-dependent, inter-twined relationship with nature, children will spontaneously develop an affinity and care for the non-human. Biophony, anthrophony, and geophony are often heard simultaneously and form a network, described by Paine (2017, p. 171) as, “a mesh of relationships that form an ecology.” The mesh of relationships could consist, for example, of wind sounds, insects, and even a machine interspersed with human speech, integrated into a symphony of sounds. Furthermore, sounds communicate the state of nature, since such sounds are affected by phenomena as moisture in the air, density of plants, and the wind. Hägerstrand (1976, p. 332) already aired Paine’s (2017) ideas about the nature of ecology being, “a dynamic system of interaction, co-dependence, and interdependence where life itself is made and presenced,” as early as 1974. Whatever the context individuals happen to exist in, they will be accustomed to the sound of their particular area, and therefore, readily detect changes in this sound should a difference occur.

Listening

Although the author focusses on aural listening skills as an individual sense in this article, Abbott (2021), augments “listening” to include the whole body when communicating with the nonhuman so that non-judgmental observation can take place using all the senses (somatic listening). Nature communicates through producing emotions, energy and even the placement of words and, “vocal or visceral imprints in [a human’s] intuitive field” (Abbott, 2021, p. 9). Abbott (ibid) uses the example of asking children to remember their favourite natural places, and then asking them to think of the sounds, the smells, the scene, and how easy it is to conjure up these images in their minds. These placements made by nature can be used to instil affinity for the natural world since, if children can be taught to listen to nature, then they would also be able to mentally recall the sounds of their favourite natural spaces and recognise sounds from their environment, which could, again, impact positively upon their well-being.

The author’s choice to focus on listening skills was further inspired by a research summary of the field of sound ecology done by Buxton et al., (2021, p. 3), who asserts that health can be improved by exposure to non-human sounds, which can reduce high stress levels. Water showed the largest positive effect, and bird songs the second largest effect in alleviating stress and increasing a pleasant sense of atmosphere. However, it must be noted that the specific study took place in a studio with non-human sound recordings, and not in genuine, natural surroundings. Buxton (2021, p. 4) also encourages walks in nature with a focus on listening since it, “could be used to enhance awareness and appreciation of natural soundscapes.” Buxton (ibid) furthermore reports on a study showing that national parks with the highest prevalence of natural sounds attract the most visitors, which supports the researcher’s notion that the more a child is exposed to natural sounds, the higher the levels of

appreciation of, and attitude towards nature will be. Buxton (2021, p. 5) concludes that being in a natural space, “has multiple benefits, including preserving important connections with nature, [and] strengthening biodiversity conservation.” Benefits of regular exposure to nature as a space for learning are also mentioned by Blaikie (2020), Beasley et al. (2021), Chawla (2020), and Barabbe (2019). These views strengthen the author’s idea that exposure to nature strengthens the connection to it, and promotes the conservation of bio-diversity.

CONCLUSION

By understanding the destruction of the Anthropocene and the aims of post-humanism, individuals can become aware of the causes and consequences, and consider what needs to be done to remedy the situation. There cannot be an instantaneous “turnaround”, since there are too many factors involved. One of the most promising methods to assist the growth of respectful interaction with, and the care of, nature, is through listening. What remains is to teach children to listen by setting an example and showing enthusiasm, so that they can develop an affinity for nature as well as an understanding. Traditional communities and homes must ensure the grounding of respect and care for humans and the non-human before children begin their formal schooling. It is important to reunite children with the language of nature, which has been muted by an imbalance caused by the over-riding noise of technology. Nature’s ability to lower stress and enhance well-being are just two of the benefits originating from interaction with the world’s natural surroundings. It is only when children have been taught to listen that they will understand what it means to “lend [an] ear to nature’s cry”.

Don't kill the world

Don't let her down

Do not destroy basic ground

Don't kill the world

Our means of life

Lend ear to nature's cry

(Farrian, 1981)

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