Case Study

Southern Resident Killer Whales Have Been Watching Humans: What Do They See?

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Land Acknowledgement

Respect and gratitude is given in acknowledgement that the subject of this research paper is situated in in the traditional territories of the Pacific Coastal ecosystem in British Columbia and Washington State, specifically the Salish Sea and unceded Indigenous lands of the Tlingit, Haida, Denendeh, Tsimshian, Kwakwaka'wakw, Nuu-chah-nulth, Coast Salish, and Lummi People.

The researcher resides in and acknowledges with respect and gratitude the traditional territories of the First Nations of the West Kootenay and Boundary regions: the Sinixt (Lakes), the Syilx (Okanagan), the Ktunaxa, and the Secwepemc (Shuswap) peoples.

Abstract

Using a post humanistic approach, this paper will traverse the ways in which the human world has been influenced to change, both in perception and behaviour, as a result of the relationship with southern resident killer whales. The relationship will be viewed through a historical and present-day lens. Indigenous oral tradition and traditional ecological knowledge will be included as well as interdisciplinary views from the fields of anthropology, archeology, paleontology, biology and scientific environmental study. This research paper's subject is set in in the areas of the Pacific Western ecosystem, specifically the Salish Sea and unceded Indigenous lands of the Tlingit, Haida, Denendeh, Tsimshian, Kwakwaka'wakw, Nuu-chah-nulth, Coast Salish, and Lummi People. A look at this area will be intersected by views of the Canadian government and economic activity, the North American aquarium entertainment industry, oil pipelines, international shipping routes and the dams on the rivers such as the Columbia, Fraser, Snake and Elwha and the dams. Parallels and convergences between the Southern Resident Killer Whales and humans will be highlighted by regarding the whales as

‘selves’, ‘more-than-human’, and part of a multi-species ecosystem of which humans are only one.

Epoché Statement

This ‘epoché statement’, which is included with the intention of transparency outlining the researcher’s position and assumptions going into the research (Griffin & May, 2017:519). While referencing evolutionary science, geological events and scientific understanding, the researcher does so with a knowing that these ‘facts’ may be changed as new historical data is discovered, and that they are approximate theories of time, geology and biology based on what we know today. It is also recognized that the scope of this paper is not exhaustive on this topic. The researcher is a nonindigenous woman born in Canada with European ancestry, currently living in a small town in inland British Columbia and has not spent time with the whales in direct encounters. She has environmentalist values that position her in opposition to extremes of resource extraction and abuse of ecosystems, but with understanding towards sustainable use of natural resources. The researcher is middle-class, educated and a mother of two. In ecological conflicts, she usually sides with the animals.

Introduction

At this time of our shared multispecies history and evolution, many humans are entering a period of self reflection on a global scale specifically regarding social injustice and environmental degradation. There is a collective wondering of why we made the choices that we did. Why did we fill the world with chemicals, with no way of containing the damage? Why did we use up natural resources and then abandon those previously thriving ecosystems? Why did we need to take more and more from everyone else, seemingly so greedy? Why did we assume importance over all other living beings? This isn’t a reflection in a past tense where we can

safely position ourselves in the present with righteousness and indignation with the comfort of knowing that was in the far-gone past and we would never do such things now. We are still following this pattern of destruction. We are in a predicament where we know we have done wrong but cannot independently correct course on the momentum of previous human generations of the Anthropocene. The solutions will be found in a global cooperation, yet we still have a societal framework of better is more and survival of the fittest, at the expense of others. We suffer a psychological conundrum, trapped in the seemingly inescapable, dualistic problems of knowing: we have covered too much agricultural land with highways while driving to work; knowing that we have polluted the oceans while living in a world dependant on chemicals; feeling animals should have better rights and treatment while eating a fast-food-chain chicken leg; wanting to have less shipping traffic in the world while consuming imported goods and foods. This list of contradictions is infinite and is pervasive throughout our lives. Because these human ways of destroying and using things up completely until they are gone is embedded in our society, it makes it difficult, if not impossible, to put on the brakes and redirect the flow of human impact for the betterment of our non-human neighbours. Of course, this is not a new predicament, people of all disciplines have been warning of the consequences of our destructive ways towards the environment for many, many decades.

There are examples of us changing our ways, but are these pockets of conservation and innovation going to be enough, and fast enough, to make a difference to the spaces and species we share this planet with? When diverse groups come together in interdisciplinary approaches to discover new ways of engaging and interacting with the world around us, we can make meaningful change. The Southern Resident Killer whales have long been witnesses to human folly, greed and cruelty, but because of these whales and their way of being, they have also

witnessed human kindness, compassion, interest, respect, humility and ultimately human change.

Post Humanism

Post humanism can be thought of from a variety of perspectives and purposes. For the intention and motivation for this paper, a post humanistic perspective will be (a) used as a framework that values non-human lives and their experiences alongside human experiences, not as less important than human, (b) an attempt will be made to look further than the automatic anthropocentric view and assumptions connected with this view, (c) humans will be thought of as a species in a world that is full of diverse species and (d) recognize the multiple ways communication can happen in these encounters, and (e) value other ways of being, being with, and being in the world for plants, animals, and lands, not just human ways. By adopting this perspective, we can take a new look at the relationship between humans and southern resident killer whales. This will not be a paper about the common view of how we have impacted them to the brink of extinction, or how we have used them without mercy. This will be a look at how they have influenced us positively and just how far reaching and impactful this relationship has been on the human species since first encountering these specific whales, right up to present day.

Southern Resident Killer Whales

Southern Resident Killer whales are a specific type of orca that live in the Pacific Ocean along the coast of British Columbia, in the Salish Sea, down the coast of Washington, and south as far as California and north as far as Alaska. These whales have become endeared, sacred, members of the communities on both sides of he Canadian and American border. The beloved whales return to the inland waters each summer for chinook salmon hunting to the joy of people from all backgrounds, disciplines and interests. People wait eagerly for their return and worry when they arrive later and later each year. When the pods finally arrive, rounding the islands,

leaping into the air and playing, its hard not to anthropomorphize and think they feel joy at returning as well. The plight of these critically endangered whales is our writing on the wall. Even though we are trying to protect the environment and ecosystem of which these whales depend and are concerned with the welfare of other species, we seem eternally stuck in our anthropocentric behaviour. We worry about the whales for many reasons, but one of those reasons is because we know their fate is ours to follow. “Killer whales are viewed as an indicator species for the Salish Sea. The decline in local killer whale populations may indicate stressors that eventually will affect the whole ecosystem” (United States Environmental Protection Agency, 2021). They are apex predators following matrilinear teachings that choose to only eat fish because that’s what their mothers taught them, unlike the transient orcas that eat sea mammals (American Cetacean Society, 2018). So beloved are the three pods of whales that hundreds of people are spending every moment of their lives whether through employment or volunteering trying to save them. How can this be that 74 whales have lit such a fire and passion in people? Our encounters with them are changing the human world on every level from one person drumming on a beach and growing into groups the world over holding ceremony and prayer, to a few people holding up signs in protest to federal political and legislative changes, from entertainment aquariums, to oceans, from all ages and backgrounds, diverse interest groups are being drawn together and connected in one common cause. The lives that share the ocean are connected to us on every level of our existence and unfortunately it has been to their detriment that we have become so consumer centric. These whales are dying because of three identified threats; (1) shipping noise interfering with their ability to echolocate prey and communicate with each other, (2) they eat chinook salmon, a population has suffered because of the hydroelectric dams specifically on the Fraser and Columbia Rivers, and (3) they are suffering the effects of

chemicals in the water like PCBs (Randon, 2020). The territory of the southern resident killer whales is shared by Canada and America, and both have put millions into conservation; efforts to try and slow boats and noise, efforts to make it illegal to approach them or cause them direct harm, efforts to have them legally recognized with the rights of personhood, passing laws that forbid the future captivity of orca, and efforts to protect and renew salmon habitat. Scientists of every discipline are collecting and studying data to try and figure out how to support the whales and their population. The human species and its understanding of the world has undergone dramatic change through its history. The southern resident killer whales have directly impacted our ways of being in the world, how we understand ecosystems and encouraged positive change in our encounters with the land and nonhumans.

Whale Culture: Indigenous oral history and traditional ecological knowledge.

Southern Resident Killer whales are recognized as having a distinct culture full of traditions, ritual, family groups, dialects and teachings that are passed down through matrilineal lines. Their culture and ways of building community inspired Indigenous culture in not just the arts and ceremony, but also in ways of making meaning and understanding family connection with all living beings. Three pods make up the whales and each have specific and recognizable physical, behavioural, and vocal differences. As a result of extensive researcher efforts, collected data, and technology, each whale has been named and numbered by humans, recognized by their voice and markings. Each whale is monitored and cheered on by humans during travel, hunting, breeding, and raising the young. Each whale in distress is watched, protected, and worried over by humans. Each missing member and death in the pods is noticed by humans and each personality noted, missed and mourned. We can see ourselves in these families, and although a strong possibility for anthropomorphizing, it is this very commonality with us that may make us

try harder to change our ways. Now that their population is down to only 74 with only 30 able to breed, every life in these pods matters. The Center for Whale Research estimates the current population has only five years left of reproductive viability (Center for Whale Research, 2018). With no room to spare, each whale needs to live a full, healthy and productive breeding life in order for these pods to avoid extinction. Humans are doing a lot of changing to support them, but it is late and still may be not enough. Through traditional ecological knowledge, science and technology we now recognize and value the whales' traditions as a culture just like our own. The research to protect the whales has brought together human groups from diverse backgrounds in an interdisciplinary approach that has far reaching implications. Their plight has connected people in a common goal with great momentum, Indigenous nations, multiple levels of cross border governments, economists, environmental lawyers, ecologists, anthropologist, scientists, biologists, hunters and fishermen, loggers, musicians and sound technologists, engineers, photographers, writers, mariners, artists, teachers, military, historians, corporations, tourists, and caring people, just to name a few. This one specific type of orca has inspired a cooperation in the human species beyond what we could have accomplished on our own.

Indigenous Peoples along the northern Pacific coast have a long relationship with the southern resident killer whales and have collective traditional ecological knowledge over millennia. They respected these revered whales and shared story through their oral tradition, created totem poles and carvings depicting them, and held ceremony in their honour. For some, it is understood that when chiefs die, they become one of these whales. The whales are protected and sacred because they are known by some like the Haida, and Tlingit and Lummi people to be their 'relatives under the waves'. Oral history describes how the whales came to exist by transformation from the white wolf. These white wolves walked into the ocean and became the

blackfish, with some of their white colouring kept, reminding them of their beginnings as the wolf. Wolves transforming into whales would have been dismissed by many European settlers as fictitious story, but as the fields of evolutionary science, biology, archeology and paleontology have proven through fossils, and other methods of discovery such as oxygen/ bone studies, amino acids, and DNA, this story is very close to current western scientific understanding. How did the Indigenous know thousands of years ago that this is in fact how the whale came to be? Perhaps they saw the whale embryo that still has evolutionary back leg stumps or was it in response to how the orca hunt like wolves, or did they have another way of knowing?

Evolutionary Science: When whales walked the land

Through a long and winding genetic pathway, the whale originated from the creature *Pakicetus*, a land mammal similar to a wolf with hooves. 50 million years ago, this species evolved into living in the ocean and changed dramatically over millions of years (Berkeley University). *Pakicetus* was a terrestrial animal that would have spent some time in the water and some on land. Over time, this ancient relative of the whale would have moved more to hunting, living and giving birth in the water. Through bone studies it has been discovered that during the evolution of *Pakicetus* it was an estuary animal spending time in both freshwater and salt water. Through recovered fossils, the bridge between these ancient animals can be traced to the current Southern Resident Killer Whales. For many decades, evolutionary biologists were not able to link whales to land mammals definitively; they were stuck at *Basilosaurus* fossils, a creature which lived exclusively in water. At the time of the accidental unearthing of *Basilosaurus*, in Arkansas 1832, it was speculated that this was a large reptile from the time of the dinosaurs, but the teeth were double rooted and sure to be mammalian. Years later, when scientists accidentally dropped a skull fossil and it smashed on the floor, they discovered the inner ear which pointed

directly to the modern whale (Switek, 2010). Because whales are mammals, they have come from the original tetrapods that emerged from the oceans 200 million years ago like us, but there was no fossil proof. Then in 1981, paleontologists in Pakistan found the missing link in the fossils of *Pakicetus*, also know as, "wolves with hooves" (Switek, 2010). In *On the Origin of Species* (1859), Darwin made a comparison observation between a bear swimming with his mouth open catching flies on the water surface and whales. To his friend, he later wondered if there was a possibility of his theory connecting large mammals with whales by using *Basilosaurus* as a transitional species (Darwin & Kebler, 1859). He was, of course ridiculed for this at the time (Black, 2010). The long-hidden mystery of the evolution of the whale has inspired the relentless international archaeological searching, countless studies and theories, and cooperation of interdisciplinary fields collaborating work for hundreds of years.

Life in the Eocene

Although the Southern Resident Killer Whales and humans appear to be very different, we have a shared evolutionary survival and a shared planetary history. Both of our ancient relatives, primates and hooved carnivores, survived to some extent, the extreme global warming of the Eocene, and the mass extinction marking the beginning of the Oligocene. Now, millions of years later in the Anthropocene, we both face global threats and extinction. The main difference between us being, that the planetary changes now are a result of human environmental destruction. This blame we do not share with the whales; it is ours alone. "Unmitigated scenarios of greenhouse gas emissions produce climates like those of the Eocene, which suggests that we are effectively rewinding the climate clock by approximately 50 million years, reversing a multimillion-year cooling trend in less than two centuries" (Burke, Williams, Chandler, Haywood, Lunt, Otto-Bliesner, 2018). The Eocene epoch is from 56 million years ago to

approximately 34 million years ago. This was when mammals first started to thrive with the disappearance of the dinosaurs. This epoch is named after the Greek words for *new dawn*, reflecting this emergence of modern mammals (Greenwood, Pigg, & DeVore, 2016). The end of this epoch is marked by a mass extinction event from large meteors impacting earth and the planetary glaciation resulting from the slow cooling of the planet. The beginning of the Eocene had a rapid global warming of 7 degrees Celsius at high elevations that lasted approximately 100,000 years. The polar caps were warmer, covered in trees and tropical climates reached as far north as the 45th parallel. This "runaway global warming" is thought to be from methane release from the ocean floor (McGill, 2007). It was during this time that the surviving mammals were set on the long evolutionary path towards both whales and humans.

In Egypt, there is a place called *Wadi Al-Hitan, Whale Valley* where archeologists have been studying the high concentration of numbers of whale fossils of a variety of evolutionary stages. It is here the mammals in the last stages of losing their back limbs have been discovered. Continuing to inspire and energize human study of the evolution of whales, "fossil material in the site makes it possible to reconstruct the surrounding environmental and ecological conditions of the time." (UNESCO). The whales are often preserved as full skeletons and hold with them this information from the time they lived in. Approximately 11 million years ago the first orca emerged as the orca we recognize today. As a time comparison, when humans came to be as we are today was only 300 000 years ago. Over the last 11 million years orcas have become many different types with different body shapes, eating habits and territories.

Anthropomorphism and Human Exceptionalism

Southern Resident Killer Whales work together to hold their sick and dying family members aloft at the surface, because being mammals, they need to breathe air like us. Even at

their own detriment like being shot at, harpooned, or risk of starvation, these whales will remain vigilant in holding the sick whale up for air between their bodies. Based on their brains and neuroscience, not only their senses, but also their capacity for emotion and empathy are far greater than our own. Parts of their brain are not like humans and the region's purpose is still unknown to us. We do not know what they can sense in the body of the other. Perhaps they can feel the brain still active, or maybe they can hear the organs still functioning in those moments. In 2018, *Talle'quah*, a mother whale in the pods, made headlines and made hearts break around the world when she carried her dead calf for seventeen days around the Salish Sea on her head, also known by humans as her "Tour of Grief". Other mammals sometimes carry their dead young too, like the chimpanzee. People were captivated by her, not as 'just a whale' but as a mother. This perceived emotion in this event stirred in us sympathy, empathy, and curiosity, but most importantly it was a catalyst to collective renewed calls for action. Some felt *Talle'quah* was displaying grief, others felt this was her behaviour being interpreted through an anthropomorphic lens and did not necessarily demonstrate grief. Because her tour seemed to purposely take place where the people were, some felt she was showing us what had happened, sending us a message of their suffering. Some people understood this as a way of demonstrating to us the harm our ways are causing.

In two separate studies, one about orca carrying their deceased young and another about chimpanzees doing the same, both studies suggested as hypotheses, that the mammals don't realize their companion has died. The study regarding the orca suggests, "Because an inanimate individual is potentially rescuable, responses to dead conspecifics-especially by females-can be explained at least in part by attempts to revive and protect, having a clear adaptive value. In some cases, such responses are followed by apparently maladaptive behaviour such as the long-

term carrying of, or standing by, a decomposed carcass, similar to observations of certain terrestrial mammals. Among the possible explanations for the observed cetacean behavioural responses to dead conspecifics are strong attachment resulting in a difficulty of "letting go"-possibly related to grieving-or perhaps individuals failing to recognise or accept that an offspring or companion has died." (Bearzi, Kerem, Furey, Pitman, Rendell, Reeves: 2018). The second study suggests, "Mothers of several species of primate have been reported to carry and continue to interact with dead infants. Such interactions have been proposed to be related to maternal condition, attachment, environmental conditions or reflect a lack of awareness that the infant has died" (Lonsdorf, Wilson, Boehm, Delaney-Soesman, Grebey, Murray, Wellens, Pusey: 2020). This hypothesis seems limited with regard to the capacity of these animals to understand life and death and their response to this process within their deep and lifelong relationships to each other.

Orcas have intelligence, language and emotional capabilities, qualities we think of as human. These capabilities are seen in their behaviours but also now shown in their brains. Orca brains have enlarged limbic lobes compared to humans and high levels of cortical folding. The limbic lobe is credited with emotional capacity and memory formation. Orcas have three cingulate gyrus, or limbic lobe, in comparison to humans with only one (Crawford: 2013). Spindle cells, related to the capacity for empathy have also been found in the brains of orca to a much larger extent than humans (Bekoff & Goodall: 2007). Having discovered neuroanatomy similar to humans, it is changing they way we can advocate for the protection of these animals and others as sentient beings and deserving of legal personhood. Perhaps humans and animals do not have the same understanding of what is death and when it technically occurs. In many Indigenous cultures, life and death are not on a linear spectrum of beginnings and endings. For some, this process is believed to be reciprocal, circular and never ending. These alternative

perspectives on death and dying are in the realm of spirituality for humans, or the not-proven-by-science. Maybe the mammals carry their dead young and other rituals because they sense and connect with something we can't; an 'aliveness' beyond what we can consider. From one digital image of *Talle'quah* and her baby, amplified through the human population via media, the collective concern and support for the Southern Resident Killer Whale was ignited by the flame of witnessing loss, sensing grief, and realizing our own magnitude of unknowing.

Knots in the Past

The current population of Southern Resident Killer Whales has already been decimated by 40 percent when, in the 1960s and 70's, 47 Southern Residents were taken for the entertainment industry. All of them except one has died. 56-year-old *Sk'aliCh'elh-tenaut* (pronounced SKAH-lee-CHUKH-tah-NOT) who was taken from her family at the age of four. "She was taken from her home waters in the infamous Penn Cove captures of 1970, a shocking incident that helped to advance legislation to outlaw live captures in Washington State" (Whale and Dolphin Conservation Organization, 2022). She is also known as *Tokitae*. Her name when she arrived in Miami was changed to Lolita where she performed four shows a day, for five decades, until April, 2022 when she was finally retired from performing. She has lived in the smallest orca pen in America, no deeper than she is long under the Florida sun without shade where she has lived all these years (Katanich, 2022). This whale, through her captivity has brought together Indigenous nations all over the world, environmental legal groups, interdisciplinary teams of scientists working on transport planning, health monitoring and sea-pen release possibilities. Fifty years after her abduction, she still sings the song of her L pod. Her mother is still alive in the wild along with members of her family (Salish Sea Marine Sanctuary, 2021). The Lummi people have travelled to Miami with a totem pole and held ceremony in her

honour with flutes, drums, and cedar. They have protested along with others using megaphones so she can hear their language and drumming that she heard in her youth. For decades people have been trying to get *Tokitae* released, but to no avail.

Outside of the aquarium great changes have been occurring because of the publicity of her long-time suffering, awareness for the endangered Southern Resident Killer Whales is now known and groups are working together to support the efforts to save them by protecting the land, water, and salmon habitat. Protests have been happening outside the entertainment aquariums and real change has occurred. This call to action, inspired by witnessing the suffering and unjust treatment of the whales prompted Canada to pass law prohibiting the captivity of orcas, and the capture of these whales in the ocean is prohibited.

Knots in the Present

Canadian government measures to protect the Southern Resident Killer Whales are included in the existing $1.5 billion in the Oceans Protection Plan, $167.4 million Whales Initiative and specific to them $61.5 million in additional measures. These additional measures require boats to keep 200m away from the whales and 400m away from critical habitat areas, creating new areas of protection increasing from 6400 to 10,000 square kilometres, partnering with Vancouver port authority to improve voluntary slow down of boats, partnering with whale watch association to refrain from offering tours, cessation of commercial and recreational fisheries between May and October, enhanced regulation control and prohibition of specific pollutants, closing fisheries in habitat of Chinook Salmon (Government of Canada: 2018).

The Trans Mountain Pipeline is a corporate project that is causing division among people, stakeholders, and organizations over the controversial effects on the Southern Resident Killer Whale pods. *The Memorandum of Understanding to advance measures to benefit the recovery of*

the Southern Resident Killer Whale through Trans Mountain Expansion Project Conditions (Canadian Energy Regulator: 2017) outlines some measures that will be taken to try and protect all species and the ecosystem in the Salish Sea, but many feel this is not enough based on the risk assessments completed. Many organizations are working together to ensure the protection of these whales remains a focal point of decision making for all projects into the future. In the United States, salmon habitat is being prioritized and dams being removed from rivers to promote their populations.

Chinook Salmon are the main food source for the Southern Resident Killer Whales. These fish populations and habitats were decimated from hydroelectric dams being built on rivers such as the Columbia, Fraser, Snake, and Elwha. The salmon are a keystone species feeding more than 40 vertebrate species and influence ecosystems including the health of plants and trees. In 2011, the Elwha Dam began to be removed to allow the river to run naturally and for the salmon to move unimpeded. It is believed that this dam removal project is partially credited with an increase in humpback whale population in the area. Four dams in the Snake River are also under review and discussion to be removed. It is predicted that by removing even one of these dams from the Snake River will increase Salmon by one million for the Southern Resident Killer Whales (Springtide: 2021). Canadian and American organizations and Indigenous nations have been working together to protect these whales in the shared ocean ecosystem. These efforts are bringing together people in cooperation and collaboration and new relationships. “Efforts to address the various threats to SRKW have forged strong internal partnerships between the West Coast Region and NMFS’ science centers. They have also increased collaborations between NMFS and a variety of outside organizations, including the Department of Fisheries and Ocean Canada (DFO), Transport Canada, the Center for Whale

Research, the Whale Museum, and the Washington Department of Fish and Wildlife (WDFW)" (National Marine Fisheries, 2021).

Conclusion

Thomas King, Indigenous storyteller and educator writes, "The truth about stories is that that's all we are." (King, 2003:3). He warns that some stories are dangerous. Some dangerous stories cannot be called back once they are loose in the world (King, 2003:10). We need to take notice of what we tell ourselves about our relationship with the living beings we share this planet with. False and delusory stories have caused us to behave in ways that we now realize were self-destructive. Traditional collective stories of Indigenous peoples cherished and protected the whales. Western stories have been used to justify our actions while harming those around us.

One of the first whales to change human perspective and behaviour was one unfortunate Southern Resident Killer Whale named by her captors Moby Doll. In 1964, this was the first whale ever displayed in captivity and it was by the founder of the Vancouver Public Aquarium. He went out to hunt and kill an orca, but missed killing the whale, only snagging it with the harpoon. He brought it alive to dock in Vancouver. "The event changed scientific history forever. People were permitted to view the whale for a single day and were shocked that it didn't seem dangerous. Public perceptions about killer whales shifted" (Leiren-Young, 2016). She only survived 87 days but during that time, people realized they were not the feared animals they were thought to be. Prior to this capture, the goal was to eradicate the Southern Resident Killer Whales because they were 'pests', non-Indigenous fishermen thought they were competing for food and they were frequently being shot at, harpooned and even a canon was set up to eradicate them from the safety of the shore. Decades after this perspective changing event, Newman, the aquarium's founder, became one of the many spokespeople protecting these whales and

encouraging an end to all whaling worldwide and efforts to revitalize salmon habitat.

The Darwinian legacy has created in humans a belief in the competitive narrative of survival-of-the-fittest. Post-World War II cast us into a belief in capitalism, and free enterprise, imposed on us by the corporations and growing big business industries such as auto, weapons, petrol-chemical, pharmaceutical, insurance, banking and many more in the late 1940s. This belief is deeply embedded into western ways of interacting with those around us and the natural environment. The value of the individual over community, the value of the self-made man who not only can be anything, he also is deserving of it and can have the freedom to achieve it. This humanistic model, an individual, person-centered model has led us down a destructive path of taking what we want while prioritizing ourselves over others.

Canadian playwright and professor emeritus at York University, in a recent lecture about Arthur Millar's play *Death of a Salesman*, (1949) spoke about the making of a tragedy and the consequences of a belief in the American dream, or American promise as he refers to it. Fothergill suggests that in tragedies, the drama happens when the protagonist is brought down to ruin, defeat, and sometimes death from initial fortune. This defeat is not through external circumstances or accidents, but through their own faults, their own character flaws, and choices (2021). True tragic heroes are responsible for their own ruination by choices they make freely. At the end of his lecture, he asks, "Do we really choose the choices that we make? Or do we always make the choices that somebody like us is always going to make? Or can we choose to be different?" (Fothergill, 2021). In the case of the Southern Resident Killer Whales, they are not the protagonists in the tragedy. The humans are the tragic heroes who have led to their own ruination and potential demise. Are we humans capable of correcting course or are we, as a species, going to continue making the same predictable choices down this path of self-serving,

short-term greed and ultimately destruction. We are in the moment of the great heroic struggle in the last act of the tragic play. Now is when the audience of the play is expecting the hero to overcome the consequences of their free choices, to make right their wrongs, and finally abandon the delusory, intangible, unattainable goals of the American Promise.

Update: Still in captivity at Miami's Seaquarium, *Tokitae* died August 18, 2023 at the age of 57.

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